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ELECTRICITY INFORMATION

2013

International Energy Agency

ELECTRICITY
INFORMATION

2013

Electricity Information provides a comprehensive review of historical and current market trends in the OECD electricity sector, including 2012 preliminary data.

An Introduction, notes, definitions and auxiliary information are provided in Part I. Part II of the publication provides an overview of the world electricity developments in 2011 covering world electricity and heat production, input fuel mix, supply and consumption, and electricity imports and exports. A greater focus is given to the 34 OECD countries with more detailed information covering production, installed capacity, input energy mix to electricity and heat production, consumption, electricity trades, input fuel prices and end-user electricity prices.

Part III of the publication provides a corresponding statistical overview of developments in the world and OECD electricity and heat market for 2011, as well as monthly OECD production and trade electricity data for 2012.

Part IV provides, in tabular form, detailed and comprehensive statistical coverage of the power and heat industry developments for each of the OECD member countries and for OECD and IEA regional aggregates. It provides comprehensive statistical details on overall energy consumption, economic indicators, electricity and heat production by energy form and plant type, electricity imports and exports, sectoral energy and electricity consumption, as well as prices for electricity and electricity input fuels for each country and regional aggregate.

Electricity Information is one of a series of annual IEA statistical publications on major energy sources; other reports are *Coal Information, Natural Gas Information, Oil Information* and *Renewables Information.*

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ELECTRICITY
INFORMATION

2013

with 2012 data

INTERNATIONAL ENERGY AGENCY

The International Energy Agency (IEA), an autonomous agency, was established in November 1974. Its primary mandate was – and is – two-fold: to promote energy security amongst its member countries through collective response to physical disruptions in oil supply, and provide authoritative research and analysis on ways to ensure reliable, affordable and clean energy for its 28 member countries and beyond. The IEA carries out a comprehensive programme of energy co-operation among its member countries, each of which is obliged to hold oil stocks equivalent to 90 days of its net imports. The Agency's aims include the following objectives:

- Secure member countries' access to reliable and ample supplies of all forms of energy; in particular, through maintaining effective emergency response capabilities in case of oil supply disruptions.
- Promote sustainable energy policies that spur economic growth and environmental protection in a global context – particularly in terms of reducing greenhouse-gas emissions that contribute to climate change.
- Improve transparency of international markets through collection and analysis of energy data.
- Support global collaboration on energy technology to secure future energy supplies and mitigate their environmental impact, including through improved energy efficiency and development and deployment of low-carbon technologies.
- Find solutions to global energy challenges through engagement and dialogue with non-member countries, industry, international organisations and other stakeholders.

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The European Commission also participates in the work of the IEA.

International Energy Agency

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Units and technical abbreviations

toe	:	tonne of oil equivalent (1 toe = 41.868 GJ = 10^7 kCal)
Mtoe	:	million tonnes of oil equivalent
kW	:	kilowatt (10^3 watts)
kWh	:	kilowatt hour
MW	:	Megawatt (electric) (10^6 watts)
MWh	:	Megawatt hour
GW	:	Gigawatt (10^9 watts)
GWh	:	Gigawatt hour (1 GWh = 3.6 TJ)
TW	:	Terawatt (10^{12} watts)
TWh	:	Terawatt hour (1 TWh = 3.6 PJ)
kcal	:	kilocalories (10^3 calories)
KJ	:	kilojoule (10^3 joules)
GJ	:	Gigajoule (10^9 joules)
TJ	:	Terajoule (10^{12} joules)
t	:	metric ton = tonne (1 t = 1000 kg)
Mt	:	million tonnes
GCV	:	Gross calorific value
NCV	:	Net calorific value
TFC	:	Total final consumption
TPES	:	Total primary energy supply
USD	:	U.S. dollars (unless otherwise specified)
..	:	not available
e	:	estimated or preliminary data
c	:	confidential data
x	:	not applicable

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PART I

INTRODUCTORY INFORMATION

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1. INTRODUCTION

IEA *Electricity Information 2013* is the latest edition of an annual publication[1] intended to provide sound market information on electricity and heat to policy and market analysts and those employed in all sectors of the electricity industry.

This monitoring and reporting of historical trends and current energy market situation provides a strong foundation for policy and market analysis to better inform the policy decision process toward selecting policy instruments that are best suited to meet domestic and/or international objectives.

IEA *Electricity Information 2013* brings together in one volume the basic statistics compiled by the IEA on electricity and heat production. It also includes information on installed capacity, consumption, trade and prices.

This introduction is followed by important information that will assist the reader in correctly using the data in this publication. In addition, calorific values used for preparing national energy balances are presented.

This information is structured as follows:

- Definitions
- Sources and notes
- Country notes
- Geographical coverage
- Conversion factors and calorific values

Part II of the publication provides a short overview of world electricity developments in 2011, covering world electricity and heat production, input fuel mix, supply and consumption, and electricity imports and exports.

A greater focus, with preliminary 2012 data, is given to OECD countries with more detailed information covering production, installed capacity, input energy mix to electricity and heat production, consumption, electricity trade, input fuel prices and end-user electricity prices.

This edition of *Electricity Information* includes a paper on the role of electricity storage in providing electricity system flexibility by David Elzinga, IEA; Jody Dillon, Ecar ENERGY and Mark O'Malley, University College Dublin; João Lampreia, IEA.

Part III of the publication provides a corresponding statistical overview of developments in the world and OECD electricity and heat markets. Included is a synthesis of the 2012 monthly electricity statistics of OECD countries from the Monthly Electricity Statistics report.

Part IV provides, in tabular form, a more detailed and comprehensive picture of the power and heat industry developments for 34 OECD Member countries.

OECD data are taken from IEA/OECD databases of Energy Statistics that are based on annual submissions from OECD Member countries to the Secretariat. The Energy Data Centre of the IEA Secretariat works closely with national administrations to secure consistency in time series and with IEA product definitions and reporting conventions. The finalized data provide the basis for IEA/OECD *Energy Balances of OECD Countries* and *Energy Statistics of OECD Countries.*

Price data in Part IV are derived from IEA/OECD *Energy Prices and Taxes*. Readers should consult this publication for detailed information on data coverage and sources.

The non-OECD data are based upon information collected by the IEA Secretariat, national submissions to the United Nations in Geneva and New York, and national energy publications. The resulting synthesis is

1. This publication is without prejudice to the status of or sovereignty over any territory, to the delimitation of international frontiers and boundaries and to the name of any territory, city or area. In addition, the term "country" refers to a country or a territory, as the case may be.

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published in *Energy Balances of Non-OECD Countries* and *Energy Statistics of Non-OECD Countries*. Users of this publication are directed to the Methodology Section of those publications for more detail on individual non-Member countries covered in the publication.

World electricity and heat production, supply and consumption are available on a CD-ROM, which also provides for each of the 34 OECD member countries details on installed capacity, input energy mix to electricity and heat production and electricity trade. Information on ordering the CD-ROM and other energy statistics publications is available at the end of this book and on the IEA website at *www.iea.org*.

In addition, a data service is available on the internet. It includes unlimited access through an annual subscription, as well obtaining data on a pay-per-view basis. Details are available at *http://data.iea.org*.

Further information on reporting methodologies is also available on the IEA Web site.

Annual energy data are collected by the Energy Data Centre (EDC) of the IEA Secretariat, headed by Mr. Jean-Yves Garnier. The IEA would like to thank and acknowledge the dedication and professionalism of the statisticians working on energy data in the countries. Mr. Vladimir Kubecek had overall responsibility for this publication, with the help of Mr. Tianlai Xu and Mr. Georgios Zazias.

Also in the IEA Secretariat, thanks are due to the non-OECD Member countries section headed by Mr. Pierre Boileau, to the OECD Balances section headed by Ms. Karen Tréanton. For their contribution to Part II of this publication, the IEA Secretariat also thanks Mr. David Elzinga of the Energy Technology Policy Division.

Editorial and desktop publishing support from Ms. Sharon Burghgraeve is also gratefully acknowledged.

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What's New?

The IEA decided to show the net maximum electricity capacities for all the OECD member countries in Table 2.12. In the previous editions of this publication, this table contained the electricity capacities for the IEA member countries only.

We hope that users of this publication will find this change useful.

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2. DEFINITIONS

Electricity and heat

Gross and net electricity production

Gross electricity production is measured at the terminals of all alternator sets in a station; it therefore includes the energy taken by station auxiliaries and losses in transformers that are considered integral parts of the station. Net electricity production is defined as gross production less own use of power plants. Net electricity production is measured at the station busbars, after deduction of electricity consumed within the station.

The difference between gross and net production is generally observed to be about 7% for conventional thermal stations, 1% for hydro stations and 6% for nuclear.

Hydroelectric stations production (gross and net) includes production from pumped storage plants.

Electricity and heat data are organised by the type of producer and the type of plant. These are defined as follows:

Types of producers

Producers are classified according to the purpose of production:

Main activity producers generate electricity and/or heat for sale to third parties, as their primary activity. They may be privately or publicly owned. Note that the sale need not take place through the public grid.

Autoproducers generate electricity and/or heat, wholly or partly for their own use as an activity which supports their primary activity. Autoproducers heat production includes only heat sold to third parties. The input fuels should correspond to the quantity of fuels used to produce the heat sold. The use of fuels for heat which is not sold is recorded in the sectors in which the fuel use occurs.

Types of plants

Electricity plants refer to plants which are designed to produce electricity only.

Combined heat and power plants (CHP) refers to plants which are designed to produce both heat and electricity (sometimes referred to as co-generation power stations). Where possible, fuel inputs and electricity/heat outputs are reported on a unit basis rather than on a plant basis.

Heat plants refers to plants designed to produce heat only. Heat delivered from CHP or heat plants may be used for process or space heating purposes in any sector of economic activity including the residential sector.

It should be noted that the reporting of data on fuel use and electricity and heat production according to plant type is normally conducted at the level of the plant. It is assumed that if a plant comprises at least one CHP unit then the entire plant is considered a CHP plant.

Electricity import and export

Electricity is considered to be imported or exported when it has crossed the national territorial boundaries of the country. If electricity is “wheeled” or transited through a country, the amount is shown as both an import and an export.

Net maximum capacity

Net maximum capacity is defined as the sum of the net maximum capacities of all stations taken individually at a given period of operation. It is the maximum active power that can be supplied, continuously, with all plants running, at the point of outlet to the network. It is assumed that all equipment is in full working

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order, that the power produced can be disposed of without any restrictions and that optimum conditions prevail as regards primary sources (*i.e.* flow and head in the case of hydroelectric plants; grades and quantity of fuel in hand and water supply, temperature and purity, in the case of combustible fuel-fired plants and assuming that the output and method of production in CHP plants are those which contribute to maximum electricity production). It represents the sum of all individual plants' maximum capacities available to run continuously throughout a prolonged period of operation in a day.

The capacity is net in the sense that it is the output capacity measured at the station busbars, *i.e.* after deducting the power consumed by station auxiliaries and losses in station transformers.

Single-fired capacity refers to units equipped to burn only one fuel type on a continuous basis. The conventional thermal fuel types are the following:

- Coal and coal products: including all types of coal, blast furnace gas and coke oven gas.
- Liquids: including crude oil and oil products, refinery gas, and other fossil liquid fuels.
- Natural gas: natural gas and gas works gas.
- Biofuels and waste: covers biomass and waste.

Multi-fired capacity refers to units that can burn more than one fuel individually and/or a combination of fuels on a continuous basis. A multi-fired unit can have either one boiler which can use more than one fuel, or two boilers each utilising a single fuel but which feed the same generator either singly or together. The unit is capable of generating its net maximum capacity or a large proportion of its maximum capacity using any one of the fuels.

Heat

Data collected on heat include more disaggregated data on inputs and outputs of combined heat and power plants and on heat only plants. Data on heat became available in different years for different countries and thus aggregated country data should be used with caution.

Coal

Coal is a family name for a variety of solid organic fuels and refers to a whole range of combustible sedimentary rock materials spanning a continuous quality scale. For convenience, this continuous series is often divided into two main categories, which are themselves divided into two subcategories:

- Hard coal
  - Anthracite
  - Bituminous coal
    - Coking coal
    - Other bituminous coal
- Brown coal
  - Sub-bituminous coal
  - Lignite

However, coal quality can vary and it is not always possible to ensure that available descriptive and analytical information is truly representative of the body of coal to which it refers.

The International Coal Classification of the Economic Commission for Europe (UN/ECE) recognises two broad categories of coal:

i) ***Hard coal*** - Coal of gross calorific value not less than 5 700 kcal/kg (23.9 GJ/t) on an ash-free but moist basis and with a mean random reflectance of vitrinite of at least 0.6.

ii) ***Brown coal*** - Non-agglomerating coal with a gross calorific value less than 5 700 kcal/kg (23.9 GJ/t) containing more than 31% volatile matter on a dry mineral matter free basis.

The IEA has adopted this definition of hard coal and brown coal in this book and in other publications.

It should be stressed that this classification system is based on the inherent qualities of the coal in question and not on the final use of the coal. In this way the classification system attempts to be objective and simple to apply.

In this context hard coal normally corresponds to anthracite and bituminous coal. However, for the countries listed below, hard coal also includes sub-bituminous coal - Australia, Belgium, Chile, Finland, France, Iceland, Japan, Korea, Mexico, New Zealand, Portugal and the United States.

Except for these 12 countries, brown coal is equivalent to sub-bituminous coal and lignite. In this publication coke oven coke, gas coke and patent fuel used for electricity generation or heat production are included in hard coal, while coal tar and brown coal briquettes (BKB) are included in brown coal.

In tables where data are presented in Mtoe in this book and sourced to OECD/IEA *Energy Balances*, the term "Coal" includes all primary coal types (including

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hard coal and brown coal), peat and coal products (including patent fuel, coke oven coke, gas coke, BKB, coal tar, gas works gas, coke oven gas, blast furnace gas, and oxygen steel furnace gas). In some tables "Coal gases" are reported separately. In such cases "Coal" does not include these gases.

Peat is defined as a combustible soft, porous or compressed fossil sedimentary deposit of plant origin with high water content (up to 90% in the raw state), easily cut and of light to dark brown colour.

Coal gases

Derived gaseous fuels are products resulting from the transformation or manufacturing of hard coal, brown coal or other primary solid fuels, sometimes with the addition of other materials. Included in this category are gas works gas (from 1990), coke oven gas, blast furnace gas and oxygen steel furnace gas. To calculate the net heat content of a coal gas, its gross heat content is multiplied by the following factors:

Product	Ratio from GCV to NCV
Gas works gas	0.9
Coke oven gas	0.9
Blast furnace gas	1.0
Oxygen steel furnace gas	1.0

Biofuels and waste

This category refers to combustible fuels other than coal, oil and natural gas that are used for electricity and/or heat generation and covers biomass and wastes. Specific products included are: solid biofuels and original products, gases/liquids from biomass, industrial waste and municipal waste.

Oil

In this publication, oil includes crude oil, refinery feedstocks, natural gas liquids, hydrocarbons not of crude oil origin and all oil products: LPG, refinery gas, aviation gasoline, motor gasoline, jet fuel, kerosene, gas/diesel oil, residual (heavy) fuel oil, naphtha, white spirit, lubricants, bitumen, paraffin waxes, petroleum coke and other oil products.

Natural gas

In this publication, natural gas excludes natural gas liquids.

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3. SOURCES AND NOTES

General notes

Energy data for OECD countries are submitted to the IEA Secretariat in a common reporting format and methodology to allow for international comparisons to be made.

Energy data reported for 2012 (shown as 2012e) are preliminary estimates based on submissions received in early 2013 and on monthly submissions to the IEA from member countries.

Statistics of non-OECD countries presented in this publication are based on available data at the time of publishing and may differ from the final non-OECD data to be published in *Energy Statistics of Non-OECD Countries*.

Additional information on methodologies and reporting conventions are included in the notes in *Energy Balances of OECD Countries* 2013 Edition and *Energy Statistics of OECD Countries* 2013 Edition.

Qualifiers

Data marked as *'e'* are the estimates of the IEA secretariat. Data marked as *'c'* means that data are confidential due to country specific regulations. Data marked as *'..'* means that data are not available (either not collected or not submitted by national government). Data marked as *'x'* means that the data point is not applicable, there is no meaningful explanation of a value there (for example, unit price is not shown if there was no trade).

Data sources

Historical data (1960-2011)

The annual historical data in Part II of this report are taken from the IEA/OECD databases of Energy Statistics which are based on annual submissions from all OECD member countries.

i) IEA/OECD Electricity Statistics

This database of annual statistics for OECD countries covers generating capacity and electricity production from main activity producer and autoproducer plants. It includes information on electricity and heat production by fuel type and supply/demand balances for electricity and heat from different types of power and heat plants.

The main data from this system are published annually in this IEA/OECD publication, *Electricity Information.*

ii) IEA/OECD Coal Statistics

This database of annual statistics for OECD countries covers all primary solid fuels, derived fuels and related manufactured gases. It contains detailed supply/demand balances for each fuel, as well as information on coal trade by origin and destination.

The main data from this system are published annually in the IEA/OECD publication *Coal Information.*

iii) IEA/OECD Oil and Gas Statistics

This database of annual statistics for OECD countries covers crude oil, NGL, refinery feedstocks and natural gas, as well as derived petroleum products. It includes detailed supply/demand balances, trade by origin and destination and stock levels and changes.

The main data from this system are published annually in the IEA/OECD publications *Oil Information* and *Natural Gas Information.*

iv) IEA/OECD Renewables Statistics

This database of annual statistics for OECD countries covers hydroelectricity, solid biofuels, geothermal, renewable municipal waste, wind, gas from biofuels, liquid biofuels, solar photovoltaics, solar thermal, tide/wave/ocean, non-renewable municipal waste and industrial waste. It includes electricity and heat

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production from renewable sources, and a supply/demand balances of renewable and waste products.

The main data from this system are published annually in the IEA/OECD publication *Renewables Information.*

v) IEA/OECD Energy Statistics

This annual database integrates data from the four IEA/OECD statistical database systems listed above to provide a summary of energy supply and demand for each OECD country. It includes detailed statistics on production, trade and consumption for each source of energy, expressed in original units (*e.g.* tonne, TJ, GWh).

The main data from this data system are published annually in the IEA/OECD *Energy Statistics of OECD Countries.* Detailed country notes referring to historical data can be found in this publication.

vi) IEA/OECD Energy Balances

Overall energy balances are constructed annually for all OECD countries from the basic energy statistics described above. The overall energy balance data are expressed in a common energy unit of tonne of oil equivalent (toe) and presented in a standard matrix format. The balances are published annually in the IEA/OECD publication *Energy Balances of OECD Countries* in which detailed country notes referring to historical data can be found.

vii) IEA/OECD Energy Prices and Taxes

The prices and taxes are published quarterly in IEA/OECD *Energy Prices and Taxes*.

viii) OECD Main Economic Indicators

OECD Main Economic Indicators is a monthly compilation of a range of indicators on recent economic developments for the 34 OECD member countries. Please refer to this publication for detailed notes regarding the selected indicators.

Latest year data: 2012

Data reported for 2012 in this publication are submitted to the Secretariat by member countries as preliminary data and are shown in this book as 2012e. Final 2012 data on electricity and heat will be submitted by OECD member countries to the Secretariat in Annual Questionnaires in late 2013. As a result, final data for 2012 and preliminary 2013 data will be published in the *Electricity Information* 2014 Edition.

Price data

Prices are published quarterly in IEA/OECD *Energy Prices and Taxes*, where complete notes on prices may be obtained. The OECD National Accounts has rebased the GDP and GDP PPP series from 2000 USD to 2005 USD. As a result, staring with the 2012 Edition, those series and all associated ratios now refer to 2005 USD.

Indices of real energy end-use prices

The methodology for calculating the real and nominal indices of real energy end-use prices is as follows:

For products where more than one price is available, a representative series is created for each country. The representative heavy fuel oil price is a combination of high sulphur fuel oil and low sulphur fuel oil. The representative motor gasoline price is a combination of the most consumed unleaded gasoline for recent time periods and leaded gasoline for earlier time periods.

For oil, the industry index includes representative heavy fuel oil, light fuel oil and automotive diesel, but not fuels used for electricity generation. The household index includes representative gasoline and light fuel oil.

Indices with the base year 2005=100 were computed for each price series from prices in national currencies and then aggregated over product groups, sectors and countries. The Paasche formula was used for index computation. The weights used were the physical quantities consumed, as published in the OECD/IEA *Energy Statistics of OECD countries*. To calculate the real price index, the nominal prices were deflated with country-specific producer price indices (2005=100) for the industry sector and with country-specific consumer price indices (2005=100) for the household sector. The regional aggregates were calculated as the weighted averages of country specific indices, using consumption quantities as the weights.

Energy end-user prices, taxes and price in national currencies

General definitions:

In general, end-use prices:

- Include transport costs to the consumer;
- Are prices actually paid (*i.e.* net of rebates); and

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- Include taxes which have to be paid by the consumer as part of the transaction and which are not refundable. This excludes value added tax (VAT) paid in many European countries by industry (including electric power stations) and commercial end-users for all goods and services (including energy). In these cases VAT is refunded to the customer, usually in the form of a tax credit. Therefore, it is not included in the prices and taxes columns in the tables. This also applies to automotive diesel for the EU countries. The VAT percentages shown in the country notes refer to a pre-VAT price that includes all other taxes.

The major exception to the above rules is the United States due to a lack of information. Although all energy products are subject to non-refundable taxes at least at the state and local level, only gasoline and automotive diesel include total average taxes. All other energy product prices shown exclude taxes since the national average of local taxes remains unknown and price data are collected on an ex-tax basis.

Conversion to euro

Prices and taxes prior to the date of entry into the Economic and Monetary Union (EMU) have been converted from the former national currency using the appropriate irrevocable conversion rate. The irrevocable conversion rate on 1 January 1999 was used for all countries, except Greece (fixed rate as of 1 January 2001), Slovenia (fixed rate as of 1 January 2007), Malta and Cyprus[1] (both fixed rate as of 1 January 2008), the Slovak Republic (fixed rate as of 1 January 2009), and Estonia (fixed rate as of 1 January 2012).

Country	Rate	Country	Rate
Austria	13.7603	Italy	1936.27
Belgium	40.3399	Luxembourg	40.3399
Cyprus[1]	0.585274	Malta	0.4293
Estonia	15.6466	Netherlands	2.20371
Finland	5.94573	Portugal	200.482
France	6.55957	Slovak Republic	30.126
Germany	1.95583	Slovenia	239.64
Greece	340.75	Spain	166.386
Ireland	0.787564		

This methodology facilitates comparisons within a country over time and ensures that the historical evolution (*i.e.* growth rate) is preserved. However, pre-EMU Euro are a notional unit and are not normally suitable to form area aggregates or to carry out cross-country comparisons.

1. Please refer to Part I Section 5, Geographical Coverage.

Sources

Most of the prices are submitted on a quarterly basis to the IEA Secretariat by Administrations; others are taken from national publications or web sites.

Oil products

By decision dated 26 January 1977, the European Commission initiated a weekly reporting system of end-use prices and taxes for the following products: Residual (Heavy) fuel oil RFO 1 (sulphur content $\leq$1 %); RFO 2 (sulphur content <2 %); heating gas oil (delivery size of 2-5 kl per transaction); automotive diesel oil, and Euro super 95 and leaded premium gasoline (pump prices). Prices are reported to the Commission as delivered prices and exclude rebates.

For some EU countries, no special series are available on heavy fuel oil prices for electricity generation and on light fuel oil for industry. They have been approximated as the ex-VAT prices for heavy fuel oil for industry and light fuel oil for households, respectively.

Coal

Given the great variety of coal qualities in domestic and international coal trade, a selection of a standard coal quality for international comparisons of end-use prices is not possible. Therefore, prices refer to the most common qualities for each country and are not necessarily comparable between countries. This is especially true for prices of coal used by households, where prices shown may refer to bituminous steam coal, anthracite, lignite or even coke.

In Austria, the United Kingdom and the United States, coal prices are available as average unit values (as average expenditure per metric ton of coal by industry, power plants, and households). These average unit values are the weighted average of all qualities and delivery sizes for which transactions have taken place. They are particularly useful for price comparisons between the four major energy sources when converted to a common heat unit and for price comparisons between countries on the basis of a single monetary unit.

Natural gas and electricity

For studies on price behaviour and policies in the field of natural gas and electricity, the concept of average unit value is also of particular importance. These two

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forms of energy are supplied under a multitude of contract or tariff conditions which link the prices to the quantity delivered, the continuity of the supply, load factors and the diurnal pattern of use. The contracts or tariffs may also include a fixed charge component.

However, when seeking a representative overall price of electricity and natural gas for broad sectors such as industry and households, the average unit value is the most appropriate. It is obtained either from utilities as average revenue per unit delivered or from industry or households as average expenditure per unit purchased. Most of the average unit values are only available on an annual basis.

The prices for natural gas refer to MWh using the gross calorific value of the gas. Prices for the net calorific value would be approximately 11% higher.

Prices per heat equivalent of 1 metric ton of oil

The prices expressed in these tables are in terms of the heat content of the fuel rather than price per physical unit (*e.g. tonne, litre*). They have been calculated using the country specific calorific value (heat content). These factors reflect the average net heat content of a given fuel in a given country. The tables at the end of this section show the net calorific values for each country that are used to convert from physical to energy units. Please see section 6 Conversion Factors and Calorific Values for more explanation.

Energy end-user prices in US dollars

In general, country differentials between national end-use prices expressed in U.S. dollars are heavily influenced by exchange rate differentials. However, world market prices of primary fuels in U.S. dollars are an important parameter for the pricing of final energy consumption, particularly for countries which rely heavily on energy imports.

The difference between world market prices and national end-use prices in U.S. dollars correspond to the remaining pricing parameters, *i.e.* transformation and distribution costs, non-internationally tradable energy sources (mainly hydro-power, but also natural gas), market structures (*e.g.* mix of large- and small-purchase lots), and the pricing policies of central or local authorities, which naturally include the national tax policies.

Household energy prices in US dollars: purchasing power parities versus exchange rates

In recent years, there have been wide fluctuations in exchange rates and there has been some concern regarding international price comparisons based on exchange rates which may not reflect the *relative purchasing power* in each currency.

An alternative method of comparison is provided by Purchasing Power Parities (PPP) which are the rates of currency conversion that equalise the purchasing power of different currencies. A given sum of money, when converted into different currencies at the PPP rates, buys the same basket of goods and services in all countries. In other words, PPP's are the rates of currency conversion which eliminate the differences in price levels between different countries.

The Purchasing Power Parities used here were developed jointly by the Economics and Statistics Division of the OECD and the Statistical Office of the European Communities (EUROSTAT) to enable international price comparisons to be made for GDP and its components. (For more information on the methodology, see *www.oecd.org/std/ppp*.)

Quarterly energy statistics

Readers who are interested in recent quarterly data should consult the OECD/IEA publication *Oil, Gas, Coal and Electricity Quarterly Statistics* which is published in January, March, June and September each year.

This book provides current, accurate and detailed statistics on quarterly production, supply and demand and trade of the major energy forms mainly in, but not limited to, the OECD area.

The information contained in this publication consists of:

Oil

- Production of crude oil and NGL for the major producers in the world;
- Refinery balances for crude oil, NGL, refinery feedstocks, and total (including inputs of origin other than crude oil and NGL);

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- Complete product balances of production, trade, refinery intake and output, final consumption, stock levels and changes;
- Crude, NGL and feedstock imports from 47 origins and exports to 24 destinations; and
- Trade data for main product groups, LPG and naphtha; imports from 44 origins and exports to 30 destinations.

Natural gas

- Balances of supply and consumption of OECD member countries; and
- Imports from 28 origins and exports to 20 destinations.

Coal

- World hard coal and brown coal production;
- World steam coal and coking coal trade; and
- Coking coal and steam coal imports and exports for major OECD countries.

Electricity

- Electricity net production, (separately from combustible fuels, nuclear, hydroelectricity, geothermal and other sources) in each of the OECD member countries, excluding Israel; and
- Imports, exports and (apparent) consumption in each of the OECD member countries, excluding Israel.

Monthly electricity statistics

Readers who are interested in timely monthly electricity production and trade data for OECD countries should consult the OECD/IEA on-line publication *Monthly Electricity Statistics*, which is published in the middle of every month on the IEA website.

The *Monthly Electricity Statistics* provides up-to-date information fully reconciled to the definitions used for the annual reporting. It contains an online archive of the monthly data that goes back to the year 2000.

The information contained in the *Monthly Electricity Statistics* consists of:

- Net electricity production, (combustible fuels, nuclear, hydroelectricity, and geothermal/wind/solar/other); and
- Total imports, exports and electricity supplied.

In this publication, data is provided for 33 of the 34 OECD countries and excludes data for Israel.

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4. COUNTRY NOTES

General notes applicable to all countries

These notes refer to data from 1960 to 2011. As a general rule, most series show a more detailed breakdown from 1970, due to limited availability of data prior to that year. Data on inputs to and output from combined heat and power plants and from heat plants may have been estimated by the Secretariat.

Prior to 1974, there is no split available between main activity producer and autoproducer electricity plants for any country.

Australia

For 2012 estimates, the Australian Administration provided natural gas production numbers which appeared too high. Information received after the preparation of this report suggest that 2012 production should have been about 47.03 Mtoe, an increase of 5%, not the 17% previously reported and included in this report.

In the 2012 edition, data for Australia were revised back to 2005 due to the adoption of the National Greenhouse and Energy Reporting (NGER) data as the main energy consumption data source for the Australian Energy Statistics. As a result, there are breaks in the time series for many data between 2004 and 2005. The Australian administration plans on revising the data in prior years as resources become available.

Data refer to fiscal year (*e.g.* July 2010 to June 2011 for 2011). For the 2002 data, the Australian Administration started to use a new survey methodology which caused shifts in the structure of industry consumption. The Australian Administration is planning to revise the historical series. Fuels used for generation by autoproducers are for single-fuel-fired units only. The use of fuel in multi-fired units operated by autoproducers is included in industry consumption. Inputs to and outputs from autoproducer CHP plants are not available prior to 1986. In 2002, the Australian Administration reclassified the types of plants between main activity producers and autoproducers.

The production of electricity from wind is available from 1994. Electricity production from solar PV starts in 1992 and from solar thermal in 2003. Prior to 1995, electricity production from biogases is included with natural gas.

Heat data are not available from 1992 onwards.

Prior to 1971 electricity consumption in the commercial and public services sector is included in industry. Prior to 1974, the breakdown of electricity consumption in industry and energy sub-sectors is not available and energy industry consumption is included in industry. Electricity consumption in coke ovens has been estimated by the Australian Administration from 1974 to 1999. Prior to 2006, electricity consumption in the mining and quarrying sector includes consumption in liquefaction/regasification plants. From 1990 to 2007, electricity consumption in the wood and wood products sector is included together with paper, pulp and printing.

The direct use of solar energy (mostly domestic solar panels) is available from 1974.

Capacity refers to net maximum capacity on 30 June.

Austria

Breaks in the series from 1995 to 1996 and from 1998 to 1999 are due to different methods of survey.

Electricity plants data may include some CHP plants operating in electricity only mode. Prior to 1981, all electricity production by CHP plants is included in

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electricity plants, and only production from combustible fuel sources is taken into account.

Prior to 1981, autoproducer CHP heat production is included in main activity producer CHP plants. For heat, own use is included in distribution losses.

Inputs to main activity producer electricity plants include inputs to CHP plants prior to 1981. Inputs of other oil products to autoproducer CHP plants were reclassified as refinery gas and natural gas in 2009.

Electricity consumption in non-specified transport represents tramways, electric busses, ski-lifts and cable cars. Electricity consumption in oil refineries includes consumption in gas works prior to 1991. Also prior to 1991, electricity consumption in the iron and steel industry includes consumption in coke ovens and blast furnaces.

Prior to 1991, consumption in commercial and public services includes small industries, offices in the tertiary sector and electricity use in electricity supply, district heating and water supply companies. From 1991, consumption in electricity supply, district heating and water supply companies is included in other energy sector. From 1990 – 2012, small amounts of electricity used in heat pumps have been included in the residential sector.

Only gross maximum electrical capacity is available. The breakdown of capacity by type of generation and fuel for autoproducer plants is not available from 1988 to 1992. In the 2012 edition, pumped hydro capacity was revised to include only the capacity relating to pure-part of the mixed-storage pumping plant.

Exports of electricity to non-specified/others are to Liechtenstein.

Belgium

The federal authorities changed their method of collecting data: instead of receiving data from the "Fédération des Producteurs d'Électricité" (FEP), the operators in the relevant sectors are surveyed by the Ministry of Economic Affairs using a survey based on that of the IEA. Moreover, the "Institut de Conseil et d'Études en Développement Durable" (ICEDD), through its co-ordinating role with respect to the regional authorities, provides complementary information (such as small off-grid power stations, and data on heat from renewable sources) which may not be collected by the FEP.

Breaks in the series may exist between 2007 and 2008 due to revisions of the NACE classifications.

There is no heat consumption from 2007 in the iron and steel industry because the installation concerned became an autoproducer in July 2006 and the heat is no longer sold.

Prior to 1982, electricity production in main activity producer CHP plants is included in production from electricity plants. Also, inputs of fuels for electricity generation in main activity producer electricity plants include inputs for heat production in CHP plants.

For 1998 and 1999, electricity production at main activity producer CHP plants with annual heat output below 0.5 TJ is reported with main activity producer electricity only plants.

In 2000, most autoproducer electricity plants were reclassified as autoproducer CHP plants; the heat production from these plants was used for internal industrial processes and not sold to third parties until 2005. Heat from chemical processes used for electricity production is available from 2005.

Heat output from CHP plants is not available prior to 1973.

The production of electricity from wind is available from 1987. Prior to 1982, data on electrical capacity by type of generation are not available.

Canada

The breakdown of electricity and heat generation between natural gas and oil products in main activity producer CHP plants has been estimated by the Canadian Administration starting in 1990. This may cause breaks in the time series between 1989 and 1990. For autoproducers generating electricity with process steam produced from biofuels and waste, the energy required to produce the initial steam is not taken into account by the Canadian Administration and as a result the efficiencies are overstated. Net electricity production by autoproducers prior to 1990 includes production from combustible fuel sources only. Starting in 2009, a new source has been used for electricity production from solar, wind, and tide. This new source covers production from solar and wind only from plants with capacity higher than 500 kW.

Heat production includes heat produced by nuclear power stations for distribution to other consumers.

Secretariat estimates have been made for certain inputs to CHP production based on output. However, incompatibility of data for inputs to and output from thermal production of autoproducers may result in

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variable efficiency rates. Inputs of fuels to heat plants are not available for 1979 to 1987.

Breaks in the series occur between 1973 and 1974 in agriculture, and between 1987 and 1988 in the industry sector. Consumption of electricity in coal mines is not available between 1982 and 1986. Consumption of electricity in oil and gas extraction is not available prior to 1987. In the 2013 edition, the Canadian Administration has allocated a large portion of 2010 and 2011 final heat consumption into statistical difference. The Secretariat has decided to allocate the final heat consumption to industry non-specified. The net calorific value provided in the coal questionnaire and the gas diesel oil and residual fuel oil net calorific values based on IEA oil product standards has been used as the basis for estimating the total amount of terajoules used for main electricity and autoproducer electricity plants. Electricity output in main activity electricity plants from other sources is electricity produced as a by-product of the transformation process from oil sands to sythetic crude oil.

Only gross maximum electrical capacity is available. From 2000 to 2002, data on capacity were estimated by the Secretariat based on Statistics Canada's "Electric Power Generating Stations" publication. Prior to 1981, data on electrical capacity by type of generation are not available.

Chile

Electricity production from other bituminous coal includes sub-bituminous coal.

The split of electricity generation by main activity and autoproducer and by fuel was estimated by the Chilean Administration for 1990 to 2003. From 2004-2007, the split includes estimations by the secretariat.

The majority of electricity generation from other sources is from a conveyor belt transporting crushed rock from high altitude to lower altitude in a mine. A small amount from waste heat is also included. Increases in electricity from natural gas in 2010 are due to the openings of new LNG terminals.

Detailed data on autoproducer electricity production by sector is available from 2009.

Prior to 2009, statistical differences are included in distribution losses. From 1990, consumption in paper and pulp includes forestry and consumption in agriculture is included in non-specified industry. In general, a new methodology has been applied for data since 1990, leading to other breaks in the time series between 1989 and 1990.

Data for peak load is available from 1999. Installed capacity by type of technology is not available.

Imports of electricity to non-specified/others are from Argentina.

Czech Republic

Data are available from 1971.

Electricity statistics from 1971 to 1989 have been estimated by the Secretariat, except for final consumption and trade which were submitted by the Czech Administration. Data from 1990 onwards have been officially submitted by the Czech Administration. This may lead to breaks in the series between 1989 and 1990. Prior to 1990, electricity production in main activity producer and autoproducer CHP plants is included in main activity producer electricity plants. The breakdown of net electricity production by source is not available prior to 1990. In 1999 and 2000 various big enterprises were divided, sold and merged. This causes breaks in the time series of all types of plants. The new reporting methodology used by the Czech Administration for biofuels and wastes causes some breaks in the time series between 2002 and 2003.

Other sources for heat production refer to recovered waste heat from the glass industry. Electricity generated from waste heat in CHP plants is included with the total production from combustible fuels.

Heat produced from heat pumps is reported from 2007, but the electricity inputs are not available. Heat produced from boilers is reported from 2010, but the electricity inputs are smaller than 1 GWh.

Data on heat production, and the corresponding fuel inputs, have been estimated from 1980 to 1989 based on consumption in the residential and commercial/public services sectors. Prior to that, inputs are included in industry. Heat production prior to 1990 excludes heat sold by industry. In addition, heat production prior to 1990 is reported under main activity heat plants because the breakdown by producer and plant type is not available before then.

Industrial waste use in main activity producer electricity plants is included with solid biofuels from 1996.

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Data on biogases and waste used in main activity producer CHP and autoproducer heat plants start in 1993.

From 1999 onwards, small amounts of heat have been exported to Slovak Republic.

The direct use of solar energy is available from 2004.

The breakdown of generating capacity is not available prior to 1990. Starting in 2000, the peak load data reported in main activity producers include the autoproducers value.

Denmark

The production of electricity from wind is available from 1978.

Heat data are not available prior to 1976. Geothermal and solar heat production for sale is available from 1989. Heat produced for sale in heat pumps starts in 1994.

From 1984 onwards, small amounts of heat have been imported from Germany.

The amount of heat reported under other sources is heat recovered from industrial processes and sold for district heating. The breakdown of industry heat consumption is estimated by the Danish Administration for 2010 and 2011.

Electricity consumption in non-specified energy industry includes consumption in district heating plants and use for the distribution of electricity.

The direct use of solar thermal energy is available from 1978.

Prior to 1981 for main activity producers, to 1994 for autoproducers, data on electrical capacity by type of generation are not available.

Estonia

Data for Estonia are available starting in 1990. Prior to that, they are included in Former Soviet Union in *Energy Statistics of Non-OECD Countries*.

Data reported under lignite are for oil shale. From 1990-1999 some electricity and heat production are reported under other oil products while the inputs are reported under the individual fuels. Revisions to classify the electricity and heat production by oil product are pending. Inputs of residual fuel oil and gas works gas to the transformation sector include shale oil.

Finland

A new survey system and a reclassification of the data led to breaks in the time series between 1999 and 2000.

Electricity production from biofuels and waste is not available between 1974 and 1976. Inputs of liquid fuels and natural gas to CHP plants are included with the inputs of these fuels to main activity producer electricity only and heat only plants prior to 1978. Electricity and heat production from biogases are available from 1996. The breakdown of net electricity production by autoproducers is not available before 1999. The decrease in electricity production in 2005 is mainly due to lower generation from coal and peat which was offset by increased electricity imports from Sweden.

Heat production from autoproducer CHP plants is available starting in 1996 and from autoproducer heat plants starting in 2000; corresponding inputs may be under-reported. Heat from chemical processes and associated electricity generation are available from 2004. The increasing heat production from heat pumps in 2007 and 2008 is from the new Katri Vala district heating and cooling plant. Other sources includes hydrogen and purchased steam.

Consumption of electricity in the industry sub-sector machinery includes consumption in transport equipment prior to 1995. Consumption of electricity in non-specified transport corresponds to use for urban transport systems.

Consumption of heat in residential includes consumption in commercial and public services and agriculture.

Net maximum electrical capacity data are not available prior to 1974. Prior to 2000, capacity reported in autoproducers steam generation includes all types of generation.

France

A new survey and a reclassification between main activity producer electricity plants and autoproducer electricity plants may cause breaks in the series for other bituminous coal between 1998 and 1999. The French Administration is working to reconcile their data collection methods for the inputs and the outputs for electricity generation. Plants using municipal waste were reclassified as autoproducer CHP plants from 1995, which leads to a break in the time series.

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From 2000-2008, there are further classification issues for inputs of and outputs of electricity from oil.

Net electricity production by autoproducers prior to 1983 includes production from combustible fuel sources only. Net electricity production by autoproducer CHP plants is available from 1989. Electricity production from wind is available from 1993.

Due to a new survey, for the 2007 edition the French Administration revised the heat data back to 2000 and included heat produced from fossil fuels in CHP plants. Data for heat produced from fossil fuels in heat only plants are not available. However, it is not possible to separate out the amount of heat not sold in autoproducer plants, so these amounts are included. But, no double counting occurs since the corresponding inputs have not been included in final consumption. In 2005, autoproducer CHP efficiencies for other biogases drop due to the opening of a larger, less efficient plant.

There are major breaks in the time series in 1965 when more detailed breakdown of data on electricity consumption became available. The industry classifications used by the French Administration were changed in 1986.

A large part of energy industry electricity consumption in non-specified is consumption in uranium treatment plants; this electricity consumption is not available prior to 1980. Consumption of electricity in the nuclear industry is not available prior to 1980. Consumption of electricity in oil refineries is included in oil and gas extraction from 1988 to 2000. Total energy industry includes the statistical differences from 1992. Consumption of electricity in non-specified includes exports to Monaco prior to 1992.

From 1995, due to a change in the economic activity classification, data have been reported in non-specified other sectors.

Prior to 1981 and after 1998, data on electrical capacity by type of generation and fuel are not available.

Germany

Data for Germany include the new federal German states from 1970, but only the former Federal Republic of Germany from 1960 to 1969. A new survey for the renewable products can cause breaks in the time series between 1998 and 1999.

GDP figures prior to 1991 are based on conversions made by the German Institute for Economic Research (*Deutsches Institut für Wirtschaftsforschung*) and the former Statistical Office of the GDR (*Statistisches Amt der DDR*). These conversions are calculations which are highly dependent on specific hypotheses and do not necessarily reflect economic realities.

Electricity production in electricity plants includes production from CHP plants prior to 2003. In 2007, many main activity CHP plants that burn biofuels and waste were reclassified as electricity only which results in breaks in the time series between 2006 and 2007. Data on electricity production from wind and solar are available from 1986 and 1990, respectively. In some instances, electricity generation from nuclear, hydroelectric, solar and wind in autoproducer electricity plants are confidential or non-available and, therefore, included in main activity producer electricity plants. The same applies to biogases from 1999. The German Administration started reporting near the surface geothermal energy in 1995, which leads to a break in the time series with 1994, where only deep geothermal energy is reported. From 1999-2008, small amounts of electricity generation that are not accounted for in the data submission have been attributed to various combustible fuels. Electricity production from other sources is available starting in 2009. This refers to the production of electricity from turbines which are located at pressure drops in fluid transport and from purchased waste heat.

Due to the implementation of the Energy Statistics Act, data collection concerning heat produced in heat plants and district heating plants became more efficient and more complete. This leads to breaks in the time series between 2002 and 2003 and between 2003 and 2004. Detailed data by fuel are not available for total heat production. The non-allocated part is reported as “heat production from non-specified combustible fuels”. Starting in the 2010 edition, the German Administration changed their methodology for reporting heat. From 2007 onwards all heat production in autoproducers is considered as non-sold (*i.e.* for self-use) and, therefore, not reported. Inputs for this heat production are no longer reported in the transformation sector. Also, more information on district heat has become available. This causes breaks in the time series between 2006 and 2007. Prior to 1993, all heat production from BKB/peat briquettes is included in main activity CHP plants. Heat production from Natural Gas was estimated based on the revisions of natural gas inputs by the German Administration for 1995-2000 and 2003-2006 for Autoproducer CHP, Main Activity CHP, and Main Activity Heat. The electricity and heat is expected to be revised in the *Electricity Information* 2014 Edition.

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Heat production and consumption prior to 1970, have been estimated by the Secretariat based on *Energiebilanz der Bundesrepublic für das Jahr 1990* provided by the German Institute for Economic Research.

Prior to 1991, electricity trade data includes only trade of the Former Federal Republic of Germany.

Starting in 1984, small amounts of heat have been exported to Denmark.

Between 1971 and 1980 electricity consumption in coal mines includes consumption in coke ovens and BKB plants. The German Federal Statistics Office reclassified some industrial branches which may cause a break in the time series in the industry subsectors of industry between 1994 and 1995.

The breakdown of heat consumption is not available for 2003 to 2006. The data for that period were estimated as follows: the transformation and distribution losses were estimated based on previous years, the heat produced by autoproducers was included in non-specified industry, and the remaining consumption included in non-specified other.

Prior to 1974, data on electrical capacity by type of generation are not available. Electricity generating capacity before 1991 is for the Former Federal Republic.

Greece

No production of solar heat is reported. Production or consumption of distributed heat (heat sold) that is produced from lignite is available from 1997.

In 2008 a new plant using refinery gas started operating in an experimental phase. For this reason the efficiency is low.

Electricity consumption in iron and steel and in the non-ferrous metals industry prior to 1971 has been estimated by the Secretariat. There is a break in the series between 1991 and 1992 for electricity consumption in transport. Prior to 1981, data on electrical capacity by type of generation are not available.

Hungary

Data are available from 1965.

The Hungarian Administration reclassified some of their plants in 1996 and 2000 which may lead to breaks in the time series.

The electricity and heat statistics were revised by the Hungarian Administration in early 2000. The revision of heat production data to conform to IEA reporting methodologies may result in a mismatch of fuel inputs with electricity and heat outputs by plant type, causing high efficiencies.

Autoproducer electricity, CHP, and heat plants using coke oven gas and blast furnace gas were reclassified as main activity power plants in 1998. Prior to 2000, electricity output from sub-bituminous coal is included with lignite. Nuclear electricity production in main activity producer electricity plants is available from 1983. Electricity and heat production from solid biofuels in autoproducer CHP plants is available from 1995. Geothermal heat production in main activity producer heat plants is also available from 1995.

Direct use of geothermal heat is available from 1990. Direct use of solar thermal heat is available from 2001.

Iceland

Electricity production from geothermal sources in main activity producer CHP plants is available from 1992. In 1998, 60 MW of generating capacity was installed in the geothermal CHP plant at Nesjavellir. Since the plant was inoperable for four months, production of geothermal heat decreased compared to 1997. However, the extra electricity capacity caused electricity production from geothermal to almost double over the same period.

Heat production from municipal waste is available from 1993. In 2002, the increase of heat produced by geothermal was due to the installation of a third unit at the Nesjavellir CHP power plant. The increase in hydro and geothermal electricity production from 2007 is due to expansion of the aluminium industry.

Energy industry consumption of electricity refers mainly to the use of electricity by the geothermal industry to pump hot water from underground sources. From 1991, it includes electricity used for the transport by pipeline of hot water from Nesjavellir to Reykjavik. Prior to 1970, total final consumption includes inputs to and outputs from heat production and non-energy use. After 1970, data on inputs and outputs in CHP plants and in main activity producer heat plants (district heat plants) and for non-energy use are separately specified. The consumption of electricity reported in non-specified other sectors corresponds to

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a NATO base at Keflavik airport which closed in 2005. Residential sector includes agriculture prior to 1983. The industrial classifications used by the Icelandic Administration changed in 1987. The increase of electricity consumption in the construction sector from 2003 to 2007 is due to the drilling of tunnels for the Kárahnjúkar power plant. Prior to 2008, all heat for space heating was reported in residential. From 2008 a portion is estimated by the Iceland Administration to be consumed in commercial and public services.

Ireland

Electricity production from wind begins in 1992 and from landfill gas in 1996.

Fuels used by autoproducers have been estimated by the Irish Administration for 1991 and 1992. Inputs of peat in kilo tonnes (kt) for electricity production have been estimated by the Secretariat prior to 1992 based on data submitted in terajoules (TJ) by the Irish Administration. Inputs of hard coal in autoproducer CHP plants have been estimated by the Secretariat from 1984 to 1989.

Prior to 1990, electricity consumption in agriculture is included with residential. Electricity consumption in the iron and steel industry includes consumption in the non-ferrous metals industry prior to 1990. The decrease of electricity consumption in the iron and steel industry from 2001 onwards is due to the fact that the main steel plant in Ireland ceased production. Electricity used for urban transport is included in non-specified transport. The increase in 2004 is due to the new light rail transit system in Dublin.

Direct use of geothermal heat and solar thermal heat is available from 1989 and 1990, respectively.

Prior to 1981, data on electrical capacity by type of generation are not available for main activity producers.

Capacity reported under other sources corresponds to cross-border transmission capacity with Northern Ireland.

Israel

Electricity production from wind begins in 2001. Data on the breakdown of hydroelectric plants are available from 2008. For 2009, solar photovoltaic electricity generation is estimated. Data for oil shale are included with lignite.

Italy

From 2000 onwards, the Italian Administration defines electricity and heat production from autoproducers as including generation from producers that consume more than 70% of their own electricity production. However, for the 2000 to 2002 period, all electricity production from autoproducers is reported with main activity producers.

Prior to 2004, electricity production from orimulsion is confidential and is included with residual fuel oil. The production of electricity reported in the category other fuel sources refers to produced from turbines which are located at pressure drops in fluid transport. Prior to 1984, net electricity production by autoproducers includes production from combustible fuel sources only. From 1989, not all outputs are reported for industrial waste used in autoproducer CHP plants.

Heat production is reported starting in 2004 and includes self-generation in industry. With the introduction of a new survey in 2008, amounts of naphtha and other kerosene that were previously included in other oil products have been reported separately in autoproducer CHP plants.

The breakdown of renewables and waste inputs into electricity, heat and CHP plants is available from 1989 only. Prior to that year, the total of the different fuels involved is reported as non-specified renewables. Prior to 2009, sub-bituminous coal used in main activity electricity plants was included under other bituminous coal.

Consumption of electricity in transport includes electricity used for pumping in oil pipelines from 1981. Other energy industry includes electricity consumption for blast furnaces. From 2000 it also includes consumption for the distribution of gas, and prior to 1989 consumption of electricity used for uranium extraction. The breakdown of heat consumption by sector has been estimated by the Italian Administration.

Prior to 1981, data on electrical capacity by type of generation are not available.

Japan

Data for the entire time series refer to fiscal year.

Fuels used and corresponding electricity and heat produced in CHP plants are not included in the data series. Inputs of biofuels and waste for electricity production and related outputs are available from 1982.

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Net electricity production by autoproducers prior to 1982 includes production from combustible fuel sources only. Net electricity production by autoproducers in the transport sector is included in non-specified prior to 1982. Net electricity production by autoproducers in the energy industry is not available prior to 1982. The production of electricity from wind began in 1993.

The IEA Secretariat estimated the photovoltaic (PV) electricity generation from autoproducers starting in 1992 based on an average capacity factor of 12% and capacity data for autoproducers. Autoproducer PV capacity is derived from data from the Japanese Administration as well as the IEA Photovoltaic Power Systems Programme (IEA-PVPS) report, "Trends in Photovoltaic Applications" published in 2012. The capacity factor was based on the report "National survey report of PV Power Applications in Japan 2009", published in 2012 by IEA-PVPS. The corresponding electricity consumption has been included with non-specified other consumption.

Prior to 1998, the electricity produced using TRT technology (Top pressure Recovery Turbines) was included with electricity generated from solid biofuels. Starting in 1998, it is included with electricity generated from coal gases.

Fuels used and heat produced for sale by autoproducers from heat plants are not available. Heat production from geothermal and solar thermal sources in Japan is not reported by the Japanese Administration. Heat produced for sale in main activity heat plants is not available prior to 1972. Heat produced for sale in main activity producer heat plants from waste heat and from electric boilers is available from 1977 and 1983, respectively.

Between 1972 and 1976, the use of combustible fuels in main activity producer heat plants is included in non-specified. Fuels used to produce heat for sale in heat plants are not available prior to 1977.

Consumption of electricity in non-specified industry includes wood and wood products and construction prior to 1982. Electricity consumption in urban transport systems is included with rail.

Prior to 1981, data on electrical capacity by type of generation are not available for main activity producer plants. Prior to 1974, data on electrical capacity by type of fuel are not available for autoproducer plants. Electricity generation capacity for nuclear power increased in 1997 due to the commissioning of two nuclear plants. Due to the events related to the March 2012 tsunami, the Japanese authorities decided to scale back the level of their nuclear program.

Korea

Data are available from 1971.

Electricity statistics from 1971 to 1993 are estimated by the Secretariat based on the Korean National Statistics. Data from 1994 onwards have been submitted by the Korean Administration. This leads to breaks in the series between 1993 and 1994.

Before 1994, electricity production from main activity producer CHP plants is included with main activity producer electricity only plants. In 2002, the Korean Administration started to report electricity and heat production by autoproducers using natural gas and petroleum products which were not reported before. Electricity generation reported under other sources is from fuel cells. Electricity production using heat from chemical processes in copper and zinc plants is available from 2005; the corresponding heat inputs are estimated. Heat from chemical processes that is sold is available from 2008. Prior to 2009, autoproducer heat production includes amounts of unsold heat.

Heat data are available from 1993. For 1993 to 1999, the breakdown of heat output by type of fuel has been estimated by the Secretariat. The breakdown by sector of heat production in autoproducers is estimated by the Korean Administration based on consumption data of purchasing companies. Heat consumption by sector is available from 2000.

Prior to 2007, production and consumption of electricity and heat in oil refineries and LNG liquefaction/regasification plants are included in the industry sector. Prior to 2008, sales of electricity by Korea's main electricity distributor, KEPCO, to the non-ferrous metals sector are included in iron and steel consumption. Data for electricity consumption in the transport equipment sector are available from 1994 and are included in the machinery sector until 2000. Heat consumption by subsector was reclassified in 2010 due to new information available on heat sales from autoproducers to end-users by sector.

The breakdown of generating capacity by fuel is not available prior to 1994.

Luxembourg

Data on the inputs of natural gas and gas/diesel oil for electricity and heat production are confidential starting in 2010.

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Most of the hydro production shown for Luxembourg is from the Vianden pumped storage plant and is exported directly to Germany. For 1989, the electricity production by autoproducers by fuel was estimated by the Secretariat based on fuel inputs submitted by the Luxembourg Administration. Net electricity production by autoproducers prior to 1990 includes production from combustible fuel sources only. Electricity from natural gas for autoproducer CHP plants are available starting in 1995 and for main activity CHP plants starting in 1996. Electricity production from biogases are available from 1999. The increase in electricity production in 2002 was due to a new natural gas combined cycle power plant. Heat production from biogases is available from 2010. In the 2012 edition, heat production from biogases in autoproducer CHP plants was removed from 2000-2009 because it was discovered the heat was not sold.

The iron and steel industry stopped production of electricity at the end of 1997.

Starting in 2005, data for electricity transmission and distribution losses were obtained from the network operator. Prior to 2005, they were estimated by the national administration.

The breakdown of electricity consumption in industry is not available from 1990-1999.

Prior to 1995, data on electrical capacity by type of generation are not available for autoproducers. Due to the lack of blast furnace gas, the iron and steel industry stopped generating electricity at the end of 1997. Therefore, electrical capacity by combustible fuels declined.

Mexico

Electricity statistics are available from 1971. In the 2012 edition, autoproducer data was revised to be consistent with the data presented by the national Energy Regulatory Commission (Comisión Reguladora de Energía).

The breakdown of net electricity production by autoproducers is available from 1993. Electricity production from wind and solar photovoltaic is available from 1990. Electricity output from biofuels and waste is available from 1998. New autoproducer electricity plants fuelled with coal gases were put on line in 1999. Prior to 1996, gas/diesel oil inputs to autoproducer electricity plants were only of diesel.

Some electricity consumption in the energy industry is included in the industry sub-sector where it was generated (*e.g.* the chemical industry, as well as in non-specified industry).

Net maximum electrical capacity for autoproducers is not available prior to 1974. The breakdown of generating capacity for main activity producer electricity plants by combustible fuels is not available prior to 1982. Production and generating capacity of main activity producer electricity plants from wind is available from 1994.

Netherlands

Electricity from other sources includes generation from chemical waste gases and heat bought from other industries. For 1970 to 1973, electricity output from autoproducer CHP plants has been included with main activity producer CHP plants. Electricity production from and inputs to main activity producer CHP plants are included with main activity producer electricity plants prior to 1982. Net electricity production by autoproducers prior to 1988 includes production from combustible fuel sources only. Electricity production from solar photovoltaic is available from 1992. Net electricity production by autoproducers in the energy industry is not available prior to 1993. The decrease in electricity produced from nuclear in 1997 is due to the closure for five months of one nuclear power plant. For the 2007 edition, the Dutch Administration implemented a reporting methodology which causes some breaks in the time series between 2004 and 2005.

Heat production from main activity producer CHP plants and heat plants is available from 1982. Heat production by fuel in heat plants prior to 1987 are estimated by the Secretariat based on fuel inputs submitted by the Dutch Administration. Heat produced from combustible renewables is available from 1990.

Heat production in commercial and public services includes production in agriculture.

Inputs of hard coal for electricity production from 1981 to 1989 in terajoules (TJ) are estimated by the Secretariat based on data submitted in kilotonnes (kt) by the Dutch Administration. Prior to 2008, a few small autoproducer electricity plants using solid biofuels were included with main activity plants for reasons of confidentiality.

The strong increase in electricity trade in 1999 is caused by the liberalization of the Dutch electricity

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market. Until 2003, trade data are based on contracted quantities instead of physical flows.

Electricity consumption in commercial and public services includes small users in other sectors. Electricity consumption in non-specified transport corresponds to consumption for road traffic. Increasing electricity consumption in agriculture is due to the expansion of the greenhouse farming sector. Prior to 1979, electricity consumption in agriculture is included in commercial and public services.

Data on direct use of solar thermal are available from 1988.

Prior to 1981 for main activity producer plants and 1982 for autoproducers, data on electrical capacity by type of generation are not available.

New Zealand

There are several breaks in the series between 1987 and 1988 due to a reorganisation of government departments during 1987. The industry classifications used by the Administration of New Zealand were changed in 1991. In the 2012 edition, electricity and heat data were revised back to 1990.

Prior to 1994, data refer to fiscal year (April 1993 to March 1994 for 1993). From 1994 data refer to calendar year. As a result, there are breaks in the series between 1989 and 1990.

Electricity production by autoproducers from natural gas and from oil has been estimated by the Secretariat from 1970 to 1973. Electricity production by autoproducers from geothermal is available from 1990. In 1999, a reclassification of autoproducer plants causes some breaks in the time series. For 2002 and 2003, natural gas autoproducer electricity includes generation of electricity from on-site heat/steam recovery during the combustion of carbon monoxide (CO) gas from the iron making reduction and melting process.

Heat from chemical processes used for electricity production is available from 2004 and corresponds to acid plants in the fertiliser industry where sulphur is the main input.

From 1974 to 1993 distribution losses include the statistical differences. Electricity consumption in pulp, paper and printing is included in wood and wood products prior to 1991. There are breaks in the time series between 1996 and 1997 for electricity consumption due to a new NZ Standard Industrial Classification (NZSIC).

Prior to 1981, data on electrical capacity by type of generation are not available. Generating capacity for autoproducers is available from 1994.

Norway

No data on electricity production from solar energy are submitted to the IEA by the Norwegian Administration. Prior to 1991, net electricity production by autoproducers by industry sub-sector was estimated by the Secretariat based on data submitted by the Norwegian Administration. Electricity production from wind is available from 1992. Breaks in the time series between 1996 and 1997 and between 2001 and 2002 are due to a reclassification of main activity producers and autoproducers. The electricity generated from other sources represents electricity from waste heat.

Own use of electricity in 2008 is based on preliminary monthly statistics as opposed to final annual data for previous years.

The increase in gas-fired generating capacity and the associated production of electricity in 2007 is due to the opening of a new plant at Kårstø in late 2007.

Heat production is not available prior to 1983. Heat production from heat pumps and electric boilers (and the electricity used for this production) are available from 1989. Heat production from biogases is available from 1995. Heat produced in autoproducer heat plants from chemical processes and from other sources and used for electricity production was estimated by the Secretariat for the period 1990 to 2006.

Data on inputs and outputs in heat plants are not available prior to 1983 for main activity heat plants and prior to 1988 for autoproducer heat plants.

Distribution losses may include statistical differences. The breakdown of heat consumption by industry sub-sector was expanded in 1992, reclassified in 1994 and collected by a new reporting system in 1997.

Consumption of electricity for pipeline transport is included in oil and gas extraction.

Electricity trade with the Netherlands begins in 2008 with the operation of a cross-sea cable interconnection between the two countries.

Net maximum electrical capacity of pumped storage plants is not available from 1970 to 1972.

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Poland

Electricity production in autoproducer electricity plants is available from 1986.

Gross heat production from autoproducer CHP plants includes the unsold heat for own use between 1988 – 1995. In order to alleviate this, the Polish Administration adopted new methods to estimate the production of heat sold in autoproducer heat plants (1993) and in autoproducer CHP plants (1995). This causes breaks in the time series between 1992 and 1993, and between 1994 and 1995 for heat production and fuel inputs in these plants and for heat consumption in industry sub-sectors. Direct use of geothermal heat is available from 2000 and direct use of solar thermal heat in commercial/public services from 2002 and in residential from 2009. In 2008, a number of CHP plants were reclassified from autoproducer to main activity producer due to an industry re-organisation. Heat production from heat pumps is available from 2009.

Prior to 1995, heat consumption in the energy industry includes process heat not sold.

Portugal

Production of electricity in main activity producer CHP plants and the associated fuel inputs are not available prior to 1980. Production of electricity from solar photovoltaic and wind are available from 1989. Net electricity production by autoproducers prior to 1992 includes production from combustible fuel sources only. New plants fuelled by municipal waste started in 1999. Electricity production from other oil products refers to methanol.

To conform to the IEA methodology, heat produced from biofuels and waste (mainly black liquor) in autoproducer CHP plants is not accounted for since it is not sold, while the electricity produced in these plants is included. In 2007, some power plants that were previously reported as main activity CHP were reclassified as autoproducer CHP. The power station that burns industrial waste started to work as a CHP plant in 2007, whereas previously it was only producing electricity.

Data on direct use of solar thermal heat and geothermal heat are available from 1989 and 1994, respectively.

Peak load for main activity producer plants includes the autoproducers data and is not available prior to 1986.

Slovak Republic

Data are available from 1971.

Electricity and heat production from combustible fuels from 1990 to 2000 have been estimated by the Secretariat based on the data on fuel used for electricity and heat plants reported in the annual fuel questionnaires. Prior to 2001, electricity generation from primary solid biofuels, municipal waste and biogases are included with industrial waste. The IEA Secretariat estimated the photovoltaic (PV) electricity generation in 2010 by the reported PV capacity by a capacity factor of 9.7%. The capacity factor was based on an annual yield published in a national report in 2009 by the IEA Photovoltaic Power Systems Programme. The corresponding electricity consumption was allocated to the residential and commercial and public services sectors.

The breakdown of net electricity and heat production by source has been estimated by the Secretariat for the period 1990-2000.

The breakdown of trade by origin and destination is available from 1993.

Direct use of geothermal heat is available from 2001 and of solar thermal heat from 2005.

The low electricity consumption in petroleum refineries in 2003 and 2004 is due to a change in ownership and work carried out on a refinery.

Data for generating capacity are not available prior to 1995. The breakdown of installed capacity by type of generation/fuel is available from 2001.

Slovenia

Data for Slovenia are available starting in 1990. Prior to that, they are included in Former Yugoslavia. A new energy data collection system was implemented in January 2001, causing some breaks in the time series between 1999 and 2000.

Surveys for data on heat consumption are available from 2003 onward for the residential, industry and energy sectors. Prior to 2003 the data was estimated by the Slovenian national administration.

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Spain

Prior to 1983, net electricity production by autoproducers includes production from combustible fuel sources only and net electricity production by autoproducer CHP plants is included in electricity plants. From 1983, net electricity production by autoproducers has been estimated by the Spanish Administration. Prior to 1987 electricity production in main activity producer CHP plants is included with production from main activity producer electricity plants. Prior to 1989 inputs and outputs from the use of biofuels and waste to generate electricity and/or heat (*i.e.* comprising solid and liquid biofuels, industrial waste, municipal waste and biogases) are reported under non-specified biofuels and waste. Electricity production from wind and solar are reported from 1989 when data became available. Production by autoproducer CHP is included with autoproducer electricity for petroleum products prior to 1990. The large increase in electricity output from main activity producer electricity plants fuelled by natural gas in 1997 is due to the opening of a new plant. Electricity from solar thermal plants is available from 2007. A reclassification of plants from main activity to autoproducer in 2008 has led to breaks in the time series for electricity production between 2008 and 2009. For 2004 and 2005, electricity production from gas diesel is included under heavy fuel oil. Electricity reported under other sources is from waste heat.

Transmission and distribution losses are estimated by the Spanish administration. Starting in 2006, a new method was used to estimate the losses from final consumption data resulting in a break in time series between 2005 and 2006.

Direct use of solar thermal heat and geothermal heat are available from 1994.

Prior to 1980, data on electrical capacity by type of generation are not available and from 2003 no breakdown of capacity by type of fuel and generation type is available. From 2004, capacity of autoproducers is included with main activity producers.

Sweden

Prior to 1987 net electricity production by autoproducer plants includes data for CHP plants only. From 1987, the breakdown of net electricity production by industry for autoproducer electricity plants is available. Prior to 1992, electricity production from biogases is included with wood/wood waste.

Heat produced in main activity producer CHP plants is not available prior to 1974; heat produced in main activity producer heat plants is not available prior to 1980. Heat produced for sale by autoproducer heat plants is available from 1992. Heat produced for sale from heat pumps and electric boilers is reported from 1992. Heat production from petroleum products in main activity producer CHP plants includes heat recovered from flue-gas condensing for 1997 and 1998.

Consumption of heat in industry and other sectors is available from 1984. Consumption of electricity for distribution of district heat is included in other energy industry.

Data on direct use of solar thermal are available from 1989.

The breakdown of generating capacity of main activity producer and autoproducer electricity plants by fuel is not available from 1990 to 2003 and from 2006 onwards. Peak load data for main activity producer plants includes data for autoproducer plants from 1992. Generating capacity of main activity producer electricity plants includes autoproducer plants prior to 1984. Prior to 1981, data on electrical capacity by type of generation are not available for main activity producer plants.

Switzerland

The allocation of electricity production in main activity producer electricity only and CHP plants between 1967 and 1973, and in main activity producer CHP and autoproducer CHP plants in 1974 are Secretariat estimates. Solar electricity production by autoproducers is available from 1990. Data for pumped hydro electricity production by autoproducers data are available from 1996.

Heat production includes heat sold by nuclear power stations and distributed to other consumers. Prior to 1978, heat output from CHP plants is not available. A decrease in the use of natural gas in main activity CHP plants in 2007 is caused by the reduced operation of one plant after the start-up of a new waste-incineration plant and the shutting down of another plant. Use increases again in 2008 due to the restarting of a district heating plant.

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Electricity consumption in the transport equipment industry is included in the machinery sub-sector. The breakdown of final consumption of electricity in the industry sector from 2000 to 2001 were estimated by the Secretariat.

Direct use of solar thermal heat and geothermal heat is available from 1990. Geothermal direct use is overstated as it refers to heat production by geothermal heat pumps, which include inputs from electricity and/or gas in the transformation process.

Electricity generating capacity for liquid fuels in main activity producer plants includes all combustible fuels prior to 1990. For 1990 to 2007 the split of hydro and pumped hydro capacity between main activity producers and autoproducers is estimated based on the split of capacity at peak load.

Electricity trade to and from the country for non-specified/others non-specified represents trade with Liechtenstein.

Turkey

Data on electricity generated from biofuels are available from 1991. In 1995, the Turkish Administration reclassified autoproducer plants by type and source to be consistent with IEA definitions. This causes breaks in the time series between 1994 and 1995 for electricity production in these plants. Electricity production from wind is available starting in 1998.

A new gas fired main activity producer CHP plant was put into operation in 1999 and a new autoproducer electricity plant fuelled with coking coal started in 2000. In the 2006 edition, the Turkish Statistical Office started providing electricity and heat output on the basis of a new survey that allowed for the revision of the time series back to 2000. This causes breaks in the time series between 1999 and 2000.

Comprehensive data on electricity consumption are available from 1973. This causes a break in the series between 1972 and 1973. Consumption in the machinery sector includes transport equipment. Prior to 1998, electricity consumption in wood and wood products sub-sector includes that of pulp, paper, and printing industry.

Net electricity generating capacity by type of generation for both main activity producers and autoproducers is not available prior to 1999. Generating capacity reported in other type of generation corresponds to gas engines.

Imports of electricity from Turkmenistan are not physical quantities, but contracted quantities that are imported via Iran. Exports of electricity to non-specified/others are to Iraq and Syria.

United Kingdom

The reorganisation and subsequent privatisation of the electricity supply industry in 1990 results in some breaks in the time series. In 1996, the break in the electricity production from nuclear time series is due to the reclassification of plants from autoproducer to main activity producer plants. Data on electricity production from solar is available from 1999 and electricity production from wind is available from 1989.

Prior to 1988, electricity output from CHP plants was included in autoproducer electricity plants. For the United Kingdom, it was necessary to combine figures for main activity producers and autoproducers in order to prevent the disclosure of information relating to less than three electricity generating companies, since this information is considered confidential. For this reason data for main activity producer CHP plants have been included with autoproducer CHP plants from 1988. Also, inputs of and output from natural gas in main activity producer electricity plants are included in autoproducer electricity plants for 1990. Prior to 2003, all outputs of electricity and heat from oil products are reported in the other oil products category. From 2007 onwards, outputs of petroleum coke from main electricity plants are included in residual fuel oil. Heat production from autoproducers is available starting in 1999.

From 1984 onwards, the electricity consumption in the industry non-specified sub-sector includes that of the wood and wood products sub-sector and unallocated consumption. Electricity consumption in coal mines includes consumption in patent fuel plants. Consumption in gas works includes electricity use in the transmission/distribution of public supply gas. Consumption in the machinery sub-sector includes that of the transport equipment industry before 1996. Consumption in the non-metallic mineral products sub-sector includes mining and quarrying. Starting in 1990, small amounts of electricity used in heat pumps have been included in the residential sector. In the 2012 edition, the data for electricity consumption in transport sector was reclassified by sub-sector resulting in a break in time series between 2003 and 2004. Prior to 2004, non-specified transport includes consumption for traction by urban rails and road vehicles,

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and consumption for non-traction by railways and bus stations and airports. From 2004 onwards, non-specified transport includes consumption by road vehicles only. Prior to 2004, electricity consumption in rail refers to industrial rail only. From 2004 onwards it includes both industrial and urban rail. The break in the electricity consumption in the residential sector between 2004 and 2005 is due to a revision in methodology for allocating by sector.

Prior to 1981 for main activity producer plants and prior to 1983 for autoproducers, data on electrical capacity by type of generation are not available.

United States

There are breaks in the series concerning the total production of electricity and heat in the United States. Prior to 1989, there are no data available for autoproducers. Electricity production in main activity producer CHP plants is available from 1991. Comprehensive data on electricity and heat production and consumption in main activity producer electricity, CHP and heat plants and autoproducer electricity and CHP plants are not available for all years. The selling of main activity producer plants to autoproducers may cause breaks in the series between 1998 and 2000. Data on electricity used for pumping and electricity production from pumped storage plants are available from 1987.

For the 2003 edition the US Administration changed the definition of what it reports under autoproducers. Prior to 2000, autoproducers include small and independent power producers which under IEA definitions are considered as main activity producers. Production from these small and independent power producers account for about 25% of reported production of electricity by autoproducers in the United States. This reclassification causes breaks between 1999 and 2000. For the 2009 edition the US Administration changed their methodology for calculating heat production in CHP plants, and revised data back to 2006. This leads to breaks in the time series between 2005 and 2006. Electricity generation reported under other sources is from purchased steam. From 2007, the industrial waste category includes recovered heat from industrial processes. Accurate accounting of coke oven gas and refinery gas inputs is not always possible and can lead to efficiencies of over 100% in main activity producer CHP plants.

Data for heat produced in main activity producer heat plants are available from 1992. Since 1995, heat data are no longer collected and have been estimated by the US Administration, which causes breaks in the time series between 1994 and 1995.

Sub-bituminous coal inputs for electricity and heat production are included in hard coal before 1983. Prior to 1991 some of the fuel inputs to electricity and heat production reported for autoproducer plants are reported as final consumption in the particular economic sector in which the autoproducer is operating. Data for peat are confidential between 1994 and 1998 and from 2000 are not reported. Prior to 2001, data on plants consuming other bituminous coal, sub-bituminous coal and lignite have been estimated by the Secretariat using information provided in the EIA's *Annual Electricity Generator Report – Utility.* From 2004 onwards, the EIA has reported electricity and heat production from anthracite under sub-bituminous coal. The IEA Secretariat estimated the split of output by fuel type based on the assumption that the plant efficiencies of the aggregate are equal to that of each part. The decline in patent fuel used for electricity production in 2008 and subsequent cessation of the time series in 2009 is a result of the termination of the patent fuel tax credit in 2008 which had previously made the fuel economical for electricity production.

The breakdown of fuel used and production of heat in main activity producer heat plants have been estimated by the Secretariat for 1992 and 1993.

A new survey for electricity consumption may cause breaks in the time series for 2003 and 2004, especially in the industry, transport, commercial and residential sectors. There are breaks in the series concerning the total consumption of heat sold to third parties. The consumption of heat sold in industry is available from 1991 and in the energy industry from 1992. Prior to 1991, total consumption of heat sold only referred to consumption in commercial and public services. No heat is reported as being sold to the residential or agriculture sectors.

From 1999 onwards, the fuel used in heat production by autoproducers is included in final consumption because the US administration cannot distinguish between the heat used directly on-site and the heat sold. Therefore, this may underestimate the heat sold to third parties.

Direct use of heat in heat pumps (mainly in residential and industry) is not available. Direct use of solar thermal heat in residential is available from 1999. Prior to 1999, solar thermal electricity production includes generation from natural gas because some

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natural gas units are attached to solar thermal plants and their production cannot be separated. The IEA Secretariat estimated US photovoltaic (PV) electricity generation from autoproducers starting in 1999 by multiplying the dispersed and distributed PV capacity estimated by the EIA by an average capacity factor of 12%. The capacity factor was based on a report published in 2007 by the IEA Photovoltaic Power Systems Programme, *Cost and Performance Trends in Grid-Connected Photovoltaic Systems and Case Studies*. The corresponding electricity consumption has been included under non-specified other consumption.

Capacity is net summer capacity. The breakdown of capacity by fuel type for 1989 is a Secretariat estimate. Capacity by type of generation is not reported prior to 1981. Data on electrical capacity for autoproducers are available from 1989.

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5. GEOGRAPHICAL COVERAGE

Australia excludes the overseas territories.

Denmark excludes the Danish Faroes and Greenland.

France includes Monaco, but excludes the French overseas territories French Polynesia, Guadeloupe, Guyane, Martinique, New Caledonia, Reunion and St.-Pierre and Miquelon.

Germany includes the new federal states of Germany from 1970 onwards.

The statistical data for **Israel** are supplied by and under the responsibility of the relevant Israeli authorities. The use of such data by the OECD is without prejudice to the status of the Golan Heights, East Jerusalem and Israeli settlements in the West Bank under the terms of international law.

Italy includes San Marino and the Vatican.

Japan includes Okinawa.

The **Netherlands** excludes Suriname and the Netherlands Antilles.

Portugal includes the Açores and Madeira.

Spain includes the Canary Islands.

Switzerland does not include Liechtenstein.

United States includes 50 States and the District of Columbia.

OECD Total[1] comprises Australia, Austria, Belgium, Canada, Chile, the Czech Republic, Denmark, Estonia[1], Finland, France, Germany, Greece, Hungary, Iceland, Ireland, Israel, Italy, Japan, Korea, Luxembourg, Mexico, the Netherlands, New Zealand, Norway, Poland, Portugal, the Slovak Republic, Slovenia[1], Spain, Sweden, Switzerland, Turkey, the United Kingdom and the United States.

With the exception of Chile, Estonia, Iceland, Israel, Mexico and Slovenia, all 34 OECD member countries are also member countries of the IEA.

The following countries are included in the regional aggregates. The OECD Total is the sum of the three regional aggregates.

IEA regional totals include only IEA Member countries and therefore exclude non-IEA Members, shown in italics below.

OECD Americas comprises Canada, *Mexico, Chile,* and the United States.

OECD Asia Oceania comprises Australia, *Israel*, Japan, Korea and New Zealand.

OECD Europe[1] comprises Austria, Belgium, Czech Republic, Denmark, *Estonia*[1], Finland, France, Germany, Greece, Hungary, *Iceland*, Ireland, Italy, Luxembourg, Netherlands, Norway, Poland, Portugal, Slovak Republic, *Slovenia*[1], Spain, Sweden, Switzerland, Turkey and the United Kingdom.

Africa includes Algeria, Angola, Benin, Botswana, Cameroon, Congo, Democratic Republic of Congo, Côte d'Ivoire, Egypt, Eritrea, Ethiopia, Gabon, Ghana, Kenya, Libyan Arab Jamahiriya, Morocco, Mozambique, Namibia, Nigeria, Senegal, South Africa, Sudan[2], United Republic of Tanzania, Togo, Tunisia, Zambia, Zimbabwe and Other Africa.

Other Africa includes Burkina Faso, Burundi, Cape Verde, Central African Republic, Chad, Comoros, Djibouti, Equatorial Guinea, Gambia, Guinea, Guinea-Bissau, Lesotho, Liberia, Madagascar,

1. Estonia and Slovenia are included starting in 1990. Prior to 1990, data for Estonia are included in Former Soviet Union and data for Slovenia in Former Yugoslavia in the publication *Energy Statistics of Non-OECD Countries*.

2. Because only aggregated data were available until 2011, the data for Sudan also include South Sudan.

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Malawi, Mali, Mauritania, Mauritius, Niger, Reunion, Rwanda, Sao Tome and Principe, Seychelles, Sierra Leone, Somalia, Swaziland, Uganda and Western Sahara.

Non-OECD Americas includes Argentina, Bolivia, Brazil, Colombia, Costa Rica, Cuba, Dominican Republic, Ecuador, El Salvador, Guatemala, Haiti, Honduras, Jamaica, Netherlands Antilles[3], Nicaragua, Panama, Paraguay, Peru, Trinidad and Tobago, Uruguay, Venezuela and Other non-OECD Americas.

Other non-OECD Americas includes Antigua and Barbuda, Aruba, Bahamas, Barbados, Belize, Bermuda, British Virgin Islands, Cayman Islands, Dominica, Falkland Islands, French Guyana, Grenada, Guadeloupe, Guyana, Martinique, Montserrat, Puerto Rico, St. Kitts and Nevis, Saint Lucia, Saint Pierre et Miquelon, St. Vincent and the Grenadines, Suriname, and Turks and Caicos Islands.

Asia includes Bangladesh, Brunei Darussalam, Cambodia, Chinese Taipei, India, Indonesia, DPR of Korea, Malaysia, Mongolia, Myanmar, Nepal, Pakistan, Philippines, Singapore, Sri Lanka, Thailand, Vietnam and Other Asia.

Other Asia includes Afghanistan, Bhutan, Cook Islands, East Timor, Fiji, French Polynesia, Kiribati, Laos, Macau, Maldives, New Caledonia, Palau, Papua New Guinea, Samoa, Solomon Islands, Tonga and Vanuatu.

China includes the People's Republic of China and Hong Kong (China).

Non-OECD Europe and Eurasia includes Albania, Armenia, Azerbaijan, Belarus, Bosnia and Herzegovina, Bulgaria, Croatia, Cyprus[4], Georgia, Gibraltar, Kazakhstan, Kosovo, Kyrgystan, Lativa, Lithuania, Former Yugoslav Republic of Macedonia (FYROM), Malta, Republic of Moldova, Montenegro, Romania, Russian Federation, Serbia[5], Tajikistan, Turkmenistan, Ukraine, Uzbekistan, Former Soviet Union[1] and Former Yugoslavia[1].

Middle East includes Bahrain, Islamic Republic of Iran, Iraq, Jordan, Kuwait, Lebanon, Oman, Qatar, Saudi Arabia, Syrian Arab Republic, United Arab Emirates and Yemen.

3. The Netherlands Antilles was dissolved on 10 October 2010, resulting in two new "constituent countries" of the Netherlands (Curaçao and Saint Maarten), with the other islands joining the Netherlands as "special municipalities". However, due to a lack of detailed data, the Secretariat's data and estimates under the "Netherlands Antilles" still refer to the whole territory of the Netherlands Antilles as it was known prior to 10 October 2010.

4. Note by Turkey:
The information in this document with reference to "Cyprus" relates to the southern part of the Island. There is no single authority representing both Turkish and Greek Cypriot people on the Island. Turkey recognises the Turkish Republic of Northern Cyprus (TRNC). Until a lasting and equitable solution is found within the context of United Nations, Turkey shall preserve its position concerning the "Cyprus issue".
Note by all the European Union Member States of the OECD and the European Union:
The Republic of Cyprus is recognised by all members of the United Nations with the exception of Turkey. The information in this document relates to the area under the effective control of the Government of the Republic of Cyprus.

5. Data for Serbia include Montenegro until 2004 and Kosovo until 1999.

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6. CONVERSION FACTORS AND CALORIFIC VALUES

Units and conversions

Conversion (to toe)

All units in this publication are metric units. Most IEA/OECD publications showing inter-fuel relations and projections present such information in a common energy unit, the tonne of oil equivalent (toe). A tonne of oil equivalent is defined as 10^7 kcal (41.868 GJ), a convenient measure because it is approximately the net heat content of one tonne of average crude oil. This unit is used by the IEA/OECD in its energy balances. Note also that totals may not be the sum of their components due to independent rounding.

The change from using the original unit to tonne of oil equivalent implies choosing coefficients of equivalence between different forms and sources of energy. This problem can be approached in many different ways. For example one could adopt a single equivalence for each major primary energy source in all countries, *e.g.* 29 307 kJ/kg (7 000 kcal/kg) for hard coal, 41 868 kJ/kg (10 000 kcal/kg) for oil, etc.

The main objection to this method is that it results in distortions since there is a wide spread in calorific values between types of coal and individual coal products, and between calorific values of these fuels in different countries.

The Secretariat has therefore adopted specific calorific factors supplied by the national administrations for the main categories of each quality of coal and for each flow or use (*i.e.* production, imports, exports, electricity generation, coke ovens, blast furnaces and industry). For crude oil, specific factors have been used based on consultations with experts from the national administrations, while for petroleum products regional conversion factors have been used.

The balances are expressed in terms of "net" calorific value. The difference between the "net" and the "gross" calorific value for each fuel is the latent heat of vaporisation of the water produced during combustion of the fuel. For coal and oil, net calorific value is usually around 5% less than gross, for most forms of natural and manufactured gas the difference is 9-10%, while for electricity there is no difference as the concept has no meaning in this case. The use of the net calorific value is consistent with the practice of the Statistical Offices of the European Communities and the United Nations.

Electricity data are converted from original units of gigawatt hours to million tonnes of oil equivalent using the relationship:

1 TWh = 0.086 Mtoe.

Complete listings of net calorific values to convert energy sources from basic units to tonne of oil equivalent are reported in section IV and can be found at the end of this Chapter.

Electricity

All electricity data are reported to the IEA in GWh (for generation) or MW (for capacity).

Figures for electricity production, trade, and final consumption are calculated using the energy content of the electricity (*i.e.* at a rate of 1 TWh = 86 ktoe).

Hydro-electricity production (excluding pumped storage) and electricity produced by other non-thermal means (wind, tide/wave/ocean, solar PV, etc.) are accounted for similarly using 1 TWh = 86 ktoe.

The primary energy equivalent of nuclear electricity is calculated from the gross generation by assuming a 33% conversion efficiency, *i.e.* 1 TWh = (86 ÷ 0.33) ktoe.

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For geothermal and solar thermal, if no country-specific information is reported, the primary energy equivalent is calculated as follows:

- 10% for geothermal electricity
  1 TWh = (86 ÷ 0.1) ktoe
- 33% for solar thermal electricity
  1 TWh = (86 ÷ 0.33) ktoe

Heat

Information on heat is supplied in terajoules and 1 terajoule = 0.02388 ktoe.

For geothermal and solar, if no country-specific information is reported, the primary energy equivalent is calculated as follows:

- 50% for geothermal heat
  1 TJ = (0.02388 ÷ 0.5) ktoe.
- 100% for solar

For direct use of geothermal and solar heat, all the heat consumed is accounted for production and consumption.

Natural gas

In this publication, natural gas excludes natural gas liquids. For the net heat content of a natural gas, its gross heat content is multiplied by 0.9.

Oil

The IEA applies regional conversion factors (in conjunction with Eurostat for the European countries) for the petroleum products:

Regional net calorific values for petroleum products

Petroleum products	Europe	Americas	Asia Oceania
	kJ/kg	kJ/kg	kJ/kg
Refinery gas	49 500	48 100	48 100
Ethane	49 500	49 400	49 400
Liquefied petroleum gases	46 000	47 300	47 700
Motor gasoline	44 000	44 800	44 600
Aviation gasoline	44 000	44 800	44 600
Gasoline type jet fuel	43 000	44 800	44 600
Kerosene type jet fuel	43 000	44 600	44 500
Kerosene	43 000	43 800	42 900
Gas/diesel oil	42 600	42 600	42 600
Residual fuel oil	40 000	40 200	42 600
Naphtha	44 000	45 000	43 200
White spirit	43 600	43 000	43 000
Lubricants	42 000	42 000	42 900
Bitumen	39 000	40 000	38 800
Paraffin waxes	40 000		
Petroleum coke	32 000	32 000	33 800
Non-specified petroleum products	40 000		

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General conversion factors for energy

To:	**TJ**	**Gcal**	**Mtoe**	**MBtu**	**GWh**
From:	multiply by:				
TJ	1	238.8	2.388×10^{-5}	947.8	0.2778
Gcal	4.1868×10^{-3}	1	10^{-7}	3.968	1.163×10^{-3}
Mtoe	4.1868×10^{4}	10^{7}	1	3.968×10^{7}	11630
MBtu	1.0551×10^{-3}	0.252	2.52×10^{-8}	1	2.931×10^{-4}
GWh	3.6	860	8.6×10^{-5}	3412	1

Conversion factors for mass

To:	**kg**	**t**	**lt**	**st**	**lb**
From:	multiply by:				
kilogramme (kg)	1	0.001	9.84×10^{-4}	1.102×10^{-3}	2.2046
tonne (t)	1000	1	0.984	1.1023	2204.6
long ton (lt)	1016	1.016	1	1.120	2240.0
short ton (st)	907.2	0.9072	0.893	1	2000.0
pound (lb)	0.454	4.54×10^{-4}	4.46×10^{-4}	5.0×10^{-4}	1

Conversion factors for volume

To:	**gal U.S.**	**gal U.K.**	**bbl**	**ft^3**	**l**	**m^3**
From:	multiply by:					
U.S. gallon (gal)	1	0.8327	0.02381	0.1337	3.785	0.0038
U.K. gallon (gal)	1.201	1	0.02859	0.1605	4.546	0.0045
Barrel (bbl)	42.0	34.97	1	5.615	159.0	0.159
Cubic foot (ft^3)	7.48	6.229	0.1781	1	28.3	0.0283
Litre (l)	0.2642	0.220	0.0063	0.0353	1	0.001
Cubic metre (m^3)	264.2	220.0	6.289	35.3147	1000.0	1

Decimal prefixes

10^{1}	deca (da)	10^{-1}	deci (d)
10^{2}	hecto (h)	10^{-2}	centi (c)
10^{3}	kilo (k)	10^{-3}	milli (m)
10^{6}	mega (M)	10^{-6}	micro (µ)
10^{9}	giga (G)	10^{-9}	nano (n)
10^{12}	tera (T)	10^{-12}	pico (p)
10^{15}	peta (P)	10^{-15}	femto (f)
10^{18}	exa (E)	10^{-18}	atto (a)

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Country specific net calorific values (kilojoule per kilogramme)

2011

	Australia	Austria	Belgium	Canada	Chile	Czech Republic	Denmark	Estonia	Finland
Crude oil									
Production	43985	42500	-	42790	43692	42400	43000	-	-
Imports	42655	42500	42750	42790	43166	42370	43000	-	42390
Exports	43985	-	-	42790	-	42400	43000	-	-
Average	43282	42500	42750	42790	43371	42370	43000	-	42390
NGL	45410	42500	45200	45220	48095	-	-	-	45217
Refinery feedstocks	43282	42454	42500	42500	44799	40652	42700	-	42496
Additives	-	-	25100	-	22651	39500	37600	-	25121
Other hydrocarbons	-	-	-	41868	-	-	-	39575	41868
Biogasoline	26800	26700	26860	26800	-	27000	26700	-	27364
Biodiesels	36800	36600	38052	36800	-	37100	37600	-	36800
Other liquid biofuels	-	33207	37000	-	-	-	-	-	36800
Anthracite									
Production	26700	-	-	-	-	-	-	-	-
Imports	-	30140	25184	26381	-	29783	-	-	-
Exports	26700	-	25184	-	-	31714	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	25184	26381	-	29809	-	-	-
Other uses	26700	30140	25184	26381	-	29809	-	-	-
Coking coal									
Production	28500	-	-	24781	-	28611	-	-	-
Imports	-	29070	29308	28400	28638	27870	-	-	29300
Exports	28500	-	29308	24781	-	27629	-	-	-
Coke ovens	28500	29070	29308	28400	28638	29207	-	-	29300
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-	-
Other uses	28000	29070	29308	24781	28638	29207	-	-	29300
Other bituminous coal									
Production	25700	-	-	24219	15708	25041	-	-	-
Imports	-	27239	25781	24219	23190	25067	24393	27160	24910
Exports	25700	27596	25781	24219	-	24942	-	-	-
Coke ovens	-	27239	-	-	-	-	-	-	-
Main activity elec. generation	27000	27325	25581	24219	23401	21504	24305	27247	24915
Industry	25700	27596	27581	24219	27968	23745	26500	27247	24910
Other uses	25700	27239	25781	24219	27968	23554	24394	27247	24910
Sub-bituminous coal									
Production	18478	-	-	18238	-	-	-	-	-
Imports	-	21383	-	18238	-	-	-	-	-
Exports	-	-	-	18238	-	-	-	-	-
Main activity elec. generation	19451	-	-	18238	-	-	-	-	-
Industry	19195	21383	-	-	-	-	-	-	-
Other uses	18478	21383	-	18238	-	-	-	-	-
Lignite									
Production	9800	-	-	14286	-	12313	-	8900	-
Imports	-	8096	8370	14286	-	18658	-	-	-
Exports	-	8096	-	14286	-	17120	-	-	-
Main activity elec. generation	10300	-	-	14286	-	11850	-	9304	-
Industry	9800	8096	8370	-	-	12214	-	11710	-
Other uses	9800	8096	8370	14286	-	12473	-	11300	-
Patent fuel	-	-	29308	-	-	-	-	-	-
Coke oven coke	25650	29000	29308	27457	28645	28095	29300	28500	29300
Coal tar	35714	41800	-	-	41366	36995	-	-	37000
BKB	20995	19305	20000	-	-	21437	18300	16000	-
Peat	-	8800	-	-	-	-	-	10254	10190
Charcoal	-	31000	29300	-	30800	-	-	-	-

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Country specific net calorific values (kilojoule per kilogramme)

2011

	France	Germany	Greece	Hungary	Iceland	Ireland	Israel	Italy	Japan
Crude oil									
Production	41855	42757	38158	41800	-	-	42538	41860	42405
Imports	41855	42757	41540	41800	-	42830	42538	41860	42405
Exports	41855	42757	41860	-	-	42830	-	41860	-
Average	41855	42757	41228	41800	-	42830	42538	41860	42405
NGL	42000	-	-	43000	-	45220	-	-	46198
Refinery feedstocks	41855	42496	41318	41800	-	42500	44799	41860	42500
Additives	25120	25121	41318	41800	-	-	-	25121	-
Other hydrocarbons	-	-	-	40000	-	-	-	-	-
Biogasoline	26805	26541	-	26600	-	26500	-	26800	-
Biodiesels	37400	36976	37980	37500	-	37273	-	37400	-
Other liquid biofuels	-	36087	-	-	-	-	-	36700	-
Anthracite									
Production	-	29030	-	-	-	-	-	-	-
Imports	-	29030	-	-	28050	28543	-	-	26362
Exports	-	30100	-	-	-	31958	-	-	-
Main activity elec. generation	-	29707	-	-	-	-	-	-	-
Industry	-	29710	-	-	28050	-	-	-	-
Other uses	-	29710	-	-	28050	28295	-	-	26362
Coking coal									
Production	-	29000	-	-	-	-	-	-	-
Imports	30500	29000	-	31840	-	-	-	30984	28130
Exports	30500	29000	-	-	-	-	-	-	-
Coke ovens	30500	29000	-	31840	-	-	-	30984	28227
Main activity elec. generation	-	29003	-	-	-	-	-	-	-
Industry	-	29000	-	-	-	-	-	-	27354
Other uses	30500	29000	-	31840	-	-	-	30984	27354
Other bituminous coal									
Production	26000	30127	-	-	-	-	-	26587	-
Imports	26000	25569	23907	24430	28050	25642	25424	26587	24801
Exports	26000	31130	23908	-	-	-	-	26587	24801
Coke ovens	-	-	-	-	-	-	-	-	24801
Main activity elec. generation	25924	25922	27448	24534	-	24679	25424	25260	25057
Industry	26000	24567	23908	25700	28050	27838	-	26587	24801
Other uses	26000	25000	23907	24120	28050	27838	25424	26587	24801
Sub-bituminous coal									
Production	-	-	-	-	-	-	-	-	-
Imports	-	-	-	17650	-	-	20358	18832	-
Exports	-	-	-	16050	-	-	-	-	-
Main activity elec. generation	-	-	-	17020	-	-	20358	18868	-
Industry	-	-	-	20390	-	-	-	-	-
Other uses	-	-	-	17810	-	-	20358	18832	-
Lignite									
Production	-	9038	5356	7210	-	-	3007	-	-
Imports	17000	-	4243	-	-	19816	-	10468	-
Exports	-	12800	4243	17000	-	19816	-	-	-
Main activity elec. generation	-	8899	5419	7153	-	-	-	-	-
Industry	17000	10257	8479	10780	-	-	3007	10468	-
Other uses	17000	10603	5356	10250	-	19816	3007	10468	-
Patent fuel	32000	31400	-	22000	-	-	-	-	-
Coke oven coke	28000	28650	-	29710	26670	-	-	29000	29400
Coal tar	38000	-	-	38000	-	-	-	-	35393
BKB	-	19991	-	23000	-	18548	-	-	-
Peat	-	-	-	-	-	13105	-	-	-
Charcoal	-	-	31000	-	-	-	30800	30800	29300

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Country specific net calorific values (kilojoule per kilogramme)

2011

	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal
Crude oil								
Production	42700	-	46655	42700	43725	42502	42523	-
Imports	42700	-	-	42700	42953	42502	42500	43040
Exports	-	-	46655	42700	43780	42502	42486	-
Average	42700	-	46655	42700	43309	42502	42500	43040
NGL	-	-	42661	44000	45310	43795	-	45220
Refinery feedstocks	44800	-	42350	42496	44039	42300	42500	43996
Additives	41868	-	46015	25121	-	36800	36169	37000
Other hydrocarbons	-	-	41868	-	-	-	42500	-
Biogasoline	-	26803	-	27000	28865	26800	29700	-
Biodiesels	38210	38133	-	37000	39599	36800	38400	37000
Other liquid biofuels	-	-	-	35600	-	36800	38400	36800
Anthracite								
Production	19259	-	-	-	-	-	-	-
Imports	26796	26700	-	29300	-	-	-	29990
Exports	-	-	-	29300	-	-	-	27846
Main activity elec. generation	24325	-	-	-	-	-	-	-
Industry	26796	26700	-	29300	-	-	-	30353
Other uses	19259	29300	-	29300	-	-	-	30353
Coking coal								
Production	-	-	29335	-	29839	-	29582	-
Imports	28261	-	29559	28671	29839	-	29610	-
Exports	-	-	29335	28671	29839	-	29460	-
Coke ovens	28261	-	29434	28671	-	-	29521	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	28261	-	-	28671	29839	-	29374	-
Other uses	28261	-	29335	28671	29839	-	28730	-
Other bituminous coal								
Production	-	-	-	-	28063	28100	22624	-
Imports	24911	24400	-	24608	28063	28100	23484	24955
Exports	-	-	-	24608	28063	28100	27550	24959
Coke ovens	-	-	-	-	-	-	24426	-
Main activity elec. generation	24911	-	-	24606	-	28100	21400	25033
Industry	24911	24400	-	-	28063	28100	22738	25182
Other uses	24911	24400	-	24608	28063	28100	25930	25616
Sub-bituminous coal								
Production	-	-	19405	-	20630	-	-	-
Imports	20934	-	22543	-	20630	-	-	-
Exports	-	-	-	-	20630	-	-	-
Main activity elec. generation	20935	-	21866	-	20382	-	-	-
Industry	-	-	19405	-	20630	-	-	-
Other uses	20933	-	19405	-	20630	-	-	-
Lignite								
Production	-	-	-	-	14543	-	8362	-
Imports	-	-	14100	20000	-	-	8420	-
Exports	-	-	-	20000	-	-	8362	-
Main activity elec. generation	-	-	-	-	-	-	8366	-
Industry	-	-	-	20000	14543	-	10093	-
Other uses	-	-	14100	20000	14543	-	8356	-
Patent fuel	19259	-	-	-	-	-	23094	-
Coke oven coke	29308	28500	26521	28500	29500	28500	27476	29557
Coal tar	37000	-	-	41900	-	-	37667	-
BKB	-	22200	-	-	-	-	17486	-
Peat	-	-	-	-	-	-	-	-
Charcoal	-	-	-	30000	-	-	-	-

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Country specific net calorific values (kilojoule per kilogramme)

2011

	Slovak Republic	Slovenia	Spain	Sweden	Swizerland	Turkey	United Kingdom	United States
Crude oil								
Production	41200	-	42665	-	-	41370	43371	43261
Imports	42000	-	42665	42161	43225	41570	43371	43272
Exports	41200	-	-	42161	-	-	43371	43261
Average	41996	-	42665	42161	43225	41520	43371	43135
NGL	37000	-	-	-	-	-	35800	46015
Refinery feedstocks	43860	-	42500	44244	43700	42500	42496	43680
Additives	43778	-	25100	25121	41325	-	-	25121
Other hydrocarbons	41500	-	-	-	-	-	-	51004
Biogasoline	21471	26670	26753	26886	26524	26800	26800	26747
Biodiesels	38252	36900	37555	37512	32040	37046	36800	40933
Other liquid biofuels	-	-	-	42095	-	-	-	21583
Anthracite								
Production	-	-	19079	-	-	-	-	28796
Imports	27384	-	24645	-	28100	-	-	28960
Exports	-	-	25300	-	-	-	-	28796
Main activity elec. generation	25555	-	20816	-	-	-	-	12887
Industry	27384	-	24412	-	28100	-	-	19335
Other uses	27375	-	20932	-	28100	-	-	21261
Coking coal								
Production	-	-	-	-	-	25010	30604	28071
Imports	29250	-	29443	30000	-	27600	30364	28203
Exports	-	-	29443	-	-	-	30604	27567
Coke ovens	29250	-	29443	30000	-	29060	30364	29669
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	27128	30400	-
Other uses	29250	-	29443	30000	-	25202	30604	28532
Other bituminous coal								
Production	-	-	17973	-	-	24742	24310	26272
Imports	25535	25341	23345	27400	28100	26902	25210	25915
Exports	-	25341	24011	27400	-	-	29640	27517
Coke ovens	-	-	-	-	-	-	30364	-
Main activity elec. generation	23708	27550	23004	27900	-	22562	24855	25635
Industry	25532	25341	24250	26860	28100	23010	25491	27299
Other uses	25532	25465	23736	27400	28100	24980	24601	26765
Sub-bituminous coal								
Production	-	-	13372	-	-	18074	-	18969
Imports	-	19336	-	-	-	-	-	20049
Exports	-	-	-	-	-	-	-	18927
Main activity elec. generation	-	18454	13372	-	-	21762	-	19237
Industry	-	18803	-	-	-	17603	-	19917
Other uses	-	18892	8621	-	-	16103	-	18893
Lignite								
Production	10601	11167	-	-	-	9170	-	13950
Imports	14675	14078	-	-	20100	-	-	13834
Exports	-	-	-	-	-	-	-	13914
Main activity elec. generation	11032	12281	-	-	-	6981	-	14474
Industry	11092	9760	-	-	20100	17078	-	13706
Other uses	11092	11214	-	-	20100	16640	-	14962
Patent fuel	28000	-	-	-	-	-	30970	-
Coke oven coke	28280	29710	26795	28080	28100	28512	28310	28842
Coal tar	33491	-	38519	-	-	-	38519	-
BKB	17000	-	-	-	-	-	-	-
Peat	-	-	-	12500	-	-	-	-
Charcoal	-	-	30800	-	-	-	-	-

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Country specific net calorific values (tonne of oil equivalent per tonne)

2011

	Australia	Austria	Belgium	Canada	Chile	Czech Republic	Denmark	Estonia	Finland
Crude oil									
Production	1.0506	1.0151	-	1.0220	1.0436	1.0127	1.0270	-	-
Imports	1.0188	1.0151	1.0211	1.0220	1.0310	1.0120	1.0270	-	1.0125
Exports	1.0506	-	-	1.0220	-	1.0127	1.0270	-	-
Average	1.0338	1.0151	1.0211	1.0220	1.0359	1.0120	1.0270	-	1.0125
NGL	1.0846	1.0151	1.0796	1.0801	1.1487	-	-	-	1.0800
Refinery feedstocks	1.0338	1.0140	1.0151	1.0151	1.0700	0.9710	1.0199	-	1.0150
Additives	-	-	0.5995	-	0.5410	0.9434	0.8981	-	0.6000
Other hydrocarbons	-	-	-	1.0000	-	-	-	0.9452	1.0000
Biogasoline	0.6401	0.6377	0.6415	0.6401	-	0.6449	0.6377	-	0.6536
Biodiesels	0.8790	0.8742	0.9089	0.8790	-	0.8861	0.8981	-	0.8790
Other liquid biofuels	-	0.7931	0.8837	-	-	-	-	-	0.8790
Anthracite									
Production	0.6377	-	-	-	-	-	-	-	-
Imports	-	0.7199	0.6015	0.6301	-	0.7114	-	-	-
Exports	0.6377	-	0.6015	-	-	0.7575	-	-	-
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	0.6015	0.6301	-	0.7120	-	-	-
Other uses	0.6377	0.7199	0.6015	0.6301	-	0.7120	-	-	-
Coking coal									
Production	0.6807	-	-	0.5919	-	0.6834	-	-	-
Imports	-	0.6943	0.7000	0.6783	0.6840	0.6657	-	-	0.6998
Exports	0.6807	-	0.7000	0.5919	-	0.6599	-	-	-
Coke ovens	0.6807	0.6943	0.7000	0.6783	0.6840	0.6976	-	-	0.6998
Main activity elec. generation	-	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	-	-	-	-
Other uses	0.6688	0.6943	0.7000	0.5919	0.6840	0.6976	-	-	0.6998
Other bituminous coal									
Production	0.6138	-	-	0.5785	0.3752	0.5981	-	-	-
Imports	-	0.6506	0.6158	0.5785	0.5539	0.5987	0.5826	0.6487	0.5950
Exports	0.6138	0.6591	0.6158	0.5785	-	0.5957	-	-	-
Coke ovens	-	0.6506	-	-	-	-	-	-	-
Main activity elec. generation	0.6449	0.6526	0.6110	0.5785	0.5589	0.5136	0.5805	0.6508	0.5951
Industry	0.6138	0.6591	0.6588	0.5785	0.6680	0.5671	0.6329	0.6508	0.5950
Other uses	0.6138	0.6506	0.6158	0.5785	0.6680	0.5626	0.5826	0.6508	0.5950
Sub-bituminous coal									
Production	0.4413	-	-	0.4356	-	-	-	-	-
Imports	-	0.5107	-	0.4356	-	-	-	-	-
Exports	-	-	-	0.4356	-	-	-	-	-
Main activity elec. generation	0.4646	-	-	0.4356	-	-	-	-	-
Industry	0.4585	0.5107	-	-	-	-	-	-	-
Other uses	0.4413	0.5107	-	0.4356	-	-	-	-	-
Lignite									
Production	0.2341	-	-	0.3412	-	0.2941	-	0.2126	-
Imports	-	0.1934	0.1999	0.3412	-	0.4456	-	-	-
Exports	-	0.1934	-	0.3412	-	0.4089	-	-	-
Main activity elec. generation	0.2460	-	-	0.3412	-	0.2830	-	0.2222	-
Industry	0.2341	0.1934	0.1999	-	-	0.2917	-	0.2797	-
Other uses	0.2341	0.1934	0.1999	0.3412	-	0.2979	-	0.2699	-
Patent fuel	-	-	0.7000	-	-	-	-	-	-
Coke oven coke	0.6126	0.6927	0.7000	0.6558	0.6842	0.6710	0.6998	0.6807	0.6998
Coal tar	0.8530	0.9984	-	-	0.9880	0.8836	-	-	0.8837
BKB	0.5015	0.4611	0.4777	-	-	0.5120	0.4371	0.3822	-
Peat	-	0.2102	-	-	-	-	-	0.2449	0.2434
Charcoal	-	0.7404	0.6998	-	0.7356	-	-	-	-

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Country specific net calorific values (tonne of oil equivalent per tonne)

2011

	France	Germany	Greece	Hungary	Iceland	Ireland	Israel	Italy	Japan
Crude oil									
Production	0.9997	1.0212	0.9114	0.9984	-	-	1.0160	0.9998	1.0128
Imports	0.9997	1.0212	0.9922	0.9984	-	1.0230	1.0160	0.9998	1.0128
Exports	0.9997	1.0212	0.9998	-	-	1.0230	-	0.9998	-
Average	0.9997	1.0212	0.9847	0.9984	-	1.0230	1.0160	0.9998	1.0128
NGL	1.0032	-	-	1.0270	-	1.0801	-	-	1.1034
Refinery feedstocks	0.9997	1.0150	0.9869	0.9984	-	1.0151	1.0700	0.9998	1.0151
Additives	0.6000	0.6000	0.9869	0.9984	-	-	-	0.6000	-
Other hydrocarbons	-	-	-	0.9554	-	-	-	-	-
Biogasoline	0.6402	0.6339	-	0.6353	-	0.6329	-	0.6401	-
Biodiesels	0.8933	0.8832	0.9071	0.8957	-	0.8903	-	0.8933	-
Other liquid biofuels	-	0.8619	-	-	-	-	-	0.8766	-
Anthracite									
Production	-	0.6934	-	-	-	-	-	-	-
Imports	-	0.6934	-	-	0.6700	0.6817	-	-	0.6296
Exports	-	0.7189	-	-	-	0.7633	-	-	-
Main activity elec. generation	-	0.7095	-	-	-	-	-	-	-
Industry	-	0.7096	-	-	0.6700	-	-	-	-
Other uses	-	0.7096	-	-	0.6700	0.6758	-	-	0.6296
Coking coal									
Production	-	0.6927	-	-	-	-	-	-	-
Imports	0.7285	0.6927	-	0.7605	-	-	-	0.7400	0.6719
Exports	0.7285	0.6927	-	-	-	-	-	-	-
Coke ovens	0.7285	0.6927	-	0.7605	-	-	-	0.7400	0.6742
Main activity elec. generation	-	0.6927	-	-	-	-	-	-	-
Industry	-	0.6927	-	-	-	-	-	-	0.6533
Other uses	0.7285	0.6927	-	0.7605	-	-	-	0.7400	0.6533
Other bituminous coal									
Production	0.6210	0.7196	-	-	-	-	-	0.6350	-
Imports	0.6210	0.6107	0.5710	0.5835	0.6700	0.6124	0.6072	0.6350	0.5924
Exports	0.6210	0.7435	0.5710	-	-	-	-	0.6350	0.5924
Coke ovens	-	-	-	-	-	-	-	-	0.5924
Main activity elec. generation	0.6192	0.6191	0.6556	0.5860	-	0.5894	0.6072	0.6033	0.5985
Industry	0.6210	0.5868	0.5710	0.6138	0.6700	0.6649	-	0.6350	0.5924
Other uses	0.6210	0.5971	0.5710	0.5761	0.6700	0.6649	0.6072	0.6350	0.5924
Sub-bituminous coal									
Production	-	-	-	-	-	-	-	-	-
Imports	-	-	-	0.4216	-	-	0.4862	0.4498	-
Exports	-	-	-	0.3833	-	-	-	-	-
Main activity elec. generation	-	-	-	0.4065	-	-	0.4862	0.4507	-
Industry	-	-	-	0.4870	-	-	-	-	-
Other uses	-	-	-	0.4254	-	-	0.4862	0.4498	-
Lignite									
Production	-	0.2159	0.1279	0.1722	-	-	0.0718	-	-
Imports	0.4060	-	0.1013	-	-	0.4733	-	0.2500	-
Exports	-	0.3057	0.1013	0.4060	-	0.4733	-	-	-
Main activity elec. generation	-	0.2125	0.1294	0.1708	-	-	-	-	-
Industry	0.4060	0.2450	0.2025	0.2575	-	-	0.0718	0.2500	-
Other uses	0.4060	0.2532	0.1279	0.2448	-	0.4733	0.0718	0.2500	-
Patent fuel	0.7643	0.7500	-	0.5255	-	-	-	-	-
Coke oven coke	0.6688	0.6843	-	0.7096	0.6370	-	-	0.6927	0.7022
Coal tar	0.9076	-	-	0.9076	-	-	-	-	0.8453
BKB	-	0.4775	-	0.5493	-	0.4430	-	-	-
Peat	-	-	-	-	-	0.3130	-	-	-
Charcoal	-	-	0.7404	-	-	-	0.7356	0.7356	0.6998

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Country specific net calorific values (tonne of oil equivalent per tonne)

2011

	Korea	Luxembourg	Mexico	Netherlands	New Zealand	Norway	Poland	Portugal
Crude oil								
Production	1.0199	-	1.1143	1.0199	1.0444	1.0151	1.0156	-
Imports	1.0199	-	-	1.0199	1.0259	1.0151	1.0151	1.0280
Exports	-	-	1.1143	1.0199	1.0457	1.0151	1.0148	-
Average	1.0199	-	1.1143	1.0199	1.0344	1.0151	1.0151	1.0280
NGL	-	-	1.0189	1.0509	1.0822	1.0460	-	1.0801
Refinery feedstocks	1.0700	-	1.0115	1.0150	1.0519	1.0103	1.0151	1.0508
Additives	1.0000	-	1.0990	0.6000	-	0.8790	0.8639	0.8837
Other hydrocarbons	-	-	1.0000	-	-	-	1.0151	-
Biogasoline	-	0.6402	-	0.6449	0.6894	0.6401	0.7094	-
Biodiesels	0.9126	0.9108	-	0.8837	0.9458	0.8790	0.9172	0.8837
Other liquid biofuels	-	-	-	0.8503	-	0.8790	0.9172	0.8790
Anthracite								
Production	0.4600	-	-	-	-	-	-	-
Imports	0.6400	0.6377	-	0.6998	-	-	-	0.7163
Exports	-	-	-	0.6998	-	-	-	0.6651
Main activity elec. generation	0.5810	-	-	-	-	-	-	-
Industry	0.6400	0.6377	-	0.6998	-	-	-	0.7250
Other uses	0.4600	0.6998	-	0.6998	-	-	-	0.7250
Coking coal								
Production	-	-	0.7007	-	0.7127	-	0.7066	-
Imports	0.6750	-	0.7060	0.6848	0.7127	-	0.7072	-
Exports	-	-	0.7007	0.6848	0.7127	-	0.7036	-
Coke ovens	0.6750	-	0.7030	0.6848	-	-	0.7051	-
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	0.6750	-	-	0.6848	0.7127	-	0.7016	-
Other uses	0.6750	-	0.7007	0.6848	0.7127	-	0.6862	-
Other bituminous coal								
Production	-	-	-	-	0.6703	0.6712	0.5404	-
Imports	0.5950	0.5828	-	0.5878	0.6703	0.6712	0.5609	0.5960
Exports	-	-	-	0.5878	0.6703	0.6712	0.6580	0.5961
Coke ovens	-	-	-	-	-	-	0.5834	-
Main activity elec. generation	0.5950	-	-	0.5877	-	0.6712	0.5111	0.5979
Industry	0.5950	0.5828	-	-	0.6703	0.6712	0.5431	0.6015
Other uses	0.5950	0.5828	-	0.5878	0.6703	0.6712	0.6193	0.6118
Sub-bituminous coal								
Production	-	-	0.4635	-	0.4927	-	-	-
Imports	0.5000	-	0.5384	-	0.4927	-	-	-
Exports	-	-	-	-	0.4927	-	-	-
Main activity elec. generation	0.5000	-	0.5223	-	0.4868	-	-	-
Industry	-	-	0.4635	-	0.4927	-	-	-
Other uses	0.5000	-	0.4635	-	0.4927	-	-	-
Lignite								
Production	-	-	-	-	0.3474	-	0.1997	-
Imports	-	-	0.3368	0.4777	-	-	0.2011	-
Exports	-	-	-	0.4777	-	-	0.1997	-
Main activity elec. generation	-	-	-	-	-	-	0.1998	-
Industry	-	-	-	0.4777	0.3474	-	0.2411	-
Other uses	-	-	0.3368	0.4777	0.3474	-	0.1996	-
Patent fuel	0.4600	-	-	-	-	-	0.5516	-
Coke oven coke	0.7000	0.6807	0.6334	0.6807	0.7046	0.6807	0.6563	0.7060
Coal tar	0.8837	-	-	1.0008	-	-	0.8997	-
BKB	-	0.5302	-	-	-	-	0.4176	-
Peat	-	-	-	-	-	-	-	-
Charcoal	-	-	-	0.7165	-	-	-	-

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Country specific net calorific values (tonne of oil equivalent per tonne)

2011

	Slovak Republic	Slovenia	Spain	Sweden	Switzerland	Turkey	United Kingdom	United States
Crude oil								
Production	0.9840	-	1.0190	-	-	0.9881	1.0359	1.0333
Imports	1.0032	-	1.0190	1.0070	1.0324	0.9929	1.0359	1.0335
Exports	0.9840	-	-	1.0070	-	-	1.0359	1.0333
Average	1.0031	-	1.0190	1.0070	1.0324	0.9917	1.0359	1.0303
NGL	0.8837	-	-	-	-	-	0.8551	1.0990
Refinery feedstocks	1.0476	-	1.0151	1.0567	1.0438	1.0151	1.0150	1.0433
Additives	1.0456	-	0.5995	0.6000	0.9870	-	-	0.6000
Other hydrocarbons	0.9912	-	-	-	-	-	-	1.2182
Biogasoline	0.5128	0.6370	0.6390	0.6422	0.6335	0.6401	0.6401	0.6388
Biodiesels	0.9136	0.8813	0.8970	0.8960	0.7653	0.8848	0.8790	0.9777
Other liquid biofuels	-	-	-	1.0054	-	-	-	0.5155
Anthracite								
Production	-	-	0.4557	-	-	-	-	0.6878
Imports	0.6541	-	0.5886	-	0.6712	-	-	0.6917
Exports	-	-	0.6043	-	-	-	-	0.6878
Main activity elec. generation	0.6104	-	0.4972	-	-	-	-	0.3078
Industry	0.6541	-	0.5831	-	0.6712	-	-	0.4618
Other uses	0.6538	-	0.5000	-	0.6712	-	-	0.5078
Coking coal								
Production	-	-	-	-	-	0.5974	0.7310	0.6705
Imports	0.6986	-	0.7032	0.7165	-	0.6592	0.7252	0.6736
Exports	-	-	0.7032	-	-	-	0.7310	0.6584
Coke ovens	0.6986	-	0.7032	0.7165	-	0.6941	0.7252	0.7086
Main activity elec. generation	-	-	-	-	-	-	-	-
Industry	-	-	-	-	-	0.6479	0.7261	-
Other uses	0.6986	-	0.7032	0.7165	-	0.6019	0.7310	0.6815
Other bituminous coal								
Production	-	-	0.4293	-	-	0.5910	0.5806	0.6275
Imports	0.6099	0.6053	0.5576	0.6544	0.6712	0.6425	0.6021	0.6190
Exports	-	0.6053	0.5735	0.6544	-	-	0.7079	0.6572
Coke ovens	-	-	-	-	-	-	0.7252	-
Main activity elec. generation	0.5663	0.6580	0.5494	0.6664	-	0.5389	0.5937	0.6123
Industry	0.6098	0.6053	0.5792	0.6415	0.6712	0.5496	0.6088	0.6520
Other uses	0.6098	0.6082	0.5669	0.6544	0.6712	0.5966	0.5876	0.6393
Sub-bituminous coal								
Production	-	-	0.3194	-	-	0.4317	-	0.4531
Imports	-	0.4618	-	-	-	-	-	0.4789
Exports	-	-	-	-	-	-	-	0.4521
Main activity elec. generation	-	0.4408	0.3194	-	-	0.5198	-	0.4595
Industry	-	0.4491	-	-	-	0.4204	-	0.4757
Other uses	-	0.4512	0.2059	-	-	0.3846	-	0.4513
Lignite								
Production	0.2532	0.2667	-	-	-	0.2190	-	0.3332
Imports	0.3505	0.3362	-	-	0.4801	-	-	0.3304
Exports	-	-	-	-	-	-	-	0.3323
Main activity elec. generation	0.2635	0.2933	-	-	-	0.1667	-	0.3457
Industry	0.2649	0.2331	-	-	0.4801	0.4079	-	0.3274
Other uses	0.2649	0.2678	-	-	0.4801	0.3974	-	0.3574
Patent fuel	0.6688	-	-	-	-	-	0.7397	-
Coke oven coke	0.6755	0.7096	0.6400	0.6707	0.6712	0.6810	0.6762	0.6889
Coal tar	0.7999	-	0.9200	-	-	-	0.9200	-
BKB	0.4060	-	-	-	-	-	-	-
Peat	-	-	-	0.2986	-	-	-	-
Charcoal	-	-	0.7356	-	-	-	-	-

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PART II

WORLD ELECTRICITY DEVELOPMENTS

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1 SUMMARY

For a second year in a row, one of the major highlights of the OECD situation was the drop in electricity production from nuclear energy which was triggered by the accident at the Fukushima Daiichi power plant in 2011. In 2012, the electricity production from nuclear energy fell by 6.5%, following the 9.0% decrease in 2011. This contributed to a 0.3% decrease in total OECD electricity production and contributed to the 1.3% decrease in total OECD primary energy supply (TPES). In 2012, Japan reduced its electricity production from nuclear by 89.0% compared to the 2011 levels, a more aggressive decrease than the 66.7% drop in 2011. Germany also followed this decreasing trend (-7.9%) but at a lower rate than in 2011 (-24.1%). It should be noted that the total OECD electricity production in 2012 was lower than its 2007 level.

Production

Between 1973 and 2011, world gross electricity production increased from 6 129 TWh to 22 202 TWh, an average annual growth rate of 3.5%. Compared to the 21 516 TWh produced in 2010, global power production in 2011 increased by 3.2% indicating a positive growth rate for a second year in a row after 2009, when the impact of the economic crisis in OECD countries was evidenced in a visible decline in global production between 2008 and 2009.

The increasing share of non-OECD countries in total world electricity production reflects the higher average growth rate which has prevailed since 1973. In the last 38 years, electricity production has increased at an average annual rate of 5.2% in non-OECD countries, while in OECD countries the average annual growth rate during the same period is 2.4%.

In 2011, 67.8% of world electricity production was from generating plants burning fossil fuel. Hydroelectric plants provided 16.1%, nuclear plants 11.6%, biofuels and waste 1.9%, and geothermal, solar, wind and other sources made up the remaining 2.6% (Table 1.2).

World heat production, which was sold to third parties, was 14 398 PJ in 2011, an increase of 2.6% from the level reported in 2010. Of the reported 2011 world heat production, 21.5% was in OECD member countries.

OECD production

Gross electricity production in 2012 in the OECD (including generation from pumped storage plants) was 10 833 TWh, a decrease of 0.3% from the 2011 level and 0.8% lower than the level in 2010 (Tables 1.1 and 2.1).

Nuclear plants accounted for 18.0% of total gross electricity production, hydroelectric plants 13.4%, total combustible fuel[1] plants 63.9% (made up of 61.1% from fossil-fuel-fired plants and 2.8% from biofuels and waste plants) and geothermal, solar, wind and other plants 4.8% (Table 2.2).

Total OECD heat production in 2012 was 3 153 PJ, an increase of 1.7% from the level reported in 2011. The majority of heat production came from combustible fuels, 76.9% coming from fossil fuels (42.4% from gas, 27.3% from coal and 7.2% from oil) and 20.8% coming from biofuels and waste.

1. Combustible fuels refer to fuel that are capable of igniting or burning, *i.e.* reacting with oxygen to produce a significant rise in temperature. Fuels included are: coal and coal products, oil and oil products, natural gas and biofuels and waste including solid biomass and animal products, gas/liquids from biomass, industrial waste and municipal waste.

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Non-OECD production

While complete statistics are not available for electricity production in all non-OECD countries for 2012, comprehensive data are available for 2011. Gross electricity production in 2011 in non-OECD countries was 11 335 TWh (Table 1.1), an increase of 7.0% from the 2010 level, in contrast with the 0.5% drop in the gross electricity production of the OECD counties between 2010 and 2011.

In 2011, 74.6% of non-OECD electricity production was generated from fossil fuels, 18.6% was provided by hydroelectric plants, 4.4% by nuclear plants and 2.3% by biofuels and waste and geothermal/solar/wind capacity (Table 1.2).

In 2011, total non-OECD heat production was 11 299 PJ - an increase of 5.0% from the 2010 reported level. Around 78.5% of the reported world heat production in 2011 was in non-OECD countries, with the Russian Federation accounting for almost 44.3% of the world.

Consumption

OECD consumption

In 2011, total final electricity consumption was 9 340 TWh, 0.7% lower than in 2010.

Based on preliminary data, 2012 apparent consumption of electricity (gross production plus imports minus exports) in the OECD was 10 816 TWh. The corresponding figure for 2011 was 10 869 TWh, indicating a 0.5% decrease in apparent electricity consumption in OECD countries in 2012.

Non-OECD consumption

In 2011, *calculated* final electricity consumption, which is equal to production plus imports minus exports, own use, other use, transmission losses and energy sector consumption, in non-OECD countries was 9 077 TWh (Table 1.1). This represents an increase of 7.2% over the *observed* final consumption in 2010.

Trade

Often when reporting electricity flows, countries use electricity trade as a “balancing” item. This leads to some distortion of the import and export data. In addition, the transmission and distribution line losses between net importers and net exporters are difficult to determine. Both of these factors lead to differences between reported net imports for OECD countries and reported net exports for non-OECD countries.

OECD trade

OECD countries imported 418 TWh of electricity (including from other OECD countries) in 2011 and exported 416 TWh (including to other OECD countries). Accordingly, net imports of electricity in 2011 amounted to 2 TWh (Table 1.1).

Preliminary data suggest that for 2012, OECD countries imported 437 TWh, and exported 455 TWh, resulting in net exports of 18 TWh (Table 2.1). If this is confirmed, it would be the first time that OECD countries become, as a whole, net exporters of electricity.

Non-OECD trade

In 2011, non-OECD countries imported 231 TWh and exported 233 TWh of electricity. The resulting net exports amounted to 2 TWh.

OECD prices

Average real electricity price (as measured by the indices of real energy prices) in the OECD increased by 0.8% in 2012 from 2011 levels. Prices for industry increased by 1.0% and prices for households by 0.6% (Table 3.1).

Electricity prices for consumers vary widely across OECD countries. Based on available 2012 data, electricity prices for industry were the lowest in Norway (57.56 USD per MWh), while they were the highest in Italy (291.77 USD per MWh) (Table 3.5). Electricity prices for households varied from 90.20 USD per MWh in Mexico to 383.43 USD per MWh in Denmark (Table 3.7).

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2. PRODUCTION AND INSTALLED CAPACITY

OECD production and installed capacity

By convention, the reported value for electricity generation is the amount of gross production less the amount of electricity generated in pumped storage plants. On this basis, 2011 OECD electricity generated was 10 802 TWh and gross electricity production was 10 867 TWh (Table 2.6), the difference being hydro pumped storage production.

The total available electricity supplied in OECD countries in 2011 was 10 279 TWh. In deriving this figure, electricity used within power stations for their own use (503 TWh) is subtracted from total gross electricity production (10 867 TWh) to determine net production (10 364 TWh). From this, use for heat pumps (1.6 TWh), electric boilers (2.0 TWh), pumped storage (83.5 TWh) and exports (416 TWh) are then deducted and the supply of imports (418 TWh) is added.

In 2011, the OECD countries reported 2 714 GW of total installed capacity, a 2.3% increase from 2010 (Table 2.7). This consisted of 1 716 GW of plants fired by fossil and other combustible fuels, 307 GW nuclear power, 462 GW hydroelectric power (including pumped storage capacity), 152 GW of wind, 65 GW of solar, and 13 GW of geothermal, tide/wave/ocean and other capacity combined (Table 2.7). A total of 60.8 GW capacity was added in 2011 with the biggest contributors being solar (43.7%), wind (28.7%) and combustible fuels (28.4%).

Total generating capacity in the OECD increased at an average annual rate of 3.5% between 1974 and 1990, with nuclear, hydroelectric and combustible fuel capacity increasing by average annual rates of 10.6%, 4.7%, and 2.2%, respectively. By comparison, between 1990 and 2011 the total generating capacity increased at an average annual rate of 2.2%, with nuclear, hydroelectric and combustible fuels increasing by 0.7%, 1.0%, and 2.2%, respectively. In this period there were also substantial additions of solar and wind capacity, increasing at an average annual rate of 28.2% and 21.9%, respectively, as many countries began to emphasise renewable energy resources that do not emit greenhouse gases.

The slower growth of total capacity additions since 1990 is partly attributable to economic evolution, which has resulted in the growth of less energy intensive service industries. The OECD-wide pattern of electric power capacity and production conceals large differences between countries. These differences reflect different resource endowments and economics of electricity generation, as well as different policy approaches between countries. Data on the growth and type of installed capacity in individual OECD countries and regions are reported in detail in Table 15 in Part IV of this report. The fuel used in individual OECD countries in the production of electricity is illustrated in the graphs in Part IV.

Hydroelectric power

Hydroelectric plants produced 1 446 TWh, or 13.4% of total gross production in the OECD in 2012, which is almost at the same level with their share in 2011 (Tables 1.2 and 2.2).

In 2011, total OECD hydroelectric capacity was 462 GW and accounted for 17.0% of net maximum installed electric capacity in the OECD. Hydroelectric development in the OECD is fairly mature so suitable and environmentally acceptable sites are increasingly difficult to locate and would likely yield lower load

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factors than the capacity in place. Many of the civil works associated with existing capacity (waterways, tunnels, conduits) have been developed, maintained or replaced over the last century. As a result, growth of the OECD's hydroelectric capacity has slowed since 1990.

Nuclear power

Nuclear power stations in the OECD produced 1 951 TWh of electricity in 2012, accounting for 18.0% of total gross electricity production. This was 136 TWh less than the 2 087 TWh produced by nuclear plants in 2011. This 6.5% decrease between 2011 and 2012 is a result of the aftermath of the accident at the Fukushima nuclear power plant in Japan in 2011 (Tables 1.2 and 2.2). OECD nuclear electricity production increased at an average annual rate of 13.9% between 1973 and 1990 (Table 2.6). This growth mainly reflects new capacity additions in the 1970s (between 7 and 14 GW per year) and the 1980s (between 6 and 25 GW per year). From 1990 to 2011, growth slowed to only 0.9%.

In 2011, total nuclear power capacity in the OECD was 307 GW and accounted for 11.3% of generating capacity (Table 2.7). Since the growth peaked in 1985, annual additions have declined sharply and fewer orders have been placed. From 1990 to 2011, installed capacity increased at an average annual rate of 0.7%. The highest level of nuclear capacity was reached in 2005 (315 GW), declining slightly since then.

Of the 18 OECD countries with nuclear capacity, four countries had a 40% or higher share of nuclear electricity production in total gross production in 2012. The share is as high as 75.8% in France, 54.3% in the Slovak Republic, 51.3% in Belgium and 45.9% in Hungary (Table 2.2).

Geothermal, solar, tide, wave and wind power

In 2012, electricity production from geothermal, solar, tide, wave, wind and other sources increased by 17.7%, totalling 519 TWh and 4.8% of total gross electricity production. Of this, 372 TWh was from wind, 94 TWh from solar, 46 TWh from geothermal, and 7 TWh from tide, wave, ocean and other sources. Production of electricity from wind sources has expanded significantly since the mid-1980s, increasing from 0.1 TWh in 1985 to 372 TWh in 2012, with an average annual growth rate from 1990 to 2012 of 23.1%. Solar electricity production increased at an average rate of 25.1% from 1990 to 2012 with particularly strong year-on-year growth in 2011 (85.4%) and 2012 (56.2%). Production of geothermal electricity increased at an average annual rate of 5.1% between 1973 and 2012. In 2012, production from tide, wave and ocean power was 0.5 TWh, while production from other sources (including electricity generated from waste heat and heat from chemical processes) was 6.9 TWh.

In 2011, OECD countries reported electricity generating capacity of 6.1 GW of geothermal, 64.8 GW of solar, 151.6 GW of wind and 6.4 GW of tide, wave, ocean and other sources. The overall capacity addition from this group of technologies in 2011 was 45 GW, an increase of 24.7% from 2010. Solar electricity generating capacity experienced the strongest growth in terms of percentage with the addition of 26.6 GW in 2011, an increase of 69.6%. An additional 17.5 GW of wind capacity was added in 2011, an increase of 13.0%, which is slower than the growth exhibited in the past several years. The historical data on capacities are presented in Table 15 in Part IV for individual countries, where available.

Measuring the generating capacity of renewable-powered plants can be relatively simple, as in the case of geothermal plants, or difficult as in the case of solar, wind and wave plants. In the latter cases, units tend to be quite small - ranging from a few kilowatts to at most 4 MW - and they are often installed by non-utility (end-user or independent) generators. Data on output from these types of small units are often less readily available than those on capacity.

The prospects for power generation from more intermittent renewable sources, especially wind, have improved as costs have declined and technology improved. The contribution from such sources will depend on their degree of dispersion geographically, the mix of energy sources and the generation flexibility of the rest of the system. Electric utilities have indicated that up to 10% to 15% of electricity generation from dispersed, intermittent sources could be managed easily, but generation beyond that share could affect system reliability.

Combustible fuels

In 2012, electricity production from combustible fuels (fossil fuels and biofuels and waste in both electricity and CHP plants) was 6 917 TWh and accounted for 63.9% of total gross electricity produced in OECD

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countries (Table 2.2). In 1973, combustible fuel-fired power plants produced 3 358 TWh and accounted for 74.9% of total gross electricity produced (Table 2.6). In the period 1973 to 1990, electricity production from combustible fuels increased more slowly than total gross production, as a large amount of nuclear capacity was added. This trend reversed after 1985 when electricity production from combustible fuels began growing at a faster rate and nuclear capacity additions began to slow. In the period 1990 to 2011 electricity production from combustible fuels increased at a 1.9% annual rate, slightly higher than the 1.7% rate for total electricity production (Table 2.6).

Not only has its share varied over the years, but the type of combustible fuel used for electricity generation in electricity and CHP plants has also varied greatly over time (Tables 2.9 and 2.10).

In the period 1974 to 1990 combustible fuel-fired capacity increased at an average annual rate of 2.2% (Table 2.7), and it kept increasing at the same rate between 1990 and 2011.[1]

Coal

Hard coal is the leading source of electric power generation in the OECD. In 2012, hard coal-fired electricity and CHP plants produced 2 810 TWh of electricity, contributing 40.6% of OECD production from combustible fuels. It also accounted for 25.9% of OECD total electricity production from all sources (Table 2.4). This was a 5% decrease from the 2 957 TWh produced in 2011 (Table 1.3). Electricity production from all coal sources, including peat and coal derived gases, was 3 461 TWh in 2012, which is a 4.3% decrease from the electricity produced in 2011. The level reached in 2011 was a 3.2% decrease from the production in 2010. The loss of electricity production from coal sources in 2011 and 2012 was mainly compensated by increased production from natural gas and renewables. This decrease has resulted in electricity production from coal in 2011 falling below its 1997 level. While some of this decline is attributed to the decline in total electricity production in 2009 due to the financial crisis, the prices of natural gas also became more competitive relative to coal. OECD coal-fired capacity at the end of 2011 was 576 GW or 21.2% of total OECD capacity (Table 2.12).

Oil

In 2012, liquid fuel-fired (including refinery gas) electricity and CHP plants produced 365 TWh of electricity, contributing 5.3% of OECD combustible fuel-fired production and 3.4% of total gross OECD electricity production. This was an increase of 5.8% from the 345 TWh produced in 2011 (Table 1.3). OECD oil-fired capacity at the end of 2011 was 152 GW or 5.6% of total OECD capacity (Table 2.12).

Natural gas

In 2012, natural gas-fired electricity and CHP plants produced 2 789 TWh of electricity, contributing 40.3% of OECD combustible fuel-fired production. It also accounted for 25.7% of total gross OECD electricity production (Table 2.4). Natural gas-fired electricity continued following its increasing trend in 2011 and 2012. In 2011, it produced 2 631 TWh, an increase of 3.3% compared to the 2010 levels and in 2012, its increase was 6.0%, resulting in the all time high production of 2 789 TWh. OECD gas-fired capacity[2] at the end of 2011 was 695 GW or 25.6% of total OECD capacity (Table 2.12).

Biofuels and waste

This category of fuels comprises the non-fossil fuels that are used for electricity and/or heat production. The category is divided into five sub-categories: wood/wood waste/other solid waste, industrial waste, municipal waste (renewable and non-renewable), biogases (landfill gas, sewage sludge gas and other biogases), and liquid biofuels and waste.

The available data on the use of these fuels for electricity generation continues to improve. The rapid development of statistics in this area has caused some data revisions from one year to the next. This results in major breaks in the series between years as new data series begin to be collected and reported to the IEA. Analysis of trends in the use of these fuels must take into account these statistical difficulties.

1. Electricity generating capacity of combustible fuel-fired plants is shown for historical years and 2011 in Table 2.12, where available. The capacity data should be viewed with caution since a large group of the OECD countries (Canada, Czech Republic, France, Germany, the Netherlands and Spain) did not submit the breakdown of combustible fuels by fuel type.

2. Includes capacity from gas works gas plants.

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In 2012, biofuels and waste were used in electricity and CHP plants to produce 303 TWh of electricity, contributing 4.4% of OECD production using only combustible fuels and 2.8% of OECD total electricity production from all sources. This was slightly higher than the 293 TWh produced in 2011. Electricity production from biofuels and waste has increased most rapidly since 1992, when efforts to reduce CO_2 emissions from fossil fuels were formalised. Capacity at the end of 2011 was 27 GW, representing 1.0% of total OECD capacity (Table 2.12).

Heat production

In OECD countries (as in other market economies), data collected on heat production are generally confined to main activity producers, *i.e.* units whose primary activity is to generate energy for public consumption. Data on heat produced by autoproducers relate only to the quantity of heat produced for sale to third parties. The quantity of heat produced and consumed by autoproducers for their own use is not generally measured, although the fuel used to produce the heat is generally measured and available.[3]

The term "district heat" refers to a particular end-use market for heat. Heat produced and distributed for district heating and other purposes can be produced in CHP plants or in plants designed to only produce heat (called here heat plants). It is then supplied to buildings or homes from a central source through a network of pipes carrying hot water or steam.

In 2011 total OECD heat production that was sold to third parties was 3 099 PJ (Table 2.8). CHP plants provided 79% of this heat (2 460 PJ) and the rest (640 PJ) came from heat plants.

Increasing concern about environmental effects of energy use has led to policies encouraging the development and use of new technologies that increase the efficiency of electricity and heat production. Reflecting such policies and other economic and social factors, large scale main activity producer CHP systems have been built in some member countries. In many cases the heat produced in these CHP plants is sold for district heating. Previously, CHP systems tended to be confined to small scale applications in industry.

3. Austria, Finland, Iceland, Japan, Norway, the Slovak Republic and Sweden report heat produced by electric boilers and the Czech Republic, Denmark, Finland, Norway, the Slovak Republic, Sweden and Switzerland report heat produced by heat pumps.

Direct use of heat

Direct use refers to the use of an energy carrier in its primary form at the point of production. In terms of heat, this concept of consumption is separate and additional from heat sold to third parties, which is generally transported via a heating network. Heat that is used directly in final consumption sectors (residential, industry, commercial and public service, etc.) refers to solar thermal and geothermal energy. It should be noted that the data on direct use of heat are not included in total final consumption in Table 2.16, nor included in heat production sold to third parties in Table 6 of Part IV.

At the present time, data on direct use of heat are reported by 30 countries. These data are summarised in the following table.

2011 Direct use of solar/geothermal heat in the OECD in TJ

	Geothermal	Solar	Total
Australia	0	10989	10989
Austria	321	6885	7026
Belgium	52	601	653
Czech Republic	0	455	455
Denmark	0	572	572
Finland	0	43	43
France	3487	2669	6156
Germany	23673	23256	46929
Greece	1109	7656	8765
Hungary	4080	242	4322
Iceland	17550	0	17550
Ireland	0	338	338
Israel	0	46070	46070
Italy	5243	5877	11120
Japan	7535	17174	24709
Korea	2002	1148	3150
Luxembourg	0	42	42
Mexico	0	5862	5862
Netherlands	316	1041	1357
New Zealand	9295	364	9659
Poland	531	434	965
Portugal	430	2842	3272
Slovak Republic	60	211	271
Slovenia	1492	367	1859
Spain	704	8582	9286
Sweden	0	461	461
Switzerland	10418	1655	12073
Turkey	61252	26377	87629
United Kingdom	33	4577	4610
United States	9285	60331	69616
Total	**158868**	**237121**	**395989**

Direct use of solar/geothermal heat was 396 PJ in 2011, an increase of 7.5% from 2010. Just over 40% of the directly used heat was produced by geothermal sources and just under 60% by solar sources.

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Non-OECD production

Gross electricity production in 2011 in non-OECD countries (including generation from pumped storage plants) was 11 335 TWh (Table 1.1), an increase of 7.0% from the level reported in 2010. Gross electricity production by non-OECD countries increased at an average annual rate of 5.2% between 1973 and 2011. Non-OECD countries' share of world electricity production increased from 27% in 1973 to 51% in 2011 as these most of these economies have developed and they have also continued to expand their electricity grids to those previously without electricity.

Hydroelectric power

Hydroelectric plants produced 2 113 TWh or 18.6% of total gross production reported for non-OECD countries in 2011 (Table 1.2). This represents a 0.6% increase over the 2011 level. Hydroelectric production reported by non-OECD countries increased at an average annual rate of 4.7% between 1973 and 2011.

Nuclear power

Nuclear power plants produced 497 TWh or 4.4% of total gross production reported for non-OECD countries for 2011 (Table 1.2). This was an increase of 6.2% compared to the 2010 level. Nuclear generation growth in non-OECD countries expanded very rapidly from 1973 to 1985 with an average annual rate of 26%. Since then, however, growth has been noticeably lower with an average annual rate of 3.0% from 1985 to 2011.

Geothermal, solar, tide, wave and wind power

Excluding hydroelectricity, non-combustible renewable energy represents only a fraction of total electricity production in non-OECD countries. In 2011, 135 TWh, or 1.2% of total reported electricity production was provided by geothermal, solar, tide, other, wave and wind power facilities (Table 1.2).

Compared to 2010 levels, electricity production from geothermal sources increased by 0.2% in 2010, production from wind sources increased by 46.2%, and production from solar PV more than doubled. It increased by 139.3%.

Combustible fuels

Electricity production from electricity and CHP plants that use combustible fuels (including fossil fuels and biofuels and waste) was 8 591 TWh in 2011. Combustible fuels comprised, by far, the largest component of non-OECD countries' gross electricity production in 2011, with a share of 75.8% (Table 1.2). Generation from these sources increased at an average annual rate of 7.2% from 1973 to 2011 – slightly higher than the 5.2% average growth rate for electricity production over that time frame. Under the current circumstances, combustible fuels will likely remain a very important component of non-OECD electricity production.

Coal

As with the OECD countries, hard coal is the leading source of electricity production in non-OECD countries. In 2011, electricity production from hard coal-fired electricity and CHP plants was 5 105 TWh, contributing 59.4% of combustible fuel-fired production or 45.0% of total production (Table 1.3)[4].

Electricity production from all coal sources, including brown coal, peat and coal gases, was 5 528 TWh in 2011, contributing 48.8% of total gross electricity production.

Oil

Liquid fuel-fired (including refinery gas) electricity and CHP plants produced 717 TWh of electricity, contributing 8.3% of combustible fuel-fired generation and 6.3% of total gross generation (Table 1.3) in 2011. Electricity from oil has become less important in non-OECD countries over time, with its share of total generation declining gradually from 24.6% in 1973, when the world experienced the first major oil disruption.

Natural gas

In 2011, natural gas-fired electricity and CHP plants produced 2 217 TWh of electricity, contributing 25.8% of combustible fuel-fired generation or 19.6% of total gross electricity production (Table 1.3). Electricity generated from natural gas decreased by 0.6% in 2011. The proportion of electricity produced with

4. In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal.

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natural gas increased until the mid 1980's and has since stayed around 20%, indicating that natural gas generation is growing at about the same rate as total generation.

Biofuels and waste

In 2011, biofuels and waste were used in electricity and CHP plants to produce 130 TWh of electricity, contributing 1.5% of combustible fuel-fired generation (Table 1.3). Electricity generation from this source has grown more slowly than that from other sources and so its share of total gross electricity generation decreased from 1.5% in 1973 to 1.1% in 2011.

Heat production

In 2011, total non-OECD heat production was 11 299 PJ, an increase of 5.0% from 2010 levels. The majority (96.7%) of this heat was produced by burning combustible fuels (Table 1.4). The remaining 3.3% was provided by nuclear, heat pumps, electric boilers, solar thermal, chemical heat and other sources. (Please note that Table 1.4 does not show a complete breakdown of the heat production by fuel due to a lack of information for several non-OECD countries, mainly in Europe.)

The largest component of heat was produced from natural gas. In 2011, 5 424 PJ, or 49.6% of total heat from combustible fuels sold in non-OECD countries came from natural gas. Reported heat production from natural gas increased by 5.2% in 2011.

The second largest component of heat sold to third parties was produced from coal. Heat produced from hard coal was 3 996 PJ, brown coal heat production was 475 PJ, production from peat was 6 PJ and production from coal gases was 307 PJ. Combined, these fossil fuels provided 43.8% of heat production from combustible fuels in 2011. Heat production from hard coal has increased since the late 1990s; however, heat production from brown coal and peat has declined sharply.

Heat production from oil was 521 PJ in 2011, contributing 4.8% of total heat production from combustible fuels. This represents an increase of 1.5% from its 2010 level.

The other significant source of combustible fuel-fired heat generation is non-fossil fuels like wood, industrial and municipal wastes, other solid waste, biogases and liquid biofuels. Heat produced from these sources was 201 PJ in 2011, a 2.9% increase from 2010. Biofuels and waste provided 1.8% of total heat production from combustible fuels in 2011.

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3. ELECTRICITY CONSUMPTION

OECD consumption

Based on 2012 preliminary data, OECD apparent consumption of electricity (gross production plus imports minus exports) was 10 816 TWh (Table 2.1), a 0.5% decrease from the 2011 level. (Detailed information on observed electricity consumption for the OECD in 2012 is unavailable at the time of going to print).

OECD electricity consumption for 2011, and for selected earlier years, is shown in Tables 2.6 and 2.13. Electricity total final consumption refers to electricity production plus imports minus exports minus electricity used at power stations (own use) minus electricity used for pumped storage, heat pumps and electric boilers, minus transmission and distribution losses. Accordingly, total final electricity consumption is significantly lower than apparent consumption data reported above.

OECD electricity total final consumption has grown from 3 901 TWh in 1973 to 9 615 TWh in 2011 representing an average annual increase of 2.4% (Table 2.14).

The rate of growth in electricity consumption varies widely among OECD countries. Between 1960 and 1973 the annual average rate of growth of electricity consumption exceeded 10% in Denmark, Greece, Iceland, Japan, Spain and Turkey. Since 1973, the growth in electricity consumption has slowed considerably. The only countries that experienced average annual growth rates over 5% are Chile, Iceland, Israel, Korea, Mexico and Turkey (Table 2.13).

OECD sectoral consumption of electricity

Much of the growth in OECD electricity consumption since 1973 has taken place in the residential and commercial/public service sectors. The combined share of total consumption of the residential and commercial/public service sectors increased from 46.5% in 1973 to 61.5% in 2011 (Table 2.14). Although the amount of electricity consumed in industry increased from 1 843 TWh in 1973 to 3 060 TWh in 2011 (Table 2.14), its share of total electricity consumption in the OECD fell from 47.2% in 1973 to 31.8% in 2011. The transport (mainly rail), agriculture (mainly irrigation pumps) and fishing sectors are relatively small consumers of electricity.

Although industry is the most significant end-use sector for electricity consumption, growth rates since 1973 have been the lowest of the major sectors. This is the result of low rates of economic growth, structural change and improvements in efficiency in energy intensive manufacturing and processing industries. OECD industrial electricity consumption increased by 0.5% in 2011, indicating that the recovery of the industry from the economic crisis (9.8% increase in consumption in 2010) is almost over. The largest increases in 2011 were seen in the iron and steel (3.9%), mining and quarrying (3.0%), non-metallic minerals (2.5%), machinery (2.2%) and transport equipment (1.9%) sectors (Table 2.15).

These data for the OECD as a whole conceal important regional differences that are shown in Table 11 for the separate OECD regions in Part IV of this report.

Non-OECD consumption

Calculated final electricity consumption in 2011 in non-OECD countries was 9 077 TWh (Table 1.1), an increase of 7.2% from the observed consumption in 2010. Between 1973 and 2011 final electricity consumption increased at an average annual rate of 5.2%. Non-OECD countries' share of world electricity final consumption increased from 26.0% in 1973 to 49.3% in 2011.

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The four highest consumers of electricity in non-OECD countries in 2011, the People's Republic of China, India, the Russian Federation and Brazil, represent 64.1% of non-OECD electricity consumption. The largest share is represented by the People's Republic of China at 42.6%. Between 1973 and 2011 electricity consumption in the People's Republic of China increased at an average annual growth rate of 9.2%.

Transmission and distribution losses represent 10.6% of electricity supply for non-OECD countries, while it was 6.5% for OECD countries (Table 1.1). Losses can reach over 25% of the electricity supply in some non-OECD countries such as Haiti, Iraq, Paraguay and Congo, to name a few.

OECD heat consumption

OECD heat consumption in 2011 was 2 475 PJ, an decrease of 6.7% from the 2010 level (Table 2.16)[1], partly due to the warmer winter in Europe which decreased the demand for heat in 2011. Of total OECD reported heat consumption, 79.3% occurred in Europe, mainly in Germany, Poland, Sweden, Finland, France, and Italy. In fact, these countries together accounted for 53.3% of total OECD heat consumption in 2011. Korea and the United States account for large shares of the remainder, both of which saw increases between 2010 and 2011 in heat consumption. The only European countries to experience increases in heat consumption over the same period were Greece, France, Iceland and the United Kingdom.

In 2011, 40.4% of third party heat consumed in OECD countries was used in the industrial sector, 34.2% in the residential sector and 17.0% in the commercial/public services sector (Table 2.17).

OECD market shares

Although electricity has certain unique uses, it also competes with other energy carriers in many end-use markets throughout the economies of OECD countries. The pattern of use is shown in Table 2.18 in which the share of electricity, heat and other fuels, in total final energy consumption in 2011 in the OECD region as a whole is reported for the major economic sectors.

1. These data do not include the consumption of heat produced in industrial plants or service industries for their own use. In this section heat consumption refers to heat sold to third parties by both main activity producers and autoproducers.

In 2011, 22.0% (803 Mtoe) of total final consumption of energy in the OECD countries was met by electricity and about 1.6% (59 Mtoe) by heat (Table 2.18). Crude oil and petroleum products held a 47.8% share of final consumption (1 746 Mtoe), natural gas 20.0% (730 Mtoe), coal 3.4% (122 Mtoe), biofuels and waste 5.0% (182 Mtoe), and geothermal and solar 0.3% (9.3 Mtoe).

Electricity plays an important part in the industry, residential and commercial/public service sectors. These three sectors accounted for 93.3% of electricity consumption in 2011 (Table 2.14). In the transport sector 93.7% of final energy is consumed in the form of oil and petroleum products. However, electricity competes with petroleum products in transport in the rail sector and to support the operations of both submarine and overland pipelines. Similarly, in agriculture and fishing, 74.9% of final energy is consumed in the form of oil and petroleum products. However, electricity holds a 12.6% share of final consumption, higher than the share held by natural gas (6.8%).

Although 31.8% of electricity consumed in 2011 was by the industry sector (Table 2.14), it is not the most consumed fuel by this sector. Electricity accounted for only 31.5% share of final energy consumption by the industry sector (Table 2.18). Electricity's main competitors in the industry sector are natural gas and petroleum products, with shares of 31.8% and 13.4%, respectively, and coal and biofuels and waste which combined held a share of 20.4%.

In the commercial/public services sector, which accounted for 30.8% of electricity consumption in 2011 (Table 2.14), electricity use is dominant over other fuels. Electricity's share in 2011 was 52.9% of the total final energy consumption in this sector compared to natural gas' share of 30.9% and petroleum products' share of 12.1% (Table 2.18). Heat contributed about 2.1% of final energy in the sector in 2011 in the OECD as a whole.

In the residential sector, the shares of fuel and electricity use vary substantially between countries. In 2011 electricity had the largest market share with 36.4%. Natural gas held a 36.3% share and petroleum products held a 12.6% share. Coal and biofuels and waste together held about an 10.8% share of energy consumption in this sector.

Between 1960 and 1973 electricity consumption in end-use markets grew at an average annual rate of 7.8% (Table 2.19). The average rate of growth was significantly lower between 1973 and 2011, at 2.2% (Table 2.20). Over both periods, electricity consumption growth significantly exceeded the growth in total

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final energy consumption, thereby increasing the share of electricity in total final energy consumption.

In the industry sector over the period 1960 to 1973, the increased use of petroleum products, natural gas and electricity displaced coal, and to a lesser extent biofuels and waste. Over this period, total final consumption in this sector increased by an average annual rate of 4.2% (Table 2.19). However, despite total final consumption in the industry sector decreasing at an average annual rate of 0.6% from 1973 to 2011, electricity consumption continued to grow, averaging an annual rate of growth of 1.0%, compared to 6.6% in the period 1960 to 1973.

Since 1960, the fastest growing market for electricity has been the commercial/public service sector. Final consumption of electricity in this sector increased at an average annual rate of 10.0% between 1960 and 1973, and at 3.6% between 1973 and 2011. This compares to annual average growth rates for petroleum products in final consumption of 10.6% between 1960 and 1973, but an overall decline in the period 1973 to 2011 of 2.3%. For natural gas, the annual average growth rate in this sector was 8.1% between 1960 and 1973 and 1.9% between 1973 and 2011.

Electricity has also substantially increased its market share in the residential sector with an average annual growth rate of 9.4% between 1960 and 1973, and a slower rate of 2.6% from 1973 to 2011. Between 1960 and 1973 electricity, natural gas, and petroleum products replaced a large share of coal in end-use, and between 1973 and 2011 heat, electricity, and biofuels replaced shares of coal and petroleum products.

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4. ELECTRICITY TRADE

Transfers of electricity between utilities in neighbouring regions have been common for many years. Exchanges based on differences in national production costs between regions are economically efficient, and fluctuations in load can be balanced by exchanges with neighbouring utilities with different load profiles. Such exchanges reduce the overall reserve margins needed by diversifying the potential sources of supply. Surplus capacity in a neighbouring region can result not only from simple differences in load timing, but also from differences in climate, economic structure, or the timing of forced and scheduled unit outages.

OECD electricity trade

OECD imports of electricity grew from 88 TWh in 1973 to 436 TWh in 2012 (Table 2.21), an average annual growth rate of 4.2%. OECD exports of electricity grew from 81 TWh in 1973 to 455 TWh in 2012, an average annual growth rate of 4.5% (Table 2.22).

Substantial trade in electricity occurred in OECD Europe, principally between OECD countries, and in OECD Americas. In OECD Europe, electricity imports grew at an average annual rate of 7.1% between 1973 and 1990, but slowed to a rate of 2.4% annually between 1990 and 2012 (Table 2.23). In OECD Americas, total imports increased by an average annual rate of 4.5% between 1973 and 1990, and by 2.3% between 1990 and 2012.

Non-OECD electricity trade

When considered as a single entity, non-OECD countries were net exporters of electricity. In 2011, these countries reported electricity imports of 231 TWh and electricity exports of 233 TWh, resulting in net exports of 2 TWh (Table 1.1).

Outside of the OECD there is substantial electricity trade between Russia, Kyrgyzstan, Turkmenistan, Ukraine and other countries of the former Soviet Union. These countries export significant quantities of electricity to net importing countries such as Belarus, Moldova, and Latvia as well as to countries in central and Western Europe.

In South America, electricity produced by large hydroelectric plants in Paraguay is exported to Brazil and Argentina. In 2011, net exports from Paraguay were 46.1 TWh, an increase of 6.3% from the 2010 level (43.4 TWh).

In Africa, there is significant trade in the southern portion of the continent. South Africa exports a significant amount of power to Zimbabwe. Mozambique, which has been a net electricity importer, became a net exporter in 1998 as a new hydro project came into service. In 2011, net exports of South Africa were 3.1 TWh.

China exports electricity from nuclear and hydroelectric plants in the south to Hong Kong. In 2011, net exports from China were 12.7 TWh.

India also imports a significant amount of electricity (5.5 TWh), a substantial part of which is produced by hydro facilities in Bhutan.

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5. OECD PRICES

In 2012, the OECD average real[1] electricity price increased by 1.0% for industry and by 0.6% for households. The overall increase was of 0.8%. The overall OECD price trends, though, mask different trends in the different OECD regions.

For example, electricity prices in OECD Europe for industry increased by 1.1% from the 2011 level, and for households increased by 0.7%; yielding an overall average rate increase of 1.0% for both sectors.

In Japan (Table 3.4 and Figure 3.2), until recent years, electricity prices had mainly been on a decline since 1985. In 2012, real electricity price for industry increased sharply by 10.5% and for households by 3.7%, yielding an overall average increase of 6.5%.

Electricity prices for industry

In 2011, average electricity prices in US dollars per MWh for industrial consumers (in countries for which data are available) increased in the OECD (Table 3.5) by 11.1%. The increase was due to significant spikes in the price for heavy fuel oil (33.6%). Changes in prices measured in local currencies may be quite different since the direct effect of exchange rate changes with the US dollar is not incorporated.

Data on prices in local currencies are published quarterly in *Energy Prices & Taxes* and are shown in Part IV of this book for individual countries. At the time of going to press, 2012 data were not yet available for some countries; hence reported average price data for 2012, for the OECD and OECD Europe as a region, cannot be calculated. Of the countries for which 2012 data are available, the average price of electricity for industrial users decreased in nineteen countries and rose in the remaining nine.

Electricity prices for industrial consumers vary widely across OECD countries. Based on available 2012 data, prices were the lowest in Norway (57.56 USD per MWh), while they were the highest in Italy (291.79 USD per MWh). Electricity prices for industry are also reported in Table 3.6 in terms of US dollars per tonne of oil equivalent to allow for comparison with other fuels.

Electricity prices for households

In 2011, electricity prices in USD per MWh for household consumers (in countries for which data are available), increased in the OECD by 9.9% (Table 3.7). Complete data for 2012 for the OECD as a whole are not yet available, but of the countries where data are available, 13 had price increases, while 17 had price reductions.

Electricity prices for household consumers also vary widely across OECD countries. Based on data that are available for 2012, prices varied from 90.20 USD per MWh in Mexico to 383.43 USD per MWh in Denmark. Electricity prices for households are also reported in Table 3.8 in terms of tonnes of oil equivalent to allow for comparison between fuels.

1. Real price indices are the current price indices divided by the country specific producer price index for industrial prices and by the consumer price index for the household sector. See Principles and Definitions at the beginning of Part II for further details on methods used. Specific producer and consumer price indices are based on 2005=100.

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Prices of competing fuels

Fuel oil, steam coal and natural gas are the main fuels used in the production of electricity in power plants that use combustible fuels (Tables 3.11 to 3.16).

In 2012, prices for heavy fuel oil varied (for those countries for which data are available) between USD 468 per tonne in Austria to USD 1219 per tonne in Turkey. In 2012, heavy fuel oil prices increased from the 2011 level in all of the seven countries that reported data. This indicates that the growth evidenced in 2010 and 2011, is continuing from the dip experienced in 2009 due to the economic crisis. In 2009, the OECD average heavy fuel oil price for electricity generation fell 31.0% from 2008 levels but rebounded in 2010. The price increased from USD 473 per tonne in 2010 to USD 631 per tonne in 2011. This sharp increase can be attributed to the higher demand for heavy fuel oil after the accident at the Fukushima Daiichi power plant.

Based on data that are available for 2012, steam coal prices for electricity generation varied from USD 39 per tonne in Turkey to USD 133 per tonne in Israel. The variations in prices reflect, in part, the degree to which domestic supply costs differ from international market prices and the relative importance of domestic supply sources, as well as transport costs from supply sources to end use markets. In 2011, the last year for which complete data are available, average steam coal price for the OECD increased by 10.3% to USD 66 per tonne.

Natural gas prices (reported in gross calorific value) also vary between OECD countries. Based on data that are available for 2012, prices varied from USD 11.57 per MWh in the United States to USD 53.27 per MWh in the Slovak Republic. Prices increased in eight countries and decreased in two for which 2012 data have been reported. In 2011, the last year for which complete data are available, average natural gas price for the OECD increased by 0.8%, from USD per 19.85 MWh to USD 20.00 per MWh.

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6. TRENDS IN THE OECD ELECTRICITY SECTOR

Energy and electricity intensity

Table 1 in Section IV, "OECD Total: Energy Consumption, GDP and Population" provides data on relative changes in total primary energy supply (TPES), gross domestic product (GDP), population and electricity final consumption (TFC). The ratio of TPES to GDP is a measure of the amount of energy input required per unit of national output. The data in the table indicate that TPES per unit of GDP (TPES/GDP), often used as a broad indicator of energy intensity of economies, has declined at an average annual rate of 1.5% since the first "oil price shock" in 1973.

However, the aggregate table for the OECD as a whole masks significant regional differences, which are further elucidated in subsequent aggregate tables for each OECD region. For example, in the OECD Asia Oceania region, the TPES/GDP ratio in 1973, at only 70% of the average for the OECD as a whole, was the lowest in all OECD regions. The low ratio reflects the relative high price of domestic and imported energy in Japan and Korea in 1973, which encouraged conservation and energy efficiency. However, as time passed, the ratio declined in the Asia Oceania region more slowly than for the OECD as a whole. Several factors, including the high level of conservation and energy efficiency at the beginning and the rapid economic development in Korea have affected this pattern. By 2012, their ratio was no longer the lowest in the OECD, reaching 94% of the average for the OECD.

In OECD Americas, which is heavily influenced by energy consumption patterns in the United States, the TPES/GDP ratio in 1973 was, by far, the highest in the OECD, 40% higher than the average for the OECD as a whole. This reflects the relatively low price of domestic and imported energy in the United States – which discouraged investment in energy efficient technology and other factors like geographic size (which encourages more auto usage) and reliance on personal automobiles rather than mass transit. However, since OECD Americas started with such a high ratio in 1973, it has experienced the most rapid rate of decline (1.8% per annum), and is now at 21% higher than the average for the OECD.

The OECD Europe region had a TPES/GDP ratio that fell in between the other two regions in 1973 at 79% of the OECD average. However, they have made great strides to reduce their energy consumption, reducing it by an average of 1.4% per year between 1973 and 2012. This has resulted in their ratio being the lowest of the three regions at 81% of the OECD average.

While the broad measure of energy intensity, TPES/GDP, suggests that all OECD regions are getting more "energy efficient," albeit at differing rates, another measure shows a different trend. One measure of electricity intensity is the ratio of final consumption of electricity to gross domestic product (Electricity TFC/GDP). The indexed electricity intensity ratio for the OECD as a whole increased at an average annual rate of 0.1% from 1973 to 2000. From 2000 to 2011, the ratio declined by an average annual rate of 0.5% per year and is now at a level lower than the one it had in 1973. As energy efficiency has improved for member countries as a whole, they are at the same time becoming more electricity intensive. However, the patterns within each region vary considerably.

In the OECD Asia Oceania region, between 1973 and 2011 the electricity intensity index has increased at an average annual rate of 0.4%. In the OECD Europe

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region, the index has increased slightly, at an annual rate of 0.04%. The OECD Americas region shows a different pattern for electricity intensity, with an average annual decline of 0.4%. Thus, Europe and Asia Oceania are growing more electricity intensive as electricity intensity declines in the Americas region.

Electricity production

Each region's natural endowment of resources, as well as the delivered price and availability of imported resources, affect the mixture of inputs for electricity generation. Inputs are also affected by government policies related to environmental compliance, energy security, the availability of investment capital for energy technologies and infrastructure, and perceived risks associated with different technologies.

Table 3 in Part IV, "OECD Total Summary Electricity Production and Consumption", provides statistics on electricity generation by sources since 1973. Production from solar, wind, other non-combustible renewable energies and biofuels and waste combined increased at an average annual rate of 12.7% between 1973 and 2012. However, the lack of reliable data from several countries in the earlier years of this time period may significantly distort the growth rates.

Data on geothermal, hydro, nuclear and combustible fossil fuels are reliable and available for most member countries throughout the time period. The strongest growth since 1973 has been for nuclear (6.2%) and geothermal (5.1%) followed by natural gas (4.4%) and coal (1.8%), while hydro (excluding production from pumped storage plants) has increased more moderately since 1973 (1.1%). Electricity generation from oil has declined at an average rate of 2.9% per annum since 1973.

Average annual growth of electricity generation by source in OECD regions from 1973 to 2012 in %

Source	Americas	Asia Oceania	Europe	Total
Coal	1.6	5.6	0.9	1.8
Oil	-3.3	-1.5	-4.6	-2.9
Natural gas	3.6	10.3	4.5	4.4
Nuclear	5.7	7.6	6.5	6.2
Geothermal	6.0	4.6	4.1	5.1
Hydro	1.0	0.6	1.2	1.1
Other	18.6	14.3	11.4	12.7
Total	**2.2**	**3.1**	**2.1**	**2.3**

The above table summarises the variation between OECD regions. Not only has the Asia Oceania region experienced the strongest growth rate, but to do so it has relied more heavily on nuclear, natural gas, and coal to meet its generation needs. Coal consumption growth is higher in the Asia Oceania and Americas regions than in Europe. Nuclear and natural gas have had the highest growth rates (of the major sources) in OECD Europe, while electricity generation from oil has declined in every region.

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7. ELECTRICITY STORAGE

This article has been adapted from a report, "The role of electricity storage in providing electricity system flexibility", written by David Elzinga, IEA; Jody Dillon, Ecar ENERGY and Mark O'Malley, University College Dublin; João Lampreia, IEA. The entire report can be found in the IEA publication called Electricity in a Climate Constrained World.

Introduction

Aging infrastructure, growth in peak demand and increased deployment of variable renewable generation, such as wind and solar photovoltaic (PV), are factors significantly affecting the security, cost and reliability of our electricity systems. Energy storage technologies can be used in a wide variety of applications to address concerns by providing a valuable source of ancillary services and flexibility to the energy system, but storage deployment is restricted by high capital costs, inherent round-trip losses and market and regulatory barriers.

Pumped hydro is the most common storage technology at present. Other storage technologies, including mechanical and chemical conversion devices, struggle to compete with conventional electricity system technologies in cost and performance. However, in certain cases where the competing technologies are expensive, the value of storage can outweigh its cost.

Electricity system concerns may create new opportunities for storage technologies in the development of a decarbonised electricity system, enabling increased levels of variable renewable deployments, while ensuring secure and reliable system operation. Much research and development work is underway internationally exploring new ways to achieve the benefits of storage at lower cost, to reduce the costs of new and emerging storage technologies and to address the other barriers to increased deployment.

Defining flexibility and storage

Power system flexibility "expresses the extent to which a power system can modify electricity production or consumption in response to variability, expected or otherwise. In other words, it expresses the capability of a power system to maintain reliable supply in the face of rapid and large imbalances, whatever the cause. It is measured in terms of the MW available for ramping up and down, over time (+/- MW/time). For example, a given combined cycle gas turbine (CCGT) plant may be able to ramp output up or down at 10 MW per minute" (IEA, 2011a, p. 35)[1]. Electricity systems need flexibility and employ a range of resources to meet it within their technical, regulatory and market frameworks (Figure 1).

In most regions, dispatchable generation technologies that are able to adjust output on demand serve as the primary flexible resource. But, as the need for flexibility increases, it will be necessary and economical to incorporate interconnection, storage and demand response. To integrate flexibility resources into the electricity system, it is critical to look at the system in its entirety: generation, transmission, distribution and end use. Generally, a suite of solutions (based on regionally available types of flexibility) emerges, where current costs are evaluated against anticipated future costs, and current needs compete with long-term needs. Individual technologies must be examined for how they best fit flexibility needs, and must be evaluated against existing regulatory and market barriers that may prevent certain options from being considered in favour of conventional approaches.

1. In a full evaluation of electricity system flexibility, other characteristics such as minimum stable load factor and start-up time must also be considered.

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Figure 1. Overview of flexibility needs and resources

Figure 2. Storage technologies by rated capacity and discharge time

Source: EPRI, 2010.

Figure 3. Hypothetical power supply and demand curves over two days

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While it is not possible to effectively store large amounts of electricity, it can be converted to other forms[2], stored and then reconverted back into electricity with some predictable energy loss. Storage technologies distinguish between energy and capacity. Energy (in kilowatt-hours [kWh]) is the fundamental quantity delivered, while the rated capacity of a facility (in kilowatts [kW]) determines the maximum rate at which stored energy can be delivered to an electricity system. Thus, storage technologies have two fundamental characteristics that determine their technical suitability for a particular system application: the capacity at which they can discharge stored energy (in kW), and the time it takes to fully deplete the energy store at this power level (the discharge time). Storage technologies can be categorised by the range of rated capacity and their associated discharge times as shown in Figure 2.

For the most common past and present storage application, energy arbitrage,[3] the quantity of energy is relatively large, typically requiring high power levels over time scales of hours. This can be characterised as an energy application and pumped hydro (PH) or compressed air energy storage (CAES) could be applied here (top right-hand corner of Figure 2). In contrast, flywheels can produce power levels up to 20 megawatts (MW), but this can only be delivered over relatively short time scales, making it suitable for regulation applications (towards the bottom left-hand side of Figure 2).

Storage applications

Storage technologies can serve a range of power system applications, such as energy arbitrage, new capacity investment deferral, congestion management and a range of ancillary services. Their ability to switch from generation to consumption relatively quickly makes storage a valuable source of flexibility for the power system. The example of balancing in Figure 3 demonstrates that electricity supply and demand do not always match. During times of excess supply (shaded in light grey) due, for example, to high wind production during low-demand periods, electricity can be stored. During times of shortfall in high-demand periods (shaded in black), storage technologies could act as a generation source to reduce or eliminate the deficit. In this case, storage contributes to the secure and reliable operation of the electricity system by assuring a manageable provision of power in reserve and deferring the need for additional generation capacity.

Storage technologies can also provide a range of ancillary services (regulation, spinning or operating reserves, voltage support and black-start capability) that have typically been provided as a by-product of electricity generation. Although storage technology is a versatile resource in an electrical system, its contributions to the system can equally be provided by other technologies, in particular transmission and interconnection. When assessing applications, storage must therefore be weighed against other technological measures: conventional generation technologies, transmission, interconnection, network devices (*e.g.* capacitors and static compensation devices), operational practices (*e.g.* forecasting, generation re-dispatch, protection measures and use of dynamic line rating information) and demand response, most of which are more mature technologies in serving system applications. Table 1 below maps many of the common storage technologies and their respective system applications or the functions they serve, and their level of maturity in performing such functions.

Storage technologies vary widely in maturity. They are generally less mature than competing technologies such as regional interconnection and system support back-up generation capacity. Storage, however, offers structural advantages. Unlike grid interconnections, it provides a self-sufficient solution independent of other grids, which is especially useful when interconnection is a challenge. Unlike compensation by back-up capacity, where a quick response is a challenge, storage can deal with troughs and peaks in intermittent outputs, possibly close to the output source, reducing stress on grids.

Current storage technologies

Pumped hydro

Conventional hydropower plants contain large amounts of stored energy which can be released when it would benefit the system, or which can be held back when cheaper resources (such as wind) would otherwise be curtailed (IEA, 2011b). Pumped hydro has many of the benefits of the two-way storage systems discussed above, but these plants are vulnerable to water availability which can vary seasonally with climatic factors such as drought (Sims *et al.*, 2011).

2. In compressed-air energy storage, electrical energy is converted and stored as a compressed gas. Battery technologies convert electrical energy and store it as chemical energy, using compounds such as sodium sulphur (NaS), lithium ion (Li-Ion), nickel-cadmium (NiCd), nickel-metal hydride (NiMh), and lead acid and flow batteries, such as vanadium redox (VR) and zinc air (Zn Air). Flywheels store kinetic energy (EPRI, 2010).

3. Arbitrage refers to the use of inexpensive electricity to fill a storage device (typically at night) for later release at times when electricity is more expensive (typically during the day).

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Table 1. Storage technologies by electricity system application (characterised by time frame and maturity)

		Discharge time / duration	Storage application by response time frame									
			Hours					Minutes			Seconds	
			Energy arbitrage	Generation capacity deferral	(T&D) Investment deferral	Congestion management	Voltage support	Black start	Spinning reserve	Renewable ramp reduction	Regulation	Power quality
Storage technologies	Pumped hydro	Hours	M	M	M	M	M	M	M	M	M	
	CAES	Hours	C	C	C	C	C	C	C	C		
	Flywheel	Minutes						D	D	D	D	D
	Super capacitor	Seconds										D
	Lead acid battery	Hours										C
	Advanced lead acid battery	Hours						D	D	D	D	C
	NaS battery	Hours						C		C	C	C
	NiCd battery	Minutes									D	C
	Flow battery	Hours					R	R	R	R	R	R
	Li-Ion battery	Minutes									D	D

Technology maturity key : M Mature C Commercial D Demonstration R R & D

Pumped hydro plants convert electrical energy from variable renewable energy sources, such as wind, into potential energy by pumping water from a lower reservoir to an upper reservoir during times when electricity generation exceeds demand, normally at night. Electricity may then be generated whenever it is advantageous to the system by releasing water from the higher reservoir back into the lower. The process has a relatively high efficiency rating, ranging from 65% to 80%. Pumped hydro's power and storage capacities are comparable to those of conventional hydropower plants: power capacity is determined by the number and size of turbines/pumps, while storage capacity is determined by the size and elevation of the upper reservoir.

With approximately 130 GW installed worldwide, pumped hydro accounts for over 95% of the world's electricity storage capacity (IRENA, 2012). Most was developed from 1970 to 1995, taking advantage of the wide daily electricity price spread (*e.g.* from high-priced oil peak-load plants to lower-priced nuclear base-load plants). During that period, this arbitrage opportunity justified the development of pumped hydro.

In the 1990s, the use of gas generation increased dramatically for both base load and mid-merit electricity production, using combined- and open-cycle gas turbines (CCGTs and OCGTs) for peak plants. The daily price spread narrowed as a result, undermining the incentive to build more pumped hydro capacity.

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At present, energy arbitrage, the traditional driver for investment in pumped hydro, does not stand up in market conditions. Even though any storage technology connected to the grid could potentially affect price arbitrage, a certain size of pumped hydro would be required for significant revenues to be generated by the peak-time selling of power which had been stored in off-peak periods. The price difference would also have to remain large over a sustained period to generate a return sufficient to justify investment, but analysis by Pieper and Rubel (2011) has shown that this difference would have to be wider than that normally seen in markets.

Current viable scenarios for pumped hydro focus on the provision of ancillary services, such as balancing energy, following the shifting principle illustrated in Figure 3, with the precondition that there be market balancing mechanisms in place. Ancillary black-start supply services are also an option for pumped hydro, since it is not necessarily fully discharged on a daily basis. This emergency-reserve capacity could therefore generate additional revenues. Other viable scenarios are seen in very specific conditions, such as small-island power systems (Caralis and Zervos, 2007). Investments in pumped hydro for the provision of ancillary services and specific condition usage have been increasing since 2003 (Figure 4).

Figure 4. Installed nuclear and pumped hydro in OECD countries

Compressed air energy storage

Compressed air energy storage (CAES) is the second-largest storage capacity connected to the electricity system: with 400 MW installed worldwide, it accounts for 0.3% of total storage. Following compression, electrical energy is stored either under or above ground; the compressed air is then combined with gas to generate electricity. Being a hybrid device, CAES efficiency is difficult to calculate, but it has similar efficiencies to pumped hydro. Only two CAES plants exist in the world: in Huntorf, Germany (290 MW), and in McIntosh, Alabama, United States (110 MW). Interestingly, both were commissioned in the same period as most of the pumped hydro plants.

Both CAES plant use salt caverns, in which salt is dissolved to store the compressed air. Other geological structures may be suitable, however, including abandoned mines, aquifers and depleted gas fields. Above-ground CAES would require a purpose-built vessel. Similar to PH, the main CAES applications are in energy arbitrage and ancillary services.

Other storage technologies

Several types of batteries are used for large-scale energy storage, all consisting of electrochemical cells with different specificities and thus suitable for different applications. At 316 MW worldwide, sodium sulphur (NaS) batteries are the next-largest (0.25%) electricity storage system after pumped hydro and compressed air energy storage. Lead-acid batteries, being reliable and cheap, are also in common use despite their smaller storage capacity. In order to obtain the most cycles possible (300-1 500) lead-acid batteries are designed to use only 10% of their storage capacity. Deep-cycle lead-acid (DCLA) batteries are currently operational in banks of up to 1 MW in wind-farm power generation (Bayar, 2011). All other storage technologies combined – including battery technologies, flywheels and super capacitors – account for just 85 MW or approximately 0.07% of global capacity (EPRI, 2010). These technologies are generally employed in highly specialised ancillary services and localised power quality applications.

Battery energy storage in Alaska

A good example of a specific storage technology application is the battery system for frequency regulation on the island of Metlakatla in Alaska. In 1995 a 1.2-MW, 1-hour, lead-acid battery storage facility for Metlakatla Power and Light was built. This instalment was required to help manage the voltage and frequency fluctuations caused by variances in the electricity demand of the 1000-person community. Small reciprocating diesel units using fuel imported on barges were used to provide this regulation service previously. The total cost of the battery storage facility was USD 2.2 million; it is estimated to have saved over USD 6.6 million in fuel over 11 years of operation (Manz, Piwko and Miller, 2012). This example demonstrates how the cost of storage can be preferable to the costs of the alternatives in specific niche situations.

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Barriers to energy storage

All electricity storage technologies have relatively high capital costs compared to conventional generation technologies. Costs and conversion energy losses vary widely across storage technologies. Figure 5 below illustrates the variability in cost per unit installed and per unit of energy output, while typical efficiency factors range between 45% for hydrogen and 80% for batteries (Pieper and Rubel, 2010). Both cost and efficiency factors currently constitute a significant barrier to wide-scale deployment of certain storage technologies, but the context is also a strong determinant. The appropriateness of an application is as vital as cost reduction and efficiency gains for financially sustainable deployment.

Although cost reduction is critical if storage is to play a large part in future electricity systems, much analysis to date values only the energy arbitrage potential of electricity storage. Valuation of other storage applications is ongoing, however – particularly its flexibility (Lannoye, Flynn and O'Malley, 2012). Because the characteristics of storage are so different from those of conventional generation, there are also institutional barriers hampering storage, which are being addressed by the modification of market rules. Cost targets for research programmes can be used as a proxy for future cost trends. The US Department of Energy's Advanced Research Projects Agency set a price target of USD 100/kWh, which is lower than the price of all the highlighted technologies (Figure 5). It should be noted, however, that real cost and cost projections vary widely and are difficult to verify.

The two main forms of storage deployed commercially today, pumped hydro and CAES, both depend largely on the availability of suitable geological structures, some of which may have already been exploited or may not be available at all in some regions. In the case of PH, many of the most suitable formations have been developed, leaving the remaining ones more costly to exploit. This is a possible factor in the decreasing rate of development of PH illustrated in Figure 4. Another factor may be that public opposition to the environmental impact of such developments has historically been lower compared to today's levels.

Some battery technologies depend on the availability of specialised materials. In the case of lithium-based battery technologies, the availability of the economically recoverable resource has been called into question (Sims *et al.,* 2011). Other battery technologies, notably NaS and advanced lead acid, have a limited number of charge and discharge cycles before performance is materially impaired, restricting their suitability for some applications.

Figure 5. Life-cycle costs of storage technologies per unit of installed capacity and energy

Note: Recent cost data for some technologies was not available from reliable sources. These technologies have been omitted from the graph.

Source: Data from EPRI, 2010.

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Future potential of storage

Several proposals for storage are currently under development, such as 7.4 GW of pumped hydro in Europe (Deane, Ó Gallachóir and McKeogh, 2010), but few have actually been constructed. Some projects have been undertaken to retrofit existing hydroelectricity facilities with reversible pumps to create a pumped hydro facility (Estanqueiro, Mateus and Pestana, 2010; REN, 2008), or to install variable-speed pumps to increase the ability to provide flexibility. These projects recognise that, rather than pumping at a fixed load, pumped hydro stations can operate over a wider range of load levels to better accommodate renewable energy resources (Deane, Ó Gallachóir and McKeogh, 2010). In the area of battery storage, research and development of new materials and technologies focuses on reducing costs and addressing cycle limitations.

At higher penetrations of variable renewables, storage for energy arbitrage begins to make economic sense (Tuohy and O'Malley, 2011). But against other options, in particular building more transmission, the case for storage is less clear (EASAC, 2009). The increasing difficulty in building transmission for wind and solar deployment may obviate this situation (Denholm and Sioshansi, 2009). Greater interconnection of regional electricity systems may use the large existing hydro storage resources more optimally. Other more specialised applications for energy storage, such as the provision of very fast-acting reserve and virtual inertial response, particularly on isolated or weakly connected power systems, may also prove cost-effective (Wu *et al.*, 2008; Delille, Francois and Malarange, 2010). The ability of storage to increase flexibility across multiple time horizons underpins its potential value to a system with increasing flexibility needs.

The potential carbon dioxide (CO_2) emissions benefits of storage are unclear in some situations. Several studies show that storage increases CO_2 emissions[4], but these results are system specific and depend on assumptions around fuel mixes and carbon prices (Ummels, Pelgrum and Kling, 2008). As variable renewable energy penetrations increase to high levels, storage eventually reduces CO_2 emissions by promoting the generation of electricity from variable renewables (Tuohy and O'Malley, 2011).

While storage may be a valuable source of flexibility for a power system, its deployment remains restricted primarily by high capital costs and low conversion efficiencies. Increased production from variable renewable generation and the increasing need for flexibility in the future may create new opportunities for storage. The use of storage to provide ancillary services, investment deferral and other applications still faces barriers in cost, market structure and regulation. In specific cases where the competing technologies are expensive, storage may be the most cost-effective option. Much research and development work is underway internationally to explore new ways to achieve the benefits of storage at lower cost, to reduce the costs of new and emerging storage technologies, and to address market and regulatory barriers to increased deployment.

In addition to these efforts, further work is needed to determine near-term opportunities for storage deployment and its long-term potential. These investigations must examine storage in the overall electricity system context and consider where it can best be used compared to other technologies (such as flexible generation, demand response and interconnection) that can provide the same electricity system services.

4. Storage technology can encourage the use of inexpensive coal generation, and therefore increase CO_2 emissions.

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PART III

ELECTRICITY DATA OVERVIEW

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Figure 1.1. World electricity and energy production

(1) Excludes production from pumped storage.

Source: IEA/OECD *Energy Balances of Non-OECD Countries.*

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Table 1.1. World electricity production, imports, exports, final consumption, 2011 (TWh)

	Gross production (1)	Imports	Exports	Own use	Other use (2)	Supply	Transm. losses(3)	Energy industry (4)	Calc. consumption (5)
OECD Total	10867.0	418.1	416.3	502.7	87.1	10279.0	664.0	275.0	9339.9
Non-OECD Total	11335.2	230.5	232.7	702.4	14.0	10616.7	1130.4	409.1	9077.2
World	**22202.2**	**648.6**	**648.9**	**1205.1**	**101.1**	**20895.7**	**1794.5**	**684.1**	**18417.1**
Australia	252.6	-	-	16.7	0.1	235.9	13.3	11.6	210.9
Austria	65.7	25.0	16.8	2.4	5.1	66.5	3.5	1.4	61.5
Belgium	90.2	13.2	10.7	3.5	1.6	87.6	4.2	3.3	80.2
Canada	637.0	15.0	51.5	18.4	0.2	581.8	34.7	28.2	518.9
Chile	65.7	0.7	-	2.5	-	63.9	4.7	0.6	58.7
Czech Republic	87.5	10.5	27.5	6.5	0.9	62.9	4.4	1.9	56.7
Denmark	35.2	11.7	10.4	1.7	0.1	34.7	2.4	1.0	31.3
Estonia	12.9	1.7	5.3	1.2	-	8.1	0.9	0.5	6.6
Finland	73.5	17.7	3.8	3.1	0.2	84.1	2.5	1.3	80.2
France	562.0	9.5	65.9	24.6	6.9	474.0	29.1	25.4	419.5
Germany	608.7	51.0	54.8	35.8	7.8	561.3	25.7	15.0	520.6
Greece	59.4	7.2	3.9	5.5	0.4	56.8	2.8	2.2	51.8
Hungary	36.0	14.7	8.0	2.5	-	40.1	3.8	1.8	34.5
Iceland	17.2	-	-	0.4	0.2	16.7	0.5	0.1	16.0
Ireland	27.7	0.7	0.2	1.3	0.0	26.9	2.1	0.2	24.6
Israel	59.6	-	4.2	5.0 e	-	50.5 e	1.6 e	0.6 e	48.3 e
Italy	302.6	47.5	1.8	11.1	2.5	334.6	20.8	12.0	301.8
Japan	1051.3	-	-	38.7	10.7	1001.8	48.2	14.3	939.4
Korea	523.3	-	-	20.1	4.3	498.9	17.4	10.3	471.1
Luxembourg	3.7	7.1	2.6	0.0	1.5	6.6	0.1	-	6.5
Mexico	295.8	0.6	1.2	16.8	-	278.5	45.6	7.2	225.7
Netherlands	113.0	20.6	11.5	3.9	-	118.1	4.6	6.1	107.5
New Zealand	44.5	-	-	1.4	-	43.1	3.1	0.5	39.5
Norway	128.1	11.3	14.3	0.6	2.5	122.0	10.3	6.3	105.4
Poland	163.5	6.8	12.0	14.7	0.7	142.9	10.6	10.3	121.9
Portugal	52.5	6.7	3.9	1.3	0.7	53.2	4.1	0.8	48.4
Slovak Republic	28.7	11.2	10.5	2.6	0.5	26.3	0.5	1.0	24.8
Slovenia	16.1	7.0	8.3	1.1	0.2	13.5	0.8	0.1	12.6
Spain	291.4	7.9	14.0	10.1	3.2	272.0	26.8	5.3	239.9
Sweden	150.4	12.5	19.7	3.4	1.5	138.2	10.6	3.0	124.6
Switzerland	64.6	34.8	32.2	1.7	2.5	63.1	4.5	-	58.6
Turkey	229.4	4.6	3.6	11.8	-	218.5	32.4	2.3	183.8
United Kingdom	367.8	8.7	2.5	16.5	3.8	353.7	27.9	7.9	318.0
United States	4349.6	52.3	15.0	215.9	28.9	4142.1	259.5	92.7	3789.9
OECD Total	**10867.0**	**418.1**	**416.3**	**502.7**	**87.1**	**10279.0**	**664.0**	**275.0**	**9339.9**
OECD Americas	*5348.1*	*68.6*	*67.7*	*253.6*	*29.1*	*5066.3*	*344.5*	*128.7*	*4593.1*
OECD Asia Oceania	*1931.3*	*-*	*4.2*	*81.8*	*15.1*	*1830.2*	*83.6*	*37.3*	*1709.3*
OECD Europe	*3587.5*	*349.5*	*344.3*	*167.2*	*43.0*	*3382.5*	*235.9*	*109.1*	*3037.5*

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Gross production refers to total main activity producers and autoproducers production, including production from pumped storage.

(2) Other use refers to used for heat pumps, electric boilers and pumped storage.

(3) Includes distribution losses.

(4) Electricity consumed by energy industries for heating, traction and lighting purposes; excludes own and other use.

(5) Calculated final consumption may differ from observed final consumption due to statistical difference.

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Table 1.1. World electricity production, imports, exports, final consumption, 2011 (continued) (TWh)

	Gross production (1)	Imports	Exports	Own use	Other use (2)	Supply	Transm. losses(3)	Energy industry (4)	Calc. consumption (5)
Algeria	51.2	0.7	0.8	4.5	-	46.5	9.9	0.8	35.9
Angola	5.7	-	-	0.1	-	5.5	0.6	-	4.9
Benin	0.2	0.9	-	-	-	1.1	0.2	-	0.9
Botswana	0.4	3.2	-	0.1	-	3.5	0.4	-	3.1
Cameroon	6.0	-	-	0.4	-	5.6	0.6	-	5.0
Congo	1.3	0.0	-	0.1	-	1.2	0.6	-	0.6
DR of Congo	7.9	0.0	0.2	0.0	-	7.7	1.0	-	6.7
Côte d'Ivoire	6.2	-	0.6	0.0	-	5.5	1.4	-	4.1
Egypt	156.6	0.0	1.6	4.4	-	150.6	16.6	-	134.0
Eritrea	0.3	-	-	0.0	-	0.3	0.1	-	0.3
Ethiopia	5.2	-	-	0.6	-	4.6	0.5	-	4.0
Gabon	1.8	-	-	0.1	-	1.7	0.3	0.0	1.3
Ghana	11.2	0.1	0.7	0.1	-	10.5	2.1	-	8.5
Kenya	7.8	0.0	0.0	0.1	-	7.8	1.3	-	6.5
Libya	27.6	0.1	0.1	1.9	-	25.6	3.6	-	22.0
Morocco	25.0	5.1	0.5	0.1	0.2	29.3	3.1	0.9	25.3
Mozambique	16.8	8.6	12.0	0.1	-	13.3	2.5	-	10.8
Namibia	1.4	2.5	0.1	-	-	3.8	0.4	-	3.4
Nigeria	27.0	-	-	0.8	-	26.3	2.6	-	23.7
Senegal	3.1	-	-	0.1	-	3.0	0.6	-	2.4
South Africa	262.5	11.9	15.0	15.0	3.9	240.5	22.0	11.7	206.9
Sudan	8.6	-	-	0.0	-	8.6	1.9	-	6.7
UR of Tanzania	5.3	-	-	-	-	5.3	1.0	0.1	4.2
Togo	0.1	0.8	-	0.0	-	0.9	0.2	-	0.7
Tunisia	16.1	0.1	0.2	0.8	-	15.3	2.3	-	13.0
Zambia	11.5	0.0	0.6	0.3	-	10.6	2.7	-	7.9
Zimbabwe	8.9	2.6	1.1	0.3	-	10.1	0.3	-	9.8
Other Africa	19.3	2.5	0.1	0.6	-	21.0	2.8	0.3	17.9
Africa	**695.0**	**39.1**	**33.5**	**30.7**	**4.1**	**665.8**	**81.6**	**13.8**	**570.5**
Argentina	129.9	10.9	1.3	4.3	0.6	134.7	18.7	-	116.0
Bolivia	7.2	-	-	0.1	-	7.1	0.8	-	6.3
Brazil	531.8	38.4	2.5	5.1	-	562.6	87.5	18.3	456.7
Colombia	61.8	0.0	1.5	1.7	-	58.6	7.4	-	51.1
Costa Rica	9.8	0.3	0.3	0.1	-	9.7	1.1	-	8.6
Cuba	17.8	-	-	0.9	-	16.8	2.8	-	14.0
Dominican Rep.	13.0	-	-	0.2	-	12.8	3.9	-	8.8
Ecuador	20.3	1.3	0.0	3.2	-	18.3	3.4	-	14.9
El Salvador	5.8	0.2	0.1	0.3	-	5.6	0.7	-	4.9
Guatemala	8.1	0.5	0.2	0.3	-	8.2	0.6	-	7.6
Haiti	0.7	-	-	0.1	-	0.7	0.4	-	0.3

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Gross production refers to total main activity producers and autoproducers production, including production from pumped storage.

(2) Other use refers to used for heat pumps, electric boilers and pumped storage.

(3) Includes distribution losses.

(4) Electricity consumed by energy industries for heating, traction and lighting purposes; excludes own and other use.

(5) Calculated final consumption may differ from observed final consumption due to statistical difference.

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Table 1.1. World electricity production, imports, exports, final consumption, 2011 (continued)
(TWh)

	Gross production (1)	Imports	Exports	Own use	Other use (2)	Supply	Transm. losses(3)	Energy industry (4)	Calc. consumption (5)
Honduras	7.1	0.0	0.2	0.0	-	6.9	1.4	-	5.5
Jamaica	5.1	-	-	0.0	-	5.1	0.9	-	4.2
N. Antilles	1.3	-	-	0.1	-	1.2	0.2	-	1.0
Nicaragua	3.8	0.0	0.0	0.3	-	3.5	0.7	-	2.8
Panama	7.9	0.1	0.0	0.0	-	7.9	1.1	-	6.8
Paraguay	57.6	-	46.1	0.5	-	11.0	3.4	-	7.6
Peru	39.2	0.0	-	0.3	-	38.9	2.3	-	36.6
Trinidad and T.	8.9	-	-	0.2	-	8.7	0.4	-	8.3
Uruguay	10.3	0.5	0.0	0.2	-	10.6	1.3	-	9.3
Venezuela	122.1	-	0.2	5.3	-	116.5	24.1	2.1	90.3
Other N.OECD Amer.	38.6	0.2	-	1.5	-	37.3	3.1	-	34.1
N.OECD Amer.	**1108.2**	**52.5**	**52.6**	**24.8**	**0.6**	**1082.6**	**166.3**	**20.4**	**895.9**
Bangladesh	44.1	-	-	2.5	-	41.6	4.5	-	37.1
Brunei Darussalam	3.7	-	-	0.1	-	3.7	0.3	0.3	3.1
Cambodia	1.1	1.6	-	0.0	-	2.7	0.3	-	2.4
India	1052.3	5.6	0.1	61.8	-	996.0	222.4	-	773.6
Indonesia	182.4	-	-	6.9	-	175.5	16.7	-	158.8
DPR of Korea	21.6	-	-	2.1	-	19.6	3.4	-	16.2
Malaysia	130.3	0.4	0.0	6.4	-	124.3	8.6	-	115.8
Mongolia	4.8	0.3	0.0	0.7	-	4.3	0.6	-	3.7
Myanmar	7.3	-	-	-	-	7.3	1.6	-	5.8
Nepal	3.3	0.7	0.0	0.0	-	4.0	1.1	-	2.8
Pakistan	95.3	-	-	2.4	-	92.9	16.1	-	76.8
Philippines	69.2	-	-	5.4	-	63.8	7.7	-	56.1
Singapore	46.0	-	-	1.8	-	44.2	2.4	-	41.7
Sri Lanka	11.6	-	-	0.2	-	11.4	1.4	-	10.0
Chinese Taipei	252.0	-	-	11.8	3.5	236.7	10.1	3.9	222.6
Thailand	156.0	10.7	1.6	5.5	-	159.5	10.8	-	148.7
Vietnam	100.0	6.2	1.1	3.4	-	101.8	10.1	-	91.7
Other Asia	22.4	6.1	7.8	0.3	-	20.4	1.3	1.5	17.6
Asia (excl. China)	**2203.4**	**31.6**	**10.7**	**111.2**	**3.5**	**2109.5**	**319.5**	**5.7**	**1784.3**
PR of China	4715.7	6.6	19.3	381.1	-	4321.8	270.1	189.1	3862.7
Hong Kong	39.0	11.3	3.0	-	-	47.4	5.3	-	42.1
China (Region)	**4754.7**	**17.9**	**22.3**	**381.1**	**-**	**4369.2**	**275.4**	**189.1**	**3904.8**
Albania	4.2	3.3	-	0.0	-	7.4	1.0	0.5	5.9
Armenia	7.4	0.2	1.5	0.3	-	5.8	0.9	-	4.9
Azerbaijan	20.3	0.1	0.8	0.9	-	18.7	4.0	1.3	13.4
Belarus	32.2	9.3	3.7	2.2	-	35.6	3.4	2.3	29.9
Bosnia and H.	15.3	4.2	5.7	1.1	-	12.7	1.5	0.4	10.8
Bulgaria	50.8	1.4	12.1	5.0	1.1	34.1	4.4	1.2	28.4

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Gross production refers to total main activity producers and autoproducers production, including production from pumped storage.

(2) Other use refers to used for heat pumps, electric boilers and pumped storage.

(3) Includes distribution losses.

(4) Electricity consumed by energy industries for heating, traction and lighting purposes; excludes own and other use.

(5) Calculated final consumption may differ from observed final consumption due to statistical difference.

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Table 1.1. World electricity production, imports, exports, final consumption, 2011 (continued) (TWh)

	Gross production (1)	Imports	Exports	Own use	Other use (2)	Supply	Transm. losses(3)	Energy industry (4)	Calc. consumption (5)
Croatia	10.8	8.7	1.0	0.4	0.2	17.9	1.8	0.4	15.7
Cyprus*	4.9	-	-	0.2	-	4.7	0.2	0.0	4.5
Georgia	10.2	0.5	0.9	0.1	-	9.7	1.1	0.4	8.1
Kazakhstan	86.6	2.6	1.8	10.2	-	77.2	6.4	6.5	64.3
Kosovo	5.8	3.1	2.7	0.7	-	5.5	0.9	0.0	4.6
Kyrgyzstan	15.2	-	2.8	0.2	-	12.1	3.3	0.1	8.8
Latvia	6.1	4.0	2.8	0.5	0.0	6.8	0.6	-	6.2
Lithuania	4.8	8.1	1.3	0.4	0.8	10.4	0.9	1.0	8.6
F.Y.R. Macedonia	6.9	2.7	-	0.5	-	9.1	1.4	0.2	7.5
Gibraltar	0.2	-	-	0.0	-	0.2	0.0	-	0.2
Malta	2.2	-	-	0.1	-	2.1	0.2	-	1.8
Rep. of Moldova	5.8	0.7	-	0.4	-	6.1	1.2	0.2	4.7
Montenegro	2.7	2.0	0.4	0.2	-	4.1	0.7	-	3.4
Romania	62.2	3.4	5.3	5.7	0.2	54.4	7.1	4.5	42.7
Russian Federation	1054.8	1.6	24.1	68.3	2.7	961.2	105.0	127.4	728.8
Serbia	38.6	6.7	7.0	2.8	0.9	34.7	5.8	0.8	28.0
Tajikistan	16.2	0.1	0.2	0.1	-	16.0	2.7	0.1	13.2
Turkmenistan	17.2	-	2.6	1.3	-	13.4	2.2	1.7	9.5
Ukraine	194.9	0.0	6.3	15.3	-	173.3	21.3	12.3	139.8
Uzbekistan	52.4	12.2	12.2	3.0	-	49.3	4.6	1.5	43.2
N.OECD E.& Eurasia	**1728.6**	**74.8**	**95.4**	**119.8**	**5.9**	**1582.4**	**182.8**	**162.7**	**1236.9**
Bahrain	13.8	0.2	0.1	0.7	-	13.3	1.0	-	12.3
IR of Iran	239.7	3.7	8.7	8.4	-	226.2	34.9	2.0	189.3
Iraq	54.2	7.3	-	-	-	61.5	18.9	-	42.6
Jordan	14.6	1.7	0.1	0.6	-	15.7	2.1	0.1	13.4
Kuwait	57.5	-	-	6.9	-	50.5	7.1	6.0	37.4
Lebanon	16.4	0.8	-	-	-	17.2	1.9	-	15.3
Oman	21.9	-	-	0.5	-	21.4	2.8	-	18.5
Qatar	30.7	-	-	2.3	-	28.4	0.6	-	27.8
Saudi Arabia	250.1	-	-	6.1	-	243.9	23.5	9.3	211.2
Syrian Arab R.	41.1	0.9	1.2	4.7	-	36.1	3.1	-	33.0
UAE	99.1	0.0	8.1	3.9	-	87.1	7.2	-	79.9
Yemen	6.2	-	-	0.4	-	5.8	1.7	-	4.1
Middle East	**845.3**	**14.7**	**18.2**	**34.7**	**-**	**807.1**	**104.9**	**17.4**	**684.8**
Non-OECD Total	**11335.2**	**230.5**	**232.7**	**702.4**	**14.0**	**10616.7**	**1130.4**	**409.1**	**9077.2**

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Gross production refers to total main activity producers and autoproducers production, including production from pumped storage.

(2) Other use refers to used for heat pumps, electric boilers and pumped storage.

(3) Includes distribution losses.

(4) Electricity consumed by energy industries for heating, traction and lighting purposes; excludes own and other use.

(5) Calculated final consumption may differ from observed final consumption due to statistical difference.

* Please refer to Part I Section 5, Geographical Coverage.

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Table 1.2. World gross electricity production, by country, by source, 2011 (TWh)

	Fossil fuels[1]	Nuclear	Hydro	Geo-thermal	Solar/ wind[2]	Biofuels & waste[3]	Total
OECD Total	6594.12	2086.97	1452.90	44.47	396.25	292.25	10866.96
Non-OECD Total	8461.48	496.71	2112.55	24.74	110.23	129.53	11335.22
World	**15055.60**	**2583.68**	**3565.45**	**69.21**	**506.47**	**421.77**	**22202.18**
Australia	227.05	-	16.81	0.00	6.66	2.10	252.62
Austria	20.73	-	37.72	0.00	2.12	5.13	65.70
Belgium	31.10	48.23	1.42	-	3.62	5.86	90.24
Canada	145.01	93.59	375.80	-	11.82	10.77 e	636.99
Chile	39.69	-	21.01	-	0.34	4.67	65.71
Czech Republic	51.16	28.28	2.66	-	2.58	2.77	87.45
Denmark	20.23	-	0.02	-	9.79	5.14	35.17
Estonia	11.71	-	0.03	-	0.37	0.78	12.89
Finland	25.61	23.19	12.45	-	0.79	11.45	73.48
France	47.50	442.38	49.89	-	14.82	7.36	561.96
Germany	362.10	107.97	23.51	0.02	71.05	44.01	608.67
Greece	50.92	-	4.28	-	3.93	0.32	59.44
Hungary	17.46	15.69	0.22	-	0.63	1.99	35.98
Iceland	0.00	-	12.51	4.70	-	-	17.21
Ireland	22.23	-	0.71	-	4.38	0.34	27.66
Israel	59.30	-	0.03	-	0.28	0.04	59.65
Italy	214.57	-	47.76	5.65	21.46	13.14	302.58
Japan	808.44	101.76	91.71	2.68	9.72 e	36.95	1051.25
Korea	356.87	154.72	7.83	-	2.23	1.64	523.29
Luxembourg	2.34	-	1.13	-	0.09	0.16	3.72
Mexico	238.78	10.09	36.27	6.51	1.68	2.51	295.84
Netherlands	94.63	4.14	0.06	-	5.35	8.79	112.97
New Zealand	10.68	-	25.08	6.12	2.01	0.61	44.50
Norway	4.21	-	122.08	-	1.37	0.49	128.15
Poland	149.72	-	2.76	-	3.21	7.87	163.55
Portugal	27.45	-	12.12	0.21	9.44	3.24	52.46
Slovak Republic	7.77	15.41	4.15	-	0.48	0.85	28.66
Slovenia	5.81	6.22	3.70	-	0.07	0.26	16.06
Spain	144.22	57.73	32.91	-	51.28	5.22	291.36
Sweden	4.33	60.48	66.56	-	6.09	12.93	150.38
Switzerland	1.05	26.71	34.13	-	0.22	2.53	64.64
Turkey	171.17	-	52.34	0.69	4.72	0.47	229.39
United Kingdom	260.10	68.98	8.59	-	15.75	14.38	367.80
United States	2960.19	821.41	344.68	17.89	127.91 e	77.49	4349.57
OECD Total	**6594.12**	**2086.97**	**1452.90**	**44.47**	**396.25**	**292.25**	**10866.96**
OECD Americas	*3383.67*	*925.08*	*777.75*	*24.40*	*141.75*	*95.45*	*5348.11*
OECD Asia Oceania	*1462.33*	*256.48*	*141.45*	*8.79*	*20.90*	*41.34*	*1931.30*
OECD Europe	*1748.12*	*905.41*	*533.70*	*11.28*	*233.59*	*155.46*	*3587.55*

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Includes hard coal, brown coal, peat, coal gases, oil products and natural gas.

(2) Includes tide, wave, ocean and other (fuel cells etc).

(3) Includes wood/wood waste/other solid waste, industrial and municipal waste, biogases and liquid biofuels.

Note: Including electricity production from pumped storage.

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Table 1.2. World gross electricity production, by country, by source, 2011 (continued) (TWh)

	Fossil fuels(1)	Nuclear	Hydro	Geo-thermal	Solar/ wind(2)	Biofuels & waste(3)	Total
Algeria	50.72	-	0.50	-	-	-	51.22
Angola	1.64	-	4.01	-	-	-	5.65
Benin	0.15	-	-	-	-	0.00	0.15
Botswana	0.37	-	-	-	-	-	0.37
Cameroon	1.64	-	4.32	-	-	0.06	6.03
Congo	0.50	-	0.79	-	-	-	1.29
DR of Congo	0.04	-	7.85	-	-	-	7.88
Côte d'Ivoire	4.27	-	1.77	-	-	0.11	6.15
Egypt	141.69	-	12.93	-	1.96	-	156.59
Eritrea	0.34	-	-	-	0.00	-	0.34
Ethiopia	0.03	-	5.11	0.02	-	-	5.16
Gabon	0.95	-	0.81	-	-	0.01	1.77
Ghana	3.64	-	7.56	-	-	-	11.20
Kenya	2.57	-	3.45	1.50	0.02	0.32	7.85
Libya	27.61	-	-	-	-	-	27.61
Morocco	22.31	-	2.01	-	0.69	-	25.01
Mozambique	0.02	-	16.81	-	-	-	16.83
Namibia	0.03	-	1.40	-	-	-	1.43
Nigeria	21.38	-	5.65	-	-	-	27.03
Senegal	2.69	-	0.26	-	0.05	0.05	3.05
South Africa	243.61	13.50	5.02	-	0.12	0.28	262.54
Sudan	2.13	-	6.47	-	-	-	8.60
UR of Tanzania	2.69	-	2.62	-	-	-	5.30
Togo	0.03	-	0.10	-	-	0.00	0.14
Tunisia	15.97	-	0.05	-	0.11	-	16.13
Zambia	0.04	-	11.41	-	-	-	11.45
Zimbabwe	2.29	-	6.57	-	-	0.07	8.93
Other Africa	12.20	-	7.04	-	0.02	0.01	19.27
Africa	**561.56**	**13.50**	**114.52**	**1.52**	**2.98**	**0.91**	**694.98**
Argentina	89.47	6.37	31.90	-	0.03	2.13	129.89
Bolivia	4.63	-	2.35	-	0.00	0.24	7.22
Brazil	52.36	15.66	428.33	-	3.26	32.15	531.76
Colombia	10.90	-	48.88	-	0.04	2.00	61.82
Costa Rica	0.86	-	7.14	1.28	0.42	0.14	9.83
Cuba	17.19	-	0.10	-	0.02	0.45	17.76
Dominican Rep.	11.42	-	1.53	-	-	0.03	12.98
Ecuador	8.57	-	11.13	-	0.00	0.56	20.27
El Salvador	1.98	-	2.01	1.53	-	0.28	5.81
Guatemala	2.70	-	3.25	0.15	-	2.06	8.15
Haiti	0.57	-	0.12	-	-	0.03	0.72

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Includes hard coal, brown coal, peat, coal gases, oil products and natural gas.

(2) Includes tide, wave, ocean and other (fuel cells etc).

(3) Includes wood/wood waste/other solid waste, industrial and municipal waste, biogases and liquid biofuels.

Note: Including electricity production from pumped storage.

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Table 1.2. World gross electricity production, by country, by source, 2011 (continued)
(TWh)

	Fossil fuels(1)	Nuclear	Hydro	Geo-thermal	Solar/ wind(2)	Biofuels & waste(3)	Total
Honduras	4.03	-	2.82	-	-	0.28	7.13
Jamaica	4.72	-	0.10	-	0.14	0.18	5.14
N. Antilles	1.31	-	-	-	-	-	1.31
Nicaragua	2.52	-	0.44	0.27	0.21	0.37	3.83
Panama	3.74	-	4.10	-	-	0.02	7.86
Paraguay	0.00	-	57.63	-	-	-	57.63
Peru	16.92	-	21.57	-	0.00	0.73	39.22
Trinidad and T.	8.87	-	-	-	-	-	8.87
Uruguay	2.91	-	6.48	-	0.11	0.85	10.34
Venezuela	38.39	-	83.67	-	-	-	122.06
Other N.OECD Amer.	36.17	-	2.05	-	0.27	0.11	38.60
N.OECD Amer.	**320.20**	**22.03**	**715.59**	**3.23**	**4.51**	**42.61**	**1108.16**
Bangladesh	43.19	-	0.87	-	-	-	44.06
Brunei Darussalam	3.72	-	-	-	0.00	-	3.73
Cambodia	0.99	-	0.05	-	0.00	0.02	1.05
India	835.71	33.29	130.67	-	23.94	28.72	1052.33
Indonesia	160.40	-	12.42	9.37	0.00	0.20	182.38
DPR of Korea	8.43	-	13.20	-	-	-	21.63
Malaysia	121.36	-	7.62	-	-	1.35	130.33
Mongolia	4.75	-	-	-	-	-	4.75
Myanmar	2.18	-	5.15	-	-	-	7.33
Nepal	0.00	-	3.31	-	-	-	3.31
Pakistan	61.48	5.27	28.52	-	-	-	95.26
Philippines	49.33	-	9.70	9.94	0.09	0.12	69.18
Singapore	44.34	-	-	-	0.01	1.65	46.00
Sri Lanka	6.88	-	4.62	-	0.11	0.03	11.65
Chinese Taipei	198.01	42.12	6.90	-	1.40	3.59	252.02
Thailand	143.44	-	8.16	0.00	0.10	4.29	155.99
Vietnam	70.04	-	29.82	-	0.09	0.06	100.00
Other Asia	7.95	-	14.17	-	0.26	-	22.38
Asia (excl. China)	**1762.19**	**80.67**	**275.17**	**19.31**	**26.01**	**40.02**	**2203.37**
PR of China	3815.12	86.35	698.95	0.15	72.88	42.27	4715.72
Hong Kong	39.03	-	-	-	0.00	-	39.03
China (Region)	**3854.15**	**86.35**	**698.95**	**0.15**	**72.88**	**42.27**	**4754.75**
Albania	0.00	-	4.16	-	-	-	4.16
Armenia	2.39	2.55	2.49	-	0.01	-	7.43
Azerbaijan	17.62	-	2.68	-	-	-	20.29
Belarus	32.00	-	0.04	-	0.00	0.15	32.19
Bosnia and H.	10.89	-	4.39	-	-	-	15.28
Bulgaria	29.75	16.31	3.69	-	0.99	0.06	50.80

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Includes hard coal, brown coal, peat, coal gases, oil products and natural gas.

(2) Includes tide, wave, ocean and other (fuel cells etc).

(3) Includes wood/wood waste/other solid waste, industrial and municipal waste, biogases and liquid biofuels.

Note: Including electricity production from pumped storage.

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Table 1.2. World gross electricity production, by country, by source, 2011 (continued)
(TWh)

	Fossil fuels(1)	Nuclear	Hydro	Geo-thermal	Solar/ wind(2)	Biofuels & waste(3)	Total
Croatia	5.96	-	4.62	-	0.20	0.06	10.83
Cyprus*	4.75	-	-	-	0.13	0.05	4.93
Georgia	2.30	-	7.89	-	-	-	10.19
Kazakhstan	78.70	-	7.88	-	-	-	86.59
Kosovo	5.70	-	0.11	-	-	-	5.80
Kyrgyzstan	1.02	-	14.14	-	-	-	15.16
Latvia	3.02	-	2.89	-	0.07	0.12	6.09
Lithuania	2.88	-	1.06	-	0.73	0.16	4.82
F.Y.R. Macedonia	5.44	-	1.43	-	0.00	-	6.88
Gibraltar	0.17	-	-	-	-	-	0.17
Malta	2.18	-	-	-	0.01	0.01	2.19
Rep. of Moldova	5.43	-	0.35	-	-	-	5.79
Montenegro	1.45	-	1.20	-	-	-	2.66
Romania	33.94	11.75	14.95	-	1.39	0.20	62.22
Russian Federation	710.91	172.94	167.61	0.52	0.01	2.78	1054.77
Serbia	29.36	-	9.24	-	-	-	38.60
Tajikistan	0.19	-	16.03	-	-	-	16.22
Turkmenistan	17.22	-	-	-	-	-	17.22
Ukraine	93.50	90.25	10.95	-	0.12	0.13	194.95
Uzbekistan	42.20	-	10.20	-	-	-	52.40
N.OECD E.& Eurasia	**1138.97**	**293.80**	**287.98**	**0.52**	**3.64**	**3.71**	**1728.62**
Bahrain	13.83	-	-	-	-	-	13.83
IR of Iran	227.07	0.36	12.06	-	0.21	0.01	239.71
Iraq	50.10	-	4.14	-	-	-	54.24
Jordan	14.58	-	0.06	-	0.00	0.01	14.65
Kuwait	57.46	-	-	-	-	-	57.46
Lebanon	15.56	-	0.81	-	-	-	16.37
Oman	21.87	-	-	-	-	-	21.87
Qatar	30.73	-	-	-	-	-	30.73
Saudi Arabia	250.08	-	-	-	-	-	250.08
Syrian Arab R.	37.80	-	3.28	-	-	-	41.08
UAE	99.14	-	-	-	-	-	99.14
Yemen	6.21	-	-	-	-	-	6.21
Middle East	**824.41**	**0.36**	**20.34**	**-**	**0.22**	**0.01**	**845.34**
Non-OECD Total	**8461.48**	**496.71**	**2112.55**	**24.74**	**110.23**	**129.53**	**11335.22**

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Includes hard coal, brown coal, peat, coal gases, oil products and natural gas.

(2) Includes tide, wave, ocean and other (fuel cells etc).

(3) Includes wood/wood waste/other solid waste, industrial and municipal waste, biogases and liquid biofuels.

* Please refer to Part I Section 5, Geographical Coverage.

Note: Including electricity production from pumped storage.

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Table 1.3. World gross electricity production from combustible fuels, by country, 2011 (TWh)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Tot. Comb. Fuels
	Hard	Brown	Peat	Gases							
OECD Total	2956.90	558.99	8.35	93.43	345.35	2631.10	163.83	13.36	60.06	54.99	6886.37
Non-OECD Total*	5104.83	376.71	0.70	45.56	716.65	2217.03	110.12	13.56	4.46	1.39	8591.01
World*	**8061.73**	**935.70**	**9.05**	**138.99**	**1062.00**	**4848.13**	**273.95**	**26.92**	**64.53**	**56.38**	**15477.37**
Australia	117.61	55.30	-	0.38	4.10	49.66	1.08	-	-	1.03	229.15
Austria	5.42	-	-	1.90	1.01	12.39	3.67	0.31	0.52	0.64	25.86
Belgium	3.40	-	-	1.97	0.29	25.44	3.13	0.58	1.40	0.75	36.96
Canada	11.55	64.81	-	-	6.53	62.11	9.63	-	0.16 e	0.98	155.78
Chile	19.62	-	-	-	6.36	13.72	4.67	-	-	-	44.37
Czech Republic	5.69	41.32	-	2.88	0.10	1.17	1.69	0.01	0.15	0.93	53.93
Denmark	13.97	-	-	-	0.45	5.81	3.06	-	1.73	0.34	25.37
Estonia	-	10.90	0.09	0.43	0.04	0.25	0.77	-	-	0.02	12.50
Finland	9.78	0.00	5.44	0.53	0.42	9.44	10.82	0.02	0.47	0.13	37.06
France	15.10	-	-	2.21	3.44	26.76	1.75	-	4.42	1.20	54.87
Germany	112.40	150.07	-	9.40	6.61	83.63	11.54	1.65	9.51	21.31	406.11
Greece	0.08	30.99	-	-	5.92	13.94	-	0.11	-	0.21	51.24
Hungary	0.01	6.47	-	0.09	0.14	10.74	1.53	0.02	0.24	0.21	19.45
Iceland	-	-	-	-	0.00	-	-	-	-	-	0.00
Ireland	4.70	-	2.22	-	0.42	14.89	0.14	-	-	0.20	22.57
Israel	34.82	0.37	-	-	4.36	19.75	-	-	0.01	0.03	59.34
Italy	44.36	0.37	-	5.41	19.89	144.55	2.52	0.10	4.42	6.10	227.71
Japan	246.98	-	-	34.16	153.34	373.96	28.83	2.13	5.99	-	845.39
Korea	205.40	0.09	-	19.03	16.63	115.72	0.38	0.37	0.27	0.61	358.51
Luxembourg	-	-	-	-	0.00	2.34	-	-	0.10	0.06	2.50
Mexico	33.55	-	-	0.59	48.37	156.28	2.40	-	-	0.11	241.30
Netherlands	21.39	-	-	3.35	1.45	68.44	3.98	-	3.77	1.05	103.42
New Zealand	1.58	0.02	-	0.56	0.00	8.51	0.38	-	-	0.23	11.29
Norway	0.04	-	-	0.08	0.03	4.06	0.25	0.01	0.22	0.01	4.69
Poland	87.33	52.53	-	1.59	2.45	5.82	7.15	0.25	0.01	0.45	157.58
Portugal	9.85	-	-	-	2.68	14.92	2.47	0.03	0.59	0.16	30.69
Slovak Republic	1.30	2.25	-	0.48	0.59	3.15	0.68	0.01	0.04	0.11	8.62
Slovenia	0.00	5.31	-	-	0.02	0.49	0.13	0.01	-	0.13	6.07
Spain	39.79	3.97	-	1.17	14.77	84.52	2.94	-	1.41	0.88	149.43
Sweden	0.66	-	0.60	0.73	0.79	1.55	9.64	0.15	3.10	0.04	17.26
Switzerland	-	-	-	-	0.06	0.99	0.21	0.19	1.91	0.23	3.58
Turkey	24.90	39.69	-	1.63	0.90	104.05	0.02	0.13	-	0.33	171.64
United Kingdom	108.58	-	-	1.04	3.67	146.82	5.50	0.40	2.74	5.74	274.48
United States	1777.04	94.54	-	3.83	39.52	1045.25	42.91	6.90	16.89	10.79	3037.68
OECD Total	**2956.90**	**558.99**	**8.35**	**93.43**	**345.35**	**2631.10**	**163.83**	**13.36**	**60.06**	**54.99**	**6886.37**
OECD Americas	*1841.76*	*159.35*	*-*	*4.42*	*100.78*	*1277.37*	*59.62*	*6.90*	*17.06*	*11.88*	*3479.13*
OECD Asia Oceania	*606.41*	*55.77*	*-*	*54.13*	*178.43*	*567.59*	*30.66*	*2.51*	*6.27*	*1.90*	*1503.67*
OECD Europe	*508.74*	*343.87*	*8.35*	*34.88*	*66.14*	*786.14*	*73.55*	*3.96*	*36.73*	*41.22*	*1903.57*

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

* In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal

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Table 1.3. World gross electricity production from combustible fuels, by country, 2011 (continued)
(TWh)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Tot. Comb.
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	Fuels
Algeria	-	-	-	-	2.82	47.91	-	-	-	-	50.72
Angola	-	-	-	-	1.64	-	-	-	-	-	1.64
Benin	-	-	-	-	0.15	-	0.00	-	-	-	0.15
Botswana	0.37	-	-	-	-	-	-	-	-	-	0.37
Cameroon	-	-	-	-	1.21	0.43	0.06	-	-	-	1.70
Congo	-	-	-	-	0.01	0.49	-	-	-	-	0.50
DR of Congo	-	-	-	-	0.01	0.03	-	-	-	-	0.04
Côte d'Ivoire	-	-	-	-	0.01	4.26	0.11	-	-	-	4.38
Egypt	-	-	-	-	24.68	117.02	-	-	-	-	141.69
Eritrea	-	-	-	-	0.34	-	-	-	-	-	0.34
Ethiopia	-	-	-	-	0.03	-	-	-	-	-	0.03
Gabon	-	-	-	-	0.37	0.58	0.01	-	-	-	0.96
Ghana	-	-	-	-	0.92	2.72	-	-	-	-	3.64
Kenya	-	-	-	-	2.57	-	0.32	-	-	-	2.89
Libya	-	-	-	-	12.06	15.55	-	-	-	-	27.61
Morocco	11.68	-	-	-	6.58	4.05	-	-	-	-	22.31
Mozambique	-	-	-	-	-	0.02	-	-	-	-	0.02
Namibia	0.02	-	-	-	0.01	-	-	-	-	-	0.03
Nigeria	-	-	-	-	4.27	17.11	-	-	-	-	21.38
Senegal	-	-	-	-	2.64	0.05	0.05	-	-	-	2.75
South Africa	243.41	-	-	-	0.20	-	0.28	-	-	-	243.89
Sudan	-	-	-	-	2.13	-	-	-	-	-	2.13
UR of Tanzania	0.06	-	-	-	0.04	2.59	-	-	-	-	2.69
Togo	-	-	-	-	0.03	-	0.00	-	-	-	0.04
Tunisia	-	-	-	-	0.01	15.96	-	-	-	-	15.97
Zambia	-	-	-	-	0.04	-	-	-	-	-	0.04
Zimbabwe	2.26	-	-	-	0.03	-	0.07	-	-	-	2.35
Other Africa	4.32	-	-	-	7.75	0.13	-	-	-	0.01	12.21
Africa	**262.12**	**-**	**-**	**-**	**70.54**	**228.90**	**0.90**	**-**	**-**	**0.01**	**562.47**
Argentina	2.58	-	-	0.66	19.59	66.64	2.13	-	-	-	91.59
Bolivia	-	-	-	-	0.12	4.51	0.24	-	-	-	4.87
Brazil	0.80	5.73	-	5.94	14.80	25.10	31.80	-	-	0.35	84.51
Colombia	2.09	-	-	0.05	0.51	8.26	2.00	-	-	-	12.90
Costa Rica	-	-	-	-	0.86	-	0.14	-	-	-	1.00
Cuba	-	-	-	-	15.13	2.06	0.45	-	-	-	17.64
Dominican Rep.	1.99	-	-	-	3.87	5.56	0.03	-	-	-	11.44
Ecuador	-	-	-	-	6.63	1.94	0.56	-	-	-	9.13
El Salvador	-	-	-	-	1.98	-	0.28	-	-	-	2.26
Guatemala	1.18	-	-	-	1.52	-	2.06	-	-	-	4.75
Haiti	-	-	-	-	0.57	-	0.03	-	-	-	0.60

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

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Table 1.3. World gross electricity production from combustible fuels, by country, 2011 (continued)
(TWh)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Tot. Comb.
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	Fuels
Honduras	0.13	-	-	-	3.90	-	0.28	-	-	-	4.31
Jamaica	-	-	-	-	4.72	-	0.18	-	-	-	4.90
N. Antilles	-	-	-	-	1.31	-	-	-	-	-	1.31
Nicaragua	-	-	-	-	2.52	-	0.37	-	-	-	2.90
Panama	0.51	-	-	-	3.23	-	0.02	-	-	-	3.76
Paraguay	-	-	-	-	0.00	-	-	-	-	-	0.00
Peru	0.64	-	-	-	2.27	14.01	0.73	-	-	-	17.65
Trinidad and T.	-	-	-	-	0.02	8.84	-	-	-	-	8.87
Uruguay	-	-	-	-	2.82	0.09	0.85	-	-	-	3.75
Venezuela	-	-	-	-	17.41	20.98	-	-	-	-	38.39
Other N.OECD Amer.	-	-	-	-	33.09	3.08	0.11	-	-	-	36.28
N.OECD Amer.	**9.91**	**5.73**	**-**	**6.65**	**136.86**	**161.05**	**42.26**	**-**	**-**	**0.35**	**362.81**
Bangladesh	0.78	-	-	-	2.10	40.31	-	-	-	-	43.19
Brunei Darussalam	-	-	-	-	0.04	3.69	-	-	-	-	3.72
Cambodia	-	0.03	-	-	0.95	-	0.02	-	-	-	1.01
India	643.90	69.75	-	1.30	12.22	108.53	28.72	-	-	-	864.44
Indonesia	-	81.00	-	-	42.31	37.09	0.20	-	-	-	160.59
DPR of Korea	7.01	0.85	-	-	0.58	-	-	-	-	-	8.43
Malaysia	52.98	-	-	0.24	9.98	58.16	1.34	-	0.01	0.00	122.71
Mongolia	-	4.52	-	-	0.23	-	-	-	-	-	4.75
Myanmar	0.56	-	-	-	0.03	1.59	-	-	-	-	2.18
Nepal	-	-	-	-	0.00	-	-	-	-	-	0.00
Pakistan	0.10	-	-	-	33.73	27.65	-	-	-	-	61.48
Philippines	17.78	7.56	-	-	3.40	20.59	0.07	-	0.04	-	49.45
Singapore	-	-	-	-	8.46	35.88	-	-	1.21	0.44	45.99
Sri Lanka	1.04	-	-	-	5.85	-	0.03	-	-	-	6.92
Chinese Taipei	103.32	20.09	-	3.62	9.64	61.34	0.39	-	3.20	-	201.59
Thailand	16.77	18.04	-	-	2.06	106.57	3.98	-	-	0.30	147.72
Vietnam	21.74	-	-	-	4.75	43.55	0.06	-	-	-	70.10
Other Asia	0.33	-	-	-	6.45	1.18	-	-	-	-	7.95
Asia (excl. China)*	**866.31**	**201.84**	**-**	**5.16**	**142.77**	**546.11**	**34.81**	**-**	**4.46**	**0.75**	**1802.21**
PR of China*	3697.48	-	-	25.77	7.86	84.02	31.50	10.77	-	-	3857.39
Hong Kong	27.78	-	-	-	0.12	11.13	-	-	-	-	39.03
China (Region)	**3725.26**	**-**	**-**	**25.77**	**7.97**	**95.15**	**31.50**	**10.77**	**-**	**-**	**3896.42**
Albania	-	-	-	-	0.00	-	-	-	-	-	0.00
Armenia	-	-	-	-	-	2.39	-	-	-	-	2.39
Azerbaijan	-	-	-	-	0.34	17.28	-	-	-	-	17.62
Belarus	-	0.01	0.01	-	0.34	31.64	0.10	0.04	-	0.01	32.15
Bosnia and H.	-	10.81	-	-	0.04	0.05	-	-	-	-	10.89
Bulgaria	4.45	23.08	-	-	0.14	2.08	0.04	-	-	0.02	29.81

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

* In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal

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Table 1.3. World gross electricity production from combustible fuels, by country, 2011 (continued)
(TWh)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Tot. Comb.
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	Fuels
Croatia	2.56	0.02	-	-	0.75	2.62	0.02	-	-	0.04	6.01
Cyprus*	-	-	-	-	4.75	-	-	-	-	0.05	4.80
Georgia	-	-	-	-	0.01	2.30	-	-	-	-	2.30
Kazakhstan	68.85	1.37	-	-	0.54	7.94	-	-	-	-	78.70
Kosovo	-	5.68	-	-	0.02	-	-	-	-	-	5.70
Kyrgyzstan	0.48	-	-	-	-	0.54	-	-	-	-	1.02
Latvia	0.00	-	-	-	0.00	3.01	0.01	-	-	0.11	3.14
Lithuania	-	-	-	-	0.21	2.67	0.12	-	-	0.04	3.03
F.Y.R. Macedonia	-	5.29	-	-	0.07	0.09	-	-	-	-	5.44
Gibraltar	-	-	-	-	0.17	-	-	-	-	-	0.17
Malta	-	-	-	-	2.18	-	-	0.00	0.00	-	2.19
Rep. of Moldova	-	-	-	-	0.02	5.41	-	-	-	-	5.43
Montenegro	-	1.45	-	-	-	-	-	-	-	-	1.45
Romania	-	24.78	-	0.02	0.77	8.37	0.19	-	-	0.01	34.14
Russian Federation	90.74	65.80	0.69	7.12	27.36	519.20	0.04	2.74	-	-	713.69
Serbia	0.00	28.71	-	0.07	0.07	0.50	-	-	-	-	29.36
Tajikistan	-	-	-	-	-	0.19	-	-	-	-	0.19
Turkmenistan	-	-	-	-	-	17.22	-	-	-	-	17.22
Ukraine	74.14	0.00	-	0.35	0.56	18.45	0.13	-	-	-	93.63
Uzbekistan	-	2.14	-	-	0.54	39.52	-	-	-	-	42.20
N.OECD E.& Eurasia	**241.23**	**169.13**	**0.70**	**7.57**	**38.88**	**681.46**	**0.64**	**2.79**	**0.00**	**0.27**	**1142.68**
Bahrain	-	-	-	-	-	13.83	-	-	-	-	13.83
IR of Iran	-	-	-	0.43	66.63	160.01	-	-	-	0.01	227.08
Iraq	-	-	-	-	16.43	33.68	-	-	-	-	50.10
Jordan	-	-	-	-	10.62	3.96	-	-	-	0.01	14.59
Kuwait	-	-	-	-	41.93	15.53	-	-	-	-	57.46
Lebanon	-	-	-	-	15.56	-	-	-	-	-	15.56
Oman	-	-	-	-	3.94	17.94	-	-	-	-	21.87
Qatar	-	-	-	-	-	30.73	-	-	-	-	30.73
Saudi Arabia	-	-	-	-	141.69	108.38	-	-	-	-	250.08
Syrian Arab R.	-	-	-	-	16.28	21.51	-	-	-	-	37.80
UAE	-	-	-	-	1.68	97.45	-	-	-	-	99.14
Yemen	-	-	-	-	4.86	1.34	-	-	-	-	6.21
Middle East	**-**	**-**	**-**	**0.43**	**319.63**	**504.36**	**-**	**-**	**-**	**0.01**	**824.43**
Non-OECD Total**	**5104.83**	**376.71**	**0.70**	**45.56**	**716.65**	**2217.03**	**110.12**	**13.56**	**4.46**	**1.39**	**8591.01**

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

* Please refer to Part I Section 5, Geographical Coverage.

** In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal

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Table 1.4. Gross heat production[(1)] from combustible fuels, by country, 2011
(PJ)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Tot. Comb. Fuels
	Hard	Brown	Peat	Gases							
OECD Total	642.47	120.14	40.28	46.55	227.44	1365.26	308.06	32.16	212.37	32.70	3034.37
Non-OECD Total	3995.98	475.21	6.26	307.36	521.21	5424.24	88.50	110.16	1.39	0.41	10930.71
World	**4638.45**	**595.35**	**46.54**	**353.91**	**748.65**	**6789.50**	**396.56**	**142.32**	**213.76**	**33.10**	**13965.09**
Australia	-	-	-	-	-	-	-	-	-	-	-
Austria	2.70	-	-	0.32	5.32	30.22	33.60	0.66	5.82	0.46	79.09
Belgium	-	-	-	-	0.69	30.52	0.30	0.26	3.06	0.27	35.10
Canada	-	-	-	-	1.11	20.93	-	-	2.11 e	0.04	24.19
Chile	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	23.57	53.14	-	7.67	1.36	29.01	2.99	0.34	2.36	0.30	120.73
Denmark	30.96	-	-	-	2.44	34.79	35.35	-	24.13	1.21	128.88
Estonia	0.01	2.86	0.93	1.64	1.24	9.11	7.07	-	-	0.02	22.89
Finland	29.82	0.00	32.47	1.35	9.47	40.47	61.60	0.76	3.71	0.33	179.97
France	10.90	-	-	2.48	23.47	92.70	-	-	23.44	-	152.98
Germany	114.60	38.46	-	0.16	5.10	221.82	18.60	10.49	48.44	2.57	467.19
Greece	-	2.21	-	-	0.04	-	-	-	-	-	2.26
Hungary	1.56	1.76	-	3.76	0.23	37.44	2.61	0.10	0.74	0.27	48.47
Iceland	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-	-
Israel	-	-	-	-	-	-	-	-	-	-	-
Italy	1.65	-	-	1.28	57.91	125.62	10.11	-	7.16	14.61	218.33
Japan	-	-	-	-	0.75	14.04	-	0.12	-	4.20	19.11
Korea	57.27	0.81	-	0.46	49.65	68.45	1.55	7.11	13.92	0.51	199.73
Luxembourg	-	-	-	-	0.01	0.96	0.09	-	-	0.04	1.09
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	15.95	-	-	2.49	6.82	102.57	1.91	-	12.24	0.24	142.23
New Zealand	-	-	-	-	-	-	-	-	-	-	-
Norway	0.24	-	-	0.02	1.48	0.63	2.76	3.73	10.17	0.07	19.10
Poland	247.77	5.80	-	12.17	6.01	19.18	14.37	2.32	0.24	0.99	308.84
Portugal	-	-	-	-	2.38	18.22	-	-	-	-	20.60
Slovak Republic	2.60	8.56	-	0.15	5.29	20.06	4.25	0.17	0.12	0.15	41.35
Slovenia	0.03	5.57	-	-	0.15	2.85	0.79	0.08	-	0.23	9.70
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	6.11	-	6.88	4.76	6.66	13.90	85.72	0.76	31.83	3.30	159.92
Switzerland	-	-	-	-	0.14	3.20	1.38	0.36	10.87	-	15.94
Turkey	0.08	0.96	-	-	0.90	48.61	-	-	-	0.37	50.92
United Kingdom	7.13	-	-	1.23	1.61	47.19	-	-	-	-	57.16
United States	89.53	-	-	6.61	37.23	332.78	23.03	4.93	12.01	2.52	508.64
OECD Total	**642.47**	**120.14**	**40.28**	**46.55**	**227.44**	**1365.26**	**308.06**	**32.16**	**212.37**	**32.70**	**3034.37**
OECD Americas	*89.53*	*-*	*-*	*6.61*	*38.34*	*353.70*	*23.03*	*4.93*	*14.13*	*2.56*	*532.82*
OECD Asia Oceania	*57.27*	*0.81*	*-*	*0.46*	*50.40*	*82.49*	*1.55*	*7.23*	*13.92*	*4.71*	*218.84*
OECD Europe	*495.67*	*119.33*	*40.28*	*39.48*	*138.71*	*929.06*	*283.48*	*20.01*	*184.33*	*25.43*	*2282.72*

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Production in industry for own use is not included.

Note: Please refer to notes in Principles and Definitions in the introduction.

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Table 1.4. Gross heat production[(1)] from combustible fuels, by country, 2011 (continued)

(PJ)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Tot. Comb.
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	Fuels
Algeria	-	-	-	-	-	-	-	-	-	-	-
Angola	-	-	-	-	-	-	-	-	-	-	-
Benin	-	-	-	-	-	-	-	-	-	-	-
Botswana	-	-	-	-	-	-	-	-	-	-	-
Cameroon	-	-	-	-	-	-	-	-	-	-	-
Congo	-	-	-	-	-	-	-	-	-	-	-
DR of Congo	-	-	-	-	-	-	-	-	-	-	-
Côte d'Ivoire	-	-	-	-	-	-	-	-	-	-	-
Egypt	-	-	-	-	-	-	-	-	-	-	-
Eritrea	-	-	-	-	-	-	-	-	-	-	-
Ethiopia	-	-	-	-	-	-	-	-	-	-	-
Gabon	-	-	-	-	-	-	-	-	-	-	-
Ghana	-	-	-	-	-	-	-	-	-	-	-
Kenya	-	-	-	-	-	-	-	-	-	-	-
Libya	-	-	-	-	-	-	-	-	-	-	-
Morocco	-	-	-	-	-	-	-	-	-	-	-
Mozambique	-	-	-	-	-	-	-	-	-	-	-
Namibia	-	-	-	-	-	-	-	-	-	-	-
Nigeria	-	-	-	-	-	-	-	-	-	-	-
Senegal	-	-	-	-	-	-	-	-	-	-	-
South Africa	-	-	-	-	-	-	-	-	-	-	-
Sudan	-	-	-	-	-	-	-	-	-	-	-
UR of Tanzania	-	-	-	-	-	-	-	-	-	-	-
Togo	-	-	-	-	-	-	-	-	-	-	-
Tunisia	-	-	-	-	-	-	-	-	-	-	-
Zambia	-	-	-	-	-	-	-	-	-	-	-
Zimbabwe	-	-	-	-	-	-	-	-	-	-	-
Other Africa	-	-	-	-	-	-	-	-	-	-	-
Africa	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Argentina	-	-	-	-	-	-	-	-	-	-	-
Bolivia	-	-	-	-	-	-	-	-	-	-	-
Brazil	-	-	-	-	-	-	-	-	-	-	-
Colombia	-	-	-	-	-	-	-	-	-	-	-
Costa Rica	-	-	-	-	-	-	-	-	-	-	-
Cuba	-	-	-	-	-	-	-	-	-	-	-
Dominican Rep.	-	-	-	-	-	-	-	-	-	-	-
Ecuador	-	-	-	-	-	-	-	-	-	-	-
El Salvador	-	-	-	-	-	-	-	-	-	-	-
Guatemala	-	-	-	-	-	-	-	-	-	-	-
Haiti	-	-	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Production in industry for own use is not included.

Note: Please refer to notes in Principles and Definitions in the introduction.

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Table 1.4. Gross heat production[(1)] from combustible fuels, by country, 2011 (continued)

(PJ)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Tot. Comb.
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	Fuels
Honduras	-	-	-	-	-	-	-	-	-	-	-
Jamaica	-	-	-	-	-	-	-	-	-	-	-
N. Antilles	-	-	-	-	-	-	-	-	-	-	-
Nicaragua	-	-	-	-	-	-	-	-	-	-	-
Panama	-	-	-	-	-	-	-	-	-	-	-
Paraguay	-	-	-	-	-	-	-	-	-	-	-
Peru	-	-	-	-	-	-	-	-	-	-	-
Trinidad and T.	-	-	-	-	-	-	-	-	-	-	-
Uruguay	-	-	-	-	-	-	-	-	-	-	-
Venezuela	-	-	-	-	-	-	-	-	-	-	-
Other N.OECD Amer.	-	-	-	-	-	-	-	-	-	-	-
N.OECD Amer.	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Bangladesh	-	-	-	-	-	-	-	-	-	-	-
Brunei Darussalam	-	-	-	-	-	-	-	-	-	-	-
Cambodia	-	-	-	-	-	-	-	-	-	-	-
India	-	-	-	-	-	-	-	-	-	-	-
Indonesia	-	-	-	-	-	-	-	-	-	-	-
DPR of Korea	-	-	-	-	-	-	-	-	-	-	-
Malaysia	-	-	-	-	-	-	-	-	-	-	-
Mongolia	-	36.21	-	-	0.14	-	-	-	-	-	36.35
Myanmar	-	-	-	-	-	-	-	-	-	-	-
Nepal	-	-	-	-	-	-	-	-	-	-	-
Pakistan	-	-	-	-	-	-	-	-	-	-	-
Philippines	-	-	-	-	-	-	-	-	-	-	-
Singapore	-	-	-	-	-	-	-	-	-	-	-
Sri Lanka	-	-	-	-	-	-	-	-	-	-	-
Chinese Taipei	-	-	-	-	-	-	-	-	-	-	-
Thailand	-	-	-	-	-	-	-	-	-	-	-
Vietnam	-	-	-	-	-	-	-	-	-	-	-
Other Asia	-	-	-	-	-	-	-	-	-	-	-
Asia (excl. China)	**-**	**36.21**	**-**	**-**	**0.14**	**-**	**-**	**-**	**-**	**-**	**36.35**
PR of China	2778.30	-	-	144.94	121.58	91.99	11.74	25.82	-	-	3174.38
Hong Kong	-	-	-	-	-	-	-	-	-	-	-
China (Region)	**2778.30**	**-**	**-**	**144.94**	**121.58**	**91.99**	**11.74**	**25.82**	**-**	**-**	**3174.38**
Albania	-	-	-	-	-	-	-	-	-	-	-
Armenia	-	-	-	-	-	0.38	-	-	-	-	0.38
Azerbaijan	-	-	-	-	0.03	4.50	-	-	-	-	4.54
Belarus	0.25	1.48	2.01	-	7.37	230.68	17.64	0.98	-	0.04	260.45
Bosnia and H.	-	3.52	-	-	1.16	1.54	0.14	-	-	-	6.36
Bulgaria	15.83	7.00	-	-	3.06	28.39	0.23	-	-	-	54.52

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Production in industry for own use is not included.

Note: Please refer to notes in Principles and Definitions in the introduction.

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Table 1.4. Gross heat production[(1)] from combustible fuels, by country, 2011 (continued)

(PJ)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Tot. Comb.
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	Fuels
Croatia	-	-	-	-	2.34	9.65	0.03	-	-	0.05	12.07
Cyprus*	-	-	-	-	-	-	-	-	-	0.03	0.03
Georgia	-	-	-	-	-	-	-	-	-	-	-
Kazakhstan	384.24	17.25	-	-	3.91	-	-	-	-	-	405.41
Kosovo	-	-	-	-	0.19	-	-	-	-	-	0.19
Kyrgyzstan	2.94	-	-	-	-	3.10	-	-	-	-	6.04
Latvia	0.29	-	0.01	-	0.51	20.21	3.80	-	-	0.17	24.99
Lithuania	0.04	0.07	0.10	-	0.94	26.55	7.87	-	-	0.03	35.58
F.Y.R. Macedonia	-	0.08	-	-	0.70	1.90	-	-	-	-	2.69
Gibraltar	-	-	-	-	-	-	-	-	-	-	-
Malta	-	-	-	-	-	-	-	-	1.39	-	1.39
Rep. of Moldova	0.05	-	-	-	0.56	10.63	0.16	-	-	-	11.40
Montenegro	-	-	-	-	-	-	-	-	-	-	-
Romania	-	25.28	-	0.13	8.18	63.17	2.00	0.01	-	0.09	98.85
Russian Federation	777.52	372.19	3.94	119.07	354.17	4292.81	35.77	83.12	-	-	6038.58
Serbia	-	6.83	-	3.18	9.76	21.38	0.07	0.23	-	-	41.44
Tajikistan	-	-	-	-	-	3.60	-	-	-	-	3.60
Turkmenistan	-	-	-	-	-	8.31	-	-	-	-	8.31
Ukraine	36.51	0.53	0.20	40.04	5.40	510.28	9.07	-	-	-	602.03
Uzbekistan	-	4.76	-	-	1.20	95.19	-	-	-	-	101.15
N.OECD E.& Eurasia	**1217.68**	**438.99**	**6.26**	**162.42**	**399.48**	**5332.25**	**76.76**	**84.34**	**1.39**	**0.41**	**7719.98**
Bahrain	-	-	-	-	-	-	-	-	-	-	-
IR of Iran	-	-	-	-	-	-	-	-	-	-	-
Iraq	-	-	-	-	-	-	-	-	-	-	-
Jordan	-	-	-	-	-	-	-	-	-	-	-
Kuwait	-	-	-	-	-	-	-	-	-	-	-
Lebanon	-	-	-	-	-	-	-	-	-	-	-
Oman	-	-	-	-	-	-	-	-	-	-	-
Qatar	-	-	-	-	-	-	-	-	-	-	-
Saudi Arabia	-	-	-	-	-	-	-	-	-	-	-
Syrian Arab R.	-	-	-	-	-	-	-	-	-	-	-
UAE	-	-	-	-	-	-	-	-	-	-	-
Yemen	-	-	-	-	-	-	-	-	-	-	-
Middle East	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Non-OECD Total	**3995.98**	**475.21**	**6.26**	**307.36**	**521.21**	**5424.24**	**88.50**	**110.16**	**1.39**	**0.41**	**10930.71**

Source: IEA/OECD *Energy Statistics of OECD Countries* and IEA/OECD *Energy Statistics of Non-OECD Countries.*

(1) Production in industry for own use is not included.

* Please refer to Part I Section 5, Geographical Coverage.

Note: Please refer to notes in Principles and Definitions in the introduction.

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Table 1.5. World fuel use for electricity and heat production,[1] by country, 2011 (PJ)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Total
	Hard	Brown	Peat	Gases							
OECD Total	28803.7	5895.3	105.2	910.0	3309.9	20229.8	1777.6	170.2	1029.6	557.0	62788.4
Non-OECD Total*	57821.1	4660.8	14.7	865.6	8553.7	26589.9	1661.7	336.6	75.3	32.5	100612.0
World*	**86624.7**	**10556.2**	**120.0**	**1775.6**	**11863.7**	**46819.7**	**3439.3**	**506.8**	**1104.9**	**589.5**	**163400.4**
Australia	1147.7	724.0	-	3.1	32.9	452.0	12.6	-	-	12.6	2384.8
Austria	46.7	-	-	17.2	14.2	109.6	70.6	5.4	15.5	6.3	285.3
Belgium	32.5	-	-	17.1	3.0	169.9	29.7	9.2	37.4	5.4	304.1
Canada	106.4	631.9	-	c	77.9	556.6	92.5	-	5.2 e	8.1 e	1478.6
Chile	200.4	-	-	-	60.2	100.8	26.0	-	-	-	387.4
Czech Republic	84.6	494.9	-	30.6	3.0	41.5	18.8	1.2	4.1	7.5	686.2
Denmark	130.0	-	-	-	7.0	64.7	54.0	-	36.3	3.4	295.3
Estonia	0.0	133.9	1.5	5.6	1.9	12.1	12.4	-	-	0.1	167.5
Finland	99.3	0.0	72.9	7.8	13.9	85.3	132.3	1.1	7.9	1.4	422.0
France	136.5	-	-	24.9	63.6	329.4	17.6	-	79.7	11.3	663.1
Germany	1116.9	1449.2	-	82.1	61.3	769.2	141.9	31.1	186.3	181.5	4019.5
Greece	0.9	328.6	-	-	60.7	100.1	-	1.2	-	2.4	493.8
Hungary	2.1	69.3	-	6.6	1.7	114.0	20.5	0.6	4.0	2.0	220.7
Iceland	-	-	-	-	0.0	-	-	-	-	-	0.0
Ireland	38.2	-	20.3	-	4.1	104.5	1.4	-	-	2.0	170.4
Israel	316.6	4.6	-	-	66.8	154.5	-	-	0.1	0.3	542.8
Italy	416.5	3.9	-	53.1	274.3	1102.8	58.9	1.8	70.6	67.9	2049.7
Japan	2160.6	-	-	287.3	1273.7	2843.0	235.0	17.6	52.2	4.6	6874.0
Korea	2144.7	2.9	-	179.6	181.9	838.8	6.2	12.0	22.9	5.9 e	3394.9
Luxembourg	-	-	-	-	0.0	17.9	0.1	-	1.2	0.3	19.5
Mexico	341.0	-	-	5.3	468.6	1133.0	43.1	-	-	2.2	1993.1
Netherlands	182.1	-	-	26.8	19.5	499.5	37.9	-	69.2	7.6	842.5
New Zealand	15.6	0.2	-	6.6	-	63.2	4.0	-	-	2.5	92.0
Norway	0.7	-	-	0.4	1.8	26.6	5.8	3.8	12.5	0.2	51.8
Poland	1052.8	517.1	-	32.6	22.0	57.1	79.9	5.8	0.4	4.5	1772.1
Portugal	92.4	-	-	-	21.2	115.1	19.6	0.2	8.2	1.9	258.7
Slovak Republic	16.7	33.1	-	2.9	11.3	41.8	14.1	0.2	1.1	1.1	122.4
Slovenia	0.1	58.4	-	-	0.3	6.4	1.9	0.3	-	1.4	68.8
Spain	399.6	38.0	-	10.8	134.5	531.8	32.0	..	14.6	8.8	1170.1
Sweden	9.7	-	10.6	8.8	11.8	20.3	146.4	1.6	49.8	4.6	263.4
Switzerland	-	-	-	-	0.5	8.3	4.7	1.1	39.7	1.5	55.7
Turkey	231.0	432.3	-	26.1	10.0	743.4	0.3	1.5	-	3.0	1447.6
United Kingdom	1052.1	-	-	27.9	38.9	1072.1	66.3	2.4	33.6	70.9	2364.3
United States	17229.3	973.0	-	46.9	367.5 e	7944.8	391.4	72.1	277.2	124.2	27426.3
OECD Total	**28803.7**	**5895.3**	**105.2**	**910.0**	**3309.9**	**20229.8**	**1777.6**	**170.2**	**1029.6**	**557.0**	**62788.4**
OECD Americas	*17877.2*	*1604.8*	*-*	*52.1*	*974.2*	*9735.2*	*552.9*	*72.1*	*282.4*	*134.5*	*31285.4*
OECD Asia Oceania	*5785.2*	*731.7*	*-*	*476.5*	*1555.3*	*4351.4*	*257.8*	*29.6*	*75.1*	*25.8*	*13288.5*
OECD Europe	*5141.3*	*3558.8*	*105.2*	*381.3*	*780.4*	*6143.1*	*967.0*	*68.5*	*672.1*	*396.7*	*18214.5*

Source: IEA/OECD *Energy Balances of OECD Countries* and IEA/OECD *Energy Balances of Non-OECD Countries*.

(1) Covers use in electricity, CHP and heat plants. Amounts corresponding to heat produced by industry for own use are not included. Data are not available for 2012.

* In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal

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Table 1.5. World fuel use for electricity and heat production,[1] by country, 2011 (continued)

(PJ)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Total
	Hard	Brown	Peat	Gases							
Algeria	-	-	-	-	35.0	464.3	-	-	-	-	499.3
Angola	-	-	-	-	29.6	-	-	-	-	-	29.6
Benin	-	-	-	-	1.5	-	0.0	-	-	-	1.5
Botswana	7.2	-	-	-	-	-	-	-	-	-	7.2
Cameroon	-	-	-	-	14.1	4.2	0.6	-	-	-	18.8
Congo	-	-	-	-	0.1	5.2	-	-	-	-	5.3
DR of Congo	-	-	-	-	0.1	0.3	-	-	-	-	0.4
Côte d'Ivoire	-	-	-	-	0.1	48.8	1.6	-	-	-	50.6
Egypt	-	-	-	-	186.2	1027.9	-	-	-	-	1214.1
Eritrea	-	-	-	-	2.9	-	-	-	-	-	2.9
Ethiopia	-	-	-	-	0.5	-	-	-	-	-	0.5
Gabon	-	-	-	-	5.1	5.3	0.3	-	-	-	10.6
Ghana	-	-	-	-	11.0	29.0	-	-	-	-	39.9
Kenya	-	-	-	-	30.8	-	3.8	-	-	-	34.6
Libya	-	-	-	-	124.6	147.3	-	-	-	-	271.9
Morocco	123.9	-	-	-	66.8	27.7	-	-	-	-	218.3
Mozambique	-	-	-	-	-	0.3	-	-	-	-	0.3
Namibia	0.3	-	-	-	0.1	-	-	-	-	-	0.4
Nigeria	-	-	-	-	41.4	154.0	-	-	-	-	195.4
Senegal	-	-	-	-	26.3	0.6	2.7	-	-	-	29.7
South Africa	2433.3	-	-	-	2.0	-	4.1	-	-	-	2439.4
Sudan	-	-	-	-	23.3	-	-	-	-	-	23.3
UR of Tanzania	0.7	-	-	-	0.6	25.4	-	-	-	-	26.7
Togo	-	-	-	-	0.4	-	0.0	-	-	-	0.4
Tunisia	-	-	-	-	0.1	131.5	-	-	-	-	131.6
Zambia	-	-	-	-	0.5	-	-	-	-	-	0.5
Zimbabwe	33.8	-	-	-	0.4	-	5.6	-	-	-	39.8
Other Africa	44.5	-	-	-	80.1	1.1	-	-	-	0.1	125.9
Africa	**2643.7**	**-**	**-**	**-**	**683.6**	**2072.8**	**18.7**	**-**	**-**	**0.1**	**5418.8**
Argentina	25.6	-	-	8.5	189.6	579.8	29.6	-	-	-	833.2
Bolivia	-	-	-	-	1.5	54.1	5.8	-	-	-	61.4
Brazil	8.6	67.0	-	40.4	137.8	207.3	241.5	-	-	4.2	706.7
Colombia	24.4	-	-	0.6	6.1	68.7	21.0	-	-	-	120.7
Costa Rica	-	-	-	-	8.3	-	2.0	-	-	-	10.4
Cuba	-	-	-	-	214.3	18.5	12.3	-	-	-	245.1
Dominican Rep.	20.5	-	-	-	80.8	50.0	0.8	-	-	-	152.1
Ecuador	-	-	-	-	82.5	15.7	8.1	-	-	-	106.3
El Salvador	-	-	-	-	18.5	-	5.2	-	-	-	23.7
Guatemala	12.1	-	-	-	15.8	-	39.4	-	-	-	67.3
Haiti	-	-	-	-	3.7	-	0.5	-	-	-	4.2

Source: IEA/OECD *Energy Balances of OECD Countries* and IEA/OECD *Energy Balances of Non-OECD Countries*.

(1) Covers use in electricity, CHP and heat plants. Amounts corresponding to heat produced by industry for own use are not included. Data are not available for 2012.

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Table 1.5. World fuel use for electricity and heat production,[1] by country, 2011 (continued)
(PJ)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Total
	Hard	Brown	Peat	Gases							
Honduras	1.3	-	-	-	33.1	-	4.1	-	-	-	38.4
Jamaica	-	-	-	-	42.1	-	5.4	-	-	-	47.5
N. Antilles	-	-	-	-	12.1	-	-	-	-	-	12.1
Nicaragua	-	-	-	-	23.5	-	10.4	-	-	-	33.9
Panama	6.1	-	-	-	29.7	-	2.2	-	-	-	38.0
Paraguay	-	-	-	-	-	-	-	-	-	-	-
Peru	8.8	-	-	-	30.4	153.3	9.7	-	-	0.2	202.4
Trinidad and T.	-	-	-	-	0.2	80.0	-	-	-	-	80.2
Uruguay	-	-	-	-	26.7	0.8	5.3	-	-	-	32.8
Venezuela	-	-	-	-	214.2	227.9	-	-	-	-	442.1
Other N.OECD Amer.	-	-	-	-	125.4	27.7	2.4	-	-	-	155.5
N.OECD Amer.	**107.4**	**67.0**	**-**	**49.6**	**1296.2**	**1483.7**	**405.6**	**-**	**-**	**4.3**	**3413.8**
Bangladesh	8.6	-	-	-	31.5	388.0	-	-	-	-	428.0
Brunei Darussalam	-	-	-	-	0.4	47.3	-	-	-	-	47.7
Cambodia	-	0.4	-	-	10.6	-	0.3	-	-	-	11.2
India	8236.8	806.2	-	18.7	260.7	835.8	529.8	-	-	-	10688.0
Indonesia	-	916.3	-	-	433.4	345.5	3.6	-	-	-	1698.8
DPR of Korea	90.9	11.2	-	-	10.5	-	-	-	-	-	112.6
Malaysia	544.9	-	-	2.9	92.3	574.2	19.3	-	0.1	0.0	1233.7
Mongolia	-	77.9	-	-	3.4	-	-	-	-	-	81.3
Myanmar	7.5	-	-	-	0.3	20.6	-	-	-	-	28.4
Nepal	-	-	-	-	0.0	-	-	-	-	-	0.0
Pakistan	2.6	-	-	-	311.0	267.8	-	-	-	-	581.4
Philippines	187.1	72.3	-	-	33.3	130.8	2.5	-	0.5	-	426.6
Singapore	-	-	-	-	79.7	285.7	-	-	17.4	21.7	404.5
Sri Lanka	11.6	-	-	-	58.2	-	0.9	-	-	-	70.6
Chinese Taipei	900.5	247.4	-	31.5	101.9	468.1	8.6	-	55.4	-	1813.5
Thailand	181.6	185.4	-	-	18.4	802.3	91.1	-	-	4.1	1283.0
Vietnam	223.7	-	-	-	53.0	319.4	0.6	-	-	-	596.8
Other Asia	3.5	-	-	-	82.0	10.6	-	-	-	-	96.0
Asia (excl. China)*	**10399.3**	**2317.1**	**-**	**53.1**	**1580.5**	**4496.0**	**656.7**	**-**	**73.5**	**25.9**	**19602.0**
PR of China*	40892.0	-	-	470.2	223.4	879.9	473.2	187.4	-	-	43125.9
Hong Kong	267.6	-	-	-	1.6	90.5	-	-	-	-	359.7
China (Region)	**41159.6**	**-**	**-**	**470.2**	**224.9**	**970.4**	**473.2**	**187.4**	**-**	**-**	**43485.6**
Albania	-	-	-	-	0.4	-	-	-	-	-	0.4
Armenia	-	-	-	-	-	16.9	-	-	-	-	16.9
Azerbaijan	-	-	-	-	3.5	166.8	-	-	-	-	170.3
Belarus	0.4	2.2	2.8	-	11.5	511.1	25.8	1.4	-	0.1	555.3
Bosnia and H.	-	160.8	-	-	1.8	2.6	0.2	-	-	-	165.3
Bulgaria	63.1	255.3	-	-	5.0	41.8	0.4	-	-	0.1	365.7

Source: IEA/OECD *Energy Balances of OECD Countries* and IEA/OECD *Energy Balances of Non-OECD Countries*.

(1) Covers use in electricity, CHP and heat plants. Amounts corresponding to heat produced by industry for own use are not included. Data are not available for 2012.

* In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal

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Table 1.5. World fuel use for electricity and heat production,[1] by country, 2011 (continued)

(PJ)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Total
	Hard	Brown	Peat	Gases							
Croatia	23.2	0.2	-	-	8.6	28.1	0.8	-	-	0.3	61.2
Cyprus*	-	-	-	-	47.4	-	-	-	-	0.3	47.6
Georgia	-	-	-	-	0.5	17.9	-	-	-	-	18.4
Kazakhstan	769.2	24.7	-	-	6.5	81.7	-	-	-	-	882.0
Kosovo	-	64.5	-	-	0.5	-	-	-	-	-	64.9
Kyrgyzstan	7.8	-	-	-	-	8.1	-	-	-	-	15.9
Latvia	0.5	-	0.0	-	0.6	35.9	6.3	-	-	0.8	44.1
Lithuania	0.1	0.1	0.1	-	2.6	48.0	9.9	-	-	0.3	61.1
F.Y.R. Macedonia	-	55.4	-	-	1.5	2.8	-	-	-	-	59.6
Gibraltar	-	-	-	-	1.7	-	-	-	-	-	1.7
Malta	-	-	-	-	24.8	-	-	0.0	1.9	-	26.7
Rep. of Moldova	0.1	-	-	-	0.6	61.8	0.4	-	-	-	62.9
Montenegro	-	17.5	-	-	-	-	-	-	-	-	17.5
Romania	-	301.0	-	0.5	18.8	122.5	4.2	0.0	-	0.1	447.2
Russian Federation	1779.8	1052.8	11.5	218.3	696.1	9916.7	40.6	147.5	-	-	13863.4
Serbia	-	302.6	-	3.8	11.9	30.2	0.1	0.3	-	-	348.8
Tajikistan	-	-	-	-	-	7.6	-	-	-	-	7.6
Turkmenistan	-	-	-	-	-	312.7	-	-	-	-	312.7
Ukraine	867.1	0.7	0.3	64.2	13.0	673.5	18.9	-	-	-	1637.6
Uzbekistan	-	39.1	-	-	7.0	572.2	-	-	-	-	618.2
N.OECD E.& Eurasia	**3511.2**	**2276.7**	**14.7**	**286.6**	**864.2**	**12658.7**	**107.6**	**149.3**	**1.9**	**2.0**	**19872.9**
Bahrain	-	-	-	-	-	148.9	-	-	-	-	148.9
IR of Iran	-	-	-	6.1	799.8	1377.8	-	-	-	0.1	2183.7
Iraq	-	-	-	-	510.7	199.6	-	-	-	-	710.3
Jordan	-	-	-	-	97.0	36.5	-	-	-	0.1	133.6
Kuwait	-	-	-	-	427.0	147.1	-	-	-	-	574.1
Lebanon	-	-	-	-	155.7	-	-	-	-	-	155.7
Oman	-	-	-	-	43.4	233.5	-	-	-	-	276.9
Qatar	-	-	-	-	-	269.7	-	-	-	-	269.7
Saudi Arabia	-	-	-	-	1630.4	1242.2	-	-	-	-	2872.6
Syrian Arab R.	-	-	-	-	171.1	209.3	-	-	-	-	380.4
UAE	-	-	-	-	27.4	1030.4	-	-	-	-	1057.8
Yemen	-	-	-	-	41.9	13.3	-	-	-	-	55.2
Middle East	**-**	**-**	**-**	**6.1**	**3904.4**	**4908.2**	**-**	**-**	**-**	**0.2**	**8818.9**
Non-OECD Total**	**57821.1**	**4660.8**	**14.7**	**865.6**	**8553.7**	**26589.9**	**1661.7**	**336.6**	**75.3**	**32.5**	**100612.0**

Source: IEA/OECD *Energy Balances of OECD Countries* and IEA/OECD *Energy Balances of Non-OECD Countries*.

(1) Covers use in electricity, CHP and heat plants. Amounts corresponding to heat produced by industry for own use are not included. Data are not available for 2012.

* Please refer to Part I Section 5, Geographical Coverage.

** In the 2013 edition, the electricity production from brown coal in People's Republic of China was reclassified as electricity production from hard coal

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Table 2.1. OECD electricity production, imports, exports, apparent consumption, 2012e (TWh)

	Gross production (1)	Imports	Exports	Apparent consumption(2)
Australia	252.3	-	-	252.3
Austria	68.4	23.3	20.5	71.2
Belgium	78.6	16.8	6.9	88.5
Canada	645.8	10.8	57.6	599.0
Chile	68.4	0.7	-	69.1
Czech Republic	87.6	11.6	28.7	70.5
Denmark	30.4	15.9	10.7	35.6
Estonia	12.0	2.7	5.0	9.7
Finland	70.4	19.1	1.6	87.8
France	561.2	12.2	56.7	516.7
Germany	617.6	46.3	66.8	597.1
Greece	57.8	6.0	4.2	59.6
Hungary	34.4	17.0	9.0	42.4
Iceland	17.5	-	-	17.5
Ireland	27.7	0.8	0.4	28.1
Israel	60.7	-	4.2	56.5
Italy	296.3	45.4	2.3	339.4
Japan	1033.7	-	-	1033.7
Korea	531.0	-	-	531.0
Luxembourg	3.8	6.7	2.6	7.9
Mexico	296.0	1.9	1.0	296.9
Netherlands	102.2	32.2	15.0	119.3
New Zealand	44.3	-	-	44.3
Norway	147.8	4.2	22.0	130.0
Poland	162.0	9.8	12.6	159.2
Portugal	46.6	10.8	2.9	54.5
Slovak Republic	28.6	13.4	13.1	28.9
Slovenia	15.7	7.5	8.4	14.8
Spain	297.1	7.8	19.0	285.9
Sweden	165.5	11.7	31.3	145.9
Switzerland	69.7	31.5	33.7	67.5
Turkey	239.5	4.4	1.5	242.4
United Kingdom	363.2	7.5	8.4	14.8
United States	4299.8	7.8	19.0	285.9
OECD Total	**10833.5**	**436.5**	**454.5**	**10815.5**
OECD Americas	*5310.0*	*65.8*	*73.7*	*5302.1*
OECD Asia Oceania	*1922.0*	*-*	*4.2*	*1917.8*
OECD Europe	*3601.5*	*370.7*	*376.6*	*3595.6*

Source: *IEA/OECD Energy Statistics of OECD Countries.*

(1) Gross production refers to total main activity producers and autoproducers production, including production from pumped storage.

(2) Apparent consumption = production + imports - exports. Includes "own use by power plant", "used for heat pumps", "electric boilers" and "pumped storage", "transmission losses" and transformation industries for heating, traction and lighting purposes. Apparent consumption is an estimate based on preliminary data and not verified with the real consumption side of the balance.

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Table 2.2. OECD gross electricity production, by country, by source, 2012e (TWh)

	Fossil fuels[1]	Nuclear	Hydro	Geo-thermal	Solar/ wind[2]	Biofuels & waste[3]	Total
Australia	228.29	-	14.08	-	7.60	2.34	252.32
Austria	16.68	-	43.44	0.00	2.81	5.42	68.36
Belgium	26.16	40.30	1.66	-	4.61	5.84	78.56
Canada	145.01	96.44	380.12	-	13.42	10.77	645.76
Chile	42.77	-	19.22	-	0.37	6.01	68.39
Czech Republic	48.32	30.32	2.96	-	2.59	3.38	87.57
Denmark	15.18	-	0.02	-	10.27	4.94	30.40
Estonia	10.49	-	0.04	-	0.43	1.00	11.97
Finland	18.80	22.98	16.80	-	0.78	11.02	70.37
France	46.34	425.37	62.52	-	19.50	7.50	561.23
Germany	365.89	99.46	28.09	0.03	76.34	47.79	617.60
Greece	48.48	-	4.56	-	4.49	0.30	57.83
Hungary	15.82	15.79	0.21	-	0.78	1.80	34.41
Iceland	0.00	-	12.34	5.21	-	-	17.55
Ireland	22.21	-	1.01	-	4.01	0.48	27.72
Israel	60.36	-	0.03	-	0.28	0.04	60.71
Italy	201.64	-	43.83	5.57	32.92	12.35	296.31
Japan	888.53	11.23	85.68	2.53	8.84	36.95	1033.75
Korea	365.78	154.89	6.25	-	2.23	1.84	530.99
Luxembourg	2.39	-	1.16	-	0.10	0.16	3.80
Mexico	244.37	8.77	31.86	5.82	3.33	1.87	296.01
Netherlands	83.92	3.95	0.11	-	5.32	8.86	102.15
New Zealand	12.56	-	22.79	6.19	2.11	0.61	44.26
Norway	2.80	-	142.90	-	1.60	0.55	147.85
Poland	144.50	-	2.47	-	4.70	10.37	162.03
Portugal	25.95	-	6.61	0.15	10.65	3.21	46.57
Slovak Republic	7.25	15.50	4.39	-	0.64	0.79	28.56
Slovenia	5.69	5.53	4.08	-	0.16	0.26	15.72
Spain	144.80	61.37	24.11	-	61.24	5.60	297.12
Sweden	4.68	63.54	78.63	-	7.18	11.43	165.46
Switzerland	1.10	25.44	40.31	-	0.22	2.63	69.69
Turkey	174.16	-	57.87	0.90	5.86	0.72	239.50
United Kingdom	246.91	70.41	8.19	-	20.71	16.96	363.19
United States	2946.90	799.71	298.13	19.62	156.74	78.70	4299.79
OECD Total	**6614.72**	**1951.00**	**1446.47**	**46.01**	**472.81**	**302.49**	**10833.49**
OECD Americas	*3379.06*	*904.92*	*729.33*	*25.43*	*173.86*	*97.36*	*5309.96*
OECD Asia Oceania	*1555.51*	*166.13*	*128.83*	*8.72*	*21.06*	*41.79*	*1922.03*
OECD Europe	*1680.15*	*879.95*	*588.31*	*11.86*	*277.89*	*163.34*	*3601.51*

Source: IEA/OECD *Energy Statistics of OECD Countries.*

(1) Includes hard coal, brown coal, peat, coal gases, oil products and natural gas.

(2) Includes tide, wave, ocean and other (fuel cells etc).

(3) Includes wood/wood waste/other solid waste, industrial and municipal waste, biogases and liquid biofuels.

Note: Including electricity production from pumped storage.

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Table 2.3. Monthly net electricity supply, [1] by country (GWh)

Australia	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	19 381	18 177	17 892	16 962	18 304	17 586	18 510	18 184	16 276	17 008	17 272	18 605
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	706	746	981	1 006	1 030	1 330	1 799	1 687	1 499	1 293	1 011	996
+ Geothermal/other	778	562	619	456	504	597	511	734	695	643	672	831
= Production	**20 865**	**19 485**	**19 492**	**18 424**	**19 838**	**19 513**	**20 820**	**20 604**	**18 470**	**18 943**	**18 954**	**20 432**
+ Imports	-	-	-	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-	-	-	-
= Supply	**20 865**	**19 485**	**19 492**	**18 424**	**19 838**	**19 513**	**20 820**	**20 604**	**18 470**	**18 943**	**18 954**	**20 432**

Austria	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	2 466	2 961	2 032	1 442	944	1 011	976	1 233	1 406	1 962	2 296	2 457
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	3 034	2 579	3 306	3 249	4 073	4 411	4 346	3 699	3 579	3 482	3 256	2 994
+ Geothermal/other	368	345	265	242	234	174	167	135	224	199	234	224
= Production	**5 868**	**5 885**	**5 603**	**4 933**	**5 252**	**5 596**	**5 489**	**5 068**	**5 209**	**5 643**	**5 787**	**5 675**
+ Imports	2 508	2 492	2 535	2 021	1 517	1 278	1 460	1 646	1 738	1 910	1 925	2 232
- Exports	1 937	1 939	2 014	1 519	1 536	1 800	1 686	1 433	1 637	1 823	1 764	1 367
= Supply	**6 439**	**6 438**	**6 124**	**5 435**	**5 233**	**5 074**	**5 263**	**5 281**	**5 310**	**5 730**	**5 948**	**6 540**

Belgium	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	2 701	3 611	2 515	2 407	2 190	2 218	2 265	2 313	2 613	2 632	2 646	2 841
+ Nuclear	4 414	3 788	3 133	3 257	3 686	3 304	3 494	3 087	2 714	2 120	2 588	2 806
+ Hydro	157	138	137	139	118	90	141	130	138	143	154	163
+ Geothermal/other	376	324	329	363	368	358	361	399	400	428	368	480
= Production	**7 649**	**7 860**	**6 114**	**6 165**	**6 363**	**5 971**	**6 261**	**5 930**	**5 866**	**5 324**	**5 757**	**6 290**
+ Imports	1 119	1 243	1 828	1 276	1 146	1 155	880	1 141	1 283	2 118	1 920	1 739
- Exports	784	1 203	405	464	670	589	803	568	530	241	228	426
= Supply	**7 984**	**7 900**	**7 537**	**6 977**	**6 839**	**6 537**	**6 338**	**6 503**	**6 619**	**7 201**	**7 449**	**7 603**

Canada	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	13 871	13 162	12 887	10 912	10 465	10 260	11 674	12 111	11 345	11 806	12 189	13 638
+ Nuclear	7 585	6 690	7 349	6 757	7 417	7 695	8 353	7 643	6 747	7 892	8 450	8 407
+ Hydro	38 288	33 823	32 904	30 053	29 403	28 006	30 604	30 254	27 127	29 786	32 516	35 515
+ Geothermal/other	1 468	1 127	1 336	1 154	1 000	962	680	749	958	1 345	1 194	1 295
= Production	**61 212**	**54 801**	**54 476**	**48 875**	**48 285**	**46 923**	**51 310**	**50 756**	**46 177**	**50 830**	**54 350**	**58 855**
+ Imports	857	798	1 108	1 161	1 053	1 093	873	720	792	671	729	988
- Exports	4 051	3 454	4 083	4 889	5 360	5 291	6 556	6 230	4 787	4 244	4 501	4 193
= Supply	**58 018**	**52 145**	**51 501**	**45 147**	**43 978**	**42 725**	**45 627**	**45 246**	**42 182**	**47 257**	**50 578**	**55 650**

Chile	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	3 596	3 600	3 977	4 266	4 599	3 444	3 152	3 875	3 628	3 950	3 949	4 103
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	1 831	1 589	1 610	1 122	1 106	1 965	2 253	1 661	1 461	1 591	1 502	1 472
+ Geothermal/other	25	34	27	14	33	34	39	29	33	32	30	44
= Production	**5 452**	**5 223**	**5 614**	**5 402**	**5 738**	**5 443**	**5 444**	**5 565**	**5 121**	**5 573**	**5 481**	**5 619**
+ Imports	61	61	61	61	61	61	61	61	61	61	61	61
- Exports	-	-	-	-	-	-	-	-	-	-	-	-
= Supply	**5 513**	**5 284**	**5 675**	**5 463**	**5 799**	**5 504**	**5 505**	**5 626**	**5 182**	**5 634**	**5 542**	**5 680**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.3. Monthly net electricity supply, [1] by country (continued) (GWh)

Czech Republic	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	4 790	4 599	4 531	4 195	3 749	3 633	3 280	3 317	3 214	3 832	3 908	3 940
+ Nuclear	2 697	2 273	2 485	2 409	2 143	2 052	2 659	2 071	2 284	2 479	2 584	2 491
+ Hydro	341	286	359	280	229	173	163	192	203	208	243	271
+ Geothermal/other	137	147	248	267	335	286	285	298	241	162	92	81
= Production	**7 965**	**7 305**	**7 623**	**7 151**	**6 455**	**6 144**	**6 387**	**5 878**	**5 943**	**6 681**	**6 827**	**6 783**
+ Imports	1 281	1 524	840	675	604	702	898	1 149	727	1 090	1 090	1 009
- Exports	3 048	2 509	2 716	2 579	2 108	2 147	2 617	2 246	1 893	2 303	2 288	2 256
= Supply	**6 198**	**6 320**	**5 747**	**5 247**	**4 951**	**4 699**	**4 668**	**4 781**	**4 777**	**5 468**	**5 629**	**5 536**

Denmark	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	2 258	2 395	1 619	1 545	1 195	1 003	842	943	1 186	1 714	1 778	2 332
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	2	2	2	1	1	1	1	1	1	2	2	2
+ Geothermal/other	1 146	945	1 073	726	736	762	596	520	932	878	875	1 080
= Production	**3 407**	**3 342**	**2 694**	**2 272**	**1 932**	**1 766**	**1 439**	**1 464**	**2 119**	**2 594**	**2 655**	**3 414**
+ Imports	909	765	1 337	1 427	1 517	1 440	1 660	1 857	1 314	1 381	1 291	1 019
- Exports	1 155	1 080	1 029	959	774	613	557	587	729	1 037	925	1 261
= Supply	**3 161**	**3 027**	**3 002**	**2 740**	**2 675**	**2 593**	**2 542**	**2 734**	**2 704**	**2 938**	**3 021**	**3 172**

Estonia	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	934	950	796	756	785	757	677	927	835	923	927	1 074
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	5	2	4	5	5	3	2	1	2	4	5	3
+ Geothermal/other	35	33	42	34	25	25	25	24	42	39	61	47
= Production	**974**	**985**	**841**	**795**	**815**	**785**	**705**	**953**	**879**	**966**	**993**	**1 125**
+ Imports	228	215	264	244	261	209	297	154	180	192	228	238
- Exports	347	329	315	346	444	407	420	508	444	439	474	477
= Supply	**855**	**871**	**790**	**693**	**632**	**587**	**582**	**599**	**615**	**719**	**747**	**886**

Finland	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	3 358	3 618	2 953	2 460	1 817	1 308	1 044	1 288	1 896	2 432	2 477	3 601
+ Nuclear	2 058	1 922	2 048	1 845	1 351	1 849	1 988	1 665	1 498	1 809	1 986	2 046
+ Hydro	1 273	1 238	1 208	1 076	1 707	1 501	1 497	1 365	1 223	1 616	1 520	1 378
+ Geothermal/other	61	65	74	62	67	48	52	48	70	60	82	67
= Production	**6 750**	**6 843**	**6 283**	**5 443**	**4 942**	**4 706**	**4 581**	**4 365**	**4 686**	**5 917**	**6 065**	**7 092**
+ Imports	1 918	1 568	1 649	1 598	1 535	1 171	1 517	1 858	1 705	1 397	1 493	1 680
- Exports	155	99	182	118	147	168	253	95	113	137	92	86
= Supply	**8 513**	**8 312**	**7 750**	**6 923**	**6 330**	**5 709**	**5 845**	**6 128**	**6 278**	**7 177**	**7 466**	**8 686**

France	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	5 732	8 769	5 616	3 536	2 024	2 426	2 534	2 809	2 706	3 600	5 482	5 620
+ Nuclear	42 811	38 661	37 549	33 100	29 058	26 562	28 818	28 314	30 130	32 848	37 119	39 912
+ Hydro	6 597	5 069	3 853	5 268	7 558	6 694	4 805	3 469	3 522	4 316	4 644	6 194
+ Geothermal/other	1 974	1 517	1 366	1 957	1 359	1 378	1 299	1 284	1 310	1 649	1 694	2 705
= Production	**57 114**	**54 016**	**48 384**	**43 861**	**39 999**	**37 059**	**37 456**	**35 876**	**37 667**	**42 413**	**48 940**	**54 432**
+ Imports	787	3 455	476	1 025	669	691	1 033	1 043	667	869	725	776
- Exports	6 250	2 632	5 484	4 510	5 127	4 354	4 239	4 603	4 736	4 490	5 102	5 205
= Supply	**51 651**	**54 839**	**43 376**	**40 376**	**35 541**	**33 396**	**34 250**	**32 316**	**33 598**	**38 792**	**44 563**	**50 003**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.3. Monthly net electricity supply, [1] by country (continued) (GWh)

Germany	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	34 299	39 158	34 646	32 437	27 747	27 979	28 378	28 458	29 187	33 894	35 737	34 153
+ Nuclear	8 796	8 415	8 725	5 790	6 721	6 703	6 802	8 553	7 991	8 540	8 642	8 433
+ Hydro	2 475	2 068	2 280	2 302	2 549	2 643	2 355	2 063	2 162	2 226	2 218	2 227
+ Geothermal/other	7 858	5 700	6 574	6 170	7 279	6 835	6 593	6 235	6 129	5 726	4 883	6 193
= Production	**53 428**	**55 340**	**52 226**	**46 700**	**44 296**	**44 159**	**44 129**	**45 308**	**45 469**	**50 385**	**51 479**	**51 007**
+ Imports	4 234	3 068	4 164	4 007	4 524	4 192	4 272	3 618	3 457	3 834	3 527	3 373
- Exports	5 976	6 305	6 670	5 242	4 331	4 444	4 346	4 845	5 412	6 467	6 015	6 757
= Supply	**51 686**	**52 103**	**49 720**	**45 465**	**44 489**	**43 907**	**44 055**	**44 081**	**43 514**	**47 752**	**48 991**	**47 623**

Greece	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	4 170	3 780	3 561	2 925	3 195	3 447	4 613	4 288	3 481	3 354	3 307	3 928
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	278	369	283	352	421	449	560	463	247	182	351	589
+ Geothermal/other	358	285	282	399	296	440	380	372	360	484	422	410
= Production	**4 806**	**4 434**	**4 126**	**3 676**	**3 912**	**4 336**	**5 553**	**5 123**	**4 088**	**4 021**	**4 081**	**4 927**
+ Imports	535	463	537	518	341	515	784	594	465	366	421	415
- Exports	375	357	401	441	300	239	305	343	319	344	392	355
= Supply	**4 966**	**4 540**	**4 262**	**3 753**	**3 953**	**4 612**	**6 032**	**5 374**	**4 234**	**4 043**	**4 110**	**4 987**

Hungary	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	1 719	1 875	1 317	1 083	1 149	1 193	1 304	1 313	1 245	1 233	1 357	1 427
+ Nuclear	1 428	1 335	1 412	1 027	1 124	1 241	1 025	1 054	1 024	1 411	1 301	1 426
+ Hydro	21	13	19	15	24	21	18	12	10	13	22	22
+ Geothermal/other	99	84	90	70	60	46	46	39	33	58	65	68
= Production	**3 266**	**3 306**	**2 839**	**2 196**	**2 356**	**2 500**	**2 394**	**2 418**	**2 312**	**2 715**	**2 745**	**2 942**
+ Imports	1 724	1 621	1 473	1 461	1 319	1 283	1 574	1 558	1 294	1 268	1 192	1 197
- Exports	1 404	1 395	930	511	511	569	606	721	458	655	576	667
= Supply	**3 586**	**3 532**	**3 382**	**3 146**	**3 164**	**3 214**	**3 362**	**3 255**	**3 148**	**3 328**	**3 361**	**3 472**

Iceland	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	-	-	-	-	-	-	-	-	-	-	-	1
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	1 059	1 003	1 038	963	1 014	995	1 015	1 014	976	1 036	1 033	1 080
+ Geothermal/other	447	410	444	423	399	348	381	398	411	437	423	440
= Production	**1 506**	**1 414**	**1 482**	**1 387**	**1 413**	**1 344**	**1 396**	**1 413**	**1 387**	**1 473**	**1 456**	**1 521**
+ Imports	-	-	-	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-	-	-	-
= Supply	**1 506**	**1 414**	**1 482**	**1 387**	**1 413**	**1 344**	**1 396**	**1 413**	**1 387**	**1 473**	**1 456**	**1 521**

Ireland	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	1 976	1 844	1 844	1 705	1 881	1 643	1 716	1 641	1 630	1 915	1 955	1 796
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	103	84	46	16	34	96	104	95	67	107	120	130
+ Geothermal/other	535	371	308	361	258	239	220	292	309	271	359	484
= Production	**2 614**	**2 300**	**2 198**	**2 082**	**2 173**	**1 979**	**2 040**	**2 029**	**2 007**	**2 293**	**2 435**	**2 410**
+ Imports	3	28	95	72	73	81	72	104	106	61	43	47
- Exports	115	54	6	12	18	9	12	22	16	23	44	38
= Supply	**2 502**	**2 274**	**2 287**	**2 142**	**2 228**	**2 051**	**2 100**	**2 111**	**2 097**	**2 331**	**2 434**	**2 419**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.3. Monthly net electricity supply, [1] by country (continued) (GWh)

Italy	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	19 178	20 580	17 526	14 918	14 643	16 021	19 357	17 841	17 233	16 094	14 691	16 281
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	2 416	2 102	2 348	2 966	4 859	5 126	4 712	3 755	3 237	3 529	4 530	3 754
+ Geothermal/other	2 608	2 648	3 466	3 457	3 658	3 307	3 647	3 442	3 060	2 797	2 637	3 099
= Production	**24 202**	**25 330**	**23 340**	**21 342**	**23 160**	**24 454**	**27 716**	**25 038**	**23 530**	**22 420**	**21 858**	**23 134**
+ Imports	4 385	3 275	4 724	3 857	3 481	3 515	3 420	2 234	3 306	4 667	4 609	3 896
- Exports	196	374	126	160	189	230	230	306	166	77	85	142
= Supply	**28 391**	**28 231**	**27 938**	**25 039**	**26 452**	**27 739**	**30 906**	**26 966**	**26 670**	**27 010**	**26 382**	**26 888**

Japan	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	84 223	82 840	76 817	67 637	65 814	67 012	76 329	82 221	74 579	69 192	71 592	82 636
+ Nuclear	3 495	1 937	1 431	453	70	-	670	1 178	1 143	1 194	1 169	1 214
+ Hydro	4 837	5 348	7 994	8 943	9 250	8 328	10 295	8 411	6 162	4 929	5 095	5 725
+ Geothermal/other	1 410	1 400	1 533	968	949	884	924	888	887	928	889	950
= Production	**93 965**	**91 525**	**87 774**	**78 001**	**76 082**	**76 224**	**88 218**	**92 698**	**82 771**	**76 243**	**78 745**	**90 526**
+ Imports	-	-	-	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-	-	-	-
= Supply	**93 965**	**91 525**	**87 774**	**78 001**	**76 082**	**76 224**	**88 218**	**92 698**	**82 771**	**76 243**	**78 745**	**90 526**

Korea	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	33 108	32 450	31 654	27 605	27 218	27 658	30 704	30 294	25 835	26 004	28 827	32 481
+ Nuclear	12 904	11 898	12 281	11 205	12 071	12 565	12 726	13 742	13 144	12 471	10 754	12 158
+ Hydro	384	348	413	632	577	495	496	627	497	486	432	480
+ Geothermal/other	185	185	185	185	185	185	185	185	185	185	185	185
= Production	**46 582**	**44 882**	**44 533**	**39 627**	**40 052**	**40 903**	**44 111**	**44 849**	**39 661**	**39 147**	**40 198**	**45 304**
+ Imports	-	-	-	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-	-	-	-
= Supply	**46 582**	**44 882**	**44 533**	**39 627**	**40 052**	**40 903**	**44 111**	**44 849**	**39 661**	**39 147**	**40 198**	**45 304**

Luxembourg	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	235	287	247	263	224	228	218	158	93	208	211	151
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	98	84	116	93	101	91	91	80	87	102	101	102
+ Geothermal/other	11	7	6	6	9	6	6	7	6	12	9	14
= Production	**345**	**378**	**370**	**362**	**335**	**326**	**316**	**245**	**186**	**323**	**322**	**267**
+ Imports	552	573	626	562	567	560	538	498	575	574	558	549
- Exports	237	280	275	267	260	247	198	164	131	202	197	165
= Supply	**660**	**671**	**721**	**657**	**642**	**639**	**656**	**579**	**630**	**695**	**683**	**651**

Mexico	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	17 853	16 360	18 824	18 366	20 731	21 269	21 169	21 606	20 582	20 318	17 837	18 389
+ Nuclear	508	757	889	1 192	1 181	1 085	999	330	67	215	514	694
+ Hydro	2 543	2 417	2 530	2 659	3 222	2 849	2 534	3 705	2 952	2 624	1 636	1 906
+ Geothermal/other	813	752	784	710	723	729	755	729	704	728	701	730
= Production	**21 716**	**20 287**	**23 026**	**22 926**	**25 856**	**25 932**	**25 457**	**26 370**	**24 305**	**23 886**	**20 688**	**21 719**
+ Imports	6	30	44	211	202	257	274	226	220	250	109	98
- Exports	125	131	120	97	67	44	49	46	43	92	93	113
= Supply	**21 597**	**20 186**	**22 950**	**23 040**	**25 991**	**26 145**	**25 682**	**26 550**	**24 482**	**24 044**	**20 704**	**21 704**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.3. Monthly net electricity supply, [1] by country (continued) (GWh)

Netherlands	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	8 884	9 261	8 078	7 278	5 867	6 268	6 369	6 639	6 435	7 943	8 207	8 154
+ Nuclear	362	327	361	99	135	340	353	350	341	357	351	362
+ Hydro	7	11	11	8	13	12	11	4	3	9	10	7
+ Geothermal/other	760	534	292	422	356	439	294	249	379	409	454	728
= Production	**10 013**	**10 132**	**8 742**	**7 807**	**6 371**	**7 058**	**7 027**	**7 241**	**7 157**	**8 719**	**9 021**	**9 252**
+ Imports	1 977	1 556	2 881	2 514	3 138	3 080	3 045	2 824	2 713	2 762	2 725	2 941
- Exports	1 232	1 707	1 573	1 326	639	935	941	971	1 052	1 658	1 561	1 450
= Supply	**10 758**	**9 981**	**10 050**	**8 995**	**8 870**	**9 203**	**9 131**	**9 094**	**8 818**	**9 823**	**10 185**	**10 743**

New Zealand	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	788	1 068	1 102	1 195	1 448	1 449	1 226	1 100	861	666	725	676
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	1 934	1 588	1 672	1 552	1 641	1 670	2 049	2 150	2 063	2 188	1 995	2 065
+ Geothermal/other	659	605	700	657	641	684	683	612	639	706	660	682
= Production	**3 380**	**3 262**	**3 473**	**3 404**	**3 730**	**3 803**	**3 958**	**3 863**	**3 563**	**3 560**	**3 380**	**3 422**
+ Imports	-	-	-	-	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-	-	-	-	-
= Supply	**3 380**	**3 262**	**3 473**	**3 404**	**3 730**	**3 803**	**3 958**	**3 863**	**3 563**	**3 560**	**3 380**	**3 422**

Norway	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	278	317	279	281	246	261	187	303	240	301	288	335
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	14 937	13 873	12 357	11 657	10 758	10 073	9 984	10 636	10 472	11 711	11 770	14 027
+ Geothermal/other	143	174	186	88	105	75	94	77	142	142	180	190
= Production	**15 357**	**14 365**	**12 822**	**12 027**	**11 109**	**10 409**	**10 265**	**11 016**	**10 855**	**12 154**	**12 239**	**14 552**
+ Imports	347	263	334	287	226	166	125	44	65	497	800	1 035
- Exports	2 229	1 968	1 570	1 841	2 004	1 979	1 940	2 554	1 683	1 573	1 382	1 283
= Supply	**13 475**	**12 660**	**11 586**	**10 473**	**9 331**	**8 596**	**8 450**	**8 506**	**9 237**	**11 078**	**11 657**	**14 304**

Poland	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	12 941	13 047	11 985	11 165	10 827	10 884	10 891	11 049	10 913	11 993	12 124	12 626
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	219	177	293	294	232	219	192	159	126	159	168	204
+ Geothermal/other	467	401	477	345	287	258	269	282	404	454	490	567
= Production	**13 627**	**13 625**	**12 755**	**11 804**	**11 346**	**11 361**	**11 352**	**11 490**	**11 443**	**12 605**	**12 782**	**13 397**
+ Imports	854	871	966	638	774	542	1 017	1 032	720	933	718	738
- Exports	1 307	1 441	1 102	960	795	920	1 001	1 077	826	1 053	1 058	1 102
= Supply	**13 174**	**13 055**	**12 619**	**11 482**	**11 325**	**10 983**	**11 368**	**11 445**	**11 337**	**12 485**	**12 442**	**13 033**

Portugal	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	3 245	3 163	2 284	1 563	1 734	2 059	2 580	2 748	3 003	2 049	1 894	1 745
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	494	367	453	423	667	473	353	345	345	580	995	1 040
+ Geothermal/other	698	960	855	1 147	838	789	833	726	787	742	1 256	1 081
= Production	**4 437**	**4 491**	**3 591**	**3 133**	**3 240**	**3 321**	**3 766**	**3 820**	**4 135**	**3 371**	**4 145**	**3 866**
+ Imports	1 042	967	978	933	979	940	832	725	839	947	599	986
- Exports	181	268	183	132	232	259	175	269	220	126	437	391
= Supply	**5 298**	**5 190**	**4 386**	**3 934**	**3 987**	**4 002**	**4 423**	**4 276**	**4 754**	**4 192**	**4 307**	**4 461**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.3. Monthly net electricity supply, [1] by country (continued) (GWh)

Slovak Republic	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	653	724	618	589	557	477	448	553	495	681	753	774
+ Nuclear	1 306	1 209	1 306	1 079	1 117	934	1 077	1 254	1 227	1 186	1 129	1 301
+ Hydro	373	285	470	424	385	385	340	243	246	271	297	326
+ Geothermal/other	53	53	53	53	53	53	53	53	53	53	53	53
= Production	**2 385**	**2 271**	**2 447**	**2 145**	**2 113**	**1 849**	**1 917**	**2 103**	**2 020**	**2 191**	**2 231**	**2 454**
+ Imports	1 438	1 369	1 074	1 106	854	1 016	1 283	1 219	970	1 090	1 039	964
- Exports	1 347	1 186	1 220	1 174	918	874	1 153	1 294	958	987	970	997
= Supply	**2 476**	**2 454**	**2 301**	**2 077**	**2 049**	**1 991**	**2 047**	**2 028**	**2 032**	**2 294**	**2 300**	**2 421**

Slovenia	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	518	542	451	391	353	322	393	409	435	477	507	472
+ Nuclear	517	477	511	213	48	495	503	496	496	478	499	519
+ Hydro	169	131	154	281	380	384	405	322	390	465	513	423
+ Geothermal/other	6	6	14	13	17	17	22	26	17	12	6	6
= Production	**1 211**	**1 156**	**1 131**	**898**	**798**	**1 218**	**1 323**	**1 254**	**1 339**	**1 433**	**1 526**	**1 420**
+ Imports	629	604	720	680	799	633	562	650	513	617	498	551
- Exports	609	546	689	498	486	757	767	810	735	909	834	724
= Supply	**1 231**	**1 214**	**1 162**	**1 080**	**1 111**	**1 094**	**1 118**	**1 094**	**1 117**	**1 141**	**1 190**	**1 247**

Spain	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	13 784	13 614	12 589	8 765	10 489	12 665	12 885	12 824	11 316	12 320	11 548	11 314
+ Nuclear	5 151	5 132	5 462	5 183	4 467	3 498	5 079	5 444	5 538	5 382	4 056	4 347
+ Hydro	1 965	1 524	1 665	2 081	2 737	2 365	1 216	1 649	1 373	1 746	2 346	3 033
+ Geothermal/other	4 249	5 856	4 803	6 129	4 948	4 761	4 528	4 505	4 974	4 014	5 208	5 935
= Production	**25 148**	**26 125**	**24 518**	**22 159**	**22 641**	**23 289**	**23 708**	**24 423**	**23 200**	**23 462**	**23 159**	**24 629**
+ Imports	958	462	705	468	696	835	772	758	488	271	647	729
- Exports	1 484	1 838	1 576	1 680	1 636	1 460	1 401	1 404	1 536	1 729	1 438	1 809
= Supply	**24 622**	**24 749**	**23 647**	**20 947**	**21 701**	**22 664**	**23 079**	**23 777**	**22 152**	**22 004**	**22 368**	**23 549**

Sweden	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	1 970	2 034	1 605	1 308	1 005	792	698	716	862	1 127	1 334	1 989
+ Nuclear	5 339	4 795	5 576	5 455	4 376	3 995	4 505	4 364	4 731	5 690	6 083	6 095
+ Hydro	7 227	7 122	6 885	6 449	6 712	6 195	5 884	6 068	5 409	6 740	6 283	7 242
+ Geothermal/other	639	677	777	523	534	431	421	351	747	621	792	665
= Production	**15 175**	**14 629**	**14 843**	**13 734**	**12 626**	**11 413**	**11 508**	**11 499**	**11 749**	**14 177**	**14 493**	**15 992**
+ Imports	1 635	1 313	574	848	892	980	836	1 295	1 110	582	518	1 096
- Exports	2 202	1 607	2 645	2 893	2 977	2 572	3 321	3 117	2 647	2 783	2 540	1 948
= Supply	**14 608**	**14 335**	**12 772**	**11 689**	**10 541**	**9 821**	**9 023**	**9 677**	**10 212**	**11 976**	**12 471**	**15 140**

Switzerland	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	292	291	331	279	308	275	302	291	269	277	315	313
+ Nuclear	2 425	2 265	2 346	2 211	2 280	1 501	2 225	1 345	1 290	1 560	2 351	2 430
+ Hydro	2 796	2 835	2 148	2 445	3 772	4 487	4 561	4 245	3 427	3 415	2 863	2 912
+ Geothermal/other	18	18	18	18	18	18	18	18	18	18	18	18
= Production	**5 532**	**5 410**	**4 843**	**4 954**	**6 378**	**6 281**	**7 106**	**5 898**	**5 003**	**5 269**	**5 547**	**5 674**
+ Imports	3 616	3 585	3 777	2 749	1 537	1 680	1 269	1 498	2 540	3 280	3 041	2 977
- Exports	2 900	2 661	2 883	2 507	2 906	2 948	3 434	2 406	2 621	3 121	2 884	2 478
= Supply	**6 248**	**6 334**	**5 737**	**5 196**	**5 009**	**5 013**	**4 941**	**4 990**	**4 922**	**5 428**	**5 704**	**6 173**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.3. Monthly net electricity supply, [1] by country (continued) (GWh)

Turkey	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	15 340	12 804	13 513	9 589	11 340	13 612	16 197	15 396	15 196	13 608	14 050	14 870
+ Nuclear	-	-	-	-	-	-	-	-	-	-	-	-
+ Hydro	4 521	5 535	5 870	7 437	6 417	4 934	4 769	4 350	3 042	2 959	3 134	4 158
+ Geothermal/other	529	449	474	508	351	585	706	716	549	464	664	613
= Production	**20 390**	**18 789**	**19 858**	**17 534**	**18 108**	**19 131**	**21 672**	**20 462**	**18 787**	**17 031**	**17 848**	**19 640**
+ Imports	218	253	286	206	266	364	434	420	410	393	509	603
- Exports	288	177	256	133	36	162	181	157	93	3	2	1
= Supply	**20 320**	**18 865**	**19 888**	**17 607**	**18 338**	**19 333**	**21 925**	**20 725**	**19 104**	**17 421**	**18 355**	**20 242**

United Kingdom	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	23 641	24 914	23 721	20 611	20 264	18 353	18 969	17 978	17 454	22 466	22 857	23 308
+ Nuclear	5 523	5 617	4 482	5 627	5 733	5 467	5 147	5 955	5 276	4 900	4 521	5 703
+ Hydro	1 045	837	727	477	496	471	545	542	648	717	832	814
+ Geothermal/other	2 089	1 757	1 379	1 511	1 370	1 485	1 198	1 323	2 317	1 534	2 101	2 641
= Production	**32 299**	**33 125**	**30 310**	**28 226**	**27 863**	**25 775**	**25 859**	**25 799**	**25 694**	**29 616**	**30 311**	**32 465**
+ Imports	1 476	522	1 172	1 128	1 223	1 000	1 403	1 416	1 493	736	1 136	1 086
- Exports	66	1 045	70	66	43	53	36	132	59	73	45	58
= Supply	**33 709**	**32 602**	**31 412**	**29 288**	**29 043**	**26 722**	**27 226**	**27 083**	**27 128**	**30 279**	**31 402**	**33 493**

United States	Jan-12	Feb-12	Mar-12	Apr-12	May-12	Jun-12	Jul-12	Aug-12	Sep-12	Oct-12	Nov-12	Dec-12
+ Combustible fuels	230 295	213 330	205 701	198 922	232 033	255 835	310 002	293 198	242 043	221 970	217 321	227 311
+ Nuclear	72 384	63 849	61 731	55 873	62 084	65 142	69 132	69 605	64 513	59 745	56 715	68 586
+ Hydro	24 608	21 513	27 208	27 552	30 468	28 526	29 025	25 424	19 329	17 582	20 211	24 563
+ Geothermal/other	15 607	13 053	16 245	15 405	15 811	15 305	11 997	11 331	11 707	15 475	14 097	16 604
= Production	**342 894**	**311 746**	**310 885**	**297 751**	**340 396**	**364 808**	**420 156**	**399 557**	**337 592**	**314 773**	**308 345**	**337 064**
+ Imports	3 662	3 212	3 712	4 409	4 829	4 740	5 891	5 602	4 332	3 888	4 144	3 880
- Exports	1 171	1 089	1 503	1 575	1 441	1 518	1 264	1 065	1 136	933	1 003	1 341
= Supply	**345 385**	**313 869**	**313 094**	**300 585**	**343 784**	**368 030**	**424 783**	**404 094**	**340 788**	**317 728**	**311 486**	**339 603**

Source: IEA/OECD Monthly Electricity Statistics

(1) Net generation excludes power station own use.

Note: Please refer to Notes, Principles and Definitions in the Monthly Electricity Statistics IEA publication.

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Table 2.4. OECD gross electricity production from combustible fuels, by country, 2012e (TWh)

	Coal				Oil	Natural Gas	Wood	Indust. waste	Municip. waste	Biogases liq. biof.	Total
	Hard	Brown	Peat	Gases							
Australia	120.30	55.25	-	0.27	3.57	48.89	1.14	-	-	1.20	230.63
Austria	4.40	-	-	1.84	0.74	9.70	3.74	0.44	0.60	0.64	22.10
Belgium	3.41	-	-	2.08	0.08	20.59	3.11	0.58	1.39	0.75	32.00
Canada	11.55	64.81	-	-	6.53	62.11	9.63	-	0.16	0.98	155.78
Chile	24.02	-	-	-	6.24	12.52	6.01	-	-	-	48.79
Czech Republic	4.89	39.32	-	2.56	0.08	1.47	1.81	0.00	0.15	1.42	51.70
Denmark	10.56	-	-	-	0.37	4.25	3.11	-	1.62	0.21	20.12
Estonia	-	9.70	0.10	0.51	0.06	0.13	0.98	-	-	0.02	11.49
Finland	6.91	0.00	4.36	0.51	0.41	6.61	10.39	0.02	0.47	0.13	29.81
France	20.26	-	-	2.40	3.22	20.46	1.86	-	4.36	1.28	53.84
Germany	118.00	159.00	-	9.42	9.47	70.00	11.40	1.54	9.80	25.05	413.68
Greece	0.00	32.10	-	-	4.40	11.98	-	0.10	-	0.20	48.78
Hungary	-	6.34	-	0.11	0.17	9.20	1.31	0.01	0.23	0.26	17.63
Iceland	-	-	-	-	0.00	-	-	-	-	-	0.00
Ireland	42.08	0.37	-	-	5.23	12.68	-	-	0.01	0.03	60.40
Israel	5.50	-	2.60	-	0.43	13.68	0.18	-	0.11	0.20	22.69
Italy	41.68	0.35	-	5.09	18.69	135.84	2.37	0.09	4.15	5.73	213.99
Japan	256.10	-	-	35.42	171.10	425.91	28.83	2.13	5.99	-	925.48
Korea	203.86	0.09	-	18.89	21.79	121.16	0.43	0.42	0.31	0.69	367.62
Luxembourg	-	-	-	-	0.00	2.39	-	-	0.10	0.06	2.54
Mexico	33.95	-	-	0.18	55.66	154.58	1.72	-	-	0.15	246.24
Netherlands	24.13	-	-	3.13	1.15	55.51	3.92	-	3.95	1.00	92.78
New Zealand	2.91	0.02	-	0.62	0.00	9.00	0.38	-	-	0.23	13.17
Norway	0.04	-	-	0.09	0.04	2.63	0.20	0.03	0.31	0.01	3.35
Poland	80.61	54.05	-	1.61	2.08	6.15	9.48	0.31	0.01	0.57	154.86
Portugal	13.14	-	-	-	2.40	10.41	2.52	0.01	0.47	0.21	29.16
Slovak Republic	1.22	2.10	-	0.45	0.55	2.94	0.64	0.01	0.04	0.11	8.04
Slovenia	0.00	5.14	-	-	0.01	0.53	0.11	0.01	-	0.14	5.94
Spain	51.98	3.02	-	0.89	15.66	73.25	3.39	-	1.28	0.93	150.40
Sweden	0.64	-	0.51	0.93	1.01	1.60	9.77	0.08	1.55	0.03	16.11
Switzerland	-	-	-	-	0.06	1.03	0.22	0.19	1.98	0.24	3.73
Turkey	30.79	35.54	-	1.68	1.64	104.51	0.03	0.13	-	0.55	174.87
United Kingdom	142.83	-	-	0.79	3.55	99.75	6.98	0.44	3.61	5.94	263.88
United States	1554.48	82.70	-	3.35	29.05	1277.33	43.58	7.00	17.16	10.96	3025.61
OECD Total	**2810.26**	**549.90**	**7.57**	**92.80**	**365.42**	**2788.77**	**169.21**	**13.55**	**59.80**	**59.92**	**6917.20**
OECD Americas	*1623.99*	*147.51*	*-*	*3.54*	*97.47*	*1506.55*	*60.95*	*7.00*	*17.32*	*12.09*	*3476.42*
OECD Asia Oceania	*625.26*	*55.73*	*-*	*55.19*	*201.69*	*617.64*	*30.77*	*2.55*	*6.31*	*2.15*	*1597.30*
OECD Europe	*561.00*	*346.66*	*7.57*	*34.07*	*66.26*	*664.59*	*77.49*	*4.00*	*36.17*	*45.69*	*1843.49*

Source: IEA/OECD *Energy Statistics of OECD Countries.*

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Table 2.5. OECD gross heat production[(1)] from combustible fuels, by country, 2012e
(PJ)

	Coal				Oil	Natural	Wood	Indust.	Municip.	Biogases	Total
	Hard	Brown	Peat	Gases		Gas		waste	waste	liq. biof.	
Australia	-	-	-	-	-	-	-	-	-	-	-
Austria	2.55	-	-	0.30	4.64	30.65	38.25	1.09	5.73	0.24	83.44
Belgium	-	-	-	-	0.20	23.69	0.29	0.26	3.05	0.27	27.75
Canada	-	-	-	-	1.11	20.93	-	-	2.11	0.04	24.19
Chile	-	-	-	-	-	-	-	-	-	-	-
Czech Republic	23.35	52.92	-	7.47	1.36	28.82	3.12	0.35	2.27	0.30	119.96
Denmark	32.61	-	-	-	2.49	32.66	38.56	-	23.94	1.84	132.10
Estonia	0.02	2.94	0.41	1.68	1.16	10.81	7.45	-	-	0.02	24.47
Finland	32.09	0.00	32.20	1.31	9.78	42.50	66.00	0.76	4.00	0.34	188.98
France	10.90	-	-	2.48	23.47	92.70	-	-	23.44	-	152.98
Germany	122.39	40.23	-	0.11	7.44	220.75	21.47	9.56	57.76	3.57	483.29
Greece	-	1.99	-	-	0.06	-	-	-	-	-	2.05
Hungary	0.03	3.06	-	3.55	0.21	34.98	2.47	0.18	0.62	0.30	45.38
Iceland	-	-	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-	-	-
Israel	-	-	-	-	-	-	-	-	-	-	-
Italy	1.56	-	-	1.22	54.94	119.17	9.59	-	6.80	13.86	207.12
Japan	-	-	-	-	0.75	14.04	-	0.12	-	4.20	19.11
Korea	57.27	0.81	-	0.46	49.65	68.45	1.55	7.11	13.92	0.51	199.73
Luxembourg	-	-	-	-	0.01	0.96	0.09	-	-	0.04	1.09
Mexico	-	-	-	-	-	-	-	-	-	-	-
Netherlands	19.91	-	-	2.66	6.06	93.09	1.83	-	13.38	0.24	137.18
New Zealand	-	-	-	-	-	-	-	-	-	-	-
Norway	0.24	-	-	0.02	1.48	0.63	2.76	3.73	10.17	0.07	19.10
Poland	246.83	5.85	-	11.75	6.18	19.83	20.85	1.97	0.27	1.18	314.69
Portugal	-	-	-	-	2.66	18.59	-	-	-	-	21.25
Slovak Republic	2.54	8.36	-	0.15	5.16	19.59	4.15	0.17	0.12	0.15	40.39
Slovenia	0.04	5.17	-	-	0.20	2.78	0.90	0.08	-	0.32	9.50
Spain	-	-	-	-	-	-	-	-	-	-	-
Sweden	5.03	-	6.56	3.28	7.31	7.25	114.19	0.84	38.46	4.73	187.64
Switzerland	-	-	-	-	0.15	3.39	1.46	0.38	11.51	-	16.88
Turkey	1.27	1.75	-	-	1.70	48.97	-	-	-	1.09	54.79
United Kingdom	7.13	-	-	1.23	1.61	47.19	-	-	-	-	57.16
United States	89.53	-	-	6.61	37.23	332.78	23.03	4.93	12.01	2.52	508.64
OECD Total	**655.29**	**123.08**	**39.16**	**44.26**	**226.99**	**1335.20**	**358.01**	**31.50**	**229.55**	**35.82**	**3078.84**
OECD Americas	*89.53*	*-*	*-*	*6.61*	*38.34*	*353.70*	*23.03*	*4.93*	*14.13*	*2.56*	*532.82*
OECD Asia Oceania	*57.27*	*0.81*	*-*	*0.46*	*50.40*	*82.49*	*1.55*	*7.23*	*13.92*	*4.71*	*218.84*
OECD Europe	*508.49*	*122.27*	*39.16*	*37.19*	*138.25*	*899.00*	*333.43*	*19.34*	*201.50*	*28.55*	*2327.18*

Note: Please refer to notes in Principles and Definitions.

(1) Production in industry for own use is not included.

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Table 2.6. Electricity production and consumption, OECD, 1973-2011 (TWh)

	1973	1980	1990	2000	2010	2011	Average annual percent change 73-90	90-11
Gross production[1]	**4484.7**	**5684.0**	**7672.4**	**9798.1**	**10922.6**	**10867.0**	**3.2**	**1.7**
Nuclear	188.5	620.7	1729.5	2249.1	2288.4	2087.0	13.9	0.9
Hydro	931.2	1108.3	1224.7	1411.5	1419.1	1452.9	1.6	0.8
of which:								
pumped storage production	*13.2*	*15.7*	*43.0*	*69.6*	*67.4*	*64.8*	*7.2*	*2.0*
Geothermal	6.6	11.1	28.6	33.0	43.4	44.5	9.0	2.1
Solar	-	-	0.7	1.3	32.3	59.9	-	23.7
Tide, wave, ocean	0.6	0.5	0.6	0.6	0.6	0.6	0.4	-0.3
Wind	-	0.0	3.8	28.6	268.6	328.4	-	23.6
Combustible fuels	3357.9	3943.4	4684.3	6072.6	6863.9	6886.4	2.0	1.9
Coal	*1695.2*	*2319.4*	*3092.9*	*3791.3*	*3735.5*	*3617.7*	*3.6*	*0.7*
Oil	*1135.7*	*992.9*	*697.3*	*595.0*	*306.1*	*345.3*	*-2.8*	*-3.3*
Natural gas	*520.3*	*617.9*	*770.3*	*1537.9*	*2547.1*	*2631.1*	*2.3*	*6.0*
Biofuels & waste	*6.7*	*13.4*	*123.7*	*148.4*	*275.1*	*292.2*	*18.7*	*4.2*
Other (e.g. fuel cells)	-	-	0.2	1.4	6.3	7.4	-	18.7
- Own use by power plant	220.0	294.9	411.9	497.5	495.8	502.7	3.8	1.0
Net production[1]	**4264.8**	**5389.0**	**7260.5**	**9300.6**	**10426.7**	**10364.3**	**3.2**	**1.7**
Nuclear	..	580.1	1634.9	2132.2	2182.8	1989.5	..	0.9
Hydro	..	1094.9	1211.8	1394.2	1409.7	1441.4	..	0.8
Geothermal	..	9.7	27.1	31.4	39.5	40.3	..	1.9
Solar	..	-	0.7	1.2	32.1	59.5	..	23.8
Tide, wave, ocean	..	0.5	0.6	0.6	0.6	0.6	..	-0.2
Wind	..	0.0	3.8	28.5	266.7	326.4	..	23.6
Combustible fuels	..	3637.2	4381.4	5711.2	6489.5	6499.6	..	1.9
Other (e.g. fuel cells)	..	-	0.2	1.4	5.9	7.0	..	18.5
- Used for heat pumps	-	-	0.0	2.3	1.9	1.6	-	29.6
- Used for electric boilers	-	-	0.8	3.8	2.2	2.0	-	4.4
- Used for pumped storage	19.1	25.5	65.7	92.4	86.4	83.5	7.5	1.1
+ Imports	87.7	140.3	258.5	348.4	386.5	418.1	6.6	2.3
- Exports	81.5	124.7	243.6	347.8	375.5	416.3	6.7	2.6
Electrical energy supplied	**4251.9**	**5379.1**	**7208.9**	**9202.7**	**10347.2**	**10279.0**	**3.2**	**1.7**
- Transmission & distr. losses	350.5	439.7	583.5	625.1	667.6	664.0	3.0	0.6
- Statistical difference	-0.0	-0.0	-4.3	-0.4	-0.6	-0.2	57.0	-14.5
Total consumption	**3901.4**	**4939.4**	**6629.7**	**8578.1**	**9680.3**	**9615.1**	**3.2**	**1.8**
- Energy industry consumption[2]	128.9	179.3	212.7	235.4	272.2	275.0	3.0	1.2
Final consumption	**3772.4**	**4760.1**	**6417.0**	**8342.7**	**9408.1**	**9340.0**	**3.2**	**1.8**
Industry	1843.2	2169.5	2583.4	3230.0	3043.3	3059.9	2.0	0.8
Transport	61.7	70.5	90.2	106.8	108.4	107.8	2.3	0.9
Commercial & publ. serv.	727.8	1009.1	1684.5	2407.4	2977.1	2959.6	5.1	2.7
Residential	1085.3	1447.9	1973.1	2506.6	3020.6	2953.4	3.6	1.9
Agriculture & fishing	44.4	51.1	70.2	82.5	90.7	93.3	2.7	1.4
Sector non-specified	10.1	11.9	15.7	9.3	168.0	166.1	2.6	11.9

Source: IEA/OECD *Energy Statistics of OECD Countries,* IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to notes in Principles and Definitions for data coverage.

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Table 2.7. Net maximum electricity capacity, OECD, by source, 1974-2011 (GW)

	1974	1985	1990	2000	2010	2011	Average annual percent change 74-90	90-11
Total	**993.32**	**1530.87**	**1728.03**	**2078.92**	**2652.75**	**2713.58**	**3.5**	**2.2**
Nuclear	52.92	205.05	266.79	302.74	313.54	306.75	10.6	0.7
Hydro	178.80	341.30	374.03	423.86	456.71	461.62	4.7	1.0
of which: pumped storage	*..*	*32.43*	*50.09*	*86.46*	*95.93*	*98.18*	*..*	*3.3*
Geothermal	0.64	2.86	4.46	5.39	6.07	6.11	12.9	1.5
Solar	-	0.02	0.35	1.18	38.18	64.74	-	28.2
Tide, wave, ocean	0.24	0.26	0.26	0.26	0.26	0.26	0.5	-
Wind	-	0.06	2.39	15.41	134.15	151.62	-	21.9
Other (e.g. fuel cells)	-	-	-	0.20	4.83	6.16	-	-
Combustible fuels(1)	760.72	981.32	1079.75	1329.88	1699.02	1716.32	2.2	2.2
of which:								
Single fuel fired:								
Coal and coal products	316.00	396.12	440.47	506.26	491.22	502.36	2.1	0.6
Liquid fuels	226.49	217.41	192.52	157.83	148.96	151.56	-1.0	-1.1
Natural gas	74.58	43.46	79.68	219.70	618.89	638.24	0.4	10.4
Comb. renew. & waste	0.16	2.89	10.72	16.39	23.45	27.31	30.1	4.6
Multi-fired:								
Solid / liquid	43.31	86.73	86.59	72.36	46.73	45.95	4.4	-3.0
Solid / natural gas	17.96	30.98	33.58	10.28	4.28	3.94	4.0	-9.7
Liquid / natural gas	68.16	186.77	174.14	216.69	56.66	56.84	6.0	-5.2
Solid / liquid / gas	9.29	16.96	29.93	30.87	23.57	23.54	7.6	-1.1

Source: IEA/OECD Electricity Statistics.

(1) Sum of capacity for single and multi-fired plants is not equal to total capacity for combustible fuels as single and multi-fired plants capacity data are not available for all countries (see Notes).

Notes: Please refer to notes in Principles and Definitions for data coverage.
Prior to 1982, split between single and multi-fired plants is not available for Mexico.
Prior to 1990, excludes Chile, Estonia, Israel, and Slovenia.
Prior to 1991, excludes new federal German states.
Prior to 1993, excludes the Czech Republic.
Prior to 1994, excludes Korea.
Prior to 1995, excludes the Slovak Republic.
Prior to 2001, split between single and multi-fired plants is not available for the Slovak Republic.
From 1990, complete split between single and multi-fired plants is not available for Japan.
From 1990 to 2003 and from 2006 onwards, split between single and multi-fired plants is not available for Sweden.
From 1999, split between single and multi-fired plants is not available for France.
From 2000, complete split between single and multi-fired plants is not available for Canada.
From 2002, split between single and multi-fired plants is not available for Germany and the Netherlands.
From 2003, split between single and multi-fired plants is not available for Spain.
From 2007, split between single and multi-fired plants is not available for Belgium.

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Table 2.8. Electricity generation and heat sold, OECD, 1974 - 2011

	1974	1980	1990	2000	2010	2011	Average annual percent change 74-90	90-11
Electricity generation (TWh)								
Total[1]	**4521.8**	**5668.2**	**7629.3**	**9728.5**	**10855.2**	**10802.2**	**3.3**	**1.7**
of which: Electricity plants	4343.9	5420.3	7070.1	8885.4	9786.0	9743.9	3.1	1.5
CHP plants	177.9	248.0	559.2	843.1	1069.2	1058.3	7.4	3.1
Main activity producers	**4154.1**	**5298.5**	**7008.9**	**9078.8**	**10129.2**	**10058.1**	**3.3**	**1.7**
of which: electricity plants	4002.1	5083.9	6731.9	8562.6	9444.5	9391.0	3.3	1.6
CHP plants	152.1	214.6	277.0	516.2	684.6	667.1	3.8	4.3
Autoproducers[1]	**367.6**	**369.7**	**620.5**	**649.7**	**726.0**	**744.0**	**3.3**	**0.9**
of which: Electricity plants	341.8	336.4	338.3	322.8	341.5	352.8	-0.1	0.2
CHP plants	..	..	282.2	326.9	384.6	391.2	..	1.6
Heat sold to third parties (PJ)								
Total[2]	**1084.3**	**1671.3**	**2059.0**	**2406.8**	**3270.9**	**3099.3**	**4.1**	**2.0**
of which: CHP plants	766.8	1159.6	1453.4	1803.2	2548.6	2459.7	4.1	2.5
Heat plants	317.5	511.7	605.6	603.5	722.3	639.6	4.1	0.3
Main activity producers	**..**	**..**	**..**	**1910.1**	**2703.1**	**2527.9**	**..**	**..**
of which: CHP plants	..	..	..	1485.6	2109.5	2013.9	..	..
Heat plants	..	..	..	424.5	593.6	514.0	..	..
Autoproducers	**..**	**..**	**..**	**496.7**	**567.8**	**571.4**	**..**	**..**
of which: CHP plants	..	..	..	317.7	439.1	445.8	..	..
Heat plants	..	..	..	179.0	128.7	125.5	..	..

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Excludes pumped storage production. Break in series: data related to United States autoproducers plants included from 1989.

(2) Includes own use in main activity producer plants. Break in series: data related to United States autoproducers CHP plants included from 1989.

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Table 2.9. Electricity production from combustible fuels in electricity plants[1], OECD, 1980 - 2011

	1980	1990	2000	2008	2009	2010	2011
Hard coal[2]							
Fuel input (1000 t)	711318	913399	1162024	1263561	1164245	1204076	1165782
Fuel input (TJ)	17640495	22088240	27978350	29061298	26685572	27578040	26546843
Electricity production (GWh)	1751965	2296849	2922815	3048254	2782694	2890659	2770079
Brown coal							
Fuel input (1000 t)	408233	502166	507801	495084	477443	464714	482248
Fuel input (TJ)	3933955	4889155	5109453	5039089	4725121	4724615	4896490
Electricity production (GWh)	353068	455951	489811	495348	458844	459055	471621
Peat							
Fuel input (1000 t)	3534	3814	3532	4805	4326	4932	4560
Fuel input (TJ)	29600	32308	29815	41955	35038	43602	40607
Electricity production (GWh)	2236	3025	2829	4715	3888	4846	4426
Coal manufactured gases[3][5]							
Fuel input (TJ)	582111	540308	640573	553220	465489	614467	605401
Electricity production (GWh)	53226	54775	66956	57077	49301	64741	63350
Petroleum products							
Fuel input (1000 t)	222879	145819	121300	76294	61115	56902	65914
Fuel input (TJ)	9190958	6371949	5201193	3173546	2516948	2354181	2760112
Electricity production (GWh)	937560	657101	526049	337215	267018	249128	294218
Natural gas[3][5]							
Fuel input (TJ)	6252533	6198417	10546407	15162431	15175511	16272846	17079552
Electricity production (GWh)	587496	610399	1143575	1844242	1851115	1979810	2079552
Wood and other solid waste							
Fuel input (TJ)	11139	353672	344363	697265	692216	850828	851324
Electricity production (GWh)	1405	25568	33602	57927	57521	77113	78614
Industrial waste							
Fuel input (TJ)	24560	33243	60395	32623	41625	57867	65200
Electricity production (GWh)	2585	3403	5510	2767	3581	4867	5677
Municipal waste							
Fuel input (TJ)	35978	228784	392362	537936	528583	523055	547055
Electricity production (GWh)	3105	15264	29393	38533	38282	38590	39309
Biogas and liquid biofuels							
Fuel input (TJ)	379	40066	122042	352751	406193	519094	383605
Electricity production (GWh)	32	2989	10129	27564	34426	40041	35766
Total combustible fuels[4]							
Electricity production (GWh)	3695470	4125324	5230669	5913642	5546670	5808850	5842936

Source: IEA/OECD Electricity Statistics.

(1) Excludes CHP plants. Please refer to Principles and Definitions.
(2) Includes sub-bituminous coal for Australia, Belgium, Finland, France, Iceland, Japan, Korea, Mexico, New Zealand, Portugal and the United States.
(3) Coal manufactured gases, natural gas and gas works gas are expressed on a gross calorific value basis.
(4) Includes non-specified combustible fuels not shown in this table.
(5) Gas works gas is included in natural gas prior to 1990.

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Table 2.10. Electricity and heat production for sale[1] from combustible fuels in CHP plants, OECD, 1980 - 2011

	1980	1990	2000	2008	2009	2010	2011
Hard coal[2]							
Fuel input (1000 t)	95159	102257	96621	99711	92046	97026	92826
Fuel input (TJ)	1933892	2309026	2302843	2270405	2109709	2212887	2085127
Electricity production (GWh)	125653	179129	199571	206271	188227	199777	186825
CHP heat production (TJ)	566114	608325	496976	532189	540573	560887	517011
Brown coal							
Fuel input (1000 t)	55527	140212	95213	104902	97698	101461	109155
Fuel input (TJ)	452337	1237152	893334	955434	900323	920472	972490
Electricity production (GWh)	25901	86943	77986	87252	80846	80792	86603
CHP heat production (TJ)	161041	340329	177364	115034	104212	111392	110641
Peat							
Fuel input (1000 t)	3192	2375	3991	5313	5434	6297	5432
Fuel input (TJ)	26726	25768	40824	55499	58221	65436	55249
Electricity production (GWh)	4194	2050	2995	3873	3915	4557	3925
CHP heat production (TJ)	6866	14414	23451	32578	34392	38368	32377
Coal manufactured gases[3][5]							
Fuel input (TJ)	61263	195933	290081	328250	259058	314467	319061
Electricity production (GWh)	3120	14069	27991	32300	25332	30577	30078
CHP heat production (TJ)	25865	34419	22497	40103	30390	38679	40376
Petroleum products							
Fuel input (1000 t)	16886	10040	18654	17439	15902	16117	14346
Fuel input (TJ)	680827	407079	720185	665556	650901	631855	561312
Electricity production (GWh)	55294	40248	68918	59161	58121	56993	51129
CHP heat production (TJ)	217857	108189	157724	246418	234199	217027	200782
Natural gas[3][5]							
Fuel input (TJ)	396231	1860780	3831203	5031565	4835492	5210560	5047021
Electricity production (GWh)	30356	159862	394345	536640	523999	567334	551548
CHP heat production (TJ)	97176	184493	711932	1150335	1079569	1148274	1115267
Wood and other solid waste							
Fuel input (TJ)	25368	1266551	619077	675292	697994	778517	791934
Electricity production (GWh)	1970	68730	51302	70997	75238	79510	85220
CHP heat production (TJ)	7069	13788	87940	163857	172732	220211	203208
Industrial waste							
Fuel input (TJ)	5289	80136	79645	55568	68814	77906	86841
Electricity production (GWh)	161	4262	7724	5976	6456	6862	7683
CHP heat production (TJ)	3077	3693	5176	7370	12250	14371	18005
Municipal waste							
Fuel input (TJ)	21105	89446	194003	338405	344755	366661	394400
Electricity production (GWh)	1313	2849	7805	16572	16721	18674	20753
CHP heat production (TJ)	3895	37009	92361	139317	138878	146562	156887
Biogas and liquid biofuels							
Fuel input (TJ)	-	6882	30605	66348	79234	93261	161233
Electricity production (GWh)	-	663	2984	6639	7786	9475	19223
CHP heat production (TJ)	-	125	3886	7499	10467	10965	23372
Total combustible fuels[4]							
Electricity production (GWh)	247962	558960	841928	1026198	987061	1055008	1043433
CHP heat production (TJ)	1137281	1426319	1783355	2443867	2375596	2518237	2429130

Source: IEA/OECD Electricity Statistics.

(1) Includes own use in main activity producer plants.

(2) Includes sub-bituminous coal for Australia, Belgium, Finland, France, Iceland, Japan, Korea, Mexico, New Zealand, Portugal and the U.S.

(3) Coal manufactured gases, natural gas and gas works gas are expressed on a gross calorific value basis.

(4) Includes non-specified combustible fuels not shown in this table.

(5) Gas works gas is included in natural gas prior to 1990.

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Table 2.11. Heat produced for sale[1] from combustible fuels in heat plants, OECD, 1980 - 2011

	1980	1990	2000	2008	2009	2010	2011
Hard coal[2]							
Fuel input (1000 t)	18562	20089	8194	6803	6985	8126	7064
Fuel input (TJ)	418375	432545	181996	159616	162356	189889	166363
Heat production (TJ)	281870	310440	147707	127744	120492	150257	125456
Brown coal							
Fuel input (1000 t)	4739	2769	774	724	690	528	447
Fuel input (TJ)	54336	30408	10674	8997	8751	7374	6604
Heat production (TJ)	39968	21674	8021	7673	5612	5652	5253
Peat							
Fuel input (1000 t)	-	1362	796	1135	843	1036	921
Fuel input (TJ)	-	14637	8552	12051	8895	10025	9366
Heat production (TJ)	-	11601	7255	9990	7598	8499	7899
Coal manufactured gases[3][5]							
Fuel input (TJ)	7266	7614	13002	6962	7563	8728	8927
Heat production (TJ)	5116	5339	10546	5029	5170	5941	6170
Petroleum products							
Fuel input (1000 t)	2233	2564	1998	849	1067	1231	809
Fuel input (TJ)	92509	104787	82632	34912	44453	51203	33316
Heat production (TJ)	70446	82539	63919	28981	35863	42123	26662
Natural gas [3][5]							
Fuel input (TJ)	111244	137036	299249	362038	336111	383014	353068
Heat production (TJ)	79694	100274	230525	263316	246227	282611	249992
Wood and other solid waste							
Fuel input (TJ)	1073	28177	63407	107422	111451	133659	134368
Heat production (TJ)	750	23001	53577	86401	92057	109297	104847
Industrial waste							
Fuel input (TJ)	476	261	4693	2080	5771	9806	18178
Heat production (TJ)	323	183	3801	1710	3776	6981	14157
Municipal waste							
Fuel input (TJ)	26121	72881	46634	73648	94001	102780	88168
Heat production (TJ)	14148	44560	31970	50734	56737	60857	55485
Biogas and liquid biofuels							
Fuel input (TJ)	-	1991	7353	12243	13351	15651	11819
Heat production (TJ)	-	1313	6303	10503	11520	12200	9323
Total combustible fuels[4]							
Heat production (TJ)	511522	601109	563624	592100	585052	684418	605244

Source: IEA/OECD Electricity Statistics.

(1) Includes own use in main activity producer plants.

(2) Includes sub-bit. coal for Australia, Belgium, Finland, France, Iceland, Japan, Korea, Mexico, New Zealand, Portugal and the U.S.

(3) Coal manufactured gases, natural gas and gas works gas are expressed on a gross calorific value basis.

(4) Includes non-specified combustible fuels not shown in this table.

(5) Gas works gas is included in natural gas prior to 1990.

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Table 2.12. OECD Electricity generating capacity, 1974-2011 (GW)[1]

	Coal[2]				Oil			
	1974	1990	2000	2011	1974	1990	2000	2011
Australia	11.65	24.92	28.65	30.87	1.43	1.59	1.93	1.56
Austria	1.60	2.10	2.24	2.16	0.51	0.48	0.51	0.32
Belgium	4.56	4.90	2.47	..	1.25	0.47	0.53	..
Canada	10.91	19.24	..	..	4.66	7.15	..	0.14
Chile	-	0.89	1.93	3.33	-	0.42	0.56	2.87
Czech Republic	..	12.11	11.47	11.89	..	..	..	..
Denmark	2.94	7.54	5.60	5.86	3.01	0.85	1.90	1.39
Estonia	-	-	2.79	2.36	-	-	-	-
Finland	2.85	5.79	7.71	7.78	1.16	0.97	0.99	0.77
France	14.28	14.23	..	7.94	9.71	7.86	..	10.36
Germany	39.94	42.73	51.59	-	9.06	6.05	4.14	-
Greece	1.34	3.89	4.49	4.79	1.22	2.15	1.97	2.51
Hungary	2.33	2.24	2.02	1.37	0.12	0.20	0.58	0.41
Iceland	-	-	-	-	0.11	0.14	0.15	0.12
Ireland	0.50	1.31	1.26	1.20	1.09	0.59	0.84	1.14
Israel	..	-	4.29 e	4.84	..	-	4.84 e	0.06
Italy	9.55	9.03	12.56	11.20	9.52	16.44	14.56	9.89
Japan	8.84	40.47	51.78	48.29	64.80	50.83	51.12	41.16
Korea	..	..	14.44 e	28.80	..	..	8.53 e	6.77
Luxembourg	0.16	0.09	-	-	0.02	0.01	-	-
Mexico	-	1.61	5.11	5.88	1.52	11.79	11.42	9.39
Netherlands	2.20	3.77	4.18 e	-	1.11	0.04	0.02 e	-
New Zealand	0.20	1.09	1.11	1.16	0.24	0.34	-	0.16
Norway	0.01	0.05	0.08	0.01	0.15	0.14	0.01	0.02
Poland	17.83	25.99	27.80	28.78	-	-	0.35	0.47
Portugal	0.26	1.47	1.99	2.33	0.53	2.57	2.34	2.85
Slovak Republic	..	..	..	1.46	..	..	..	0.13
Slovenia	-	-	1.03	0.85	-	-	0.01	-
Spain	3.90	10.41	11.36	-	6.64	7.65	8.14	-
Sweden	-	..	..	-	7.39	..	..	-
Switzerland	-	0.01 e	-	0.30	0.59	0.12 e	0.06 e	0.09
Turkey	1.00	5.58	7.40	13.03	1.28	1.75	1.59	1.30
United Kingdom	48.60	41.17	33.37	29.37	18.93	15.92	5.19	6.01
United States	201.11	307.96	321.06 e	319.92	80.45	56.02	35.55	51.70
OECD Total	**386.56**	**590.57**	**619.78**	**575.78**	**226.49**	**192.52**	**157.83**	**151.56**
OECD Americas	*212.02*	*329.70*	*328.09*	*329.13*	*86.62*	*75.37*	*47.53*	*64.09*
OECD Asia Oceania	*20.69*	*66.48*	*100.27*	*113.96*	*66.48*	*52.75*	*66.42*	*49.70*
OECD Europe	*153.85*	*194.40*	*191.41*	*132.69*	*73.39*	*64.39*	*43.88*	*37.77*

Source: IEA/OECD Electricity Statistics.

(1) Net maximum electricity generating capacity on 31 December

(2) Includes multi-fired units.

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Table 2.12. OECD Electricity generating capacity, 1974-2011 (continued) (GW)[1]

	Natural gas[2]				Nuclear			
	1974	1990	2000	2011	1974	1990	2000	2011
Australia	0.82	3.39	6.01 e	16.86	-	-	-	-
Austria	0.90	3.05	3.25	5.21	-	-	-	-
Belgium	1.84	1.79	5.37	..	0.01	5.50	5.71	5.93
Canada	2.52	3.90	..	2.37	2.67	13.54	10.62	12.67
Chile	-	0.02	2.44	4.68	-	-	-	-
Czech Republic	..	..	..	..	..	1.76	1.76	3.97
Denmark	-	0.31	2.28	2.13	-	-	-	-
Estonia	-	-	0.01	0.25	-	-	-	-
Finland	0.22	1.48	2.01	2.08	-	2.36	2.64	2.70
France	2.16	0.58	..	9.49	2.89	55.75	63.18	63.13
Germany	9.10	18.75	23.12	-	3.29	22.41	22.40	12.05
Greece	0.10	0.02	1.11	3.68	-	-	-	-
Hungary	1.44	2.93	3.78	5.24	-	1.76	1.85	2.00
Iceland	-	-	-	-	-	-	-	-
Ireland	-	1.39	1.95	4.04	-	-	-	-
Israel	..	-	- e	6.70	..	-	-	-
Italy	3.47	11.69	26.23	52.75	0.55	-	-	-
Japan	3.10	15.62	35.27	46.68	3.91	31.65	45.25	48.96
Korea	..	..	13.37 e	22.44	..	..	13.72	18.72
Luxembourg	-	-	0.07	0.49	-	-	-	-
Mexico	-	4.71	11.87	31.75	-	0.68	1.37	1.37
Netherlands	9.74	13.16	15.87 e	-	0.50	0.51	0.45	0.51
New Zealand	0.53	0.86	1.53	1.73	-	-	-	-
Norway	-	-	0.04	1.39	-	-	-	-
Poland	-	-	0.21	0.87	-	-	-	-
Portugal	-	-	1.87	4.69	-	-	-	-
Slovak Republic	..	..	..	1.59	..	..	2.64	1.94
Slovenia	-	-	0.07	0.39	-	-	0.66	0.69
Spain	-	2.04	6.28	-	1.09	6.97	7.50	7.45
Sweden	-	..	..	-	1.06	9.97	9.46	9.32
Switzerland	-	0.10 e	0.24 e	0.27	1.01	2.95	3.20	3.28
Turkey	-	2.21	7.04	19.48	-	-	-	-
United Kingdom	-	0.73	21.87	32.64	4.28	11.35	12.49	10.66
United States	106.82	165.11	243.24	415.19	31.66	99.64	97.86	101.42
OECD Total	**142.74**	**253.83**	**436.38**	**695.08**	**52.92**	**266.79**	**302.74**	**306.75**
OECD Americas	*109.34*	*173.74*	*257.55*	*454.00*	*34.33*	*113.86*	*109.84*	*115.45*
OECD Asia Oceania	*4.44*	*19.86*	*56.17*	*94.41*	*3.91*	*31.65*	*58.96*	*67.68*
OECD Europe	*28.96*	*60.23*	*122.66*	*146.67*	*14.69*	*121.29*	*133.94*	*123.62*

Source: IEA/OECD Electricity Statistics.

(1) Net maximum electricity generating capacity on 31 December

(2) Includes multi-fired units.

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Table 2.12. OECD Electricity generating capacity, 1974-2011 (continued) (GW)[1]

	Hydro				Geothermal/solar/wind[3]			
	1974	1990	2000	2011	1974	1990	2000	2011
Australia	5.32	8.32	9.20	8.79	-	-	0.06	2.70
Austria	5.98	10.95	11.61	13.21	-	-	0.06	1.40
Belgium	0.44	1.40	1.41	1.43	-	0.01	0.01	2.46
Canada	36.78	59.38	67.41	75.08	-	0.02	0.12 e	5.84
Chile	-	2.68	4.43	5.95	-	-	-	0.21
Czech Republic	..	1.41	2.10	2.20	-	-	0.00	2.13
Denmark	0.01	0.01	0.01	0.01	-	0.34	2.39	3.97
Estonia	-	-	0.00	0.01	-	-	-	0.18
Finland	2.27	2.62	2.88	3.16	-	-	0.04	0.21
France	16.09	24.75	25.12	25.33	0.24	0.24	0.30	10.96
Germany	4.81	6.85	8.98	11.56	-	0.05	6.21	57.82
Greece	1.29	2.41	3.07	3.22	-	0.00	0.23	2.25
Hungary	0.02	0.05	0.05	0.06	-	-	-	0.34
Iceland	0.38	0.76	1.06	1.88	0.00	0.05	0.17	0.67
Ireland	0.51	0.51	0.53	0.53	-	-	0.12	1.83
Israel	..	-	-	0.01	..	-	-	0.30
Italy	14.87	18.77	20.35	21.74	0.38	0.50	1.13	20.73
Japan	23.55	37.83	46.32	48.42	0.02	0.27	0.95 e	7.87 e
Korea	..	2.34	3.15	6.42	..	0.00	0.01	1.22
Luxembourg	0.91	1.13	1.13	1.13	-	-	0.01	0.09
Mexico	3.55	7.84	9.65	11.65	0.08	0.70	0.89	1.52
Netherlands	-	0.04	0.04	0.04	-	0.05	0.51	2.53
New Zealand	3.48	4.62	5.19	5.25	0.16	0.26	0.45	1.26
Norway	16.08	26.88	28.13	29.69	-	-	0.02	0.47
Poland	0.79	1.89	2.18	2.35	-	-	0.00	1.80
Portugal	2.12	3.34	4.53	5.55	-	0.00	0.10	4.45
Slovak Republic	..	..	2.42	2.52	-	-	-	0.21
Slovenia	-	-	0.84	1.25	-	-	-	0.06
Spain	11.65	16.23	17.96	18.54	-	0.01	2.22	27.03
Sweden	12.31	16.33	16.53	16.58	-	0.01	0.21	2.78
Switzerland	11.72	11.67	13.24	15.59	-	0.00	0.02	0.24
Turkey	1.45	6.76	11.18	17.14	-	0.02	0.04	1.84
United Kingdom	2.41	3.90	4.27	4.42	-	0.01	0.42	7.47
United States	-	92.36	98.88	100.94	-	4.92	5.77 e	54.08 e
OECD Total	**178.80**	**374.03**	**423.86**	**461.62**	**0.88**	**7.46**	**22.44**	**228.90**
OECD Americas	*40.33*	*162.26*	*180.37*	*193.61*	*0.08*	*5.64*	*6.77*	*61.65*
OECD Asia Oceania	*32.35*	*53.11*	*63.87*	*68.88*	*0.18*	*0.53*	*1.47*	*13.35*
OECD Europe	*106.12*	*158.66*	*179.62*	*199.12*	*0.63*	*1.29*	*14.20*	*153.89*

Source: IEA/OECD Electricity Statistics.

(1) Net maximum electricity generating capacity on 31 December

(2) Includes tide, wave, ocean and other (e.g. fuel cells).

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Table 2.12. OECD Electricity generating capacity, 1974-2011 (continued) (GW)[1]

	Biofuels and waste				Total			
	1974	1990	2000	2011	1974	1990	2000	2011
Australia	0.02	0.24	0.36	0.34	19.25	38.45	46.20	61.12
Austria	-	0.11	0.13	0.48	8.98	16.69	17.80	22.79
Belgium	-	0.08	0.18	..	8.11	14.14	15.69	20.10
Canada	-	0.91	..	4.24	57.53	104.14	111.32	138.69
Chile	-	-	0.02	0.55	-	5.10	9.89	17.57
Czech Republic	..	..	..	..	..	15.28	15.32	20.18
Denmark	-	0.10	0.13	0.23	5.96	9.14	12.32	13.58
Estonia	-	-	-	0.03	-	-	2.80	2.83
Finland	-	-	-	-	6.50	13.22	16.26	16.69
France	-	-	..	-	45.38	103.41	114.68	131.35
Germany	-	0.91	1.94	-	66.20	97.75	118.38	163.26
Greece	-	0.05	0.04	0.07	3.94	8.51	10.90	16.52
Hungary	-	-	-	0.24	3.91	7.18	8.28	9.65
Iceland	-	-	-	-	0.49	0.94	1.38	2.67
Ireland	-	-	0.02	0.05	2.09	3.81	4.71	8.79
Israel	..	-	-	2.14	..	5.07	9.13	14.04
Italy	-	0.13	0.69	2.14	38.34	56.56	75.51	118.44
Japan	-	..	..	-	104.21	194.73	260.49	292.06
Korea	..	..	0.48 e	0.30	..	2.34	53.69	84.65
Luxembourg	-	0.01	0.01	0.03	1.08	1.24	1.22	1.74
Mexico	-	0.05	0.04	0.05	9.92	27.37	40.35	61.60
Netherlands	-	-	-	-	13.56	17.56	21.06	28.05
New Zealand	-	-	0.10	0.08	4.60	7.18	8.39	9.63
Norway	-	0.07	0.14	0.12	16.24	27.13	28.42	31.70
Poland	-	-	0.01	0.28	18.62	27.88	30.56	34.55
Portugal	0.00	0.01	0.07	0.07	2.91	7.40	10.90	19.94
Slovak Republic	..	..	..	0.20	..	..	7.45	8.06
Slovenia	-	-	0.00	0.04	-	-	2.61	3.27
Spain	0.07	0.10	0.46	-	23.36	43.42	53.92	102.80
Sweden	-	..	..	-	20.77	34.19	33.72	35.23
Switzerland	-	0.25 e	0.49 e	0.27	13.32	15.11	17.25	20.03
Turkey	0.01	-	0.02	0.13	3.73	16.32	27.26	52.91
United Kingdom	-	0.12	0.79	3.26	74.22	73.21	78.39	93.82
United States	0.06	7.58	10.27 e	12.02	420.10	733.59	812.63 e	1055.3 e
OECD Total	**0.16**	**10.72**	**16.39**	**27.31**	**993.32**	**1728.03**	**2078.92**	**2713.58**
OECD Americas	*0.06*	*8.55*	*10.34*	*16.85*	*487.54*	*870.20*	*974.19*	*1273.1*
OECD Asia Oceania	*0.02*	*0.24*	*0.94*	*2.85*	*128.07*	*247.76*	*377.91*	*461.50*
OECD Europe	*0.08*	*1.93*	*5.12*	*7.62*	*377.71*	*610.06*	*726.82*	*978.94*

Source: IEA/OECD Electricity Statistics.

(1) Net maximum electricity generating capacity on 31 December

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Table 2.13. OECD Electricity consumption, by country, 1960-2011 (TWh)

	1960	1973	1990	2000	2009	2010	2011	Average annual percent change 60-73	Average annual percent change 73-11
Australia	17.6	52.5	134.3	179.9	217.4	220.2	222.5	8.8	3.9
Austria	11.6	25.9	43.6	52.6	60.3	62.7	63.0	6.4	2.4
Belgium	13.4	35.8	59.1	79.2	79.7	85.9	83.4	7.9	2.3
Canada	98.9	223.2	433.1 e	503.5 e	491.2	533.3	547.1	6.5	2.4
Chile	..	7.6	15.8	37.1	54.5	55.3	58.5	..	5.5
Czech Republic	..	34.1	53.0	52.3	57.1	59.3	58.5	..	1.4
Denmark	4.6	16.1	28.9	33.0	32.4	33.1	32.4	10.1	1.9
Estonia	..	..	7.5	5.4	7.1	7.4	7.2	..	..
Finland	8.0	27.2	59.5	76.5	78.4	84.8	81.5	9.9	2.9
France	65.2	160.0	323.3	410.4	447.6	471.8	445.1	7.1	2.7
Germany(1)	106.5	337.6	481.0	501.4	512.0	543.8	536.5	9.3	1.2
Greece	1.9	13.0	29.7	45.0	56.8	55.3	53.9	16.0	3.8
Hungary	..	18.6	33.0	30.9	35.3	36.0	36.4	..	1.8
Iceland	0.5	2.1	3.9	7.1	15.8	15.9	16.2	12.4	5.6
Ireland	1.9	6.2	12.0	20.4	25.4	25.6	25.1	9.7	3.7
Israel	..	7.6	18.2	38.6	45.4	49.1 e	49.5 e	..	5.1
Italy	47.6	125.8	218.8	279.3	299.9	309.9	313.8	7.8	2.4
Japan	99.3	421.7	758.8	956.5	950.3	1014.4	953.7	11.8	2.2
Korea	..	12.8 e	94.4 e	263.1	414.7	458.5	481.0	..	10.0
Luxembourg	1.4	3.0	4.1	5.8	6.1	6.6	6.5	6.2	2.1
Mexico	..	31.6	100.2	166.7	208.5	215.3	233.1	..	5.4
Netherlands	14.7	46.1	75.5	100.9	109.4	112.7	113.5	9.2	2.4
New Zealand	5.7	15.9	28.5	34.8	38.5	39.6	39.1	8.3	2.4
Norway	27.2	61.0	97.4	110.5	112.6	119.7	111.7	6.4	1.6
Poland	24.0	67.2	109.2	108.8	122.2	129.3	132.3	8.2	1.8
Portugal	2.8	8.3	24.0	38.9	48.8	50.6	49.1	8.8	4.8
Slovak Republic	..	12.3	23.4	22.5	24.3	25.1	25.8	..	2.0
Slovenia	..	..	9.4	10.7	11.4	12.1	12.7	..	..
Spain	14.6	60.7	129.2	194.7	247.2	250.2	245.2	11.6	3.7
Sweden	29.3	69.4	130.7	131.1	126.3	135.0	127.6	6.9	1.6
Switzerland	15.9	29.0	46.6	52.4	57.5	59.8	58.6	4.7	1.9
Turkey	2.4	10.5	46.8	98.3	156.9	172.1	186.1	12.1	7.9
United Kingdom	117.5	242.5	284.4	340.3	330.0	337.5	325.9	5.7	0.8
United States	688.0	1715.9	2712.6	3589.8 e	3724.7 e	3892.7 e	3882.6	7.3	2.2
OECD Total	**..**	**3901.4**	**6629.7**	**8578.1**	**9205.7**	**9680.3**	**9615.1**	**..**	**2.4**
OECD Americas	*..*	*1978.3*	*3261.6*	*4297.2*	*4478.9*	*4696.6*	*4721.3*	*..*	*2.3*
OECD Asia Oceania	*..*	*510.5*	*1034.3*	*1472.8*	*1666.3*	*1781.8*	*1745.8*	*..*	*3.3*
OECD Europe	*..*	*1412.6*	*2333.8*	*2808.1*	*3060.5*	*3201.9*	*3148.0*	*..*	*2.1*

Source: IEA/OECD *Energy Statistics of OECD Countries.*

(1) Includes data for new federal German states, except for 1960.

Note: Electricity consumption = gross production + imports - exports - own use by power plants - electricity used for pumped storage - used for heat pumps - used for electric boilers - transmission and distribution losses = final consumption + energy sector consumption.

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Table 2.14. Electricity consumption, OECD, by sector, 1973-2011 (TWh)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-11
Total consumption (TWh)	**3901.35**	**4939.43**	**6629.74**	**8578.08**	**9205.69**	**9680.27**	**9615.08**	**2.4**
Industry	1843.18	2169.54	2583.37	3229.95	2770.54	3043.29	3059.89	1.3
Transport	61.67	70.53	90.19	106.81	107.23	108.36	107.78	1.5
Agriculture and fishing	44.45	51.12	70.24	82.51	91.88	90.70	93.32	2.0
Commercial and publ. serv.	727.76	1009.14	1684.46	2407.45	2913.93	2977.06	2959.57	3.8
Residential	1085.29	1447.89	1973.08	2506.64	2884.26	3020.60	2953.37	2.7
Energy(1)	128.94	179.33	212.72	235.39	263.38	272.21	275.04	2.0
Sector non specified	10.06	11.88	15.68	9.33	174.47	168.05	166.12	7.7
Total consumption (Mtoe)	**335.52**	**424.79**	**570.16**	**737.72**	**791.69**	**832.50**	**826.90**	**2.4**

Source: IEA/OECD *Energy Statistics of OECD Countries.*

(1) Includes use in coal mines, oil and gas extraction, petroleum refineries and elsewhere in energy industries and excludes own use in electricity, CHP and heat plants and electricity used for pumped storage.

Note: The final consumption of electricity reported in Table 3 of OECD in Part III excludes energy consumed in energy industries.

Table 2.15. Electricity consumption, OECD, by industry, 1973-2011 (TWh)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-11
Total industry (TWh)	**1843.18**	**2169.54**	**2583.37**	**3229.95**	**2770.54**	**3043.29**	**3059.89**	**1.3**
Iron and steel	257.27	289.32	301.40	346.82	308.75	348.47	361.91	0.9
Chemical and petrochemical	382.38	412.22	516.16	598.10	519.69	570.30	575.42	1.1
Non-ferrous metals	226.53	280.80	236.26	302.43	284.89	301.18	306.40	0.8
Non-metallic minerals	93.12	113.17	140.74	169.37	160.69	170.58	174.89	1.7
Transport equipment	67.37	80.34	77.33	127.35	106.29	116.74	118.90	1.5
Machinery	120.69	149.63	291.67	333.10	324.36	377.73	385.86	3.1
Mining and quarrying	56.74	66.74	104.38	118.62	97.30	116.08	119.60	2.0
Food and tobacco	85.28	111.08	161.07	211.77	226.14	237.29	241.46	2.8
Paper, pulp and print	164.09	198.11	332.04	398.21	334.08	349.52	347.42	2.0
Wood and wood products	32.68	42.13	50.79	58.13	52.16	55.58	55.39	1.4
Construction	6.77	10.10	14.64	16.30	22.06	23.05	22.00	3.2
Textiles and leather	85.78	89.50	96.17	105.95	72.47	78.34	78.01	-0.2
Non specified/other	264.49	326.41	260.74	443.81	261.66	298.43	272.62	0.1
Total industry (Mtoe)	**158.51**	**186.58**	**222.17**	**277.78**	**238.27**	**261.72**	**263.15**	**1.3**

Source: IEA/OECD *Energy Statistics of OECD Countries.*

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Table 2.16. OECD Final consumption of heat, by country, 1980-2011 (Mtoe)

	1980	1990	2000	2008	2009	2010	2011	Average annual percent change 1980-2011
Australia	-	-	-	-	-	-	-	-
Austria	0.19	0.61	1.02	1.50	1.49	1.90	1.75	7.5
Belgium	0.39	0.22	0.49	0.47	0.57	0.67	0.66	1.7
Canada	1.03	0.63	0.81	0.76	0.88	0.49	0.55	-2.03
Chile	-	-	-	-	-	-	-	-
Czech Republic	1.37	2.96	2.62	2.23	2.07	2.25	2.10	1.39
Denmark	0.59	1.76	2.25	2.40	2.45	2.84	2.50	4.78
Estonia	..	2.09	0.51	0.51	0.49	0.53	0.47	..
Finland	1.14	1.91	3.33	4.15	4.13	4.66	4.08	4.19
France	0.24	0.48	3.24	3.82	2.98	3.52	3.65	9.21
Germany	7.69	9.15	6.83	10.43	10.24	11.29	10.03	0.86
Greece	-	-	0.03	0.04	0.05	0.05	0.05	-
Hungary	1.72	1.59	1.45	1.16	1.09	1.09	1.01	-1.71
Iceland	0.03	0.10	0.17	0.24	0.24	0.24	0.24	6.67
Ireland	-	-	-	-	-	-	-	-
Israel	-	-	-	-	-	-	-	-
Italy	-	-	-	3.17	3.09	3.33	3.19	-
Japan	0.10	0.19	0.54	0.58	0.56	0.60	0.54	5.54
Korea(1)	-	-	3.29	4.72	4.44	4.33	4.50	-
Luxembourg	-	-	0.01	0.02	0.03	0.03	0.03	-
Mexico	-	-	-	-	-	-	-	-
Netherlands	-	0.31	2.89	2.39	2.06	2.11	2.07	-
New Zealand	-	-	-	-	-	-	-	-
Norway	-	0.07	0.13	0.26	0.30	0.38	0.34	-
Poland	18.01	15.56	6.88	6.39	6.40	6.99	6.41	-3.28
Portugal	0.02	0.03	0.13	0.32	0.31	0.34	0.33	9.28
Slovak Republic	0.45	0.65	0.62	0.71	0.77	0.85	0.77	1.73
Slovenia	..	0.19	0.20	0.18	0.18	0.19	0.19	..
Spain	-	-	-	-	-	-	-	-
Sweden	2.36	1.71	3.55	4.06	4.26	5.14	4.13	1.83
Switzerland	0.19	0.25	0.31	0.37	0.37	0.41	0.38	2.26
Turkey	-	-	0.39	1.02	1.06	1.23	1.22	-
United Kingdom	0.12	-	2.44	1.47	1.21	1.27	1.27	7.90
United States(2)	-	2.15	5.28	6.96	6.79	6.64	6.64	-
OECD Total(1,2)	**35.65**	**42.60**	**49.42**	**60.35**	**58.49**	**63.34**	**59.11**	**..**
OECD Americas (2)	*1.03*	*2.79*	*6.09*	*7.72*	*7.67*	*7.12*	*7.19*	..
OECD Asia Oceania (1)	*0.10*	*0.19*	*3.83*	*5.30*	*5.00*	*4.93*	*5.04*	..
OECD Europe	*34.52*	*39.63*	*39.50*	*47.32*	*45.82*	*51.29*	*46.89*	*0.99*
OECD Total (TJ)(1,2)	**1492883**	**1783898**	**2069571**	**2527048**	**2449388**	**2652435**	**2475305**	**..**
OECD Americas (TJ) (2)	*43140*	*116655*	*255133*	*323459*	*321377*	*298294*	*300920*	..
OECD Asia Oceania (TJ) (1)	*4270*	*7797*	*160425*	*222055*	*209242*	*206366*	*211005*	..
OECD Europe (TJ)	*1445473*	*1659446*	*1654013*	*1981534*	*1918769*	*2147775*	*1963380*	*0.99*

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Break in series: data related to Korea included from 1991

(2) Break in series: data related to United States autoproducers CHP plants included from 1989.

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Table 2.17. Final consumption of heat, OECD, by sector[(1)], 1980-2011
(per cent of total)

	1980	1990	2000	2008	2009	2010	2011	Average annual percent change 80-11
Total final consumption	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**100.00**	**-**
Industry	43.30	34.82	33.84	41.27	41.07	37.87	40.42	-0.2
Transport	-	-	-	-	-	-	-	-
Agriculture and fishing	1.37	2.36	0.95	0.50	0.50	0.42	0.41	-3.8
Commercial and publ. serv.	6.30	14.01	15.56	18.66	17.80	18.86	17.03	3.3
Residential	38.14	45.74	41.47	31.73	33.77	35.43	34.16	-0.4
Sector non specified	10.89	3.07	8.18	7.85	6.85	7.42	7.97	-1.0
TFC (Mtoe)	**35.65**	**42.60**	**49.42**	**60.35**	**58.49**	**63.34**	**59.11**	**1.6**
TFC (TJ)	**1492883**	**1783898**	**2069571**	**2527048**	**2449388**	**2652435**	**2475305**	**1.6**

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Break in series: data related to United States autoproducers CHP plants included from 1989.

Note: Excludes direct use of geothermal and solar heat.

Table 2.18. Share of final consumption, OECD, by source, by sector , 2011
(per cent of total)

	Coal	Oil	Natural gas	Biofuels & waste	Geo-thermal	Solar thermal	Electricity	Heat
Industry	11.78	13.39	31.83	8.64	0.03	0.00	31.46	2.86
Transport	0.01	93.68	1.99	3.53	-	-	0.78	-
Agriculture and fishing	1.88	74.91	6.77	3.13	0.37	0.01	12.56	0.38
Commercial and publ. serv.	0.79	12.09	30.88	1.01	0.13	0.06	52.94	2.09
Residential	2.28	12.58	36.27	8.53	0.37	0.72	36.35	2.89
Sector non specified	0.69	17.64	11.51	4.12	0.18	0.40	49.23	16.24
Non-energy use	0.74	90.73	8.53	-	-	-	-	-
TFC (%)[(1)]	**3.35**	**47.81**	**20.00**	**4.97**	**0.10**	**0.15**	**22.00**	**1.62**
TFC (Mtoe)	**122.48**	**1745.60**	**730.11**	**181.63**	**3.79**	**5.47**	**803.24**	**59.11**

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes non-energy use.

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Table 2.19. Final consumption, OECD, by source, by sector, average annual rate of growth (%), 1960-1973

	Coal	Biofuels & waste	Crude oil	Petroleum products	Natural gas	Electricity	Heat	Total
Total consumption	**-2.51**	**2.34**	**-**	**6.74**	**6.85**	**7.76**	**11.55**	**5.09**
Industry	-1.23	3.62	-	6.17	6.69	6.62	9.06	4.23
Transport	-11.05	-	-	5.72	38.85	4.58	-	5.25
Agriculture and fishing	6.51	11.49	-	6.70	18.35	0.34	3.11	5.88
Commercial and publ. serv.	-0.27	19.77	-	10.55	8.12	10.00	10.45	8.42
Residential	-4.61	6.00	-	7.36	4.99	9.39	18.09	4.11
Sector non specified	-0.68	-3.52	-	2.38	78.71	-2.42	16.35	1.38
Non-energy use	12.55	-	-	9.73	43.07	-	-	9.93

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Excludes Chile, the Czech Republic, Estonia, Hungary, Israel, Korea, Mexico, the Slovak Republic, and Slovenia.

Table 2.20. Final consumption, OECD, by source, by sector, average annual rate of growth (%), 1973-2011

	Coal	Biofuels & waste	Crude oil	Petroleum products	Natural gas	Electricity	Heat	Total
Total consumption	**-2.40**	**2.01**	**9.54**	**0.02**	**0.87**	**2.22**	**2.57**	**0.52**
Industry	-1.74	1.32	6.33	-2.96	0.01	1.00	1.79	-0.55
Transport	-9.83	29.08	-	1.18	0.67	1.45	-	1.25
Agriculture and fishing	0.27	9.48	-	0.45	13.94	1.46	-0.40	0.85
Commercial and publ. serv.	-4.40	4.23	-	-2.33	1.89	3.56	7.71	1.22
Residential	-3.80	2.06	-	-2.45	1.34	2.56	2.15	0.53
Sector non specified	-9.59	-6.06	-	-6.60	-3.12	10.87	4.59	-2.30
Non-energy use	-1.15	-	-	0.72	4.97	-	-	0.93

Source: IEA/OECD *Energy Balances of OECD Countries* .

Note: Excludes Chile, the Czech Republic, Estonia, Hungary, Israel, Korea, Mexico, the Slovak Republic, and Slovenia.

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Table 2.21. OECD Total electricity imports, by country, 1960-2012e

(GWh)

	1960	1973	1990	2000	2009	2010	2011	2012e
Austria	641	3261	6839	13824	19542	19898	24972	23264
Belgium	402	1650	4785	11645	9486	12395	13189	16848
Canada	357	2249	17781	15342	18163	18686	14962	10844
Chile	..	3	-	1190	1348	958	732	732
Czech Republic	..	2926	8179	8725	8586	6642	10457	11587
Denmark	397	1002	11973	8417	11208	10599	11694	15920
Estonia	..	..	1475	258	3025	1100	1690	2710
Finland	427	4556	11007	12206	15460	15719	17656	19089
France	1787	4654	6674	3695	18517	19475	9501	12213
Germany(1)	5964	19685	31669	45134	41859	42962	51003	46269
Greece	9	79	1330	1729	7600	8517	7180	5954
Hungary	..	5732	13299	9523	10972	9897	14664	16967
Ireland	-	74	-	169	939	760	732	784
Israel	..	-	-	-	-	-	-	-
Italy	237	3248	35577	44831	47070	45987	47519	45369
Luxembourg	81	2827	4678	6445	6022	7280	7096	6732
Mexico	..	317	576	1069	346	397	596	1927
Netherlands	257	7	9679	22946	15452	15583	20620	32155
Norway	210	66	334	1474	5651	14673	11255	4190
Poland	659	2011	10437	3290	7403	6310	6780	9803
Portugal	1	68	1733	4698	7598	5814	6742	10766
Slovak Republic	..	3024	7255	5951	8994	7334	11227	13422
Slovenia	..	..	1716	4232	7780	8625	7036	7452
Spain	257	315	3208	12268	6751	5206	7932	7786
Sweden	264	5950	12909	18308	13765	14931	12481	11682
Switzerland	1306	7018	20754	24330	31368	33401	34824	31549
Turkey	-	-	176	3791	812	1144	4556	4363
United Kingdom	-	177	11990	14308	6609	7144	8689	13791
United States	5323	16848	22506	48592	52191	45083	52301	52301
OECD Total	**..**	**87747**	**258539**	**348390**	**384517**	**386520**	**418086**	**436469**
OECD Americas	*..*	*19417*	*40863*	*66193*	*72048*	*65124*	*68591*	*65804*
OECD Asia Oceania	*..*	*-*	*-*	*-*	*-*	*-*	*-*	*-*
OECD Europe	*..*	*68330*	*217676*	*282197*	*312469*	*321396*	*349495*	*370665*

Source: IEA/OECD *Energy Statistics of OECD Countries.*

(1) Includes data for new federal German states, except for 1960.

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Table 2.22. OECD Total electricity exports, by country, 1960-2012e
(GWh)

	1960	1973	1990	2000	2009	2010	2011	2012e
Austria	2544	4808	7298	15192	18762	17567	16777	20455
Belgium	365	2405	8509	7319	11321	11844	10652	6911
Canada	5512	16286	18130	50983	51782	44389	51517	57638
Chile	..	-	-	-	-	-	-	-
Czech Republic	..	5135	8871	18742	22230	21590	27501	28707
Denmark	293	1226	4925	7752	10874	11734	10374	10706
Estonia	..	..	8477	1187	2943	4354	5252	4950
Finland	5	237	364	326	3375	5218	3804	1645
France	1849	7543	52112	73174	44451	50188	65914	56734
Germany(1)	1799	8123	30739	42077	54132	57917	54768	66810
Greece	1	34	619	1740	3233	2811	3948	4170
Hungary	..	1070	2152	6083	5459	4702	8021	9003
Ireland	-	29	-	71	175	290	242	370
Israel	..	57	456	1457	3783	3966	4222	4222
Italy	365	2369	922	484	2111	1827	1787	2281
Luxembourg	72	791	746	737	2604	3216	2614	2622
Mexico	..	-	1945	195	1249	1349	1164	1018
Netherlands	139	1352	471	4031	10561	12807	11531	15045
Norway	78	5259	16241	20529	14634	7124	14329	22006
Poland	357	3765	11478	9663	9594	7664	12022	12643
Portugal	-	78	1696	3767	2822	3191	3929	2871
Slovak Republic	..	184	2059	8647	7682	6293	10500	13078
Slovenia	..	..	2704	5553	10839	10717	8298	8363
Spain	406	2331	3628	7827	14855	13539	14023	18986
Sweden	1030	5216	14677	13630	9080	12853	19714	31255
Switzerland	3822	10516	22862	31400	33525	32881	32237	33749
Turkey	-	-	907	437	1546	1918	3645	1489
United Kingdom	1	114	47	134	3748	4481	2467	1746
United States	788	2570	20526	14678	18138	19107	15038	15038
OECD Total	**..**	**81498**	**243561**	**347815**	**375508**	**375537**	**416290**	**454511**
OECD Americas	*..*	*18856*	*40601*	*65856*	*71169*	*64845*	*67719*	*73694*
OECD Asia Oceania	*..*	*57*	*456*	*1457*	*3783*	*3966*	*4222*	*4222*
OECD Europe	*..*	*62585*	*202504*	*280502*	*300556*	*306726*	*344349*	*376595*

Source: IEA/OECD *Energy Statistics of OECD Countries.*

(1) Includes data for new federal German states, except for 1960.

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Table 2.23. Electricity trade, 1960-2012e
(GWh)

	1960	1973	1990	2009	2010	2011	2012e	Average annual percent change 73-90	90-11
OECD Americas[1]									
Imports									
Total	**5680**	**19414**	**40863**	**72048**	**65124**	**68591**	**66219**	**4.48**	**2.50**
from:									
OECD	..	19414	40863	70700	64166	67859	..	4.48	2.44
Other[2]	..	-	-	1348	958	732	..	..	..
Exports									
Total	**6300**	**18856**	**40601**	**71169**	**64845**	**67719**	**79258**	**4.61**	**2.47**
to:									
OECD	..	18856	40601	70931	64495	67434	..	4.61	2.45
Other	..	..	-	238	350	285	..	..	..
OECD Asia Oceania[3]									
Imports									
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
from:									
OECD	..	-	-	-	-	-	..	-	-
Other	..	-	-	-	-	-	..	..	..
Exports									
Total	**-**	**-**	**456**	**3783**	**3966**	**4222**	**4222**	**-**	**11.18**
to:									
OECD	..	..	-	-	-	-	..	..	-
Other	..	..	456	3783	3966	4222	..	..	..
OECD Europe[4]									
Imports									
Total	**12240**	**68330**	**217676**	**312469**	**321396**	**349495**	**323443**	**7.05**	**2.28**
from:									
OECD[5]	..	16611	172007	278979	287804	317430	..	14.74	2.96
Non-OECD Europe and Eurasia[6]	..	5384	18244	31991	32270	29934	..	7.44	2.39
Other[7]	..	46335	27425	1499	1322	2131	..	..	..
Exports									
Total	**12355**	**62585**	**202504**	**300556**	**306726**	**344349**	**307510**	**7.15**	**2.56**
to:									
OECD[5]	..	..	170664	279076	287984	316665	..	..	2.99
Non-OECD Europe and Eurasia[6]	..	..	1891	13038	10756	19024	..	..	11.62
Other[7]	..	..	29949	8442	7986	8660	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Excludes Mexico for 1960.
(2) Includes Argentina.
(3) Refers to Israel.
(4) Excludes Czech Republic, Hungary and the Slovak Republic for 1960.
(5) Prior to 1991 excludes imports and exports of German Democratic Republic.
(6) Includes Albania, Bulgaria, Romania, Bosnia-Herzegovina, Croatia, FYR of Macedonia, Serbia and Montenegro, Slovenia.
(7) Includes Andorra, Liechtenstein and non-specified.

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Table 3.1. OECD: Indices of real energy prices for end-users
(2005=100)

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
					Total energy					
Industry	70.1	84.0	75.3	79.2	104.0	118.1	101.2	106.3	114.0	116.1
Households	87.9	109.1	88.2	86.3	108.4	116.4	101.3	107.6	118.3	120.0
Both sectors	78.7	95.7	81.6	82.8	106.2	117.2	101.3	107.0	116.2	118.1
					Oil products					
Industry(1)	58.0	82.1	63.7	78.2	106.3	124.2	97.6	109.3	124.2	128.5
Households(2)	83.7	113.9	79.8	82.1	111.7	123.2	96.0	108.6	128.0	130.2
Both sectors	74.4	102.0	74.1	80.6	109.5	123.6	96.6	108.9	126.4	129.5
					Coal					
Industry	111.2	106.5	80.2	66.4	104.4	149.6	145.8	139.7	159.3	153.5
Households	54.3	60.2	81.0	93.0	110.1	123.8	136.2	134.5	137.9	140.3
Both sectors	104.5	101.4	80.3	67.7	104.8	148.0	145.0	139.3	157.7	152.5
					Natural gas					
Industry	49.4	58.4	52.0	63.8	96.2	112.4	86.2	83.2	83.3	80.7
Households	67.8	73.6	78.6	80.2	107.4	113.7	108.5	102.8	104.9	107.4
Both sectors	56.9	64.4	63.5	71.1	101.6	113.1	97.5	92.8	93.9	93.7
					Electricity					
Industry	97.5	105.0	106.1	89.7	106.6	111.2	118.1	115.6	113.6	114.7
Households	122.7	124.6	116.7	97.9	104.4	107.4	109.5	109.5	109.9	110.5
Both sectors	107.4	112.8	110.7	93.3	105.5	109.4	113.6	112.5	111.7	112.6

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Industry includes prices for automotive diesel oil.
(2) Households includes prices for gasoline.

Note: "Real" price indices are the current price indices divided by the country specific producer price index for industrial prices, and by the consumer price index for the household sector.

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Table 3.2. United States: Indices of real energy prices for end-users
(2005=100)

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
					Total energy					
Industry	71.5	88.0	75.1	73.2	103.5	119.2	89.0	95.1	103.0	100.1
Households	90.4	119.6	86.5	80.0	111.0	120.1	98.2	106.0	119.4	119.3
Both sectors	85.1	109.8	83.1	77.8	108.7	119.8	95.6	102.8	114.5	113.6
					Oil products					
Industry(1)	57.7	95.7	68.6	69.3	112.0	137.2	92.9	108.4	130.2	131.9
Households(2)	86.5	128.5	76.6	74.1	116.3	130.5	95.0	110.3	135.4	136.5
Both sectors	81.6	122.1	74.9	72.9	115.1	132.3	94.5	109.8	134.0	135.3
					Coal					
Industry	127.2	123.4	83.3	66.8	105.8	118.0	138.1	133.7	148.0	147.7
Households	..	..	..	..	..	..	..	..	..	..
Both sectors	127.2	123.4	83.3	66.8	105.8	118.0	138.1	133.7	148.0	147.7
					Natural gas					
Industry	45.3	54.1	45.2	59.4	83.6	98.0	56.8	54.8	48.2	35.6
Households	60.0	68.3	71.0	74.1	95.8	98.4	86.1	78.2	74.7	70.8
Both sectors	53.5	61.5	59.5	67.2	90.5	98.2	74.2	68.4	63.6	56.1
					Electricity					
Industry	109.4	114.8	109.1	90.6	103.2	102.1	107.2	101.8	94.9	91.2
Households	136.6	134.4	124.2	98.4	106.2	108.2	110.8	109.7	107.7	107.0
Both sectors	125.7	126.9	118.7	95.5	105.3	106.5	109.9	107.6	104.2	102.7

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Industry includes prices for automotive diesel oil.

(2) Households includes prices for gasoline.

Note: "Real" price indices are the current price indices divided by the country specific producer price index for industrial prices, and by the consumer price index for the household sector.

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Table 3.3. OECD Europe: Indices of real energy prices for end-users
(2005=100)

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
					Total energy					
Industry	65.5	76.8	74.0	83.2	104.9	117.3	108.7	115.0	122.1	126.6
Households	82.3	94.7	88.2	93.8	106.6	114.1	108.6	114.4	122.0	126.4
Both sectors	72.1	83.8	80.2	87.8	105.6	115.9	108.7	114.7	122.1	126.6
					Oil products					
Industry(1)	52.4	68.3	62.0	86.5	100.5	112.1	95.7	106.3	117.0	122.5
Households(2)	77.2	95.5	80.6	95.0	104.0	111.3	96.6	108.6	119.9	125.5
Both sectors	64.9	82.0	72.3	90.7	101.9	111.8	96.0	107.2	118.1	123.6
					Coal					
Industry	86.5	84.3	78.0	72.2	98.0	133.8	129.6	142.5	159.2	150.4
Households	54.3	60.2	81.0	93.0	110.1	123.8	136.2	134.5	137.9	140.3
Both sectors	78.6	78.5	78.6	75.0	99.9	132.0	131.0	140.9	154.8	148.3
					Natural gas					
Industry	59.1	74.9	61.1	72.2	117.9	136.4	129.3	120.3	125.9	134.8
Households	85.7	84.4	89.5	85.9	118.9	129.9	131.5	125.5	132.8	141.6
Both sectors	68.7	78.6	73.9	79.0	118.4	132.8	130.6	123.2	129.7	138.6
					Electricity					
Industry	94.5	99.5	106.4	82.7	113.6	124.3	137.8	136.4	135.0	136.5
Households	106.6	108.6	109.6	95.2	105.0	110.8	114.0	117.4	121.0	121.9
Both sectors	98.6	102.7	107.6	87.7	110.1	118.6	127.0	128.0	128.8	130.0

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Industry includes prices for automotive diesel oil.
(2) Households includes prices for gasoline.

Note: "Real" price indices are the current price indices divided by the country specific producer price index for industrial prices, and by the consumer price index for the household sector.

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Table 3.4. Japan: Indices of real energy prices for end-users
(2005=100)

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
					Total energy					
Industry	93.2	118.8	93.3	88.2	106.1	122.2	109.7	108.9	119.6	127.5
Households	119.1	156.8	111.7	92.8	107.0	115.0	100.4	104.4	111.6	114.1
Both sectors	105.5	137.0	103.3	90.9	106.7	117.5	103.5	106.0	114.4	118.8
					Oil products					
Industry(1)	76.4	114.8	71.2	68.8	116.7	144.5	101.1	117.0	132.3	140.0
Households(2)	110.8	154.0	100.3	80.6	113.1	127.4	96.9	108.4	120.2	121.2
Both sectors	97.3	139.3	89.4	76.7	114.1	132.0	98.0	110.6	123.3	126.0
					Coal					
Industry	132.9	121.1	77.1	42.8	111.2	184.4	161.3	141.6	177.3	167.4
Households	..	..	..	..	..	..	..	..	..	..
Both sectors	132.9	121.1	77.1	42.8	111.2	184.4	161.3	141.6	177.3	167.4
					Natural gas					
Industry	183.6	188.9	116.0	104.6	117.2	112.0	117.0	123.6	143.2	148.1
Households	109.2	132.8	106.1	99.5	105.9	110.2	111.0	110.9	114.4	119.0
Both sectors	124.3	143.5	107.6	100.3	108.4	110.6	112.3	113.7	120.8	125.5
					Electricity					
Industry	96.1	119.1	112.4	108.3	97.9	99.2	106.8	98.4	102.6	113.4
Households	137.1	166.5	130.8	108.5	99.7	100.8	102.1	98.4	100.9	104.7
Both sectors	110.4	135.8	120.8	108.4	98.9	100.1	104.0	98.4	101.6	108.3

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Industry includes prices for automotive diesel oil.

(2) Households includes prices for gasoline.

Note: "Real" price indices are the current price indices divided by the country specific producer price index for industrial prices, and by the consumer price index for the household sector.

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Table 3.5. Electricity prices for industry in US dollars/MWh

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	26.816	30.783	45.951	45.178	..	..	..	..	..	..
Austria	39.489	50.638	65.375	38.249	134.247	154.094	..	..	..	..
Belgium	44.558	57.931	70.084	47.742	..	138.596	138.789	124.503	138.514	126.607
Canada	15.254	19.583	37.443	38.381	63.303	69.970	58.875	69.889	..	..
Chile	..	..	..	47.571	114.042	170.673	157.457	151.548	154.307	126.697
Czech Republic	..	..	29.526	42.964	115.333	151.265	147.680	143.884	159.937	144.874
Denmark	48.974	49.949	62.233	57.690	100.867	129.829	110.647	114.376	115.172	104.147
Estonia	..	..	..	..	..	79.693	84.420	93.162	101.016	100.964
Finland	46.744	54.473	63.142	38.618	81.411	96.885	97.435	94.848	113.642	103.891
France	32.413	47.981	56.386	35.760	92.192	104.825	106.696	106.946	121.537	116.327
Germany	47.420	57.589	91.283	40.553	108.904	128.947	139.553	135.828	157.228	148.715
Greece	26.852	42.400	65.086	42.283	..	112.281	113.921	113.907	125.574	133.740
Hungary	..	..	74.355	48.718	134.305	169.646	159.739	132.669	137.367	131.565
Ireland	37.613	50.971	67.578	48.940	149.090	185.892	168.972	137.219	152.393	155.195
Israel	..	..	..	64.074	81.566	112.319	96.381	86.654	96.934	107.692
Italy	43.151	65.158	97.577	88.940	236.986	289.810	276.146	258.093	279.310	291.786
Japan	62.251	86.458	122.238	143.188	115.956	139.288	157.776	154.395	179.032	194.267
Korea	42.810	81.159	69.915	51.564	69.460	60.171	57.798	..	..	..
Luxembourg	34.955	47.034	..	..	..	115.643	136.427	114.967	117.852	111.697
Mexico	22.026	30.568	39.990	50.858	102.081	125.997	86.215	104.041	115.370	114.740
Netherlands	31.161	59.202	52.300	57.051	120.753	132.895	138.650	116.093	118.478	109.512
New Zealand	18.524	27.551	34.090	27.986	68.406	71.442	65.001	71.618	87.342	94.338
Norway	11.638	18.230	35.153	19.436	48.115	63.565	58.680	73.720	71.165	57.557
Poland	..	..	25.368	36.887	82.456	119.265	119.739	120.379	121.768	114.587
Portugal	26.941	45.382	98.169	67.005	128.767	131.287	127.390	120.265	139.140	147.301
Slovak Republic	20.753	24.430	29.178	42.254	136.996	173.907	194.776	169.139	178.482	169.743
Slovenia	..	..	..	..	..	129.531	134.447	121.391	126.382	117.770
Spain	27.983	44.316	97.390	42.581	89.589	125.152	103.154	131.881	148.769	..
Sweden	28.780	40.199	49.848	..	75.762	95.346	82.713	96.293	104.196	89.193
Switzerland	51.278	56.321	89.135	69.080	83.674	93.762	93.546	112.209	131.623	130.240
Turkey	61.500	60.625	82.042	79.953	108.748	138.799	137.639	150.918	138.641	148.222
United Kingdom	37.975	62.762	70.693	55.404	129.878	145.944	134.290	121.063	129.487	134.170
United States	27.900	36.900	47.500	46.000	63.941	68.280	68.116	67.890	68.205	66.979
OECD	36.395	49.794	66.426	58.610	93.708	109.242	106.535	110.775	123.124	..

Table 3.6. Electricity prices for industry in US dollars/toe

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	311.8	357.9	534.3	525.3	..	..	..	..	..	..
Austria	459.2	588.8	760.2	444.8	1561.0	1791.8	..	..	..	..
Belgium	518.1	673.6	814.9	555.1	..	1611.6	1613.8	1447.7	1610.6	1472.2
Canada	177.4	227.7	435.4	446.3	736.1	813.6	684.6	812.7	..	..
Chile	..	..	..	553.2	1326.1	1984.6	1830.9	1762.2	1794.3	1473.2
Czech Republic	..	..	343.3	499.6	1341.1	1758.9	1717.2	1673.1	1859.7	1684.6
Denmark	569.5	580.8	723.6	670.8	1172.9	1509.6	1286.6	1330.0	1339.2	1211.0
Estonia	..	..	..	..	..	926.7	981.6	1083.3	1174.6	1174.0
Finland	543.5	633.4	734.2	449.0	946.6	1126.6	1133.0	1102.9	1321.4	1208.0
France	376.9	557.9	655.6	415.8	1072.0	1218.9	1240.7	1243.6	1413.2	1352.6
Germany	551.4	669.6	1061.4	471.5	1266.3	1499.4	1622.7	1579.4	1828.2	1729.2
Greece	312.2	493.0	756.8	491.7	..	1305.6	1324.7	1324.5	1460.2	1555.1
Hungary	..	..	864.6	566.5	1561.7	1972.6	1857.4	1542.7	1597.3	1529.8
Ireland	437.4	592.7	785.8	569.1	1733.6	2161.5	1964.8	1595.6	1772.0	1804.6
Israel	..	..	..	745.0	948.4	1306.0	1120.7	1007.6	1127.1	1252.2
Italy	501.8	757.7	1134.6	1034.2	2755.7	3369.9	3211.0	3001.1	3247.8	3392.9
Japan	723.8	1005.3	1421.4	1665.0	1348.3	1619.6	1834.6	1795.3	2081.8	2258.9
Korea	497.8	943.7	813.0	599.6	807.7	699.7	672.1	..	..	..
Luxembourg	406.5	546.9	..	..	..	1344.7	1586.4	1336.8	1370.4	1298.8
Mexico	256.1	355.4	465.0	591.4	1187.0	1465.1	1002.5	1209.8	1341.5	1334.2
Netherlands	362.3	688.4	608.1	663.4	1404.1	1545.3	1612.2	1349.9	1377.6	1273.4
New Zealand	215.4	320.4	396.4	325.4	795.4	830.7	755.8	832.8	1015.6	1097.0
Norway	135.3	212.0	408.8	226.0	559.5	739.1	682.3	857.2	827.5	669.3
Poland	..	..	295.0	428.9	958.8	1386.8	1392.3	1399.8	1415.9	1332.4
Portugal	313.3	527.7	1141.5	779.1	1497.3	1526.6	1481.3	1398.4	1617.9	1712.8
Slovak Republic	241.3	284.1	339.3	491.3	1593.0	2022.2	2264.8	1966.7	2075.4	1973.8
Slovenia	..	..	..	..	..	1506.2	1563.3	1411.5	1469.6	1369.4
Spain	325.4	515.3	1132.4	495.1	1041.7	1455.3	1199.5	1533.5	1729.9	..
Sweden	334.7	467.4	579.6	..	881.0	1108.7	961.8	1119.7	1211.6	1037.1
Switzerland	596.3	654.9	1036.5	803.3	972.9	1090.3	1087.7	1304.8	1530.5	1514.4
Turkey	715.1	704.9	954.0	929.7	1264.5	1613.9	1600.5	1754.9	1612.1	1723.5
United Kingdom	441.6	729.8	822.0	644.2	1510.2	1697.0	1561.5	1407.7	1505.7	1560.1
United States	324.4	429.1	552.3	534.9	743.5	794.0	792.0	789.4	793.1	778.8
OECD	423.2	579.0	772.4	681.5	1089.6	1270.3	1238.8	1288.1	1431.7	..

Source: IEA/OECD *Energy Prices & Taxes.*

Note: Prices are in current US dollars.

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Table 3.7. Electricity prices for households in US dollars/MWh

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	38.735	43.325	71.696	63.191	..	..	..	..	..	..
Austria	79.830	101.277	155.690	117.512	213.699	257.018	255.682	257.629	272.850	253.924
Belgium	114.853	140.966	166.586	132.258	..	265.643	232.565	231.656	264.366	249.936
Canada	24.108	28.391	53.123	52.926	89.090	90.015	84.545	94.545	..	..
Chile	..	..	41.226	85.405	165.636	228.492	213.189	208.826	210.740	185.383
Czech Republic	34.375	38.542	26.741	54.352	145.892	191.474	192.126	185.535	210.705	198.946
Denmark	67.899	101.583	164.474	197.441	344.143	396.058	364.780	356.292	409.169	383.426
Estonia	..	..	..	..	..	117.132	123.767	127.087	136.636	138.946
Finland	57.742	69.329	102.799	77.788	145.377	172.405	173.729	175.391	213.615	194.867
France	80.523	114.130	150.120	101.659	156.438	164.327	159.211	165.279	187.090	174.767
Germany	85.394	100.538	163.801	120.645	263.151	322.807	317.866	318.742	351.955	338.753
Greece	62.963	74.400	118.534	70.814	..	156.871	151.848	158.411	173.090	180.527
Hungary	..	31.755	38.760	65.306	188.317	224.177	206.228	218.625	218.900	204.156
Ireland	56.344	76.699	131.250	101.382	243.516	267.152	255.013	232.583	259.468	270.322
Israel	..	..	..	93.021	123.543	155.481	136.578	139.519	148.590	151.388
Italy	50.000	76.923	156.704	135.484	257.534	305.263	284.218	263.166	278.879	288.401
Japan	93.138	117.336	176.796	214.041	176.495	206.016	227.640	232.158	260.931	276.758
Korea	66.529	98.115	96.186	83.776	101.973	88.640	76.921	83.172	88.643	93.079
Luxembourg	68.502	85.517	123.764	99.263	230.685	215.497	235.899	215.497	220.259	209.254
Mexico	35.242	52.402	45.834	68.284	93.010	96.053	79.875	89.670	95.199	90.195
Netherlands	82.383	114.523	117.191	131.060	284.955	242.642	258.024	221.154	237.897	238.238
New Zealand	23.936	33.489	54.652	60.054	161.425	164.368	151.428	182.648	214.183	231.756
Norway	28.427	35.447	73.343	57.814	131.672	151.262	132.605	175.829	170.697	135.984
Poland	..	22.624	10.316	65.467	150.920	192.954	167.489	179.125	198.505	190.868
Portugal	46.575	71.084	147.324	119.539	213.699	219.664	215.199	215.232	245.668	260.668
Slovak Republic	34.372	38.523	27.685	50.124	187.790	219.887	230.897	212.980	241.721	229.640
Slovenia	..	..	..	..	..	167.575	183.049	185.472	201.851	193.443
Spain	57.267	80.046	189.723	117.143	186.971	218.013	212.337	246.715	295.311	..
Sweden	46.491	59.116	87.868	..	195.768	218.433	194.042	217.995	248.180	223.962
Switzerland	65.984	72.549	110.735	111.322	136.345	154.300	163.917	179.989	222.297	204.160
Turkey	77.000	62.625	50.640	84.419	121.761	164.801	165.095	184.141	169.350	184.749
United Kingdom	52.167	87.169	118.472	106.721	204.432	217.768	191.204	183.065	211.178	220.739
United States	43.100	53.600	78.500	82.000	106.511	112.634	115.071	115.765	117.169	118.832
OECD	55.186	68.206	102.420	100.940	140.843	156.229	155.699	158.458	174.078	..

Table 3.8. Electricity prices for households in US dollars/toe

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	450.4	503.8	833.7	734.8	..	..	..	..	..	..
Austria	928.3	1177.6	1810.3	1366.4	2484.9	2988.6	2973.0	2995.7	3172.7	2952.6
Belgium	1335.5	1639.1	1937.0	1537.9	..	3088.9	2704.2	2693.7	3074.0	2906.2
Canada	280.3	330.1	617.7	615.4	1035.9	1046.7	983.1	1099.4	..	..
Chile	..	..	479.4	993.1	1926.0	2656.9	2478.9	2428.2	2450.5	2155.6
Czech Republic	399.7	448.2	310.9	632.0	1696.4	2226.4	2234.0	2157.4	2450.1	2313.3
Denmark	789.5	1181.2	1912.5	2295.8	4001.7	4605.3	4241.6	4142.9	4757.8	4458.4
Estonia	..	..	..	..	..	1362.0	1439.1	1477.8	1588.8	1615.7
Finland	671.4	806.2	1195.3	904.5	1690.4	2004.7	2020.1	2039.4	2483.9	2265.9
France	936.3	1327.1	1745.6	1182.1	1819.1	1910.8	1851.3	1921.8	2175.5	2032.2
Germany	993.0	1169.0	1904.7	1402.9	3059.9	3753.6	3696.1	3706.3	4092.5	3939.0
Greece	732.1	865.1	1378.3	823.4	..	1824.1	1765.7	1842.0	2012.7	2099.2
Hungary	..	369.2	450.7	759.4	2189.7	2606.7	2398.0	2542.2	2545.4	2373.9
Ireland	655.2	891.8	1526.2	1178.9	2831.6	3106.4	2965.3	2704.5	3017.1	3143.3
Israel	..	..	..	1081.6	1436.5	1807.9	1588.1	1622.3	1727.8	1760.3
Italy	581.4	894.5	1822.1	1575.4	2994.6	3549.6	3304.9	3060.1	3242.8	3353.5
Japan	1083.0	1364.4	2055.8	2488.8	2052.3	2395.5	2647.0	2699.5	3034.1	3218.1
Korea	773.6	1140.9	1118.4	974.1	1185.7	1030.7	894.4	967.1	1030.7	1082.3
Luxembourg	796.5	994.4	1439.1	1154.2	2682.4	2505.8	2743.0	2505.8	2561.1	2433.2
Mexico	409.8	609.3	533.0	794.0	1081.5	1116.9	928.8	1042.7	1107.0	1048.8
Netherlands	957.9	1331.7	1362.7	1524.0	3313.4	2821.4	3000.3	2571.6	2766.2	2770.2
New Zealand	278.3	389.4	635.5	698.3	1877.0	1911.3	1760.8	2123.8	2490.5	2694.8
Norway	330.5	412.2	852.8	672.3	1531.1	1758.9	1541.9	2044.5	1984.9	1581.2
Poland	..	263.1	120.0	761.2	1754.9	2243.6	1947.5	2082.8	2308.2	2219.4
Portugal	541.6	826.6	1713.1	1390.0	2484.9	2554.2	2502.3	2502.7	2856.6	3031.0
Slovak Republic	399.7	447.9	321.9	582.8	2183.6	2556.8	2684.9	2476.5	2810.7	2670.2
Slovenia	..	..	..	..	..	1948.5	2128.5	2156.6	2347.1	2249.3
Spain	665.9	930.8	2206.1	1362.1	2174.1	2535.0	2469.0	2868.8	3433.8	..
Sweden	540.6	687.4	1021.7	..	2276.4	2539.9	2256.3	2534.8	2885.8	2604.2
Switzerland	767.3	843.6	1287.6	1294.4	1585.4	1794.2	1906.0	2092.9	2584.9	2374.0
Turkey	895.3	728.2	588.8	981.6	1415.8	1916.3	1919.7	2141.2	1969.2	2148.2
United Kingdom	606.6	1013.6	1377.6	1240.9	2377.1	2532.2	2223.3	2128.7	2455.6	2566.7
United States	501.2	623.3	912.8	953.5	1238.5	1309.7	1338.0	1346.1	1362.4	1381.8
OECD	641.7	793.1	1190.9	1173.7	1637.7	1816.6	1810.5	1842.5	2024.2	..

Source: IEA/OECD *Energy Prices & Taxes.*

Note: Prices are in current US dollars.

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Table 3.9. Electricity prices for households in US dollars/MWh
Converted with purchasing power parities

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	34.537	38.136	66.887	82.924	..	..	..	..	..	..
Austria	80.428	97.685	139.929	141.627	179.827	206.219	216.798	230.206	231.659	233.005
Belgium	91.600	113.424	153.011	161.060	..	208.014	193.966	202.452	219.245	223.925
Canada	24.299	28.648	49.415	63.816	79.011	77.852	80.412	79.895	..	..
Chile	..	..	77.565	161.606	233.228	327.974	316.212	266.482	253.364	226.960
Czech Republic	..	..	86.943	147.757	212.262	229.281	261.863	248.536	267.654	281.966
Denmark	47.678	74.248	114.644	189.901	227.450	252.051	248.202	256.095	278.993	282.193
Estonia	..	..	..	..	..	145.879	168.860	180.294	181.445	196.121
Finland	51.560	55.839	64.805	84.833	112.821	128.510	137.698	143.118	163.620	161.368
France	67.716	86.396	120.766	117.457	127.882	127.403	132.378	143.617	155.323	157.550
Germany	73.622	84.298	140.415	135.376	231.265	272.038	281.192	296.839	314.889	329.697
Greece	96.399	108.797	162.813	111.662	..	153.065	155.836	167.648	174.315	201.700
Hungary	..	78.357 e	108.645 e	170.878	263.242	298.708	330.046	352.093	336.835	348.460
Ireland	66.415	76.523	124.819	114.359	185.468	192.040	204.631	205.920	222.942	251.667
Israel	..	..	..	110.166	136.448	144.256	133.710	130.025	132.171	143.798
Italy	66.177	87.081	137.678	179.898	230.113	264.686	261.054	248.459	251.733	283.790
Japan	72.552	107.447	135.053	148.795	172.888	182.292	184.821	182.966	195.127	212.589
Korea	93.828	139.258	124.478	126.935	123.307	124.192	121.739	116.672	119.670	128.442
Luxembourg	56.699	67.679	113.303	114.595	182.141	162.652	186.172	175.199	170.906	171.998
Mexico	62.402	71.514	90.617	105.833	137.920	143.422	139.667	142.899	144.578	141.892
Netherlands	63.456	88.282	104.494	159.315	242.594	197.033	219.511	196.374	202.829	222.172
New Zealand	29.307	38.528	60.062	91.844	145.860	157.177	163.868	167.054	177.350	187.129
Norway	18.691	21.696	47.202	55.712	87.894	97.611	92.618	117.337	105.082	85.694
Poland	..	..	36.342	154.526	226.425	250.490	278.639	291.614	312.876	328.466
Portugal	81.055	115.152	208.172	185.370	236.410	231.435	243.259	255.467	278.810	326.923
Slovak Republic	..	..	72.928 e	146.366	281.824	292.682	323.346	307.445	327.215	336.732
Slovenia	..	..	..	..	..	180.690	203.322	214.722	225.146	234.071
Spain	77.690	90.556	188.291	173.140	187.356	207.075	214.248	258.335	295.714	..
Sweden	33.633	39.254	59.300	..	148.894	164.248	165.644	173.156	180.040	170.996
Switzerland	49.928	58.069	77.036	101.491	102.189	107.964	116.576	124.578	136.495	134.429
Turkey	77.000	83.500	80.591	186.634	183.146	240.478	278.440	289.298	274.342	305.148
United Kingdom	63.650	75.773	109.065	110.851	158.283	182.722	185.910	177.633	194.191	204.708
United States	43.100	53.600	78.500	82.000	106.511	112.634	115.071	115.765	117.169	118.832
OECD	51.177	64.355 e	94.370 e	104.674	135.089	146.077	150.430	152.653	162.757	..

Table 3.10. Purchasing power parities
National currency/US dollars

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	0.98	1.00	1.37	1.32	1.42	1.48	1.47	1.53	1.56	1.52
Austria	1.05	0.97	0.92	0.90	0.87	0.85	0.85	0.84	0.85	0.85
Belgium	0.98	0.90	0.90	0.89	0.89	0.87	0.86	0.86	0.87	0.87
Canada	1.13	1.16	1.25	1.23	1.21	1.23	1.20	1.22	1.23	1.22
Chile	..	41.30 e	162.06	285.11	371.05	364.74	376.84	399.64	402.20	396.96
Czech Republic	..	..	5.52	14.21	13.95	14.26	13.98	14.24	13.90	13.79
Denmark	7.85	7.71	8.88	8.41	8.24	8.01	7.88	7.82	7.86	7.87
Estonia	..	0.00 e	0.00 e	0.46	0.55	0.55	0.53	0.53	0.54	0.55
Finland	0.77	0.78	1.02	0.99	0.94	0.92	0.91	0.93	0.94	0.94
France	0.82	0.85	1.03	0.94	0.89	0.88	0.87	0.87	0.87	0.86
Germany	1.19	1.11	0.96	0.97	0.83	0.81	0.81	0.81	0.80	0.80
Greece	0.07	0.09	0.34	0.68	0.72	0.70	0.70	0.71	0.71	0.70
Hungary	14.58 e	13.18 e	22.55 e	107.88	131.34	129.43	126.26	129.00	130.35	131.72
Ireland	0.56	0.62	0.81	0.96	0.96	0.95	0.90	0.85	0.84	0.84
Israel	0.00	0.00	1.70	3.44	3.72	3.87	4.02	4.01	4.02	4.06
Italy	0.33	0.39	0.70	0.82	0.82	0.79	0.78	0.80	0.80	0.79
Japan	270.15	247.56	189.56	155.11	120.22	116.85	115.25	111.36	106.77	103.90
Korea	343.18	427.98	547.08	746.21	768.65	785.72	805.58	823.67	820.59	815.93
Luxembourg	0.94	0.92	0.91	0.94	0.92	0.91	0.91	0.93	0.93	0.95
Mexico	0.01	0.02	1.44	6.10	7.37	7.47	7.72	7.93	8.18	8.36
Netherlands	1.27	1.17	0.93	0.89	0.86	0.84	0.85	0.85	0.84	0.83
New Zealand	0.78	0.89	1.53	1.44	1.51	1.49	1.48	1.52	1.53	1.53
Norway	7.97	8.07	9.72	9.13	8.78	8.75	9.01	9.06	9.09	9.23
Poland	..	..	0.27	1.84	1.84	1.86	1.87	1.85	1.88	1.89
Portugal	0.13	0.15	0.50	0.70	0.66	0.65	0.64	0.64	0.63	0.62
Slovak Republic	..	..	0.23 e	0.53	0.55	0.53	0.51	0.52	0.53	0.53
Slovenia	..	..	0.04	0.53	0.63	0.63	0.65	0.65	0.64	0.64
Spain	0.34	0.38	0.62	0.73	0.73	0.72	0.71	0.72	0.72	0.71
Sweden	6.24	6.37	8.77	9.14	8.89	8.77	8.97	9.07	8.94	8.87
Switzerland	2.36	2.09	2.00	1.85	1.60	1.55	1.53	1.51	1.45	1.42
Turkey	0.00	0.00	0.00	0.28	0.86	0.89	0.92	0.95	1.03	1.08
United Kingdom	0.43	0.49	0.61	0.64	0.65	0.65	0.66	0.67	0.68	0.68
United States	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00	1.00

Source: IEA/OECD *Energy Prices & Taxes.*

Note: Data are in current US dollars.

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Table 3.11. Heavy fuel oil prices for electricity generation in US dollars/tonne

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	91.93	198.65	..	..	..	..	..	..	..	..
Austria	94.83	164.67	127.05	70.33	220.33	342.31	210.81	370.40	456.04	467.76
Belgium	92.87	179.34	126.94	180.78	x	x	x	x	x	x
Canada	70.09	79.84	..	120.05	271.46	277.10	294.54	426.83	539.35	..
Chile	..	..	..	..	..	..	..	..	..	..
Czech Republic	70.83	71.48	151.42	111.47	285.47	438.40	c	c	c	c
Denmark	..	162.93	..	..	..	..	..	..	..	..
Estonia	..	..	..	..	..	..	..	..	..	..
Finland	97.84	203.39	179.44	183.32	412.36	577.01	421.92	535.28	..	..
France	..	..	..	..	..	..	..	..	..	..
Germany	103.80	197.58	146.20	167.28	372.50	572.11	420.23	503.18	..	c
Greece	68.06	136.32	159.81	..	..	..	..	..	..	..
Hungary	..	84.23	89.15	146.11	..	..	..	..	..	..
Ireland	..	..	111.55	140.48	339.24	566.12	..	..	..	..
Israel	..	..	..	..	..	598.35	407.53	495.20	768.36	804.62
Italy	85.75	181.24	134.60	c	c	c	c	c	c	c
Japan	109.48	250.29	207.11	..	..	..	..	..	..	..
Korea	..	250.60	130.77	275.67	..	..	..	..	..	..
Luxembourg	..	181.70	..	..	..	..	..	..	..	..
Mexico	11.45	15.40	55.11	124.86	252.51	443.95	302.87	412.34	537.85	602.77
Netherlands	91.10	192.46	..	..	..	..	..	..	..	..
New Zealand	c	c	c	c	c	c	c	c	c	c
Norway	x	x	x	x	x	x	x	x	x	x
Poland	..	..	86.21	112.69	380.30	525.65	394.19	505.00	674.38	715.17
Portugal	66.07	130.20	104.65	148.68	352.18	478.36	336.37	x	x	x
Slovak Republic	70.83	71.43	121.97	..	x	x	x	x	x	x
Slovenia	..	..	..	..	..	..	..	..	..	..
Spain	88.00	168.38	142.90	227.35	..	..	..	..	..	..
Sweden	92.10	199.10	106.79	..	..	..	..	..	..	..
Switzerland	..	..	..	..	..	..	..	..	..	..
Turkey	144.25	245.69	239.82	206.11	786.05	999.18	802.61	930.75	1122.46	1218.55
United Kingdom	95.36	199.28	94.42	181.35	454.55	533.44	405.38	631.44	805.73	856.89
United States	88.65	178.01	139.37	178.64	359.64	572.74	381.24	528.64	766.42	873.15
OECD	91.65 e	189.66 e	139.88 e	167.52 e	333.12 e	523.83	361.37	472.54	631.49	..

Table 3.12. Heavy fuel oil prices for electricity generation in US dollars/toe

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	95.8	206.9	..	..	..	..	..	..	..	..
Austria	98.8	171.5	132.3	73.3	229.5	356.6	219.6	385.8	475.0	487.3
Belgium	95.2	183.9	130.2	185.4	x	x	x	x	x	x
Canada	73.0	83.2	..	125.0	282.8	288.6	306.8	444.6	561.8	..
Chile	..	..	..	..	..	..	..	..	..	..
Czech Republic	74.3	75.0	158.9	116.9	299.5	459.9	c	c	c	c
Denmark	..	168.8	..	..	..	..	..	..	..	..
Estonia	..	..	..	..	..	..	..	..	..	..
Finland	101.9	211.9	186.9	191.0	429.5	601.1	439.5	557.6	..	..
France	..	..	..	..	..	..	..	..	..	..
Germany	105.9	201.6	149.2	170.7	380.1	583.8	428.8	513.4	..	c
Greece	70.9	142.0	166.5	..	..	..	..	..	..	..
Hungary	..	86.8	91.9	150.6	..	..	..	..	..	..
Ireland	..	..	117.7	148.2	357.8	597.2	..	..	..	..
Israel	..	..	..	..	..	623.3	424.5	515.8	800.4	838.1
Italy	89.3	188.8	140.2	c	c	c	c	c	c	c
Japan	114.0	260.7	215.7	..	..	..	..	..	..	..
Korea	..	272.3	142.1	299.5	..	..	..	..	..	..
Luxembourg	..	188.3	..	..	..	..	..	..	..	..
Mexico	11.3	15.2	54.4	123.1	249.0	437.9	298.7	406.7	530.5	594.5
Netherlands	93.3	197.2	..	..	..	..	..	..	..	..
New Zealand	c	c	c	c	c	c	c	c	c	c
Norway	x	x	x	x	x	x	x	x	x	x
Poland	..	..	88.0	115.1	388.3	536.8	400.8	514.5	687.0	728.6
Portugal	68.8	135.6	109.0	154.9	368.6	500.7	352.1	x	x	x
Slovak Republic	73.0	73.6	125.8	..	x	x	x	x	x	x
Slovenia	..	..	..	..	..	..	..	..	..	..
Spain	93.6	179.1	152.0	241.9	..	..	..	..	..	..
Sweden	95.9	207.4	111.2	..	..	..	..	..	..	..
Switzerland	..	..	..	..	..	..	..	..	..	..
Turkey	150.3	255.9	249.8	214.7	818.8	1040.8	836.1	969.5	1169.2	1269.3
United Kingdom	96.6	201.9	95.7	183.7	460.5	540.5	410.7	639.8	816.3	868.2
United States	88.8	178.2	139.5	178.9	360.1	573.4	381.7	529.3	767.3	874.2
OECD	93.8 e	195.4 e	144.1 e	171.0 e	335.6 e	528.2	363.8	473.3	632.0	..

Source: IEA/OECD *Energy Prices & Taxes.*

Note: Prices are in current US dollars.

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Table 3.13. Steam coal prices for electricity generation in US dollars/tonne

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	10.21	13.65	27.39	..	..	..	..	..	..	..
Austria	163.51	167.07	76.45	53.76	96.24	122.13	133.47	109.10	127.96	119.80
Belgium	40.47	47.67	45.45	32.76	75.54	130.54	76.84	..	..	..
Canada	32.98	42.32	53.12	17.88	28.47	28.90	24.96	31.03	28.84	..
Chile	..	..	..	32.41	69.81	116.66	95.43	83.62	106.83	96.33
Czech Republic	3.75	4.20	7.47	7.97	c	c	c	c	c	c
Denmark	..	46.53	..	..	..	..	..	..	..	..
Estonia	..	..	..	..	..	..	..	..	..	..
Finland	45.02	67.70	62.95	38.64	83.72	142.92	97.08	101.72	137.10	116.12
France	..	49.96	50.88	37.25	83.86	136.12	113.94	108.27	128.37	..
Germany	82.94	98.85	140.21	42.41	90.26	152.57	110.10	117.80	153.25	126.45
Greece	..	..	..	..	..	..	..	..	..	..
Hungary	..	11.44	26.89	c	c	c	c	c	c	c
Ireland	..	..	55.85	30.31	83.45	99.46	113.73	83.36	125.43	88.13
Israel	..	..	..	..	..	125.98	122.53	96.70	140.78	133.11
Italy	36.60	50.81	59.98	c	84.99	140.06	102.90	107.72	..	..
Japan	72.09	71.81	81.05	40.93	..	..	..	..	..	..
Korea	..	..	..	..	60.31	90.97	82.54	..	..	..
Luxembourg	..	..	..	..	..	..	..	..	..	..
Mexico	..	21.83	31.50	31.82	45.92	52.41	51.11	54.57	56.14	56.93
Netherlands	40.99	63.99	71.37	..	..	..	..	..	..	..
New Zealand	c	c	c	c	c	c	c	c	c	c
Norway	..	..	..	..	..	..	..	..	..	..
Poland	..	2.26	11.39	28.23	57.74	79.23	80.43	78.51	84.99	83.14
Portugal	27.26	38.71	51.37	30.24	76.41	141.29	81.39	88.26	113.33	90.17
Slovak Republic	3.75	4.20	7.52	..	..	..	..	..	..	..
Slovenia	..	..	..	..	..	..	..	..	..	..
Spain	33.47	54.80	..	..	..	..	..	..	..	..
Sweden	47.60	87.49	..	..	..	..	..	..	..	..
Switzerland	x	x	x	x	x	x	x	x	x	x
Turkey	..	14.25	9.10	14.41	27.75	32.35	32.12	36.38	37.45	38.83
United Kingdom	42.14	74.01	77.74	44.43	82.37	120.07	84.86	96.22	128.39	105.09
United States	26.11	31.72	33.57	27.46	40.48	47.35	50.47	51.79	54.74	55.01
OECD	31.64	38.28	42.23	29.14	48.80	62.60	60.43	60.00	66.17	..

Table 3.14. Steam coal prices for electricity generation in US dollars/toe

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	15.5	20.7	41.5	..	..	..	..	..	..	..
Austria	247.4	252.8	115.7	81.3	145.6	184.8	202.0	165.1	193.6	181.3
Belgium	75.8	89.3	85.1	61.4	141.5	244.6	144.0	..	..	..
Canada	54.1	69.4	87.2	29.3	46.7	47.4	41.0	50.9	47.3	..
Chile	..	..	..	46.3	99.7	166.7	136.3	119.5	152.6	137.6
Czech Republic	14.7	16.5	29.3	31.3	c	c	c	c	c	c
Denmark	..	79.8	..	..	..	..	..	..	..	..
Estonia	..	..	..	..	..	..	..	..	..	..
Finland	73.9	111.1	103.4	63.4	137.4	234.6	159.4	167.0	225.1	190.6
France	..	80.4	81.9	60.0	135.0	219.2	183.5	174.4	206.7	..
Germany	120.0	143.0	202.8	61.3	130.5	220.7	159.2	170.4	221.7	182.9
Greece	..	..	..	..	..	..	..	..	..	..
Hungary	..	48.1	129.4	c	c	c	c	c	c	c
Ireland	..	..	90.2	48.9	134.7	160.6	183.6	134.6	202.5	142.3
Israel	..	..	..	..	..	242.3	235.6	186.0	270.7	256.0
Italy	59.0	82.0	96.7	c	144.0	241.5	174.4	182.6	..	..
Japan	129.4	128.9	145.5	73.5	..	..	..	..	..	..
Korea	..	..	..	..	91.4	137.8	125.1	..	..	..
Luxembourg	..	..	..	..	..	..	..	..	..	..
Mexico	..	47.7	68.9	69.6	100.4	114.6	111.7	119.3	122.7	124.4
Netherlands	58.6	91.4	102.0	..	..	..	..	..	..	..
New Zealand	c	c	c	c	c	c	c	c	c	c
Norway	..	..	..	..	..	..	..	..	..	..
Poland	..	4.7	24.3	55.5	113.2	157.4	156.9	153.2	165.8	162.2
Portugal	44.7	63.4	84.1	49.5	125.2	231.4	133.3	144.6	185.6	147.7
Slovak Republic	6.1	6.9	12.3	..	..	..	..	..	..	..
Slovenia	..	..	..	..	..	..	..	..	..	..
Spain	60.9	99.6	..	..	..	..	..	..	..	..
Sweden	71.4	131.3	..	..	..	..	..	..	..	..
Switzerland	x	x	x	x	x	x	x	x	x	x
Turkey	..	71.3	45.5	72.1	138.7	161.7	160.6	181.9	187.3	194.2
United Kingdom	74.5	130.9	137.5	78.6	145.7	212.4	150.1	170.2	227.1	185.9
United States	42.8	52.0	55.0	45.0	66.4	77.6	82.7	84.9	89.7	90.2
OECD	52.0	63.5	70.2	49.4	81.8	104.8	101.0	101.3	111.5	..

Source: IEA/OECD *Energy Prices & Taxes.*

Note: Prices are in current US dollars.

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Table 3.15. Natural gas prices for electricity generation in US dollars/MWh (Gross calorific value basis)

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	..	..	..	..	..	..	..	..	..	..
Austria	8.21	18.22	12.78	..	..	..	..	..	..	..
Belgium	7.23	13.61	10.62	c	c	c	c	c	c	c
Canada	3.81	3.64	5.41	11.59	21.45	22.71	16.95	17.58	15.88	..
Chile	..	..	..	..	..	..	..	..	..	..
Czech Republic	..	..	10.40	12.57	..	..	..	..	..	..
Denmark	c	c	c	c	c	c	c	c	c	c
Estonia	..	..	..	..	..	..	..	..	..	..
Finland	8.67	17.47	10.63	9.73	20.68	29.24	25.98	27.62	33.88	35.30
France	..	..	..	..	..	..	..	..	..	..
Germany	6.71	10.90	13.59	13.19	..	..	..	..	..	..
Greece	..	..	..	c	c	c	c	c	c	c
Hungary	..	5.68	8.46	8.59	42.49	53.63	44.18	32.62	41.96	43.96
Ireland	..	..	10.06	8.52	c	c	c	c	c	c
Israel	x	x	x	x	..	30.23	28.17	37.44	41.83	42.39
Italy	7.03	14.88	10.05	c	c	c	c	c	c	c
Japan	8.08	16.81	14.37	..	..	..	..	..	..	..
Korea	..	..	..	..	42.11	58.09	38.92	..	..	..
Luxembourg	..	..	..	..	..	..	..	..	..	..
Mexico	1.17	1.54	7.56	12.90	27.19	36.36	17.03	20.04	18.83	14.05
Netherlands	6.80	14.03	11.41	..	..	..	..	..	..	..
New Zealand	c	c	c	c	c	c	c	c	c	c
Norway	..	..	..	..	..	..	..	..	..	..
Poland	..	..	..	..	27.02	32.25	24.11	25.09	27.52	28.35
Portugal	x	x	x	..	30.40	42.53	31.07	31.75	41.46	46.08
Slovak Republic	4.96	5.88	8.51	8.72	36.14	61.82	56.83	34.28	44.39	53.27
Slovenia	..	..	..	..	..	..	..	..	..	..
Spain	6.65	14.11	13.09	14.19	..	..	..	..	..	..
Sweden	..	..	..	..	..	..	..	..	..	..
Switzerland	..	..	..	..	..	..	..	..	..	..
Turkey	..	..	12.18	14.49	37.74	49.18	40.09	34.12	33.38	40.97
United Kingdom	5.85	10.30	c	8.95	24.74	30.10	21.88	22.57	30.67	33.83
United States	4.85	7.50	7.92	14.86	24.21	31.16	16.14	17.32	16.13	11.57
OECD	5.54	9.32	9.99	13.64	26.44	34.10	19.98	19.85	20.00	..

Table 3.16. Natural gas prices for electricity generation in US dollars/toe (Net calorific value basis)

	1978	1980	1990	2000	2007	2008	2009	2010	2011	2012
Australia	..	..	..	..	..	..	..	..	..	..
Austria	106.1	235.5	165.1	..	..	..	..	..	..	..
Belgium	93.5	175.9	137.3	c	c	c	c	c	c	c
Canada	49.2	47.0	69.9	149.7	277.2	293.4	219.1	227.2	205.1	..
Chile	..	..	..	..	..	..	..	..	..	..
Czech Republic	..	..	134.4	162.5	..	..	..	..	..	..
Denmark	c	c	c	c	c	c	c	c	c	c
Estonia	..	..	..	..	..	..	..	..	..	..
Finland	112.1	225.7	137.3	125.8	267.3	377.9	335.8	356.9	437.8	456.2
France	..	..	..	..	..	..	..	..	..	..
Germany	86.7	140.8	175.7	170.5	..	..	..	..	..	..
Greece	..	..	..	c	c	c	c	c	c	c
Hungary	..	73.3	109.3	111.0	549.0	693.0	570.9	421.5	542.3	568.0
Ireland	..	..	130.0	110.1	c	c	c	c	c	c
Israel	x	x	x	x	..	390.6	364.1	483.9	540.6	547.8
Italy	90.8	192.3	129.9	c	c	c	c	c	c	c
Japan	104.4	217.3	185.7	..	..	..	..	..	..	..
Korea	..	..	..	..	544.1	750.7	503.0	..	..	..
Luxembourg	..	..	..	..	..	..	..	..	..	..
Mexico	15.2	19.9	97.7	166.7	351.4	469.9	220.1	258.9	243.3	181.6
Netherlands	87.8	181.3	147.5	..	..	..	..	..	..	..
New Zealand	c	c	c	c	c	c	c	c	c	c
Norway	..	..	..	..	..	..	..	..	..	..
Poland	..	..	..	..	349.2	416.7	311.6	324.2	355.6	366.4
Portugal	x	x	x	..	392.8	549.6	401.5	410.3	535.7	595.5
Slovak Republic	64.0	75.9	110.0	112.7	467.0	798.8	734.4	443.0	573.6	688.4
Slovenia	..	..	..	..	..	..	..	..	..	..
Spain	86.0	182.3	169.1	183.3	..	..	..	..	..	..
Sweden	..	..	..	..	..	..	..	..	..	..
Switzerland	..	..	..	..	..	..	..	..	..	..
Turkey	..	..	157.5	187.2	487.6	635.5	518.1	440.9	431.3	529.4
United Kingdom	75.6	133.1	c	115.6	319.6	388.9	282.7	291.6	396.3	437.2
United States	62.7	97.0	102.3	192.1	312.8	402.7	208.6	223.8	208.5	149.5
OECD	71.6	120.4	129.1	176.2	341.7	440.7	258.2	256.5	258.4	..

Source: IEA/OECD *Energy Prices & Taxes.*

Note: Prices are in current US dollars.

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Table 3.17. US Dollar exchange rates in national currencies

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Australia	0.8726	0.8771	1.2818	1.7265	1.1975	1.2822	1.0902	0.9695	0.966
Austria	1.056	0.94	0.826	1.085	0.684	0.7198	0.755	0.7187	0.778
Belgium	0.781	0.725	0.829	1.085	0.684	0.7198	0.755	0.7187	0.778
Canada	1.1407	1.1694	1.1671	1.4851	1.0676	1.1414	1.0302	0.9896	0.9993
Chile	31.6558	39	304.903	539.49	523.542	558.942	509.982	483.543	485.986
Czech Republic	14.4	14.27	17.95	38.637	17.078	19.05	19.08	17.655	19.538
Denmark	5.5111	5.6358	6.1864	8.088	5.099	5.3594	5.6218	5.3572	5.7899
Estonia	..	..	..	1.0845	0.6835	0.7195	0.7546	0.7187	0.778
Finland	0.691	0.626	0.643	1.085	0.684	0.7198	0.755	0.7187	0.778
France	0.688	0.644	0.83	1.085	0.684	0.7198	0.755	0.7187	0.778
Germany	1.027	0.929	0.826	1.085	0.684	0.7198	0.755	0.7187	0.778
Greece	0.108	0.125	0.464	1.069	0.684	0.7198	0.755	0.7187	0.778
Hungary	37.91	32.53	63.21	282.29	172.46	202.06	207.76	200.57	224.82
Ireland	0.662	0.618	0.768	1.085	0.684	0.7198	0.755	0.7187	0.778
Israel	0.0017	0.0051	2.0162	4.0773	3.588	3.9323	3.739	3.5781	3.8559
Italy	0.438	0.442	0.619	1.085	0.684	0.7198	0.755	0.7187	0.778
Japan	210.44	226.7	144.8	107.83	103.39	93.57	87.76	79.84	79.81
Korea	484	607.45	708	1130.64	1100.86	1274.95	1155.43	1107.81	1125.93
Luxembourg	0.781	0.725	0.829	1.085	0.684	0.7198	0.755	0.7187	0.778
Mexico	0.0227	0.0229	2.8407	9.4531	11.1532	13.5042	12.6319	12.4291	13.1502
Netherlands	0.982	0.902	0.826	1.085	0.684	0.7198	0.755	0.7187	0.778
New Zealand	0.9609	1.0272	1.6779	2.2047	1.4255	1.6	1.3876	1.2684	1.2349
Norway	5.2415	4.9369	6.2583	8.7967	5.6478	6.2901	6.0445	5.5988	5.8149
Poland	0.00033	0.00442	0.95	4.3457	2.4101	3.1191	3.0145	2.9577	3.2519
Portugal	0.219	0.249	0.71	1.085	0.684	0.7198	0.755	0.7187	0.778
Slovak Republic	0.478	0.474	0.596	1.535	0.709	0.7198	0.755	0.7187	0.778
Slovenia	..	..	..	0.9291	0.684	0.7198	0.755	0.7187	0.778
Spain	0.461	0.431	0.613	1.085	0.684	0.7198	0.755	0.7187	0.778
Sweden	4.517	4.229	5.918	9.161	6.597	7.653	7.202	6.482	6.769
Switzerland	1.7883	1.6761	1.3889	1.6879	1.0836	1.0861	1.0427	0.8889	0.9375
Turkey	0.00002	0.00008	0.00261	0.62522	1.29878	1.54687	1.49897	1.66893	1.79162
United Kingdom	0.5214	0.4302	0.563	0.6606	0.5461	0.6413	0.6475	0.6242	0.6312
United States	1	1	1	1	1	1	1	1	1

Source: IEA/OECD *Energy Prices & Taxes.*

Note: For information on the euro conversion rates before 2000 please see notes in the introductory information.

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Figure 3.1. OECD - Indices of real energy end-use prices
(2005=100)

Figure 3.2. Japan - Indices of real energy end-use prices
(2005=100)

Source: IEA/OECD *Energy Prices & Taxes.*

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Figure 3.3. USA - Indices of real energy end-use prices
(2005=100)

Figure 3.4. OECD Europe - Indices of real energy end-use prices
(2005=100)

Source: IEA/OECD *Energy Prices & Taxes.*

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PART IV

DETAILED OECD ELECTRICITY AND HEAT DATA

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DIRECTORY OF PART IV TABLES

Part IV of *Electricity Information* contains detailed statistical information on electricity and heat for the 34 member countries of the OECD and for OECD/IEA regional aggregates. The tables of regional aggregates are presented before the country tables, which are set out in alphabetical order. As data for some countries were not available for all years (particularly the early years), these aggregate regional table should be used with caution.

A full list of the figures and the tables is set out below. It should be noted that tables are not shown in cases where the data are not applicable. This is particularly the case for tables 13 and 14 which do not appear for countries that do not report electricity trade. However, there are other tables for which the data are not applicable either, and so do not appear.

Figures:

1. Total final consumption by fuel
2. Electricity generation by fuel
3. Electricity consumption by sector
4. Electricity indicators
   - Elec./TFC: relative contribution of electricity to total final energy consumption (1971=100).
   - Elec./GDP: electricity intensity of economic activity (1971=100).
   - Prod./cons.: electricity supply self-sufficiency = Net production / (net production + imports – exports)
   - Elec./population: per capita electricity consumption (1971=100).
   - CO_2/elec.&heat: CO_2 emissions per electricity and heat output (1971=100).
5. Total final electricity consumption by sector

Tables:

1. Energy consumption, GDP and population.
2. Total primary energy supply (TPES) by source.
3. Summary electricity production and consumption.
4. Electricity production and generation by source.
5. Net electricity production by autoproducers.
6. Heat production in transformation processes.

7A. Fuel use for electricity and heat production.

7B. Imputed energy used for electricity and heat production.

8. Electricity production and fuel inputs in electricity plants.
9. Electricity production and heat produced for sale and fuel inputs in CHP plants.
10. Heat produced for sale, and fuel inputs in heat plants.
11. Final consumption of energy by source.
12. Total final industry consumption of energy and electricity.
13. Electricity imports by origin.
14. Electricity exports by destination.
15. Net maximum electricity generating capacity on 31 December.
16. Fuel prices to end-users.

Interpreting energy data and comparing statistics between countries is made difficult by differences in definitions used by countries in the collection and reporting of data. In the section *Introductory Information* such differences are explained. The conventions used by the Secretariat in presenting energy data are also reported in the *Introductory Information*. In particular, readers are strongly advised to read the country notes for historical data. Conversion factors and calorific values are also included for reference.

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OECD TOTAL

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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OECD TOTAL

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	3740.55	4067.62	4522.53	5292.65	5406.24	5304.78	5237.94	1.1	0.7
GDP (billion 2005 USD)	15116.69	18269.37	24792.76	32279.37	37594.92	38239.50	38672.33	3.0	2.0
TPES/GDP(1)	0.25	0.22	0.18	0.16	0.14	0.14	0.14	-1.8	-1.3
Population (millions)	915.75	979.95	1064.03	1151.84	1233.56	1240.51	1246.56	0.9	0.7
TPES/population(2)	4.08	4.15	4.25	4.59	4.38	4.28	4.20	0.2	-0.1
TPES/GDP (2005 = 100)	161	145	119	107	94	90	88	-1.8	-1.3
Ele.TFC/GDP(2005=100)(3)	99	103	102	102	99	97	..	0.2	..
Ele.TFC/population(4)	4121	4859	6033	7245	7629	7532	..	2.3	..
Elec. generated (TWh)(5)	4471.52	5668.23	7629.33	9728.50	10855.18	10802.18	10771.26	3.2	1.6

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**3740.55**	**4067.62**	**4522.53**	**5292.65**	**5406.24**	**5304.78**	**5237.94**	**1.1**	**0.7**
Coal	844.60	965.60	1080.38	1100.71	1085.35	1063.04	1022.42	1.5	-0.3
Oil	1967.44	1945.51	1869.79	2114.38	1960.90	1921.33	1890.91	-0.3	0.1
Natural gas	706.32	778.08	842.72	1155.97	1318.54	1317.24	1347.78	1.0	2.2
Biofuels & waste	87.36	110.62	146.92	182.61	263.97	266.68	270.42	3.1	2.8
Nuclear	49.22	162.25	451.21	586.18	596.49	544.02	508.56	13.9	0.5
Geothermal	6.08	10.19	26.29	30.46	31.62	32.65	33.41	9.0	1.1
Solar, wind, tide(1)	0.05	0.07	2.24	6.39	31.51	39.66	46.30	25.4	14.8
Hydro	78.94	93.96	101.62	115.41	116.25	119.38	119.04	1.5	0.7
Net electricity imports(2)	0.54	1.34	1.29	0.05	0.94	0.15	-1.55	5.3	-
Heat	-	-	0.06	0.49	0.67	0.63	0.66	-	11.7

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net electricity imports between OECD and non-OECD countries.

Note: Please refer to definitions in the introductory information.

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OECD TOTAL

3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**4484.7**	**5684.0**	**7672.4**	**9798.1**	**10575.1**	**10922.6**	**10867.0**	**10833.5**
Nuclear	188.5	620.7	1729.5	2249.1	2351.6	2288.4	2087.0	1951.0
Hydro	931.2	1108.3	1224.7	1411.5	1374.6	1419.1	1452.9	1446.5
of which:								
pumped storage production	*13.2*	*15.7*	*43.0*	*69.6*	*74.3*	*67.4*	*64.8*	*62.2*
Geothermal	6.6	11.1	28.6	33.0	37.6	43.4	44.5	46.0
Solar	-	-	0.7	1.3	4.2	32.3	59.9	93.5
Tide, wave, ocean	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5
Wind	-	0.0	3.8	28.6	93.7	268.6	328.4	371.9
Combustible fuels	3357.9	3943.4	4684.3	6072.6	6704.9	6863.9	6886.4	6917.2
Coal	*1695.2*	*2319.4*	*3092.9*	*3791.3*	*3984.6*	*3735.5*	*3617.7*	*3460.5*
Oil	*1135.7*	*992.9*	*697.3*	*595.0*	*535.7*	*306.1*	*345.3*	*365.4*
Natural gas	*520.3*	*617.9*	*770.3*	*1537.9*	*1986.9*	*2547.1*	*2631.1*	*2788.8*
Biofuels & waste	*6.7*	*13.4*	*123.7*	*148.4*	*197.8*	*275.1*	*292.2*	*302.5*
Other (e.g. fuel cells)	-	-	0.2	1.4	7.8	6.3	7.4	6.9
- Own use by power plant	220.0	294.9	411.9	497.5	488.5	495.8	502.7	..
Net production	**4264.8**	**5389.0**	**7260.5**	**9300.6**	**10086.6**	**10426.7**	**10364.3**	**..**
Nuclear	..	580.1	1634.9	2132.2	2245.1	2182.8	1989.5	..
Hydro	..	1094.9	1211.8	1394.2	1360.8	1409.7	1441.4	..
Geothermal	..	9.7	27.1	31.4	34.3	39.5	40.3	..
Solar	..	-	0.7	1.2	4.1	32.1	59.5	..
Tide, wave, ocean	..	0.5	0.6	0.6	0.6	0.6	0.6	..
Wind	..	0.0	3.8	28.5	93.6	266.7	326.4	..
Combustible fuels	..	3637.2	4381.4	5711.2	6340.9	6489.5	6499.6	..
Other (e.g. fuel cells)	..	-	0.2	1.4	7.2	5.9	7.0	..
- Used for heat pumps	-	-	0.0	2.3	2.0	1.9	1.6	2.0
- Used for electric boilers	-	-	0.8	3.8	2.3	2.2	2.0	2.1
- Used for pumped storage	19.1	25.5	65.7	92.4	99.0	86.4	83.5	85.2
+ Imports	87.7	140.3	258.5	348.4	423.9	386.5	418.1	436.5
- Exports	81.5	124.7	243.6	347.8	408.0	375.5	416.3	454.5
Electrical energy supplied	**4251.9**	**5379.1**	**7208.9**	**9202.7**	**9999.3**	**10347.2**	**10279.0**	**..**
- Transmission & distr. losses	350.5	439.7	583.5	625.1	680.0	667.6	664.0	..
- Statistical difference	-0.0	-0.0	-4.3	-0.4	-2.8	-0.6	-0.2	..
Total consumption	**3901.4**	**4939.4**	**6629.7**	**8578.1**	**9322.1**	**9680.3**	**9615.1**	**..**
- Energy industry consumption[2]	128.9	179.3	212.7	235.4	262.6	272.2	275.0	..
Final consumption	**3772.4**	**4760.1**	**6417.0**	**8342.7**	**9059.5**	**9408.1**	**9340.0**	**..**
Industry	1843.2	2169.5	2583.4	3230.0	3126.9	3043.3	3059.9	..
Transport	61.7	70.5	90.2	106.8	109.9	108.4	107.8	..
Commercial & publ. serv.	727.8	1009.1	1684.5	2407.4	2725.1	2977.1	2959.6	..
Residential	1085.3	1447.9	1973.1	2506.6	2840.4	3020.6	2953.4	..
Agriculture & fishing	44.4	51.1	70.2	82.5	86.5	90.7	93.3	..
Sector non specified	10.1	11.9	15.7	9.3	170.7	168.0	166.1	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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OECD TOTAL

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**4532.54**	**5683.95**	**7672.37**	**9798.08**	**10462.04**	**10922.57**	**10866.96**	**3.3**	**1.7**
- Hydro pumped storage	*10.79*	*15.73*	*43.04*	*69.58*	*64.90*	*67.39*	*64.78*	*9.0*	*2.0*
Total generation(1)	**4521.76**	**5668.23**	**7629.33**	**9728.50**	**10397.14**	**10855.18**	**10802.18**	**3.3**	**1.7**
Main activity producers									
Gross production	4164.92	5314.22	7051.81	9148.30	9792.98	10196.53	10122.88	3.3	1.7
- Hydro pumped storage	*10.79*	*15.73*	*42.96*	*69.48*	*64.87*	*67.36*	*64.74*	*9.0*	*2.0*
Total generation(1)	4154.14	5298.49	7008.85	9078.82	9728.11	10129.16	10058.14	3.3	1.7
Nuclear	237.85	615.44	1722.93	2248.43	2242.14	2288.37	2086.97	13.2	0.9
Hydro	943.20	1011.88	1098.26	1274.48	1266.66	1289.97	1321.89	1.0	0.9
Geothermal	6.97	11.07	21.39	32.70	41.83	43.23	44.26	7.3	3.5
Solar, wind, tide(2)	0.60	0.51	1.42	29.51	235.57	286.32	367.57	5.6	30.3
Coal	1502.86	2185.94	2932.53	3623.53	3476.59	3598.13	3488.95	4.3	0.8
Oil	959.36	884.23	607.61	483.58	233.48	218.33	262.39	-2.8	-3.9
Natural gas	501.26	585.31	618.24	1335.67	2110.63	2263.58	2335.69	1.3	6.5
Biofuels & waste	2.06	4.13	6.48	50.94	121.22	141.23	150.42	7.4	16.2
Autoproducers									
Gross production	367.62	369.73	620.55	649.77	669.06	726.05	744.08	3.3	0.9
- Hydro pumped storage	*-*	*-*	*0.08*	*0.10*	*0.02*	*0.03*	*0.03*	*-*	*-4.1*
Total generation(1)	367.62	369.73	620.48	649.67	669.03	726.01	744.05	3.3	0.9
Nuclear	4.23	5.23	6.52	0.71	-	-	-	2.7	-
Hydro	72.53	80.67	83.39	67.47	59.91	61.78	66.24	0.9	-1.1
Geothermal	-	0.01	7.23	0.27	0.25	0.22	0.21	-	-15.5
Solar, wind, tide(2)	-	-	3.90	2.34	17.06	21.43	28.67	-	10.0
Coal	137.56	133.42	160.42	167.73	116.88	137.33	128.73	1.0	-1.0
Oil	118.10	108.63	89.74	111.39	91.66	87.79	82.96	-1.7	-0.4
Natural gas	29.88	32.54	152.02	202.25	264.48	283.56	295.41	10.7	3.2
Biofuels & waste	5.31	9.24	117.25	97.51	118.80	133.91	141.83	21.3	0.9

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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OECD TOTAL

5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**286879 e**	**280623 e**	**587823 e**	**629732 e**	**645712 e**	**696180 e**	**713644 e**	**0.9**
Total energy	**12901**	**12004**	**47923 e**	**47219 e**	**125402**	**125653**	**125523**	**4.7**
Coal mines	-	-	1	3102 e	9961	10759	9518	54.7
Oil and gas extraction	-	-	857	3549	18166	19442	19308	16.0
Patent fuel plants	-	-	-	-	34	34	24	-
Coke ovens	-	-	-	481 e	502	637	581	-
Gas works	-	-	-	18	-	1135	1112	-
BKB	-	-	13	34	7	6	5	-4.4
Oil refineries	30	27	7887	30625 e	69701	71153	70769	11.0
Energy non specified/other	12871	11977	39165 e	9410 e	27031	22487	24206	-2.3
Total industry	**224583 e**	**213654 e**	**452757 e**	**433193 e**	**416690 e**	**457305 e**	**459877 e**	**0.1**
Iron and steel	25416 e	31657 e	40742 e	58713 e	58577	64607	63185	2.1
Chemical and petrochemical	54090 e	65274 e	80662 e	90729 e	127114 e	140755 e	142120 e	2.7
Non-ferrous metals	7944 e	14797 e	7514 e	19855 e	18809 e	18622 e	18081 e	4.3
Non-metallic minerals	1089 e	2999	9824	17927 e	17691 e	17927 e	17503 e	2.8
Transport equipment	690 e	586 e	812	1338	2341	2687	2593	5.7
Machinery	447 e	481	3494	6157 e	5179 e	5041 e	5027 e	1.7
Mining and quarrying	40859 e	40552 e	21982	18226	8416	8284	9657	-3.8
Food and tobacco	4361 e	5459 e	6324 e	14666 e	25194 e	25080 e	26291 e	7.0
Pulp and printing	12807	26928	38308 e	67137 e	112566 e	115557 e	118570 e	5.5
Wood and wood products	2144 e	2179 e	2869	3760 e	5408	5477	5547	3.2
Construction	-	-	-	354	303	524	674	-
Textile and leather	3604 e	2140 e	2083	9031 e	5571	5867	5338	4.6
Non specified/other industries	71132 e	20602 e	238143 e	125300 e	29521 e	46877 e	45291 e	-7.6
Total transport	**-**	**-**	**1869**	**2468**	**2768**	**2809 e**	**2977 e**	**2.2**
Rail and pipeline	-	-	-	-	44	85	340	-
Transport non specified	-	-	1869	2468	2724	2724 e	2637 e	1.7
Other	**49395 e**	**54965 e**	**85274 e**	**146852 e**	**100852 e**	**110413 e**	**125267 e**	**1.8**
Commerce and pub. services	29 e	36 e	2694 e	14963 e	28958	34202 e	37615	13.4
Residential	-	-	3	82	575	649 e	835	30.7
Agriculture and fishing	5	5	113	2357	12632	14382	15823	26.5
Sector non specified	49361 e	54924 e	82464 e	129450 e	58687 e	61180 e	70994 e	-0.7

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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OECD TOTAL
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**1671338**	**2058990**	**2406777**	**3216737**	**3270877**	**3099307**	**3152624**	**2.0**
Nuclear	..	..	1706	5098	5368	5815	4944	..
Geothermal	..	..	8114	10164	13117	12151	12016	..
Coal	..	..	897865	852463	924247	849432	861783	..
Oil	..	..	221643	311316	259150	227444	226987	..
Natural gas	..	..	942457	1350998	1430885	1365259	1335198	..
Biofuels & waste	..	..	285014	386974	581444	585284	654870	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	7000	..
Chemical processes	..	..	5486	10133	14040	13164	13819	..
Heat pumps	..	..	27439	22962	23974	22056	24081	..
Electric boilers	..	..	13054	7663	7711	6963	7911	..
Other sources(1)	..	..	3999	4242	4012	4784	4015	..
of which:								
Main activity producers								
Total	1141243	1515036	1910079	2239356	2703050	2527935	..	2.5
Nuclear	..	..	1706	5098	5368	5815	..	..
Geothermal	..	..	8063	10044	12999	12083	..	..
Coal	..	..	775819	734868	818731	741124	..	..
Oil	..	..	109101	119540	129726	102128	..	..
Natural gas	..	..	777527	1059002	1243088	1171949	..	..
Biofuels & waste	..	..	197559	279757	460470	464026	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	27288	22832	23791	21852	..	..
Electric boilers	..	..	12992	7658	7700	6958	..	..
Other sources(1)	..	..	24	557	1177	2000	..	..
Autoproducers								
Total	530095	543954	496698	977381	567827	571372	..	0.2
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	51	120	118	68	..	..
Coal	..	..	122046	117595	105516	108308	..	..
Oil	..	..	112542	191776	129424	125316	..	..
Natural gas	..	..	164930	291996	187797	193310	..	..
Biofuels & waste	..	..	87455	107217	120974	121258	..	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	..	..
Chemical processes	..	..	5486	10133	14040	13164	..	..
Heat pumps	..	..	151	130	183	204	..	..
Electric boilers	..	..	62	5	11	5	..	..
Other sources(1)	..	..	3975	3685	2835	2784	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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OECD TOTAL
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**828.99**	**975.66**	**1140.98**	**1392.09**	**1431.74**	**1503.25**	**1499.39**	**1.9**	**1.3**
Coal	447.57	594.75	758.66	894.40	845.86	875.94	852.86	3.2	0.6
Oil	257.79	233.63	153.91	135.45	74.85	71.64	79.04	-3.0	-3.1
Natural gas	120.65	141.64	175.82	315.32	437.26	471.39	483.09	2.2	4.9
Biofuels & waste	2.98	5.64	52.59	46.91	73.77	84.28	84.40	18.4	2.3
of which: ***main activity prod.***									
Total	**..**	**894.37**	**991.02**	**1257.31**	**1309.71**	**1371.14**	**1363.30**	**..**	**1.5**
Coal	..	550.23	711.00	856.85	820.11	845.79	823.07	..	0.7
Oil	..	207.59	135.52	104.80	54.23	51.71	59.17	..	-3.9
Natural gas	..	134.63	140.86	276.45	389.52	420.64	429.38	..	5.5
Biofuels & waste	..	1.92	3.63	19.21	45.85	53.00	51.67	..	13.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**54.94**	**171.86**	**475.62**	**613.94**	**613.18**	**627.33**	**578.26**	**13.5**	**0.9**
Nuclear	49.22	162.25	451.21	586.18	584.44	596.49	544.00	13.9	0.9
Geothermal	5.72	9.61	24.24	27.56	26.85	27.71	28.60	8.9	0.8
Solar	-	-	0.17	0.20	1.89	3.13	5.67	-	18.0
Non-Thermal									
Total	**78.99**	**94.00**	**102.00**	**117.94**	**133.60**	**139.43**	**147.71**	**1.5**	**1.8**
Hydro	78.94	93.96	101.62	115.41	114.08	116.25	119.38	1.5	0.8
Tide, wave, ocean	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.4	-0.3
Wind	-	0.00	0.33	2.46	19.46	23.10	28.24	-	23.6
Other (e.g. fuel cells)	-	-	-	0.02	0.02	0.03	0.04	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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OECD TOTAL

8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	711318	913399 e	1162024 e	1164245	1204076	1165782	1.2
Fuel input (TJ)	17640495	22088240 e	27978350 e	26685572 e	27578040 e	26546843 e	0.9
Electricity production (GWh)	1751965	2296849 e	2922815 e	2782694 e	2890659 e	2770079 e	0.9
Brown coal							
Fuel input (1000 t)	408233	502166 e	507801 e	477443	464714	482413	-0.2
Fuel input (TJ)	3933955	4889155 e	5109453 e	4725121 e	4724615 e	4899849 e	0.0
Electricity production (GWh)	353068	455951 e	489811 e	458844	459055	471945	0.2
Peat							
Fuel input (1000 t)	3534	3814	3532	4326	4932	4560	0.9
Fuel input (TJ)	29600	32308	29815	35038	43602	40607	1.1
Electricity production (GWh)	2236	3025 e	2829	3888	4846	4426	1.8
Coal manufactured gases(1)							
Fuel input (TJ)	582111	540308 e	640573 e	465489	614467	605401	0.5
Electricity production (GWh)	53226 e	54775 e	66956 e	49301	64741 e	63350	0.7
Petroleum products							
Fuel input (1000 t)	222879	145819 e	121300 e	61115 e	56902 e	65914	-3.7
Fuel input (TJ)	9190958	6371949 e	5201193 e	2516948 e	2354181 e	2760112 e	-3.9
Electricity production (GWh)	937560	657101 e	526049 e	267018 e	249128 e	294218 e	-3.8
Natural gas (1)							
Fuel input (TJ)	6252533	6198417 e	10546407 e	15175511	16272846	17079552	4.9
Electricity production (GWh)	587496	610399 e	1143575 e	1851115	1979810	2079552	6.0
Wood and other solid waste							
Fuel input (TJ)	11139	353672 e	344363 e	692216	850828	851324	4.3
Electricity production (GWh)	1405	25568 e	33602	57521	77113	78614	5.5
Industrial waste							
Fuel input (TJ)	24560	33243	60395 e	41625	57867	65200	3.3
Electricity production (GWh)	2585	3403	5510 e	3581	4867	5677	2.5
Municipal waste							
Fuel input (TJ)	35978 e	228784 e	392362 e	528583 e	523055	547055	4.2
Electricity production (GWh)	3105 e	15264	29393 e	38282 e	38590	39309	4.6
Biogases and liquid biofuels							
Fuel input (TJ)	379	40066 e	122042 e	406193 e	519094	383605	11.4
Electricity production (GWh)	32	2989 e	10129 e	34426 e	40041	35766	12.5
Total combustible fuels(2)							
Electricity production (GWh)	3695470	4125324 e	5230669 e	5546670 e	5808850	5842936	1.7

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	95159	102257 e	96621 e	92046	97026	92826	-0.5
Fuel input (TJ)	1933892	2309026 e	2302843 e	2109709 e	2212887 e	2085127 e	-0.5
Electricity production (GWh)	125653	179129 e	199571 e	188227 e	199777 e	186825 e	0.2
CHP Heat production (TJ)	566114 e	608325 e	496976 e	540573 e	560887 e	517011 e	-0.8
Brown coal							
Fuel input (1000 t)	55527	140418 e	95575 e	98112	101897	109569	-1.2
Fuel input (TJ)	452337	1238848 e	899848 e	907723	928403	980135	-1.1
Electricity production (GWh)	25901	87098 e	78293 e	81266	81249	87049	-0.0
CHP Heat production (TJ)	161041	340556 e	181412 e	108304	115964	114890	-5.0
Peat							
Fuel input (1000 t)	3192	2375	3991	5434	6297	5432	4.0
Fuel input (TJ)	26726	25768	40824	58221	65436	55249	3.7
Electricity production (GWh)	4194	2050 e	2995	3915	4557	3925	3.1
CHP Heat production (TJ)	6866	14414 e	23451	34392	38368	32377	3.9
Coal manufactured gases(1)							
Fuel input (TJ)	61263 e	195933 e	290081 e	259058	314467	319061	2.3
Electricity production (GWh)	3120 e	14069 e	27991 e	25332	30577	30078	3.7
CHP Heat production (TJ)	25865 e	34419 e	22497 e	30390	38679 e	40376	0.8
Petroleum products							
Fuel input (1000 t)	16886	10040 e	18654 e	15902	16117	14346	1.7
Fuel input (TJ)	680827 e	407079 e	720185 e	650901	631855	561312	1.5
Electricity production (GWh)	55294	40248 e	68918 e	58121	56993	51129	1.1
CHP Heat production (TJ)	217857 e	108189 e	157724 e	234199 e	217027 e	200782	3.0
Natural gas(1)							
Fuel input (TJ)	396231	1860780 e	3831203 e	4835492	5210560	5047021	4.9
Electricity production (GWh)	30356 e	159862 e	394345 e	523999	567334	551548	6.1
CHP Heat production (TJ)	97176	184493 e	711932 e	1079569	1148274	1115267	8.9
Wood and other solid waste							
Fuel input (TJ)	25368	1266551 e	619077 e	697994	778517	791934	-2.2
Electricity production (GWh)	1970 e	68730 e	51302 e	75238	79510	85220	1.0
CHP Heat production (TJ)	7069 e	13788 e	87940	172732	220211	203208	13.7
Industrial waste							
Fuel input (TJ)	5289	80136	79645	68814	77906	86841	0.4
Electricity production (GWh)	161	4262	7724	6456	6862	7683	2.8
CHP Heat production (TJ)	3077	3693	5176	12250	14371	18005	7.8
Municipal waste							
Fuel input (TJ)	21105	89446 e	194003 e	344755 e	366661	394400	7.3
Electricity production (GWh)	1313 e	2849 e	7805 e	16721 e	18674	20753	9.9
CHP Heat production (TJ)	3895 e	37009 e	92361 e	138878 e	146562	156887	7.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	6882	30605 e	79234 e	93261	161233	16.2
Electricity production (GWh)	-	663	2984	7786 e	9475	19223	17.4
CHP Heat production (TJ)	-	125	3886	10467 e	10965	23372	28.3
Total combustible fuels(2)							
Electricity production (GWh)	247962 e	558960 e	841928 e	987061 e	1055008 e	1043433	3.0
CHP Heat production (TJ)	1137281	1426319 e	1783355 e	2375596 e	2518237	2429130	2.6

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	18562	20089 e	8194 e	6985	8126	7064	-4.9
Fuel input (TJ)	418375	432545 e	181996 e	162356	189889	166363	-4.4
Heat production (TJ)	281870	310440 e	147707 e	120492	150257	125456	-4.2
Brown coal							
Fuel input (1000 t)	4739	2794 e	774 e	690	528	447	-8.4
Fuel input (TJ)	54336	30614 e	10674 e	8751	7374	6604	-7.0
Heat production (TJ)	39968	21859 e	8021 e	5612	5652	5253	-6.6
Peat							
Fuel input (1000 t)	-	1362	796	843	1036	921	-1.8
Fuel input (TJ)	-	14637	8552	8895	10025	9366	-2.1
Heat production (TJ)	-	11601 e	7255	7598	8499	7899	-1.8
Coal manufactured gases(1)							
Fuel input (TJ)	7266	7614 e	13002 e	7563	8728	8927	0.8
Heat production (TJ)	5116 e	5339 e	10546 e	5170	5941	6170	0.7
Petroleum products							
Fuel input (1000 t)	2233	2564 e	1998 e	1067	1231	809	-5.3
Fuel input (TJ)	92509	104787 e	82632 e	44453	51203	33316	-5.3
Heat production (TJ)	70446 e	82539 e	63919 e	35863	42123	26662	-5.2
Natural gas(1)							
Fuel input (TJ)	111244	137036 e	299249 e	336111	383014	353068	4.6
Heat production (TJ)	79694 e	100274 e	230525 e	246227	282611	249992	4.4
Wood and other solid waste							
Fuel input (TJ)	1073	28177 e	63407	111451	133659	134368	7.7
Heat production (TJ)	750 e	23001 e	53577	92057	109297	104847	7.5
Industrial waste							
Fuel input (TJ)	476	261	4693 e	5771	9806	18178	22.4
Heat production (TJ)	323	183	3801 e	3776	6981	14157	23.0
Municipal waste							
Fuel input (TJ)	26121 e	72881 e	46634 e	94001 e	102780	88168	0.9
Heat production (TJ)	14148 e	44560 e	31970 e	56737 e	60857	55485	1.0
Biogases and liquid biofuels							
Fuel input (TJ)	-	1991	7353	13351	15651	11819	8.9
Heat production (TJ)	-	1313	6303	11520	12200	9323	9.8
Total combustible fuels(2)							
Heat production (TJ)	511522 e	601109 e	563624 e	585052 e	684418	605244	0.0

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**2815.60**	**2941.57**	**3108.84**	**3645.36**	**3561.38**	**3715.33**	**3651.43**	**0.6**	**0.8**
Geothermal	0.35	0.51	1.98	2.76	3.43	3.60	3.79	10.6	3.1
Solar thermal	-	0.03	1.80	3.67	4.81	5.07	5.47	-	5.4
Coal	303.31	258.87	235.21	139.46	113.24	126.94	122.48	-1.5	-3.1
Oil	1584.02	1573.54	1592.50	1850.98	1747.04	1779.72	1745.60	0.0	0.4
Natural gas	498.48	558.73	589.07	746.22	698.92	748.50	730.11	1.0	1.0
Biofuels & waste	84.30	104.87	93.81	135.37	166.41	179.07	181.63	0.6	3.2
Electricity	324.43	409.37	551.86	717.47	769.04	809.09	803.24	3.2	1.8
Heat	20.71	35.65	42.60	49.42	58.49	63.34	59.11	4.3	1.6
of which:									
Total industry	**958.20**	**941.62**	**828.89**	**911.89**	**766.58**	**835.81**	**836.36**	**-0.8**	**0.0**
Geothermal	0.03	0.02	0.16	0.31	0.29	0.29	0.29	10.5	2.9
Solar thermal	-	-	0.01	0.10	0.01	0.02	0.02	-	3.4
Coal	182.81	160.30	159.98	119.34	88.33	100.36	98.51	-0.8	-2.3
Oil	313.29	278.70	169.35	145.38	114.16	115.98	111.97	-3.6	-2.0
Natural gas	250.44	250.97	225.78	281.90	234.46	261.89	266.24	-0.6	0.8
Biofuels & waste	42.26	49.61	36.60	70.35	67.04	71.57	72.28	-0.8	3.3
Electricity	158.51	186.58	222.17	277.78	238.27	261.72	263.15	2.0	0.8
Heat	10.86	15.44	14.83	16.73	24.02	23.98	23.89	1.8	2.3
Transport	**695.32**	**782.29**	**940.41**	**1145.99**	**1167.78**	**1191.77**	**1182.06**	**1.8**	**1.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	7.34	2.60	0.29	0.10	0.19	0.18	0.13	-17.3	-3.7
Oil	665.68	756.67	913.67	1111.78	1101.84	1119.86	1107.35	1.9	0.9
Natural gas	17.00	16.96	18.70	20.90	21.40	23.13	23.56	0.6	1.1
Biofuels & waste	0.00	0.00	0.01	4.03	35.13	39.28	41.75	5.4	52.2
Electricity	5.30	6.07	7.76	9.19	9.22	9.32	9.27	2.3	0.9
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**284.66**	**294.02**	**352.90**	**436.17**	**483.51**	**492.27**	**480.74**	**1.3**	**1.5**
Geothermal	0.01	0.02	0.21	0.63	0.64	0.60	0.61	17.9	5.3
Solar thermal	-	-	0.07	0.09	0.25	0.26	0.30	-	7.1
Coal	19.94	20.08	16.20	3.08	4.77	4.02	3.81	-1.2	-6.7
Oil	130.50	105.84	84.38	83.43	63.11	61.15	58.15	-2.5	-1.8
Natural gas	69.96	77.98	100.49	131.48	149.03	153.46	148.45	2.2	1.9
Biofuels & waste	0.81	1.08	0.72	2.73	4.69	4.81	4.84	-0.7	9.5
Electricity	62.59	86.79	144.86	207.04	250.60	256.03	254.52	5.1	2.7
Heat	0.84	2.25	5.97	7.69	10.41	11.95	10.07	12.2	2.5

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**549.16**	**556.43**	**599.12**	**696.31**	**703.66**	**735.88**	**698.69**	**0.5**	**0.7**
Geothermal	0.29	0.45	0.98	1.57	2.24	2.49	2.60	7.4	4.8
Solar thermal	-	0.03	1.71	3.41	4.47	4.69	5.03	-	5.3
Coal	76.67	63.87	47.56	13.82	16.04	18.04	15.96	-2.8	-5.1
Oil	198.68	149.96	120.57	128.30	96.93	96.55	87.90	-2.9	-1.5
Natural gas	144.14	173.92	198.66	257.62	258.60	270.63	253.44	1.9	1.2
Biofuels & waste	28.29	30.09	40.48	55.52	57.59	61.27	59.57	2.1	1.9
Electricity	93.34	124.52	169.69	215.57	248.05	259.77	253.99	3.6	1.9
Heat	7.75	13.60	19.48	20.50	19.75	22.44	20.19	5.6	0.2
Agriculture & fishing	**43.74**	**49.93**	**62.60**	**64.97**	**61.75**	**64.95**	**63.90**	**2.1**	**0.1**
Geothermal	0.02	0.02	0.10	0.25	0.26	0.23	0.23	9.4	4.3
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	17.3
Coal	1.62	1.78	1.78	1.10	1.19	1.42	1.20	0.5	-1.9
Oil	37.71	42.50	48.57	50.12	46.29	48.77	47.87	1.5	-0.1
Natural gas	0.12	0.60	4.34	4.74	3.86	4.34	4.33	23.7	-0.0
Biofuels & waste	0.08	0.14	0.78	1.19	1.94	2.12	2.00	14.3	4.6
Electricity	3.82	4.40	6.04	7.10	7.90	7.80	8.03	2.7	1.4
Heat	0.37	0.49	1.00	0.47	0.29	0.27	0.24	6.0	-6.5
Other	**63.89**	**73.27**	**34.40**	**18.10**	**27.60**	**28.58**	**29.02**	**-3.6**	**-0.8**
Geothermal	-	-	0.54	0.00	0.00	0.00	0.05	-	-10.6
Solar thermal	-	-	0.01	0.06	0.07	0.09	0.12	-	10.2
Coal	11.83	7.96	6.96	0.31	0.23	0.19	0.20	-3.1	-15.6
Oil	26.20	15.30	3.72	4.87	4.88	4.93	5.12	-10.8	1.5
Natural gas	11.25	21.16	5.30	6.47	3.38	4.18	3.34	-4.3	-2.2
Biofuels & waste	12.86	23.95	15.21	1.54	0.03	0.03	1.20	1.0	-11.4
Electricity	0.87	1.02	1.35	0.80	15.00	14.45	14.29	2.6	11.9
Heat	0.88	3.88	1.31	4.04	4.01	4.70	4.71	2.4	6.3
Non-energy use(1)	**220.63**	**244.01**	**290.51**	**371.93**	**350.50**	**366.06**	**360.66**	**1.63**	**1.04**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**2815.60**	**2941.57**	**3108.84**	**3645.36**	**3725.90**	**3561.38**	**3715.33**	**3651.43**
Total industry (Mtoe)	**958.20**	**941.62**	**828.89**	**911.89**	**852.34**	**766.58**	**835.81**	**836.36**
Iron and steel	163.21	136.36	106.42	111.19	102.32	84.74	98.24	100.50
Chem. and petrochemical	104.50	109.93	161.87	188.32	165.87	151.36	164.42	165.98
Non-ferrous metals	30.31	39.08	34.01	50.34	45.10	41.26	43.63	44.17
Non-metallic minerals	67.28	73.35	73.22	90.76	96.21	82.37	86.29	87.39
Transport equipment	14.44	15.24	12.64	25.47	22.42	19.92	22.02	22.36
Machinery	28.40	32.78	46.89	56.18	56.76	50.85	57.75	58.18
Mining and quarrying	13.91	18.90	19.42	21.99	26.83	26.67	31.16	32.34
Food and tobacco	40.02	46.40	50.08	72.52	73.08	68.73	73.36	73.46
Paper, pulp and printing	62.62	63.67	75.65	128.14	122.44	110.69	116.23	113.40
Wood and wood products	6.97	8.73	8.85	21.25	22.66	21.76	23.59	22.56
Construction	10.37	12.47	15.40	15.84	17.32	16.36	17.15	17.78
Textile and leather	24.91	24.28	18.62	25.10	16.04	14.69	15.36	15.01
Non specified/other	391.27	360.43	205.81	104.79	85.29	77.19	86.61	83.22
Electricity consumption (Mtoe)	**324.43**	**409.37**	**551.86**	**717.47**	**801.61**	**769.04**	**809.09**	**803.24**
Total industry (Mtoe)	**158.51**	**186.58**	**222.17**	**277.78**	**266.02**	**238.27**	**261.72**	**263.15**
Iron and steel	22.13	24.88	25.92	29.83	30.86	26.55	29.97	31.12
Chem. and petrochemical	32.88	35.45	44.39	51.44	49.81	44.69	49.05	49.49
Non-ferrous metals	19.48	24.15	20.32	26.01	27.07	24.50	25.90	26.35
Non-metallic minerals	8.01	9.73	12.10	14.57	15.52	13.82	14.67	15.04
Transport equipment	5.79	6.91	6.65	10.95	10.39	9.14	10.04	10.23
Machinery	10.38	12.87	25.08	28.65	30.98	27.89	32.49	33.18
Mining and quarrying	4.88	5.74	8.98	10.20	9.85	8.37	9.98	10.29
Food and tobacco	7.33	9.55	13.85	18.21	20.36	19.45	20.41	20.77
Paper, pulp and printing	14.11	17.04	28.56	34.25	32.05	28.73	30.06	29.88
Wood and wood products	2.81	3.62	4.37	5.00	5.16	4.49	4.78	4.76
Construction	0.58	0.87	1.26	1.40	1.96	1.90	1.98	1.89
Textile and leather	7.38	7.70	8.27	9.11	6.92	6.23	6.74	6.71
Non specified/other	22.75	28.07	22.42	38.17	25.09	22.50	25.66	23.45
Total industry (TWh)	**1843.18**	**2169.54**	**2583.37**	**3229.95**	**3093.29**	**2770.54**	**3043.29**	**3059.89**
Iron and steel	257.27	289.32	301.40	346.82	358.86	308.75	348.47	361.91
Chem. and petrochemical	382.38	412.22	516.16	598.10	579.16	519.69	570.30	575.42
Non-ferrous metals	226.53	280.80	236.26	302.43	314.77	284.89	301.18	306.40
Non-metallic minerals	93.12	113.17	140.74	169.37	180.51	160.69	170.58	174.89
Transport equipment	67.37	80.34	77.33	127.35	120.76	106.29	116.74	118.90
Machinery	120.69	149.63	291.67	333.10	360.24	324.36	377.73	385.86
Mining and quarrying	56.74	66.74	104.38	118.62	114.55	97.30	116.08	119.60
Food and tobacco	85.28	111.08	161.07	211.77	236.70	226.14	237.29	241.46
Paper, pulp and printing	164.09	198.11	332.04	398.21	372.70	334.08	349.52	347.42
Wood and wood products	32.68	42.13	50.79	58.13	60.04	52.16	55.58	55.39
Construction	6.77	10.10	14.64	16.30	22.76	22.06	23.05	22.00
Textile and leather	85.78	89.50	96.17	105.95	80.47	72.47	78.34	78.01
Non specified/other	264.49	326.41	260.74	443.81	291.76	261.66	298.43	272.62

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**87744**	**140286**	**258539**	**259722**	**348390**	**409049**	**384517**	**386520**	**418086**
Imports from:									
Total from OECD	**36025**	**74734**	**212870**	**249448**	**333916**	**376372**	**349679**	**351970**	**385289**
Austria	498	991	6910	8924	16332	18077	22360	20511	19594
Belgium	89	7810	4488	3550	4452	6544	11289	11826	10652
Canada	16848	30181	20555	44503	48515	55732	51109	43763	51077
Czech Republic	-	-	2975	6116	18634	19986	22225	21449	27497
Denmark	289	1372	4940	5648	8177	11006	10174	11741	10229
Estonia	-	-	-	-	-	2250	1785	1967	1650
Finland	260	1163	362	276	1004	3226	3220	4983	3663
France	2496	4338	55503	77740	77719	56967	43322	48741	64186
Germany	1238	5067	22161	27167	39909	59782	51146	56858	52515
Greece	-	-	-	-	-	209	2192	2312	2553
Hungary	-	-	212	622	843	722	238	696	703
Ireland	-	-	-	30	41	152	85	146	120
Italy	318	736	253	384	476	3464	1536	1217	1859
Luxembourg	-	-	965	778	738	1629	1868	1845	1532
Mexico	-	-	1951	2257	77	1287	1082	1320	1224
Netherlands	215	3906	3499	3902	4031	9272	10511	12772	11758
Norway	5401	1503	16413	8573	20486	15700	13867	5776	13119
Poland	-	828	7878	7150	9658	9632	9820	7514	11958
Portugal	78	514	1697	1742	3767	1314	2801	3189	3930
Slovak Republic	303	549	778	2484	8825	7487	6063	5017	8144
Slovenia	-	-	1363	816	4554	5599	7240	8066	5178
Spain	2239	3631	3606	3031	5293	12405	9941	9315	9200
Sweden	20	1321	14605	8627	12955	16480	10632	14581	20921
Switzerland	3071	7247	23354	26496	29785	31559	32365	31676	31069
Turkey	-	-	-	-	-	-	-	736	2590
United Kingdom	96	19	45	46	1234	1676	4299	4870	2810
United States	2566	3558	18357	8586	16411	24215	18509	19083	15558
Total from non-OECD	**5384**	**11425**	**18244**	**10274**	**12985**	**29829**	**31991**	**32270**	**29934**
Albania	-	151	165	198	50	-	61	404	4
Azerbaijan	-	-	-	-	-	94	125	156	330
Belarus	-	-	-	-	163	554	-	-	-
Bulgaria	-	750	320	652	4364	4628	3418	3454	4918
Croatia	-	-	1	59	403	4921	5198	6586	4602
F.Y.R. of Macedonia	-	-	-	-	-	1188	3810	3856	1488
Georgia	-	649	176	-	204	215	182	303	219
Lativia	-	-	-	-	-	83	562	664	815
Lithuania	-	-	-	-	120	1207	2328	172	374
Romania	1428	955	-	283	-	720	586	1252	866
Russian Federation	46	49	4531	5084	4893	11059	11931	11847	10968
Serbia	115	545	891	496	612	-	75	544	267
Turkmenistan	-	-	-	-	-	450	505	685	1074
Ukraine	3795	8326	12160	3502	2176	4710	3210	2347	4009
Non-specified/others	**46335**	**54127**	**27425**	**-**	**1489**	**2848**	**2847**	**2280**	**2863**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports (1)	**81441**	**124551**	**243561**	**256630**	**347815**	**401551**	**375508**	**375537**	**416290**
Exports to:									
Total to OECD	**45184**	**71313**	**211265**	**250385**	**332184**	**375785**	**350007**	**352479**	**384099**
Austria	614	1067	7789	9751	15198	23206	22337	22388	27201
Belgium	1320	1086	2322	6058	11557	17021	9507	12427	13314
Canada	2570	3461	19936	7992	12685	23499	17490	18482	14385
Czech Republic	-	-	47	4405	8699	8523	8234	6685	10440
Denmark	918	1841	12106	3825	8571	12432	10490	10260	11549
Estonia	-	-	-	-	-	10	87	246	484
Finland	4136	678	6481	3873	8365	4671	3104	3684	6975
France	2686	9845	7019	3256	3676	10563	19460	20463	9482
Germany	3211	3930	24998	39439	45612	38627	38127	40816	47890
Greece	-	-	-	-	-	1810	311	67	2064
Hungary	-	-	233	1288	7826	8304	7407	5946	9747
Ireland	-	-	-	-	133	373	452	378	366
Italy	761	1425	34226	38000	42078	43585	47259	46298	47768
Luxembourg	913	1073	4364	5651	6409	5666	5000	5384	5562
Mexico	-	-	590	1154	1993	699	648	625	653
Netherlands	1288	10	12657	15497	21835	25231	15562	15486	20829
Norway	165	991	407	1911	1231	1824	4815	13258	10074
Poland	-	4	13	4088	2494	7673	7071	6173	6676
Portugal	132	2342	1734	2661	4698	10753	7608	5823	6744
Slovak Republic	552	3652	4602	2101	5967	7830	8762	6695	10813
Slovenia	-	-	2089	2805	3307	1309	2594	2136	2452
Spain	322	2337	3209	7632	12271	5884	6782	5191	7927
Sweden	5256	1825	12749	8221	17688	14686	15468	16801	13985
Switzerland	3893	5540	21694	19083	24070	31317	30751	32796	34286
Turkey	-	-	-	-	-	30	-	-	-
United Kingdom	161	22	11925	16330	14768	13722	7888	8583	10037
United States	16286	30184	20075	45364	51053	56537	52793	45388	52396
Total to non-OECD	**60**	**193**	**1891**	**4840**	**11212**	**13922**	**13038**	**10756**	**19024**
Albania	-	-	541	391	1111	1657	1035	491	2125
Azerbaijan	-	-	-	495	437	-	-	-	20
Belarus	-	-	-	-	-	-	-	-	18
Bulgaria	-	-	573	9	205	-	-	-	622
Croatia	-	-	-	2398	7079	7523	6883	5690	9290
F.Y.R. of Macedonia	-	-	-	-	-	95	6	8	109
Georgia	-	-	122	178	-	54	-	-	-
Lativia	-	-	-	529	813	572	1724	2695	2084
Lithuania	-	-	-	-	-	-	-	-	1482
Romania	2	15	256	88	-	105	308	146	340
Russian Federation	-	-	-	477	374	-	-	-	-
Serbia	58	154	389	258	1189	2653	1364	392	697
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	24	10	17	4	1263	1718	1334	2237
Non-specified/others	**36197**	**53045**	**30405**	**1405**	**4419**	**11844**	**12463**	**12302**	**13167**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total Capacity [1]	**924.78**	**1291.09**	**1599.95**	**1749.07**	**1786.69**	**2353.47**	**2408.78**	**2470.98**	**2524.34**
Nuclear	52.37	119.91	265.84	295.27	302.58	312.94	312.85	313.54	306.75
Hydro	166.67	282.05	357.69	391.94	406.82	436.20	439.62	442.71	447.79
of which: pumped storage	*2.36*	*17.99*	*50.02*	*83.68*	*86.19*	*94.98*	*95.53*	*95.83*	*98.08*
Geothermal	0.64	1.87	3.37	3.78	5.35	5.59	5.85	6.03	6.06
Solar	-	-	0.01	0.05	0.60	10.34	16.80	30.37	51.42
Tide, wave, ocean	0.24	0.24	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Wind	-	-	0.41	1.12	14.82	92.31	113.30	128.71	145.99
Other (e.g. fuel cells)	-	-	-	0.08	0.17	0.45	0.48	1.63	2.88
Combustible fuels	704.86	887.02	972.36	1056.57	1056.10	1495.39	1519.63	1547.74	1563.19
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993, Korea before 1994 and for Slovak Republic before 1995.

(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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OECD TOTAL

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total Capacity [1]	**68.54**	**75.93**	**128.08**	**167.27**	**292.23**	**158.41**	**164.02**	**181.77**	**189.24**
Nuclear	0.55	1.01	0.95	0.70	0.17	-	-	-	-
Hydro	12.13	14.24	16.34	18.34	17.04	11.00	10.84	14.00	13.83
of which: pumped storage	-	-	*0.07*	*0.23*	*0.27*	*0.12*	*0.11*	*0.10*	*0.10*
Geothermal	-	0.04	1.09	1.27	0.05	0.04	0.04	0.04	0.04
Solar	-	-	0.34	0.48	0.58	3.61	4.98	7.81	13.32
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	1.97	3.09	0.58	3.66	5.27	5.43	5.63
Other (e.g. fuel cells)	-	-	-	0.11	0.03	0.64	0.67	3.21	3.29
Combustible fuels	55.87	60.64	107.38	143.28	273.78	139.46	142.22	151.28	153.13
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993, Korea before 1996 and Slovak Republic before 2001.
(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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OECD AMERICAS

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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OECD AMERICAS

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	1950.36	2101.23	2260.06	2695.34	2676.34	2662.78	2609.74	0.9	0.7
GDP (billion 2005 USD)	5644.82	6859.32	9313.37	13027.43	15264.97	15574.72	15935.79	3.0	2.5
TPES/GDP(1)	0.35	0.31	0.24	0.21	0.18	0.17	0.16	-2.1	-1.8
Population (millions)	297.82	329.13	372.30	426.78	469.29	473.01	477.48	1.3	1.1
TPES/population(2)	6.55	6.38	6.07	6.32	5.70	5.63	5.47	-0.4	-0.5
TPES/GDP (2005 = 100)	182	161	128	109	92	90	86	-2.1	-1.8
Ele.TFC/GDP(2005=100)(3)	112	115	112	105	98	97	..	-0.0	..
Ele.TFC/population(4)	6470	7281	8511	9798	9743	9713	..	1.6	..
Elec. generated (TWh)(5)	2281.46	2879.31	3819.06	4875.74	5287.73	5325.05	5291.75	3.1	1.5

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**1950.36**	**2101.23**	**2260.06**	**2695.34**	**2676.34**	**2662.78**	**2609.74**	**0.9**	**0.7**
Coal	329.35	400.40	490.44	575.46	539.02	513.96	460.69	2.4	-0.3
Oil	934.32	954.97	920.09	1058.95	1003.58	983.90	964.27	-0.1	0.2
Natural gas	562.81	542.19	517.22	655.94	692.33	713.08	740.58	-0.5	1.6
Biofuels & waste	52.84	70.81	82.10	98.59	114.62	117.93	116.61	2.6	1.6
Nuclear	27.31	79.77	179.55	229.00	243.79	241.08	235.83	11.7	1.2
Geothermal	2.25	5.39	18.51	18.16	14.10	14.15	14.59	13.2	-1.1
Solar, wind, tide(1)	-	-	0.34	2.15	11.05	13.70	16.70	-	19.4
Hydro	41.44	47.70	51.80	57.05	57.83	64.90	61.16	1.3	0.8
Net electricity imports(2)	0.05	0.01	0.02	0.03	0.02	0.07	-0.68	-4.4	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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OECD AMERICAS

3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**2281.6**	**2879.4**	**3835.0**	**4902.6**	**5216.8**	**5311.9**	**5348.1**	**5310.0**
Nuclear	104.4	304.2	687.5	878.7	913.6	935.5	925.1	904.9
Hydro	481.9	554.8	618.2	690.3	715.8	696.6	777.8	729.3
of which:								
pumped storage production	*0.1*	*0.1*	*15.9*	*26.9*	*25.6*	*24.2*	*23.1*	*18.2*
Geothermal	2.6	6.3	21.1	20.5	24.1	24.2	24.4	25.4
Solar	-	-	0.7	0.7	1.1	4.1	6.4	15.3
Tide, wave, ocean	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Wind	-	-	3.1	5.9	19.4	105.4	133.0	156.3
Combustible fuels	1692.6	2014.1	2504.4	3306.4	3542.2	3545.0	3479.1	3476.4
Coal	*943.7*	*1304.6*	*1796.2*	*2275.0*	*2304.2*	*2127.0*	*2005.5*	*1775.0*
Oil	*362.1*	*317.5*	*210.9*	*229.2*	*226.8*	*107.9*	*100.8*	*97.5*
Natural gas	*386.5*	*390.2*	*406.0*	*719.7*	*925.9*	*1220.7*	*1277.4*	*1506.5*
Biofuels & waste	*0.3*	*1.9*	*91.3*	*82.6*	*85.3*	*89.4*	*95.5*	*97.4*
Other (e.g. fuel cells)	-	-	-	-	0.6	1.0	2.3	2.3
- Own use by power plant	109.2	150.6	209.6	266.2	239.9	252.0	253.6	..
Net production	**2172.4**	**2728.8**	**3625.3**	**4636.5**	**4976.9**	**5059.9**	**5094.5**	**..**
Nuclear	..	287.0	648.6	830.5	879.1	898.2	888.2	..
Hydro	..	551.5	612.3	681.1	709.1	693.7	773.8	..
Geothermal	..	5.9	20.0	19.7	21.6	21.5	21.6	..
Solar	..	-	0.7	0.7	1.1	4.0	6.3	..
Tide, wave, ocean	..	-	0.0	0.0	0.0	0.0	0.0	..
Wind	..	-	3.0	5.9	19.3	104.9	132.2	..
Combustible fuels	..	1884.4	2340.7	3098.5	3346.1	3336.7	3270.3	..
Other (e.g. fuel cells)	..	-	-	-	0.6	1.0	2.1	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.3	0.2	22.8	32.0	32.2	29.8	29.1	29.1
+ Imports	19.4	33.7	40.9	66.2	66.4	65.1	68.6	65.8
- Exports	18.9	33.6	40.6	65.9	64.6	64.8	67.7	73.7
Electrical energy supplied	**2172.7**	**2728.7**	**3602.8**	**4604.9**	**4946.5**	**5030.4**	**5066.3**	**..**
- Transmission & distr. losses	194.5	254.2	347.7	307.8	353.8	335.2	344.5	..
- Statistical difference	-0.0	-	-6.5	-0.1	-1.3	-1.4	0.5	..
Total consumption	**1978.3**	**2474.5**	**3261.6**	**4297.2**	**4594.0**	**4696.6**	**4721.3**	**..**
- Energy industry consumption[2]	52.0	78.8	94.2	117.1	130.2	126.0	128.7	..
Final consumption	**1926.3**	**2395.7**	**3167.4**	**4180.1**	**4463.8**	**4570.6**	**4592.6**	**..**
Industry	774.5	918.4	1098.0	1470.6	1272.5	1233.1	1266.9	..
Transport	8.1	6.0	8.4	10.3	13.1	13.1	13.1	..
Commercial & publ. serv.	481.5	640.6	958.8	1308.2	1436.7	1503.2	1507.0	..
Residential	641.0	814.1	1078.6	1373.0	1561.0	1651.3	1637.9	..
Agriculture & fishing	18.5	11.6	15.4	17.7	18.4	18.1	20.7	..
Sector non specified	2.7	4.9	8.1	0.3	162.0	151.8	147.0	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**2291.24**	**2879.41**	**3834.98**	**4902.63**	**5124.03**	**5311.91**	**5348.11**	**3.3**	**1.6**
- Hydro pumped storage	*0.11*	*0.10*	*15.92*	*26.89*	*22.93*	*24.18*	*23.06*	*36.7*	*1.8*
Total generation(1)	**2291.13**	**2879.31**	**3819.06**	**4875.74**	**5101.10**	**5287.73**	**5325.05**	**3.2**	**1.6**
Main activity producers									
Gross production	2246.32	2832.59	3557.57	4649.55	4890.82	5066.02	5091.10	2.9	1.7
- Hydro pumped storage	*0.11*	*0.10*	*15.92*	*26.89*	*22.93*	*24.18*	*23.06*	*36.7*	*1.8*
Total generation(1)	2246.21	2832.49	3541.65	4622.66	4867.89	5041.84	5068.04	2.9	1.7
Nuclear	135.95	304.22	687.38	878.74	930.80	935.47	925.08	10.7	1.4
Hydro	503.81	522.54	564.08	627.48	661.76	642.75	721.18	0.7	1.2
Geothermal	3.06	6.27	14.22	20.52	23.79	24.20	24.40	10.1	2.6
Solar, wind, tide(2)	-	-	0.03	6.50	82.30	105.80	135.14	-	49.3
Coal	900.56	1304.48	1768.88	2218.76	2003.86	2101.28	1983.92	4.3	0.5
Oil	344.74	308.69	202.87	215.75	101.40	90.40	84.48	-3.3	-4.1
Natural gas	357.82	385.83	301.99	621.51	1026.14	1102.75	1154.99	-1.1	6.6
Biofuels & waste	0.26	0.46	2.21	33.41	37.85	39.21	38.86	14.2	14.6
Autoproducers									
Gross production	44.92	46.83	277.41	253.08	233.21	245.89	257.01	12.1	-0.4
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	44.92	46.83	277.41	253.08	233.21	245.89	257.01	12.1	-0.4
Nuclear	-	-	0.12	-	-	-	-	-	-
Hydro	34.00	32.14	38.21	35.88	34.49	29.71	33.52	0.7	-0.6
Geothermal	-	-	6.92	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	3.73	0.20	2.63	4.79	6.62	-	2.8
Coal	0.20	0.09	27.29	56.23	19.45	25.73	21.61	36.2	-1.1
Oil	7.94	8.85	8.08	13.46	17.32	17.49	16.30	0.1	3.4
Natural gas	2.74	4.34	103.98	98.17	110.15	117.94	122.38	25.5	0.8
Biofuels & waste	0.05	1.41	89.08	49.14	49.18	50.24	56.59	60.5	-2.1

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**11574**	**15832**	**261619 e**	**245182 e**	**221687 e**	**231073 e**	**242727 e**	**-0.4**
Total energy	**-**	**-**	**-**	**8506 e**	**42804**	**38770**	**39441**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	2028	10613	10999	10716	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	2275	20267	21111	21359	-
Energy non specified/other	-	-	-	4203 e	11924	6660	7366	-
Total industry	**5924**	**7991**	**220329**	**117727 e**	**120037**	**131059**	**134122**	**-2.3**
Iron and steel	-	-	-	953	577	647	605	-
Chemical and petrochemical	-	-	-	2866	56143	61848	64262	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	243	256	291	-
Transport equipment	-	-	-	-	254	208	168	-
Machinery	-	-	-	-	51	43	57	-
Mining and quarrying	-	-	-	185	3239	3122	3688	-
Food and tobacco	-	-	-	906	6437	7258	7777	-
Pulp and printing	-	-	838	1628	45113	44523	46407	21.1
Wood and wood products	-	-	-	-	1329	1356	1273	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	75	438	633	275	-
Non specified/other industries	5924	7991	219491	111114 e	6213	11165	9319	-14.0
Total transport	**-**	**-**	**-**	**-**	**381**	**412**	**393**	**-**
Rail and pipeline	-	-	-	-	1	2	3	-
Transport non specified	-	-	-	-	380	410	390	-
Other	**5650**	**7841**	**41290 e**	**118949 e**	**58465**	**60832**	**68771**	**2.5**
Commerce and pub. services	-	-	23	720	7910	8138	8421	32.5
Residential	-	-	-	-	22	103	141	-
Agriculture and fishing	-	-	-	-	254	270	280	-
Sector non specified	5650	7841	41267 e	118229 e	50279 e	52321 e	59929 e	1.8

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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OECD AMERICAS
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**43140**	**129895**	**359761**	**290819**	**529891**	**532822**	**532822**	**7.0**
Nuclear	..	..	-	-	-	-	-	..
Geothermal	..	..	-	-	-	-	-	..
Coal	..	..	81572	50316	102689	96134	96134	..
Oil	..	..	9181	29596	37621	38342	38342	..
Natural gas	..	..	239876	192185	343425	353704	353704	..
Biofuels & waste	..	..	29132	18722	46156	44642	44642	..
Non-spec. comb. fuels	..	..	-	-	-	-	-	..
Chemical processes	..	..	-	-	-	-	-	..
Heat pumps	..	..	-	-	-	-	-	..
Electric boilers	..	..	-	-	-	-	-	..
Other sources(1)	..	..	-	-	-	-	-	..
of which:								
Main activity producers								
Total	43140	114236	357747	288805	527779	530710	..	7.6
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	81572	50316	102689	96134	..	..
Oil	..	..	9181	29596	37621	38342	..	..
Natural gas	..	..	239876	192185	343425	353704	..	..
Biofuels & waste	..	..	27118	16708	44044	42530	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	-	-	-	-	..	..
Other sources(1)	..	..	-	-	-	-	..	..
Autoproducers								
Total	-	15659	2014	2014	2112	2112	..	-9.1
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	-	-	-	-	..	..
Oil	..	..	-	-	-	-	..	..
Natural gas	..	..	-	-	-	-	..	..
Biofuels & waste	..	..	2014	2014	2112	2112	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	-	-	-	-	..	..
Other sources(1)	..	..	-	-	-	-	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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OECD AMERICAS
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**403.84**	**472.17**	**602.00**	**770.35**	**725.35**	**765.57**	**747.10**	**2.4**	**1.0**
Coal	225.57	307.54	419.53	535.48	468.93	493.46	466.47	3.7	0.5
Oil	88.70	74.04	46.64	55.92	26.82	24.80	23.26	-3.7	-3.3
Natural gas	89.29	90.22	95.10	154.56	206.73	223.42	232.48	0.4	4.3
Biofuels & waste	0.29	0.38	40.73	24.39	22.87	23.89	24.88	33.9	-2.3
of which: ***main activity prod.***									
Total	**..**	**470.59**	**531.21**	**713.37**	**690.08**	**727.46**	**707.46**	**..**	**1.4**
Coal	..	307.52	414.63	523.23	465.71	488.87	462.49	..	0.5
Oil	..	73.26	45.95	43.06	22.84	20.91	19.61	..	-4.0
Natural gas	..	89.70	70.05	136.52	187.96	203.68	211.48	..	5.4
Biofuels & waste	..	0.11	0.57	10.57	13.56	14.00	13.88	..	16.4

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**29.55**	**85.16**	**197.89**	**246.80**	**256.64**	**258.13**	**255.68**	**11.8**	**1.2**
Nuclear	27.31	79.77	179.55	229.00	242.57	243.79	241.08	11.7	1.4
Geothermal	2.25	5.39	18.17	17.64	13.73	13.88	13.93	13.1	-1.3
Solar	-	-	0.17	0.15	0.34	0.47	0.67	-	6.7
Non-Thermal									
Total	**41.44**	**47.70**	**52.06**	**57.56**	**66.89**	**66.90**	**76.35**	**1.4**	**1.8**
Hydro	41.44	47.70	51.80	57.05	59.88	57.83	64.90	1.3	1.1
Tide, wave, ocean	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Wind	-	-	0.26	0.51	7.01	9.07	11.44	-	19.7
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	491980	644211 e	833576 e	796802	835041	790914	1.0
Fuel input (TJ)	12599183	15692502 e	19835501 e	17634525 e	18547173 e	17402056 e	0.5
Electricity production (GWh)	1231374	1615092 e	2033675 e	1823020 e	1916324 e	1795642 e	0.5
Brown coal							
Fuel input (1000 t)	53059	100889	108847	95454	99738	103874	0.1
Fuel input (TJ)	802220	1553703 e	1667206 e	1467902 e	1538642 e	1604985 e	0.2
Electricity production (GWh)	73154	143310	154372	149091	154783	159340	0.5
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	452	623 e	29002 e	8652	12136	12171	15.2
Electricity production (GWh)	41 e	51	2073	696	938	924	14.8
Petroleum products							
Fuel input (1000 t)	76937	48835	53101	25376	24325	22922	-3.5
Fuel input (TJ)	3354324	2194255 e	2296620 e	1023781 e	964676 e	910367 e	-4.1
Electricity production (GWh)	317538	205496	215265	102493	94409	88609	-3.9
Natural gas (1)							
Fuel input (TJ)	4238108	3278187	5113391	7710599	8351602	8828270	4.8
Electricity production (GWh)	390174	306647	501519	922950	997362	1054460	6.1
Wood and other solid waste							
Fuel input (TJ)	11139	258964 e	215975 e	255627	286704	294182	0.6
Electricity production (GWh)	1405	15368	19532	19681	21699	22844	1.9
Industrial waste							
Fuel input (TJ)	-	9138	10421	15050	21683	22084	4.3
Electricity production (GWh)	-	749	923	1426	1598	1668	3.9
Municipal waste							
Fuel input (TJ)	-	162000 e	219034 e	242100 e	241385	249665	2.1
Electricity production (GWh)	-	9693	14561 e	14967 e	14945	15297	2.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	30950 e	58676 e	101466 e	109587	116749	6.5
Electricity production (GWh)	-	2517 e	4630 e	8791 e	9612	10372	7.0
Total combustible fuels(2)							
Electricity production (GWh)	2014143	2298923 e	2946550 e	3043115	3211670	3149156	1.5

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	11445 e	30402 e	22012	23375	21865	3.1
Fuel input (TJ)	-	302045 e	788540 e	489858 e	524444 e	471610 e	2.1
Electricity production (GWh)	-	35063 e	75408 e	48127 e	51750 e	46120 e	1.3
CHP Heat production (TJ)	-	19742 e	81572 e	95870 e	95149 e	89528 e	7.5
Brown coal							
Fuel input (1000 t)	-	1096 e	1246 e	-	-	13	-19.0
Fuel input (TJ)	-	16154 e	18583 e	-	-	101	-21.5
Electricity production (GWh)	-	2651 e	3134 e	-	-	9	-23.7
CHP Heat production (TJ)	-	258 e	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	83858 e	32604	38442	40727	-
Electricity production (GWh)	-	-	6323	2370	3207	3493	-
CHP Heat production (TJ)	-	-	-	8167	7540	6606	-
Petroleum products							
Fuel input (1000 t)	283	77	4020	3275	2391	2193	17.3
Fuel input (TJ)	12311 e	3190	145721	126539	96424	88027	17.1
Electricity production (GWh)	-	5451	13940	16224	13481	12172	3.9
CHP Heat production (TJ)	8618 e	2943	9181 e	41029	37621	38342	13.0
Natural gas(1)							
Fuel input (TJ)	-	1147018	2078966	1909069	1975939	1989670	2.7
Electricity production (GWh)	-	99324	218156	213336	223326	222905	3.9
CHP Heat production (TJ)	-	7601	239876 e	365014	343425	353704	20.1
Wood and other solid waste							
Fuel input (TJ)	-	1157395 e	402284	253600	246418	258687	-6.9
Electricity production (GWh)	-	57969	33015	34501	33610	36779	-2.1
CHP Heat production (TJ)	-	-	9489	30839	26954	23028	-
Industrial waste							
Fuel input (TJ)	-	71583	58985	38004	44934	49986	-1.7
Electricity production (GWh)	-	3961	6247	4106	4772	5227	1.3
CHP Heat production (TJ)	-	-	187	3818	3807	4927	-
Municipal waste							
Fuel input (TJ)	-	13083 e	40737 e	34740 e	31454	30148	4.1
Electricity production (GWh)	-	1037 e	2319 e	2106 e	1842	1761	2.6
CHP Heat production (TJ)	-	633 e	15884 e	12437 e	12063	12715	15.4
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	12790	14568 e	15380	17502	-
Electricity production (GWh)	-	-	1325	1443 e	1371	1503	-
CHP Heat production (TJ)	-	-	2191	1049 e	1921	2561	-
Total combustible fuels(2)							
Electricity production (GWh)	-	205456 e	359867 e	322213 e	333359	329969	2.3
CHP Heat production (TJ)	22654	112485 e	358380 e	558223 e	528480	531411	7.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD AMERICAS
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	2629 e	2629 e	2591 e	2591	2591	-0.1
Heat production (TJ)	-	1381 e	1381 e	1411 e	1411	1411	0.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Heat production (TJ)	-	1381 e	1381 e	1411 e	1411	1411	0.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD AMERICAS
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**1493.06**	**1539.57**	**1547.87**	**1854.53**	**1782.98**	**1855.43**	**1848.93**	**0.2**	**0.8**
Geothermal	-	-	0.34	0.52	0.22	0.22	0.22	-	-2.0
Solar thermal	-	-	0.02	1.48	1.54	1.51	1.58	-	24.0
Coal	81.58	62.67	61.13	38.22	28.35	32.34	29.77	-1.7	-3.4
Oil	795.17	812.85	808.78	945.05	906.34	936.29	924.14	0.1	0.6
Natural gas	398.00	386.57	361.35	429.54	377.15	394.43	398.30	-0.6	0.5
Biofuels & waste	52.56	70.43	41.07	74.14	86.53	90.45	92.77	-1.4	4.0
Electricity	165.66	206.03	272.40	359.49	375.18	393.07	394.97	3.0	1.8
Heat	0.10	1.03	2.79	6.09	7.67	7.12	7.19	21.9	4.6
of which:									
Total industry	**455.93**	**462.45**	**360.80**	**421.82**	**344.41**	**380.10**	**382.34**	**-1.4**	**0.3**
Geothermal	-	-	-	0.11	0.11	0.11	0.11	-	-
Solar thermal	-	-	0.00	0.00	0.01	0.01	0.01	-	10.3
Coal	66.97	54.39	50.99	35.65	25.95	30.13	27.79	-1.6	-2.8
Oil	90.97	108.36	59.82	41.65	43.24	45.91	45.80	-2.4	-1.3
Natural gas	195.44	178.19	137.56	166.87	134.66	151.44	153.48	-2.0	0.5
Biofuels & waste	35.84	41.52	17.36	46.09	39.12	40.72	40.42	-4.2	4.1
Electricity	66.61	78.98	94.43	126.47	95.09	106.05	108.95	2.1	0.7
Heat	0.10	1.00	0.63	4.98	6.25	5.73	5.79	11.7	11.1
Transport	**462.11**	**494.48**	**562.26**	**682.20**	**689.93**	**713.15**	**707.51**	**1.2**	**1.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.25	0.05	-	-	-	-	-	-	-
Oil	444.32	477.53	543.23	658.05	648.50	667.72	659.94	1.2	0.9
Natural gas	16.84	16.38	18.31	19.95	17.33	18.79	19.06	0.5	0.2
Biofuels & waste	-	-	-	3.32	22.96	25.50	27.38	-	-
Electricity	0.69	0.52	0.72	0.88	1.14	1.13	1.13	0.2	2.1
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**166.42**	**162.96**	**182.95**	**224.52**	**237.05**	**236.21**	**237.19**	**0.6**	**1.2**
Geothermal	-	-	-	0.19	0.08	0.08	0.08	-	-
Solar thermal	-	-	0.01	0.02	0.06	0.05	0.05	-	10.4
Coal	3.44	1.86	2.43	0.91	1.60	1.52	1.31	-2.0	-2.9
Oil	55.76	38.24	26.05	24.33	20.14	19.89	19.40	-4.4	-1.4
Natural gas	65.81	67.74	69.59	84.21	82.96	81.80	83.33	0.3	0.9
Biofuels & waste	-	-	0.26	1.24	2.27	2.20	2.03	-	10.2
Electricity	41.41	55.09	82.46	112.51	128.51	129.28	129.60	4.1	2.2
Heat	-	0.03	2.16	1.12	1.43	1.39	1.39	-	-2.1

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**273.65**	**257.22**	**257.47**	**317.87**	**317.31**	**322.19**	**319.95**	**-0.4**	**1.0**
Geothermal	-	-	-	0.22	0.03	0.03	0.03	-	-
Solar thermal	-	-	0.01	1.46	1.47	1.46	1.52	-	27.1
Coal	3.61	1.69	1.59	1.39	0.04	0.04	0.04	-4.7	-16.0
Oil	87.65	57.30	38.35	43.88	32.72	31.73	29.91	-4.7	-1.2
Natural gas	119.39	119.74	114.85	130.85	126.31	125.28	125.00	-0.2	0.4
Biofuels & waste	7.87	8.47	9.90	22.00	21.84	21.65	22.59	1.4	4.0
Electricity	55.13	70.02	92.76	118.08	134.91	142.01	140.86	3.1	2.0
Heat	-	-	0.00	-	0.00	-	-	-	-
Agriculture & fishing	**18.76**	**18.41**	**20.02**	**21.33**	**21.92**	**24.11**	**23.73**	**0.4**	**0.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.04	0.01	0.01	0.00	0.00	-	-12.0
Oil	17.18	17.13	18.15	19.22	19.42	21.61	20.88	0.3	0.7
Natural gas	-	0.27	0.50	0.59	0.52	0.57	0.72	-	1.8
Biofuels & waste	-	-	0.00	-	0.34	0.37	0.34	-	24.6
Electricity	1.59	1.00	1.33	1.52	1.63	1.55	1.78	-1.0	1.4
Heat	-	-	0.00	0.00	0.00	-	-	-	-
Other	**17.80**	**25.47**	**20.31**	**1.52**	**13.91**	**13.05**	**12.65**	**0.8**	**-2.2**
Geothermal	-	-	0.34	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	7.30	4.55	5.74	-	-	-	-	-1.4	-
Oil	1.42	0.06	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	8.85	20.44	13.54	1.50	-	-	-	2.5	-
Electricity	0.23	0.42	0.70	0.03	13.91	13.05	12.65	6.7	14.8
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**98.39**	**118.59**	**144.06**	**185.27**	**158.44**	**166.62**	**165.56**	**2.27**	**0.66**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**1493.06**	**1539.57**	**1547.87**	**1854.53**	**1876.18**	**1782.98**	**1855.43**	**1848.93**
Total industry (Mtoe)	**455.93**	**462.45**	**360.80**	**421.82**	**382.59**	**344.41**	**380.10**	**382.34**
Iron and steel	50.39	40.26	27.68	38.50	29.75	25.14	29.17	28.85
Chem. and petrochemical	24.49	34.92	79.97	102.47	81.99	74.05	81.73	80.94
Non-ferrous metals	12.85	16.22	10.65	25.13	18.82	17.10	18.48	18.90
Non-metallic minerals	8.87	13.31	15.02	29.81	33.69	29.10	32.00	31.91
Transport equipment	5.19	5.23	4.35	13.42	11.24	10.03	11.11	11.26
Machinery	5.14	7.03	11.49	24.89	21.27	18.93	21.01	21.26
Mining and quarrying	5.24	9.47	10.97	15.37	20.69	20.77	24.61	25.30
Food and tobacco	9.73	10.54	12.67	30.05	34.25	30.51	33.99	34.13
Paper, pulp and printing	31.93	33.60	34.92	77.14	71.69	64.50	67.62	67.63
Wood and wood products	2.36	3.07	2.78	13.63	13.65	12.69	14.00	12.91
Construction	-	1.14	2.62	1.86	3.00	3.03	3.22	3.44
Textile and leather	4.07	5.40	3.77	8.67	6.00	5.28	5.85	5.88
Non specified/other	295.68	282.24	143.90	40.87	36.55	33.28	37.31	39.92
Electricity consumption (Mtoe)	**165.66**	**206.03**	**272.40**	**359.49**	**392.89**	**375.18**	**393.07**	**394.97**
Total industry (Mtoe)	**66.61**	**78.98**	**94.43**	**126.47**	**106.65**	**95.09**	**106.05**	**108.95**
Iron and steel	6.02	6.75	7.72	8.18	8.37	7.36	8.00	8.07
Chem. and petrochemical	12.90	14.22	19.98	25.15	23.70	21.26	23.23	23.79
Non-ferrous metals	10.73	12.86	8.08	12.59	11.63	10.64	11.31	11.62
Non-metallic minerals	2.72	3.05	3.43	4.08	4.30	3.72	4.26	4.42
Transport equipment	2.66	2.84	3.36	5.29	4.14	3.63	3.99	4.09
Machinery	4.46	5.36	10.30	11.83	9.84	8.59	9.46	9.66
Mining and quarrying	3.01	3.35	6.22	7.74	7.21	5.77	7.01	7.32
Food and tobacco	3.55	4.08	5.17	6.71	7.55	6.62	7.26	7.49
Paper, pulp and printing	6.59	8.29	15.38	17.31	15.14	13.41	14.30	14.49
Wood and wood products	1.65	1.96	2.47	2.83	2.49	2.18	2.39	2.45
Construction	-	-	0.03	0.03	0.04	0.04	0.05	0.04
Textile and leather	3.16	3.07	3.21	3.29	2.45	2.14	2.36	2.41
Non specified/other	9.15	13.16	9.07	21.43	9.80	9.73	12.43	13.11
Total industry (TWh)	**774.51**	**918.43**	**1098.03**	**1470.63**	**1240.13**	**1105.69**	**1233.13**	**1266.89**
Iron and steel	70.02	78.47	89.78	95.12	97.28	85.60	93.08	93.82
Chem. and petrochemical	149.98	165.36	232.28	292.49	275.60	247.17	270.15	276.58
Non-ferrous metals	124.81	149.53	93.98	146.43	135.24	123.75	131.50	135.15
Non-metallic minerals	31.66	35.51	39.88	47.45	49.95	43.28	49.54	51.43
Transport equipment	30.92	33.01	39.12	61.50	48.19	42.22	46.42	47.52
Machinery	51.85	62.32	119.78	137.54	114.40	99.92	109.96	112.36
Mining and quarrying	34.99	38.95	72.37	90.02	83.85	67.07	81.54	85.08
Food and tobacco	41.30	47.43	60.17	78.04	87.74	76.95	84.43	87.06
Paper, pulp and printing	76.64	96.41	178.87	201.33	176.02	155.94	166.24	168.50
Wood and wood products	19.20	22.74	28.75	32.85	28.96	25.30	27.84	28.45
Construction	-	-	0.30	0.40	0.47	0.46	0.55	0.48
Textile and leather	36.73	35.65	37.34	38.27	28.49	24.91	27.41	28.00
Non specified/other	106.41	153.06	105.43	249.17	113.94	113.13	144.48	152.49

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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OECD AMERICAS

13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**19414**	**33739**	**40863**	**55346**	**66193**	**82388**	**72048**	**65124**	**68591**
Imports from:									
Total from OECD	**19414**	**33739**	**40863**	**55346**	**65003**	**81234**	**70700**	**64166**	**67859**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	16848	30181	20555	44503	48515	55732	51109	43763	51077
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	1951	2257	77	1287	1082	1320	1224
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	2566	3558	18357	8586	16411	24215	18509	19083	15558
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**1190**	**1154**	**1348**	**958**	**732**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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OECD AMERICAS

14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**18856**	**33645**	**40601**	**54534**	**65856**	**80986**	**71169**	**64845**	**67719**
Exports to:									
Total to OECD	**18856**	**33645**	**40601**	**54510**	**65731**	**80735**	**70931**	**64495**	**67434**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	2570	3461	19936	7992	12685	23499	17490	18482	14385
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	590	1154	1993	699	648	625	653
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	16286	30184	20075	45364	51053	56537	52793	45388	52396
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**24**	**125**	**251**	**238**	**350**	**285**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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OECD AMERICAS

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**480.13**	**714.33**	**817.69**	**853.25**	**770.95**	**1164.14**	**1188.89**	**1204.71**	**1219.58**
Nuclear	34.33	62.36	113.84	117.22	109.84	115.47	115.03	115.20	115.45
Hydro	35.90	124.27	156.36	169.78	168.87	185.38	186.61	187.46	187.84
of which: pumped storage	-	-	*0.19*	*21.56*	*19.70*	*22.04*	*22.34*	*22.38*	*22.47*
Geothermal	0.08	1.16	2.31	2.50	3.65	3.19	3.35	3.37	3.30
Solar	-	-	-	0.01	0.43	0.57	0.71	1.15	2.02
Tide, wave, ocean	-	-	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wind	-	-	-	0.03	2.47	27.13	37.86	43.34	51.18
Other (e.g. fuel cells)	-	-	-	0.05	-	0.03	0.03	-	-
Combustible fuels	409.83	526.55	545.15	563.65	485.68	832.36	845.28	854.19	859.77
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**7.42**	**10.10**	**52.51**	**80.31**	**203.24**	**47.04**	**48.80**	**51.93**	**53.56**
Nuclear	-	-	0.02	-	-	-	-	-	-
Hydro	4.43	6.07	5.89	7.98	11.51	5.72	5.75	5.74	5.77
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	1.06	1.22	-	-	-	-	-
Solar	-	-	0.34	0.41	0.19	1.10	1.49	2.54	4.21
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	1.91	1.73	0.02	0.02	0.39	0.50	0.55
Other (e.g. fuel cells)	-	-	-	-	-	0.40	0.37	0.37	0.38
Combustible fuels	2.98	4.03	43.29	68.97	191.54	39.81	40.79	42.78	42.66
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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OECD ASIA OCEANIA

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	414.75	472.14	642.97	850.53	913.05	886.22	890.83	2.6	1.5
GDP (billion 2005 USD)	2392.46	3028.92	4800.52	5840.30	6821.20	6869.89	6961.66	4.2	1.7
TPES/GDP(1)	0.17	0.16	0.13	0.15	0.13	0.13	0.13	-1.5	-0.2
Population (millions)	162.89	177.03	191.70	203.37	211.88	212.55	212.66	1.0	0.5
TPES/population(2)	2.55	2.67	3.35	4.18	4.31	4.17	4.19	1.6	1.0
TPES/GDP (2005 = 100)	127	114	98	106	98	94	93	-1.5	-0.2
Ele.TFC/GDP(2005=100)(3)	84	87	85	100	102	100	..	0.0	..
Ele.TFC/population(4)	3095	3705	5321	7144	8243	8041	..	3.2	..
Elec. generated (TWh)(5)	571.87	740.00	1148.34	1629.28	1960.92	1919.51	1911.44	4.2	2.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**414.75**	**472.14**	**642.97**	**850.53**	**913.05**	**886.22**	**890.83**	**2.6**	**1.5**
Coal	89.84	101.38	140.62	194.55	247.16	245.02	250.44	2.7	2.7
Oil	300.71	302.12	343.73	405.35	354.51	357.94	366.73	0.8	0.3
Natural gas	8.78	29.78	65.57	106.99	158.98	176.06	190.77	12.6	5.0
Biofuels & waste	3.53	4.13	10.44	13.40	18.74	19.53	19.86	6.6	3.0
Nuclear	2.53	22.43	66.50	112.32	113.84	66.84	43.29	21.2	-1.9
Geothermal	1.30	1.79	3.05	5.05	6.12	6.33	6.19	5.1	3.3
Solar, wind, tide(1)	-	0.02	1.62	1.59	3.24	3.58	3.62	-	3.7
Hydro	8.07	10.50	11.44	11.36	10.68	11.15	10.17	2.1	-0.5
Net electricity imports(2)	-0.00	-0.01	-0.04	-0.13	-0.34	-0.36	-0.36	13.0	10.6
Heat	-	-	0.04	0.04	0.13	0.13	0.13	-	5.6

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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OECD ASIA OCEANIA

3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**577.2**	**744.6**	**1155.6**	**1640.8**	**1809.4**	**1972.2**	**1931.3**	**1922.0**
Nuclear	9.7	86.1	255.2	431.0	451.5	436.8	256.5	166.1
Hydro	99.1	126.8	140.3	143.6	130.5	135.4	141.5	128.8
of which:								
pumped storage production	*5.3*	*4.6*	*7.3*	*11.5*	*11.7*	*11.3*	*11.8*	*10.6*
Geothermal	1.5	2.1	3.9	6.3	6.4	8.5	8.8	8.7
Solar	-	-	0.0	0.4	1.6	4.9	7.1	7.1
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.3	3.4	11.5	13.2	13.3
Combustible fuels	466.9	529.7	756.2	1059.2	1215.9	1374.6	1503.7	1597.3
Coal	*88.5*	*127.6*	*267.0*	*548.8*	*676.0*	*734.4*	*716.3*	*736.2*
Oil	*364.6*	*311.6*	*280.7*	*186.7*	*173.2*	*119.2*	*178.4*	*201.7*
Natural gas	*13.5*	*89.8*	*196.8*	*306.6*	*340.0*	*480.7*	*567.6*	*617.6*
Biofuels & waste	*0.3*	*0.7*	*11.8*	*17.0*	*26.7*	*40.4*	*41.3*	*41.8*
Other (e.g. fuel cells)	-	-	0.1	0.1	0.1	0.4	0.6	0.6
- Own use by power plant	21.0	31.2	49.4	69.8	79.2	84.1	81.8	..
Net production	**556.1**	**713.5**	**1106.2**	**1571.0**	**1730.2**	**1888.1**	**1849.5**	**..**
Nuclear	..	81.9	244.2	412.2	429.8	416.4	242.7	..
Hydro	..	126.0	139.2	142.6	129.6	134.7	140.7	..
Geothermal	..	1.2	3.6	5.9	5.9	7.9	8.2	..
Solar	..	-	0.0	0.4	1.6	4.9	7.1	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.3	3.4	11.5	13.2	..
Combustible fuels	..	504.3	719.1	1009.6	1159.7	1312.2	1437.0	..
Other (e.g. fuel cells)	..	-	0.1	0.1	0.1	0.4	0.6	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	0.3	1.1	1.1	1.1	1.0	1.0
- Used for pumped storage	5.3	7.4	13.4	17.5	16.0	13.6	14.0	12.6
+ Imports	-	-	-	-	-	-	-	-
- Exports	0.1	0.2	0.5	1.5	1.7	4.0	4.2	4.2
Electrical energy supplied	**550.8**	**705.9**	**1092.1**	**1551.0**	**1711.4**	**1869.4**	**1830.2**	**..**
- Transmission & distr. losses	40.3	40.3	57.3	78.9	83.9	87.7	83.6	..
- Statistical difference	-0.0	-0.0	0.6	-0.7	-1.5	-0.0	0.7	..
Total consumption	**510.5**	**665.6**	**1034.3**	**1472.8**	**1629.1**	**1781.8**	**1745.8**	**..**
- Energy industry consumption[2]	6.5	9.9	14.7	20.4	23.6	35.8	37.3	..
Final consumption	**504.0**	**655.7**	**1019.6**	**1452.4**	**1605.4**	**1746.0**	**1708.5**	**..**
Industry	331.3	394.2	470.8	613.5	626.3	662.4	633.2	..
Transport	14.1	16.5	19.7	23.0	25.2	25.0	24.8	..
Commercial & publ. serv.	43.8	79.0	263.8	432.4	521.3	578.5	582.4	..
Residential	109.0	161.4	255.9	366.5	414.7	456.5	442.8	..
Agriculture & fishing	2.9	3.7	7.1	12.7	13.6	16.9	17.3	..
Sector non specified	2.8	0.9	2.3	4.3	4.5	6.7	8.0	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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OECD ASIA OCEANIA

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**573.91**	**744.64**	**1155.60**	**1640.81**	**1852.04**	**1972.23**	**1931.30**	**4.5**	**2.5**
- Hydro pumped storage	*2.51*	*4.64*	*7.26*	*11.52*	*9.83*	*11.31*	*11.80*	*6.9*	*2.3*
Total generation(1)	**571.40**	**740.00**	**1148.34**	**1629.28**	**1842.21**	**1960.92**	**1919.51**	**4.5**	**2.5**
Main activity producers									
Gross production	505.18	671.65	1057.31	1483.59	1684.02	1781.81	1737.78	4.7	2.4
- Hydro pumped storage	*2.51*	*4.64*	*7.26*	*11.52*	*9.83*	*11.31*	*11.80*	*6.9*	*2.3*
Total generation(1)	502.66	667.01	1050.05	1472.07	1674.19	1770.50	1725.99	4.7	2.4
Nuclear	19.70	85.49	254.29	430.30	427.52	436.83	256.48	17.3	0.0
Hydro	105.82	115.14	125.91	124.60	106.45	107.62	112.31	1.1	-0.5
Geothermal	1.39	2.09	3.56	6.00	7.51	8.30	8.58	6.0	4.3
Solar, wind, tide(2)	-	-	-	0.19	6.60	8.44	9.72	-	-
Coal	76.83	107.27	236.27	492.01	652.36	668.28	651.01	7.3	4.9
Oil	280.26	267.91	235.99	122.82	68.63	74.77	134.77	-1.1	-2.6
Natural gas	18.57	89.08	193.42	294.01	398.37	454.06	539.02	15.8	5.0
Biofuels & waste	0.11	0.03	0.61	2.14	6.77	12.20	14.10	11.6	16.2
Autoproducers									
Gross production	68.74	73.00	98.29	157.21	168.03	190.42	193.52	2.3	3.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	68.74	73.00	98.29	157.21	168.03	190.42	193.52	2.3	3.3
Nuclear	-	0.58	0.87	0.71	-	-	-	-	-
Hydro	6.17	7.01	7.09	7.49	9.31	16.52	17.35	0.9	4.4
Geothermal	-	-	0.31	0.27	0.25	0.22	0.21	-	-1.8
Solar, wind, tide(2)	-	-	0.07	0.57	7.02	8.40	11.18	-	27.4
Coal	12.09	20.34	30.71	56.77	60.47	66.09	65.30	6.0	3.7
Oil	49.34	43.71	44.74	63.89	45.70	44.41	43.66	-0.6	-0.1
Natural gas	0.53	0.70	3.34	12.62	26.43	26.64	28.58	12.2	10.8
Biofuels & waste	0.61	0.67	11.16	14.89	18.85	28.15	27.24	19.9	4.3

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**58730**	**61448**	**97569 e**	**156362 e**	**166736**	**188800**	**190916**	**3.2**
Total energy	**-**	**-**	**5113**	**11682**	**22546**	**22731**	**23178**	**7.5**
Coal mines	-	-	1	1	48	36	89	23.8
Oil and gas extraction	-	-	831	1252	3053	3183	4052	7.8
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	4281	10429	19406	19469	19037	7.4
Energy non specified/other	-	-	-	-	39	43	-	-
Total industry	**58223**	**58171**	**91430**	**142715 e**	**140457**	**160763**	**160238**	**2.7**
Iron and steel	970	11969	21717	39140 e	40229	43482	42929	3.3
Chemical and petrochemical	240	17419	28214	39935 e	29838	33280	32712	0.7
Non-ferrous metals	1953	8604	2648	6240 e	7185	6866	6176	4.1
Non-metallic minerals	246	2155	8889	12557 e	13161	13177	13066	1.9
Transport equipment	-	2	-	-	-	-	-	-
Machinery	6	9	2006	4389 e	3672	3596	3584	2.8
Mining and quarrying	2228	3200	36	1991	3580	3419	4532	25.9
Food and tobacco	287	769	80	538 e	2158	2005	2309	17.4
Pulp and printing	473	11061	17111	26816 e	22544	22133	22302	1.3
Wood and wood products	25	21	390	583 e	521	508	518	1.4
Construction	-	-	-	-	7	26	5	-
Textile and leather	-	30	-	2328 e	1908	1897	1839	-
Non specified/other industries	51795	2932	10339	8198	15654	30374	30266	5.2
Total transport	**-**	**-**	**1**	**1**	**44**	**40**	**325**	**31.7**
Rail and pipeline	-	-	-	-	40	35	300	-
Transport non specified	-	-	1	1	4	5	25	16.6
Other	**507 e**	**3277 e**	**1025 e**	**1964 e**	**3689**	**5266**	**7175**	**9.7**
Commerce and pub. services	-	-	317 e	510 e	905	1475	1840	8.7
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	2	-	1	-
Sector non specified	507 e	3277 e	708	1454 e	2782	3791	5334	10.1

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**9713**	**11676**	**164294**	**219421**	**218207**	**227728**	**227728**	**15.2**
Nuclear	..	..	-	-	-	-	-	..
Geothermal	..	..	-	-	-	-	-	..
Coal	..	..	33715	35764	53342	58543	58543	..
Oil	..	..	67224	101557	53514	50395	50395	..
Natural gas	..	..	49482	62339	76814	82492	82492	..
Biofuels & waste	..	..	8765	13707	25185	27405	27405	..
Non-spec. comb. fuels	..	..	-	-	-	-	-	..
Chemical processes	..	..	1610	2449	5295	5285	5285	..
Heat pumps	..	..	-	-	-	-	-	..
Electric boilers	..	..	3498	3605	4057	3608	3608	..
Other sources(1)	..	..	-	-	-	-	-	..
of which:								
Main activity producers								
Total	9713	10066	70151	89255	94388	94187	..	11.2
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	613	539	-	-	..	..
Oil	..	..	11202	16998	8619	6146	..	..
Natural gas	..	..	49426	62110	76114	79474	..	..
Biofuels & waste	..	..	5412	6003	5598	4959	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	3498	3605	4057	3608	..	..
Other sources(1)	..	..	-	-	-	-	..	..
Autoproducers								
Total	-	1610	94143	130166	123819	133541	..	23.4
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	33102	35225	53342	58543	..	..
Oil	..	..	56022	84559	44895	44249	..	..
Natural gas	..	..	56	229	700	3018	..	..
Biofuels & waste	..	..	3353	7704	19587	22446	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	1610	2449	5295	5285	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	-	-	-	-	..	..
Other sources(1)	..	..	-	-	-	-	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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OECD ASIA OCEANIA
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**106.02**	**123.02**	**164.76**	**225.80**	**274.18**	**289.80**	**317.33**	**2.6**	**3.2**
Coal	26.47	31.67	62.81	124.25	166.41	168.88	167.00	5.2	4.8
Oil	76.64	73.72	58.62	38.50	23.32	24.46	37.14	-1.6	-2.1
Natural gas	2.87	17.45	40.17	58.91	78.58	87.53	103.91	16.8	4.6
Biofuels & waste	0.03	0.19	3.16	4.14	5.87	8.92	9.27	30.3	5.3
of which: ***main activity prod.***									
Total	**..**	**107.83**	**144.22**	**196.99**	**243.78**	**256.34**	**282.04**	**..**	**3.2**
Coal	..	28.66	55.11	112.86	153.66	154.84	152.45	..	5.0
Oil	..	61.86	49.59	27.39	15.09	16.22	28.18	..	-2.7
Natural gas	..	17.30	39.34	56.15	73.38	82.56	98.28	..	4.5
Biofuels & waste	..	0.01	0.18	0.60	1.65	2.73	3.13	..	14.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**3.83**	**24.22**	**69.30**	**116.99**	**116.93**	**119.94**	**73.33**	**18.6**	**0.3**
Nuclear	2.53	22.43	66.50	112.32	111.41	113.84	66.84	21.2	0.0
Geothermal	1.30	1.79	2.80	4.63	5.21	5.68	5.88	4.6	3.6
Solar	-	-	0.00	0.03	0.30	0.42	0.61	-	47.6
Non-Thermal									
Total	**8.07**	**10.50**	**11.44**	**11.39**	**10.79**	**11.68**	**12.31**	**2.1**	**0.4**
Hydro	8.07	10.50	11.44	11.36	9.95	10.68	11.15	2.1	-0.1
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.03	0.83	0.99	1.13	-	-
Other (e.g. fuel cells)	-	-	-	-	0.01	0.02	0.03	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	38017	80856	162941 e	237047	238581	234222	5.2
Fuel input (TJ)	685708	1832353	4031905 e	5754489	5742869	5647959	5.5
Electricity production (GWh)	81428	194832	443493 e	606439	616621	599315	5.5
Brown coal							
Fuel input (1000 t)	29798	43346	66902 e	71251	70616	69389	2.3
Fuel input (TJ)	285435	403302	646099 e	731368	724810	713993	2.8
Electricity production (GWh)	19034	33427	50609 e	55889	54995	54563	2.4
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	278254	300575	359932 e	280452	366323	357335	0.8
Electricity production (GWh)	27084	32099	40774 e	32777	41367	39921	1.0
Petroleum products							
Fuel input (1000 t)	73942	57682 e	35893 e	21380 e	22198 e	34858	-2.4
Fuel input (TJ)	2966255	2579434 e	1604793 e	947779 e	988290 e	1543402	-2.4
Electricity production (GWh)	311615	280731 e	178666 e	108694 e	112961 e	173524	-2.3
Natural gas (1)							
Fuel input (TJ)	919706	1870284	2582465 e	3393460	3756586	4483261	4.3
Electricity production (GWh)	89757	196697	293163 e	401796	451590	534699	4.9
Wood and other solid waste							
Fuel input (TJ)	-	78705	85269 e	111335	237682	239323	5.4
Electricity production (GWh)	-	8713	10456	14187	29157	29230	5.9
Industrial waste							
Fuel input (TJ)	-	-	814	4790	13052	20163	-
Electricity production (GWh)	-	-	97	616	1567	2376	-
Municipal waste							
Fuel input (TJ)	-	16439 e	40934 e	57583	47529	52433	5.7
Electricity production (GWh)	-	1807	4706	6843	5632	6020	5.9
Biogases and liquid biofuels							
Fuel input (TJ)	379	288	942	17590	16852	18095	21.8
Electricity production (GWh)	32	27	87	1619	1548	1625	21.5
Total combustible fuels(2)							
Electricity production (GWh)	529335	748333	1022051 e	1228860	1315438	1441273	3.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	28	1957	3837	4579	5556	28.6
Fuel input (TJ)	-	585	53971	90279	109168	136548	29.6
Electricity production (GWh)	-	52	2072	4067	5841	7091	26.4
CHP Heat production (TJ)	-	-	33102	50690	53342	57270	-
Brown coal							
Fuel input (1000 t)	-	1249	13	1463	1447	1505	0.9
Fuel input (TJ)	-	12396	185	15126	14967	17595	1.7
Electricity production (GWh)	-	548	17	1161	1140	1211	3.8
CHP Heat production (TJ)	5443	2269	-	-	-	811	-4.8
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	724 e	87437	101235	104427	123888	129369	1.9
Electricity production (GWh)	60 e	6019	11823	12496	14404	14209	4.2
CHP Heat production (TJ)	-	-	-	488	-	462	-
Petroleum products							
Fuel input (1000 t)	-	-	3396 e	2369	2348	2050	-
Fuel input (TJ)	-	-	154012 e	111624	101483	97691	-
Electricity production (GWh)	-	-	8044	5637	6217	4907	-
CHP Heat production (TJ)	-	-	59190	63464	49799	47739	-
Natural gas(1)							
Fuel input (TJ)	272	714	140503 e	243128	293304	332589	34.0
Electricity production (GWh)	30 e	60	13463	22998	29112	32893	35.0
CHP Heat production (TJ)	-	-	36767	51117	57308	65264	-
Wood and other solid waste							
Fuel input (TJ)	2876	33742 e	28472 e	25619	22706	17261	-3.1
Electricity production (GWh)	280	1110	1163 e	2018	1976	1431	1.2
CHP Heat production (TJ)	-	-	-	1333	1077	988	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	25	1815	-
Electricity production (GWh)	-	-	-	-	1	129	-
CHP Heat production (TJ)	-	-	-	-	9	1081	-
Municipal waste							
Fuel input (TJ)	-	-	344 e	7391	7125	11497	-
Electricity production (GWh)	-	-	36 e	186	207	253	-
CHP Heat production (TJ)	-	-	-	2516	2295	4575	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1229	6143	1668	2973	2995	4.3
Electricity production (GWh)	-	113	482	148	264	274	4.3
CHP Heat production (TJ)	-	-	-	-	515	401	-
Total combustible fuels(2)							
Electricity production (GWh)	370 e	7902	37100 e	48711	59162	62398	10.3
CHP Heat production (TJ)	5443	2269	129059	169608	164345	178591	23.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	38	32	27	-	-	-	-
Fuel input (TJ)	960	804	690	-	-	-	-
Heat production (TJ)	637	515	613	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	40	57	213	124	117	67	0.8
Fuel input (TJ)	1816	2534	9634	5164	4915	2838	0.5
Heat production (TJ)	1201	1609	8034	4128	3715	2656	2.4
Natural gas(1)							
Fuel input (TJ)	2946	6169	15750	20049	23186	19528	5.6
Heat production (TJ)	1949	3556	12715	17112	19506	17228	7.8
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	1206	-
Heat production (TJ)	-	-	-	-	-	564	-
Industrial waste							
Fuel input (TJ)	-	80	172	77	2596	7656	24.3
Heat production (TJ)	-	51	153	74	2081	6147	25.6
Municipal waste							
Fuel input (TJ)	-	-	4191	12926	17686	11195	-
Heat production (TJ)	-	-	3353 e	10341	14149	9345	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1946	6098	6885	5537	4738	4.3
Heat production (TJ)	-	1279	5259	6083	5059	4304	5.9
Total combustible fuels(2)							
Heat production (TJ)	4270	7010	30127 e	37738	44510	40244	8.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD ASIA OCEANIA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**300.53**	**321.38**	**437.57**	**564.86**	**562.25**	**584.78**	**580.10**	**2.2**	**1.4**
Geothermal	-	-	0.25	0.41	0.47	0.44	0.45	-	2.9
Solar thermal	-	0.02	1.62	1.53	1.72	1.81	1.81	-	0.5
Coal	36.66	40.32	48.54	39.02	36.52	40.50	40.04	1.7	-0.9
Oil	211.62	209.26	265.68	337.49	304.62	307.38	303.83	1.3	0.6
Natural gas	5.39	11.34	26.38	48.42	64.55	69.71	71.74	9.8	4.9
Biofuels & waste	3.50	3.95	7.23	9.25	9.06	9.86	10.25	4.4	1.7
Electricity	43.34	56.39	87.68	124.91	140.32	150.16	146.93	4.2	2.5
Heat	0.03	0.10	0.19	3.83	5.00	4.93	5.04	11.9	17.0
of which:									
Total industry	**129.63**	**122.75**	**145.72**	**165.77**	**149.64**	**162.24**	**160.31**	**0.7**	**0.5**
Geothermal	-	-	0.11	0.14	0.15	0.15	0.15	-	1.4
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	24.64	27.41	38.11	37.26	34.10	38.07	37.73	2.6	-0.0
Oil	72.01	53.40	51.69	50.10	34.12	34.26	32.94	-1.9	-2.1
Natural gas	2.98	5.82	10.56	16.45	21.20	23.35	25.31	7.7	4.2
Biofuels & waste	1.49	2.22	4.76	6.94	6.53	7.11	7.30	7.1	2.1
Electricity	28.50	33.90	40.49	52.76	50.83	56.97	54.46	2.1	1.4
Heat	-	-	-	2.12	2.70	2.34	2.43	-	-
Transport	**59.28**	**79.26**	**112.60**	**147.29**	**142.88**	**144.69**	**143.54**	**3.8**	**1.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.23	0.01	0.07	0.09	0.18	0.17	0.12	-6.5	2.4
Oil	57.84	77.82	110.77	144.92	138.73	140.31	139.12	3.9	1.1
Natural gas	-	0.01	0.07	0.30	1.34	1.47	1.54	-	16.1
Biofuels & waste	-	-	-	-	0.46	0.59	0.63	-	-
Electricity	1.21	1.42	1.69	1.98	2.18	2.15	2.13	2.0	1.1
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**22.74**	**26.27**	**59.41**	**86.06**	**92.55**	**94.47**	**94.65**	**5.8**	**2.2**
Geothermal	-	-	0.09	0.17	0.20	0.19	0.19	-	3.7
Solar thermal	-	-	0.05	0.03	0.03	0.03	0.04	-	-1.3
Coal	1.09	1.11	1.10	0.70	0.59	0.59	0.57	0.1	-3.1
Oil	17.26	17.11	30.43	35.38	22.22	20.65	20.39	3.4	-1.9
Natural gas	0.59	1.13	4.85	11.83	20.02	21.88	21.91	13.2	7.4
Biofuels & waste	-	0.02	0.05	0.17	0.49	0.58	0.70	-	13.1
Electricity	3.76	6.79	22.69	37.18	48.28	49.75	50.09	11.1	3.8
Heat	0.03	0.10	0.16	0.60	0.72	0.80	0.77	10.7	7.9

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**33.36**	**42.44**	**60.95**	**76.50**	**80.48**	**84.67**	**82.99**	**3.6**	**1.5**
Geothermal	-	-	0.01	0.01	0.01	0.01	0.01	-	2.2
Solar thermal	-	0.02	1.57	1.50	1.69	1.78	1.77	-	0.6
Coal	10.62	11.79	8.85	0.61	0.92	0.87	0.86	-1.1	-10.5
Oil	9.79	11.12	16.29	21.70	17.08	18.06	17.46	3.0	0.3
Natural gas	1.57	3.93	9.78	17.92	20.47	21.34	21.37	11.4	3.8
Biofuels & waste	2.00	1.70	2.42	2.13	1.58	1.57	1.59	1.1	-2.0
Electricity	9.38	13.88	22.01	31.52	37.16	39.26	38.08	5.1	2.6
Heat	-	-	0.03	1.10	1.57	1.79	1.83	-	21.5
Agriculture & fishing	**4.19**	**5.26**	**10.44**	**11.39**	**9.18**	**9.48**	**9.47**	**5.5**	**-0.5**
Geothermal	-	-	0.04	0.10	0.11	0.09	0.10	-	4.2
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.01	0.01	0.02	0.04	0.06	-	9.5
Oil	3.94	4.94	9.73	10.12	7.64	7.86	7.76	5.5	-1.1
Natural gas	-	-	0.04	0.06	0.05	0.04	0.04	-	-0.2
Biofuels & waste	-	-	-	-	-	-	0.02	-	-
Electricity	0.25	0.32	0.61	1.09	1.36	1.45	1.49	5.4	4.3
Heat	-	-	-	-	-	-	-	-	-
Other	**10.28**	**10.17**	**1.86**	**3.43**	**3.60**	**3.73**	**3.96**	**-9.6**	**3.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.07	-	-	-	-	-	-	-	-
Oil	9.94	10.07	1.67	3.05	3.09	3.14	3.27	-10.0	3.3
Natural gas	0.02	0.02	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	0.00	0.01	0.01	0.00	-	-
Electricity	0.24	0.08	0.20	0.37	0.51	0.58	0.68	-1.3	6.1
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**41.07**	**35.24**	**46.58**	**74.42**	**83.92**	**85.49**	**85.17**	**0.74**	**2.92**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**300.53**	**321.38**	**437.57**	**564.86**	**567.54**	**562.25**	**584.78**	**580.10**
Total industry (Mtoe)	**129.63**	**122.75**	**145.72**	**165.77**	**156.93**	**149.64**	**162.24**	**160.31**
Iron and steel	38.48	32.98	26.01	28.12	31.18	28.58	32.87	33.90
Chem. and petrochemical	15.19	12.31	24.18	28.21	26.66	26.93	28.62	28.77
Non-ferrous metals	4.71	7.75	9.40	10.83	12.06	11.65	11.80	11.51
Non-metallic minerals	12.57	13.95	16.44	17.23	17.32	16.03	16.31	16.79
Transport equipment	0.89	1.45	0.32	2.67	2.31	2.20	2.59	3.08
Machinery	0.82	1.65	12.40	11.82	15.00	14.10	15.44	16.12
Mining and quarrying	0.55	1.58	2.03	2.88	2.78	3.03	3.16	3.68
Food and tobacco	4.04	6.82	9.06	10.99	9.10	9.47	9.46	9.56
Paper, pulp and printing	6.06	5.71	12.67	14.20	12.56	11.32	11.70	11.52
Wood and wood products	0.14	0.88	0.75	1.19	1.29	1.70	1.82	1.75
Construction	3.34	4.42	6.37	6.55	5.37	5.34	5.42	5.49
Textile and leather	5.87	4.76	2.85	4.67	2.96	2.94	2.83	2.70
Non specified/other	36.97	28.49	23.22	26.41	18.34	16.33	20.21	15.44
Electricity consumption (Mtoe)	**43.34**	**56.39**	**87.68**	**124.91**	**142.11**	**140.32**	**150.16**	**146.93**
Total industry (Mtoe)	**28.50**	**33.90**	**40.49**	**52.76**	**52.88**	**50.83**	**56.97**	**54.46**
Iron and steel	6.45	7.37	7.47	9.56	9.80	9.10	10.51	10.97
Chem. and petrochemical	4.58	4.46	6.62	8.49	8.09	7.85	8.58	8.66
Non-ferrous metals	2.48	3.10	3.87	4.86	5.77	5.85	6.12	6.21
Non-metallic minerals	1.31	1.90	2.82	3.18	3.43	3.30	3.47	3.45
Transport equipment	0.87	1.28	0.14	1.10	1.56	1.51	1.77	1.95
Machinery	0.82	1.42	6.13	8.46	11.34	10.79	11.92	12.07
Mining and quarrying	0.20	0.47	0.81	1.14	1.21	1.32	1.41	1.57
Food and tobacco	0.53	1.07	1.81	2.55	2.89	2.89	3.00	3.01
Paper, pulp and printing	1.83	2.34	3.76	4.69	4.28	4.01	4.06	4.00
Wood and wood products	0.13	0.28	0.08	0.19	0.27	0.36	0.38	0.37
Construction	0.01	0.01	0.21	0.19	0.18	0.17	0.16	0.16
Textile and leather	0.76	1.08	1.04	1.68	1.19	1.15	1.22	1.25
Non specified/other	8.54	9.12	5.73	6.66	2.84	2.53	4.37	0.79
Total industry (TWh)	**331.35**	**394.20**	**470.78**	**613.52**	**614.84**	**591.09**	**662.44**	**633.22**
Iron and steel	75.05	85.68	86.89	111.21	113.91	105.80	122.16	127.56
Chem. and petrochemical	53.30	51.86	76.92	98.78	94.11	91.23	99.81	100.73
Non-ferrous metals	28.78	36.02	45.00	56.46	67.15	68.08	71.21	72.21
Non-metallic minerals	15.23	22.11	32.79	36.97	39.91	38.41	40.37	40.09
Transport equipment	10.06	14.83	1.68	12.83	18.19	17.54	20.61	22.64
Machinery	9.48	16.53	71.27	98.38	131.87	125.44	138.61	140.38
Mining and quarrying	2.37	5.49	9.45	13.23	14.12	15.37	16.45	18.25
Food and tobacco	6.15	12.43	21.06	29.69	33.65	33.65	34.83	34.97
Paper, pulp and printing	21.26	27.21	43.68	54.49	49.76	46.60	47.16	46.46
Wood and wood products	1.50	3.30	0.90	2.19	3.16	4.17	4.39	4.33
Construction	0.06	0.10	2.42	2.27	2.06	1.95	1.88	1.87
Textile and leather	8.81	12.55	12.04	19.55	13.90	13.40	14.22	14.55
Non specified/other	99.29	106.10	66.69	77.48	33.05	29.46	50.76	9.18

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**-**	**-**	**456**	**914**	**1457**	**3666**	**3783**	**3966**	**4222**
Exports to:									
Total to OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**456**	**914**	**1457**	**3666**	**3783**	**3966**	**4222**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**116.33**	**159.32**	**225.15**	**288.95**	**337.16**	**379.89**	**386.34**	**386.08**	**388.08**
Nuclear	3.89	15.51	31.48	49.81	58.80	65.65	66.56	66.68	67.68
Hydro	31.28	38.72	51.73	59.00	62.40	65.30	65.30	62.92	64.63
of which: pumped storage	*-*	*11.50*	*18.95*	*24.83*	*27.40*	*30.13*	*30.10*	*30.01*	*31.71*
Geothermal	0.18	0.27	0.50	0.73	0.91	1.08	1.13	1.23	1.23
Solar	-	-	-	-	-	0.30	0.42	0.55	0.62
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.07	1.96	2.56	2.85	3.14
Other (e.g. fuel cells)	-	-	-	-	-	-	0.02	0.04	0.06
Combustible fuels	80.97	104.81	141.44	179.41	214.99	245.59	250.35	251.83	250.74
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**11.74**	**14.34**	**22.62**	**27.79**	**40.75**	**55.89**	**57.33**	**69.48**	**73.42**
Nuclear	0.01	0.18	0.17	0.17	0.17	-	-	-	-
Hydro	1.07	1.11	1.38	1.37	1.47	1.48	1.41	4.37	4.26
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	0.03	0.04	0.05	0.05	0.04	0.04	0.04	0.04
Solar	-	-	-	0.06	0.36	2.29	2.86	3.98	5.79
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.09	1.87	1.99	2.21	2.36
Other (e.g. fuel cells)	-	-	-	-	-	0.02	0.08	0.03	0.13
Combustible fuels	10.66	13.02	21.04	26.14	38.61	50.19	50.95	58.84	60.85
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	1375.44	1494.24	1619.49	1746.79	1816.85	1755.78	1737.37	1.0	0.3
GDP (billion 2005 USD)	7079.41	8381.14	10678.87	13411.64	15508.75	15794.89	15774.89	2.4	1.8
TPES/GDP(1)	0.19	0.18	0.15	0.13	0.12	0.11	0.11	-1.4	-1.4
Population (millions)	455.04	473.78	500.03	521.69	552.39	554.95	556.41	0.6	0.5
TPES/population(2)	3.02	3.15	3.24	3.35	3.29	3.16	3.12	0.4	-0.2
TPES/GDP (2005 = 100)	156	143	122	104	94	89	88	-1.4	-1.4
Ele.TFC/GDP(2005=100)(3)	94	101	103	100	98	95	..	0.6	..
Ele.TFC/population(4)	2951	3608	4461	5197	5599	5478	..	2.5	..
Elec. generated (TWh)(5)	1618.19	2048.91	2661.93	3223.48	3606.52	3557.63	3568.07	3.0	1.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**1375.44**	**1494.24**	**1619.49**	**1746.79**	**1816.85**	**1755.78**	**1737.37**	**1.0**	**0.3**
Coal	425.41	463.82	449.32	330.69	299.17	304.05	311.29	0.3	-1.7
Oil	732.41	688.42	605.97	650.07	602.80	579.49	559.91	-1.1	-0.4
Natural gas	134.73	206.11	259.93	393.04	467.23	428.10	416.43	3.9	2.2
Biofuels & waste	30.99	35.68	54.38	70.63	130.60	129.21	133.95	3.4	4.2
Nuclear	19.38	60.05	205.17	244.85	238.86	236.09	229.44	14.9	0.5
Geothermal	2.53	3.01	4.73	7.25	11.41	12.18	12.63	3.7	4.6
Solar, wind, tide(1)	0.05	0.05	0.28	2.66	17.22	22.38	25.98	11.0	22.8
Hydro	29.44	35.75	38.39	47.00	47.74	43.32	47.72	1.6	1.0
Net electricity imports(2)	0.49	1.35	1.30	0.15	1.26	0.44	-0.51	5.9	-
Heat	-	-	0.02	0.45	0.54	0.50	0.53	-	16.3

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**1626.0**	**2059.9**	**2681.8**	**3254.6**	**3548.9**	**3638.4**	**3587.5**	**3601.5**
Nuclear	74.4	230.4	786.8	939.4	986.5	916.1	905.4	880.0
Hydro	350.1	426.7	466.2	577.7	528.3	587.1	533.7	588.3
of which:								
pumped storage production	*7.8*	*11.0*	*19.9*	*31.2*	*37.1*	*31.9*	*29.9*	*33.4*
Geothermal	2.5	2.7	3.6	6.2	7.1	10.7	11.3	11.9
Solar	-	-	0.0	0.1	1.5	23.3	46.3	71.1
Tide, wave, ocean	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5
Wind	-	0.0	0.8	22.3	71.0	151.7	182.2	202.2
Combustible fuels	1198.4	1399.6	1423.7	1707.0	1946.9	1944.2	1903.6	1843.5
Coal	*663.1*	*887.2*	*1029.8*	*967.5*	*1004.4*	*874.1*	*895.8*	*949.3*
Oil	*409.0*	*363.7*	*205.7*	*179.1*	*135.7*	*79.1*	*66.1*	*66.3*
Natural gas	*120.4*	*137.9*	*167.5*	*511.6*	*721.0*	*845.8*	*786.1*	*664.6*
Biofuels & waste	*6.0*	*10.8*	*20.7*	*48.9*	*85.8*	*145.3*	*155.5*	*163.3*
Other (e.g. fuel cells)	-	-	0.1	1.4	7.1	4.8	4.6	4.1
- Own use by power plant	89.8	113.2	152.9	161.5	169.4	159.6	167.2	..
Net production	**1536.2**	**1946.7**	**2528.9**	**3093.1**	**3379.5**	**3478.8**	**3420.3**	**..**
Nuclear	..	211.2	742.0	889.6	936.2	868.2	858.6	..
Hydro	..	417.3	460.3	570.4	522.1	581.3	526.9	..
Geothermal	..	2.6	3.4	5.8	6.7	10.1	10.6	..
Solar	..	-	0.0	0.1	1.5	23.2	46.0	..
Tide, wave, ocean	..	0.5	0.6	0.6	0.5	0.5	0.5	..
Wind	..	0.0	0.8	22.3	70.9	150.4	181.0	..
Combustible fuels	..	1248.5	1321.6	1603.0	1835.1	1840.6	1792.4	..
Other (e.g. fuel cells)	..	-	0.1	1.3	6.5	4.5	4.3	..
- Used for heat pumps	-	-	0.0	2.3	2.0	1.9	1.6	2.0
- Used for electric boilers	-	-	0.5	2.7	1.2	1.1	1.0	1.1
- Used for pumped storage	13.6	17.8	29.6	43.0	50.8	43.1	40.4	43.6
+ Imports	68.3	106.5	217.7	282.2	357.4	321.4	349.5	370.7
- Exports	62.6	90.9	202.5	280.5	341.7	306.7	344.3	376.6
Electrical energy supplied	**1528.4**	**1944.5**	**2514.0**	**3046.9**	**3341.4**	**3447.4**	**3382.5**	**..**
- Transmission & distr. losses	115.8	145.1	178.5	238.4	242.3	244.7	235.9	..
- Statistical difference	-	-	1.7	0.3	0.1	0.9	-1.4	..
Total consumption	**1412.6**	**1799.4**	**2333.8**	**2808.1**	**3099.0**	**3201.9**	**3148.0**	**..**
- Energy industry consumption[2]	70.4	90.6	103.8	97.9	108.7	110.4	109.1	..
Final consumption	**1342.2**	**1708.7**	**2230.0**	**2710.2**	**2990.3**	**3091.5**	**3038.9**	**..**
Industry	737.3	856.9	1014.6	1145.8	1228.2	1147.7	1159.8	..
Transport	39.5	48.0	62.1	73.5	71.6	70.3	69.8	..
Commercial & publ. serv.	202.5	289.6	461.8	666.9	767.1	895.3	870.2	..
Residential	335.2	472.3	638.6	767.1	864.7	912.9	872.6	..
Agriculture & fishing	23.1	35.8	47.7	52.1	54.5	55.7	55.3	..
Sector non specified	4.5	6.1	5.3	4.7	4.1	9.6	11.1	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**1667.39**	**2059.90**	**2681.79**	**3254.64**	**3485.96**	**3638.43**	**3587.55**	**3.0**	**1.4**
- Hydro pumped storage	*8.17*	*10.99*	*19.86*	*31.16*	*32.13*	*31.91*	*29.92*	*5.7*	*2.0*
Total generation(1)	**1659.22**	**2048.91**	**2661.93**	**3223.48**	**3453.83**	**3606.52**	**3557.63**	**3.0**	**1.4**
Main activity producers									
Gross production	1413.43	1809.99	2436.94	3015.16	3218.14	3348.70	3294.00	3.5	1.4
- Hydro pumped storage	*8.17*	*10.99*	*19.78*	*31.06*	*32.11*	*31.88*	*29.89*	*5.7*	*2.0*
Total generation(1)	1405.27	1799.00	2417.16	2984.10	3186.03	3316.83	3264.11	3.4	1.4
Nuclear	82.20	225.74	781.26	939.39	883.82	916.08	905.41	15.1	0.7
Hydro	333.57	374.19	408.27	522.40	498.45	539.61	488.40	1.3	0.9
Geothermal	2.51	2.72	3.61	6.18	10.54	10.74	11.28	2.3	5.6
Solar, wind, tide(2)	0.60	0.51	1.39	22.82	146.67	172.09	222.72	5.4	27.3
Coal	525.47	774.19	927.38	912.76	820.37	828.57	854.01	3.6	-0.4
Oil	334.36	307.63	168.76	145.01	63.45	53.16	43.14	-4.2	-6.3
Natural gas	124.86	110.39	122.83	420.15	686.12	706.78	641.69	-0.1	8.2
Biofuels & waste	1.69	3.64	3.66	15.39	76.60	89.82	97.46	4.9	16.9
Autoproducers									
Gross production	253.96	249.91	244.85	239.48	267.83	289.73	293.55	-0.2	0.9
- Hydro pumped storage	*-*	*-*	*0.08*	*0.10*	*0.02*	*0.03*	*0.03*	*-*	*-4.1*
Total generation(1)	253.96	249.91	244.77	239.39	267.80	289.70	293.52	-0.2	0.9
Nuclear	4.23	4.65	5.54	-	-	-	-	1.7	-
Hydro	32.37	41.52	38.09	24.10	16.12	15.55	15.37	1.0	-4.2
Geothermal	-	0.01	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.11	1.57	7.41	8.24	10.88	-	24.7
Coal	125.28	113.00	102.42	54.72	36.96	45.52	41.83	-1.3	-4.2
Oil	60.82	56.07	36.92	34.04	28.64	25.89	22.99	-3.1	-2.2
Natural gas	26.60	27.50	44.71	91.47	127.91	138.98	144.46	3.3	5.7
Biofuels & waste	4.65	7.17	17.00	33.48	50.77	55.52	58.00	8.4	6.0

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**216575 e**	**203343 e**	**228635 e**	**228188 e**	**257289**	**276307 e**	**280001**	**1.0**
Total energy	**12901**	**12004**	**42810 e**	**27031**	**60052**	**64152**	**62904**	**1.8**
Coal mines	-	-	-	3101 e	9913	10723	9429	-
Oil and gas extraction	-	-	26	269	4500	5260	4540	27.9
Patent fuel plants	-	-	-	-	34	34	24	-
Coke ovens	-	-	-	481 e	502	637	581	-
Gas works	-	-	-	18	-	1135	1112	-
BKB	-	-	13	34	7	6	5	-4.4
Oil refineries	30	27	3606	17921 e	30028	30573	30373	10.7
Energy non specified/other	12871	11977	39165 e	5207	15068	15784	16840	-3.9
Total industry	**160436 e**	**147492 e**	**140998 e**	**172751 e**	**156196 e**	**165483 e**	**165517 e**	**0.8**
Iron and steel	24446 e	19688 e	19025 e	18620	17771	20478	19651	0.2
Chemical and petrochemical	53850 e	47855 e	52448 e	47928 e	41133 e	45627 e	45146 e	-0.7
Non-ferrous metals	5991 e	6193 e	4866 e	13615 e	11624 e	11756 e	11905 e	4.4
Non-metallic minerals	843 e	844	935	5370 e	4287 e	4494 e	4146 e	7.3
Transport equipment	690 e	584 e	812	1338	2087	2479	2425	5.3
Machinery	441 e	472	1488	1768 e	1456 e	1402 e	1386 e	-0.3
Mining and quarrying	38631 e	37352 e	21946	16050	1597	1743	1437	-12.2
Food and tobacco	4074 e	4690 e	6244 e	13222 e	16599 e	15817 e	16205 e	4.6
Pulp and printing	12334	15867	20359 e	38693 e	44909 e	48901 e	49861 e	4.4
Wood and wood products	2119 e	2158 e	2479	3177	3558	3613	3756	2.0
Construction	-	-	-	354	296	498	669	-
Textile and leather	3604 e	2110 e	2083	6628	3225	3337	3224	2.1
Non specified/other industries	13413 e	9679 e	8313 e	5988	7654 e	5338 e	5706 e	-1.8
Total transport	**-**	**-**	**1868**	**2467**	**2343**	**2357 e**	**2259 e**	**0.9**
Rail and pipeline	-	-	-	-	3	48	37	-
Transport non specified	-	-	1868	2467	2340	2309 e	2222 e	0.8
Other	**43238 e**	**43847**	**42959**	**25939 e**	**38698 e**	**44315 e**	**49321 e**	**0.7**
Commerce and pub. services	29 e	36 e	2354	13733 e	20143	24589 e	27354	12.4
Residential	-	-	3	82	553	546 e	694	29.6
Agriculture and fishing	5	5	113	2357	12376	14112	15542	26.4
Sector non specified	43204	43806	40489	9767 e	5626 e	5068 e	5731 e	-8.9

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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OECD EUROPE
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**1618485**	**1917419**	**1882722**	**2706497**	**2522779**	**2338757**	**2392074**	**1.0**
Nuclear	..	..	1706	5098	5368	5815	4944	..
Geothermal	..	..	8114	10164	13117	12151	12016	..
Coal	..	..	782578	766383	768216	694755	707106	..
Oil	..	..	145238	180163	168015	138707	138250	..
Natural gas	..	..	653099	1096474	1010646	929063	899002	..
Biofuels & waste	..	..	247117	354545	510103	513237	582823	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	7000	..
Chemical processes	..	..	3876	7684	8745	7879	8534	..
Heat pumps	..	..	27439	22962	23974	22056	24081	..
Electric boilers	..	..	9556	4058	3654	3355	4303	..
Other sources(1)	..	..	3999	4242	4012	4784	4015	..
of which:								
Main activity producers								
Total	1088390	1390734	1482181	1861296	2080883	1903038	..	1.5
Nuclear	..	..	1706	5098	5368	5815	..	..
Geothermal	..	..	8063	10044	12999	12083	..	..
Coal	..	..	693634	684013	716042	644990	..	..
Oil	..	..	88718	72946	83486	57640	..	..
Natural gas	..	..	488225	804707	823549	738771	..	..
Biofuels & waste	..	..	165029	257046	410828	416537	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	27288	22832	23791	21852	..	..
Electric boilers	..	..	9494	4053	3643	3350	..	..
Other sources(1)	..	..	24	557	1177	2000	..	..
Autoproducers								
Total	530095	526685	400541	845201	441896	435719	..	-0.9
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	51	120	118	68	..	..
Coal	..	..	88944	82370	52174	49765	..	..
Oil	..	..	56520	107217	84529	81067	..	..
Natural gas	..	..	164874	291767	187097	190292	..	..
Biofuels & waste	..	..	82088	97499	99275	96700	..	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	..	..
Chemical processes	..	..	3876	7684	8745	7879	..	..
Heat pumps	..	..	151	130	183	204	..	..
Electric boilers	..	..	62	5	11	5	..	..
Other sources(1)	..	..	3975	3685	2835	2784	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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OECD EUROPE
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**319.13**	**380.46**	**374.22**	**395.94**	**432.20**	**447.88**	**434.96**	**0.9**	**0.7**
Coal	195.53	255.54	276.32	234.68	210.51	213.59	219.38	2.1	-1.1
Oil	92.45	85.87	48.66	41.03	24.72	22.38	18.64	-3.7	-4.5
Natural gas	28.49	33.97	40.56	101.85	151.95	160.44	146.70	2.1	6.3
Biofuels & waste	2.66	5.08	8.69	18.38	45.02	51.47	50.25	7.2	8.7
of which: ***main activity prod.***									
Total	**..**	**315.95**	**315.59**	**346.95**	**375.85**	**387.34**	**373.80**	**..**	**0.8**
Coal	..	214.05	241.26	220.76	200.74	202.09	208.12	..	-0.7
Oil	..	72.46	39.98	34.36	16.29	14.57	11.39	..	-5.8
Natural gas	..	27.64	31.47	83.79	128.18	134.40	119.63	..	6.6
Biofuels & waste	..	1.80	2.88	8.04	30.64	36.28	34.66	..	12.6

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**21.55**	**62.49**	**208.43**	**250.15**	**239.61**	**249.26**	**249.25**	**14.3**	**0.9**
Nuclear	19.38	60.05	205.17	244.85	230.45	238.86	236.07	14.9	0.7
Geothermal	2.17	2.43	3.26	5.29	7.91	8.16	8.80	2.4	4.8
Solar	-	-	0.00	0.01	1.25	2.24	4.38	-	48.3
Non-Thermal									
Total	**29.49**	**35.79**	**38.50**	**48.99**	**55.92**	**60.85**	**59.05**	**1.6**	**2.1**
Hydro	29.44	35.75	38.39	47.00	44.25	47.74	43.32	1.6	0.6
Tide, wave, ocean	0.05	0.04	0.05	0.05	0.04	0.05	0.05	0.1	-0.3
Wind	-	0.00	0.07	1.92	11.62	13.04	15.67	-	29.7
Other (e.g. fuel cells)	-	-	-	0.02	0.01	0.01	0.01	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	181321	188332 e	165507 e	130396	130454	140646	-1.4
Fuel input (TJ)	4355604	4563385 e	4110944 e	3296558	3287998	3496828	-1.3
Electricity production (GWh)	439163	486925 e	445647	353235 e	357714 e	375122	-1.2
Brown coal							
Fuel input (1000 t)	325376	357931 e	332052 e	310738	294360	309150	-0.7
Fuel input (TJ)	2846300	2932150 e	2796148 e	2525851	2461163	2580871	-0.6
Electricity production (GWh)	260880	279214 e	284830 e	253864	249277	258042	-0.4
Peat							
Fuel input (1000 t)	3534	3814	3532	4326	4932	4560	0.9
Fuel input (TJ)	29600	32308	29815	35038	43602	40607	1.1
Electricity production (GWh)	2236	3025 e	2829	3888	4846	4426	1.8
Coal manufactured gases(1)							
Fuel input (TJ)	303405	239110 e	251639 e	176385	236008	235895	-0.1
Electricity production (GWh)	26101	22625 e	24109 e	15828	22436 e	22505	-0.0
Petroleum products							
Fuel input (1000 t)	72000	39302 e	32306 e	14359	10379	8134	-7.2
Fuel input (TJ)	2870379	1598260 e	1299780 e	545388	401215	306343	-7.6
Electricity production (GWh)	308407	170874 e	132118 e	55831	41758	32085 e	-7.7
Natural gas (1)							
Fuel input (TJ)	1094719	1049946 e	2850551 e	4071452	4164658	3768021	6.3
Electricity production (GWh)	107565	107055 e	348893 e	526369	530858	490393	7.5
Wood and other solid waste							
Fuel input (TJ)	-	16003	43119 e	325254	326442	317819	15.3
Electricity production (GWh)	-	1487 e	3614	23653	26257	26540	14.7
Industrial waste							
Fuel input (TJ)	24560	24105	49160 e	21785	23132	22953	-0.2
Electricity production (GWh)	2585	2654	4490 e	1539	1702	1633	-2.3
Municipal waste							
Fuel input (TJ)	35978 e	50345 e	132394 e	228900	234141	244957	7.8
Electricity production (GWh)	3105 e	3764	10126	16472	18013	17992	7.7
Biogases and liquid biofuels							
Fuel input (TJ)	-	8828 e	62424 e	287137	392655	248761	17.2
Electricity production (GWh)	-	445	5412 e	24016	28881	23769	20.9
Total combustible fuels(2)							
Electricity production (GWh)	1151992	1078068 e	1262068 e	1274695 e	1281742	1252507	0.7

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD EUROPE

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	95159	90784 e	64262 e	66197	69072	65405	-1.5
Fuel input (TJ)	1933892	2006396 e	1460332 e	1529572	1579275	1476969	-1.4
Electricity production (GWh)	125653	144014 e	122091 e	136033 e	142186	133614	-0.4
CHP Heat production (TJ)	566114 e	588583 e	382302 e	394013	412396	370213	-2.2
Brown coal							
Fuel input (1000 t)	55527	138073 e	94316 e	96649	100450	108051	-1.2
Fuel input (TJ)	452337	1210298 e	881080 e	892597	913436	962439	-1.1
Electricity production (GWh)	25901	83899 e	75142 e	80105	80109	85829	0.1
CHP Heat production (TJ)	155598	338029 e	181412 e	108304	115964	114079	-5.0
Peat							
Fuel input (1000 t)	3192	2375	3991	5434	6297	5432	4.0
Fuel input (TJ)	26726	25768	40824	58221	65436	55249	3.7
Electricity production (GWh)	4194	2050 e	2995	3915	4557	3925	3.1
CHP Heat production (TJ)	6866	14414 e	23451	34392	38368	32377	3.9
Coal manufactured gases(1)							
Fuel input (TJ)	60539	108496 e	104988 e	122027	152137	148965	1.5
Electricity production (GWh)	3060	8050 e	9845 e	10466	12966	12376	2.1
CHP Heat production (TJ)	25865 e	34419 e	22497 e	21735	31139 e	33308	-0.2
Petroleum products							
Fuel input (1000 t)	16603	9963 e	11238 e	10258	11378	10103	0.1
Fuel input (TJ)	668516	403889 e	420452 e	412738	433948	375594	-0.3
Electricity production (GWh)	55294	34797 e	46934 e	36260	37295	34050	-0.1
CHP Heat production (TJ)	209239 e	105246 e	89353 e	129706 e	129607 e	114701	0.4
Natural gas(1)							
Fuel input (TJ)	395959	713048 e	1611734 e	2683295	2941317	2724762	6.6
Electricity production (GWh)	30326	60478 e	162726 e	287665	314896	295750	7.9
CHP Heat production (TJ)	97176	176892 e	435289 e	663438	747541	696299	6.7
Wood and other solid waste							
Fuel input (TJ)	22492	75414 e	188321 e	418775	509393	515986	9.6
Electricity production (GWh)	1690 e	9651 e	17124	38719	43924	47010	7.8
CHP Heat production (TJ)	7069 e	13788 e	78451	140560	192180	179192	13.0
Industrial waste							
Fuel input (TJ)	5289	8553	20660	30810	32947	35040	6.9
Electricity production (GWh)	161	301	1477	2350	2089	2327	10.2
CHP Heat production (TJ)	3077	3693	4989	8432	10555	11997	5.8
Municipal waste							
Fuel input (TJ)	21105	76363	152922 e	302624	328082	352755	7.6
Electricity production (GWh)	1313 e	1812	5450	14429	16625	18739	11.8
CHP Heat production (TJ)	3895 e	36376	76477 e	123925	132204	139597	6.6
Biogases and liquid biofuels							
Fuel input (TJ)	-	5653	11672 e	62998	74908	140736	16.5
Electricity production (GWh)	-	550	1177	6195	7840	17446	17.9
CHP Heat production (TJ)	-	125	1695	9418	8529	20410	27.5
Total combustible fuels(2)							
Electricity production (GWh)	247592	345602 e	444961 e	616137 e	662487 e	651066	3.1
CHP Heat production (TJ)	1109184	1311565 e	1295916 e	1647765	1825412	1719128	1.3

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD EUROPE
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	18524	20057 e	8167 e	6985	8126	7064	-4.8
Fuel input (TJ)	417415	431741 e	181306 e	162356	189889	166363	-4.4
Heat production (TJ)	281233	309925 e	147094 e	120492	150257	125456	-4.2
Brown coal							
Fuel input (1000 t)	4739	2794 e	774 e	690	528	447	-8.4
Fuel input (TJ)	54336	30614 e	10674 e	8751	7374	6604	-7.0
Heat production (TJ)	39968	21859 e	8021 e	5612	5652	5253	-6.6
Peat							
Fuel input (1000 t)	-	1362	796	843	1036	921	-1.8
Fuel input (TJ)	-	14637	8552	8895	10025	9366	-2.1
Heat production (TJ)	-	11601 e	7255	7598	8499	7899	-1.8
Coal manufactured gases(1)							
Fuel input (TJ)	7266	7614 e	13002 e	7563	8728	8927	0.8
Heat production (TJ)	5116 e	5339 e	10546 e	5170	5941	6170	0.7
Petroleum products							
Fuel input (1000 t)	2193	2507 e	1785 e	943	1114	742	-5.6
Fuel input (TJ)	90693	102253 e	72998 e	39289	46288	30478	-5.6
Heat production (TJ)	69245 e	80930 e	55885 e	31735	38408	24006	-5.6
Natural gas(1)							
Fuel input (TJ)	108298	130867 e	283499 e	316062	359828	333540	4.6
Heat production (TJ)	77745 e	96718 e	217810 e	229115	263105	232764	4.3
Wood and other solid waste							
Fuel input (TJ)	1073	28177 e	63407	111451	133659	133162	7.7
Heat production (TJ)	750 e	23001 e	53577	92057	109297	104283	7.5
Industrial waste							
Fuel input (TJ)	476	181	4521 e	5694	7210	10522	21.3
Heat production (TJ)	323	132	3648 e	3702	4900	8010	21.6
Municipal waste							
Fuel input (TJ)	26121 e	70252 e	39814 e	78484	82503	74382	0.3
Heat production (TJ)	14148 e	43179 e	27236	44985	45297	44729	0.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	45	1255	6466	10114	7081	27.2
Heat production (TJ)	-	34	1044	5437	7141	5019	26.9
Total combustible fuels(2)							
Heat production (TJ)	507252 e	592718 e	532116 e	545903	638497	563589	-0.2

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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OECD EUROPE
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**1022.01**	**1080.61**	**1123.40**	**1225.97**	**1216.15**	**1275.12**	**1222.40**	**0.6**	**0.4**
Geothermal	0.35	0.51	1.40	1.83	2.75	2.94	3.12	8.4	3.9
Solar thermal	-	0.01	0.17	0.66	1.55	1.75	2.08	-	12.8
Coal	185.08	155.88	125.54	62.22	48.37	54.10	52.67	-2.3	-4.1
Oil	577.22	551.43	518.04	568.44	536.08	536.05	517.63	-0.6	-0.0
Natural gas	95.09	160.82	201.34	268.27	257.22	284.36	260.06	4.5	1.2
Biofuels & waste	28.25	30.49	45.50	51.98	70.81	78.76	78.61	2.8	2.6
Electricity	115.43	146.95	191.78	233.08	253.54	265.87	261.34	3.0	1.5
Heat	20.59	34.52	39.63	39.50	45.82	51.29	46.89	3.9	0.8
of which:									
Total industry	**372.65**	**356.43**	**322.37**	**324.31**	**272.53**	**293.48**	**293.70**	**-0.8**	**-0.4**
Geothermal	0.03	0.02	0.05	0.07	0.03	0.04	0.04	3.2	-1.7
Solar thermal	-	-	0.01	0.10	0.00	0.01	0.01	-	1.5
Coal	91.20	78.50	70.89	46.43	28.28	32.16	32.99	-1.5	-3.6
Oil	150.31	116.94	57.84	53.63	36.80	35.81	33.24	-5.5	-2.6
Natural gas	52.01	66.96	77.65	98.59	78.61	87.10	87.45	2.4	0.6
Biofuels & waste	4.92	5.87	14.47	17.33	21.39	23.74	24.56	6.6	2.5
Electricity	63.41	73.69	87.25	98.54	92.34	98.70	99.74	1.9	0.6
Heat	10.77	14.43	14.20	9.63	15.07	15.92	15.67	1.6	0.5
Transport	**173.93**	**208.55**	**265.54**	**316.50**	**334.97**	**333.93**	**331.01**	**2.5**	**1.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	6.85	2.54	0.21	0.01	0.01	0.01	0.01	-18.4	-14.0
Oil	163.52	201.32	259.67	308.81	314.61	311.83	308.30	2.8	0.8
Natural gas	0.16	0.57	0.32	0.65	2.73	2.86	2.97	4.2	11.2
Biofuels & waste	0.00	0.00	0.01	0.71	11.71	13.18	13.73	5.4	44.4
Electricity	3.40	4.13	5.34	6.32	5.91	6.04	6.01	2.7	0.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**95.50**	**104.79**	**110.54**	**125.59**	**153.91**	**161.59**	**148.90**	**0.9**	**1.4**
Geothermal	0.01	0.02	0.12	0.27	0.36	0.33	0.34	14.1	5.1
Solar thermal	-	-	0.02	0.05	0.16	0.18	0.21	-	12.9
Coal	15.41	17.11	12.67	1.47	2.58	1.91	1.93	-1.1	-8.6
Oil	57.49	50.48	27.90	23.72	20.75	20.62	18.36	-4.2	-2.0
Natural gas	3.55	9.12	26.05	35.44	46.05	49.77	43.22	12.4	2.4
Biofuels & waste	0.81	1.05	0.41	1.32	1.93	2.03	2.10	-4.0	8.1
Electricity	17.42	24.90	39.72	57.35	73.81	77.00	74.84	5.0	3.1
Heat	0.82	2.12	3.66	5.97	8.26	9.75	7.90	9.2	3.7

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**242.15**	**256.77**	**280.71**	**301.94**	**305.87**	**329.02**	**295.75**	**0.9**	**0.2**
Geothermal	0.29	0.45	0.97	1.34	2.20	2.45	2.56	7.3	4.7
Solar thermal	-	0.01	0.13	0.45	1.32	1.46	1.74	-	13.3
Coal	62.44	50.39	37.12	11.82	15.07	17.13	15.07	-3.0	-4.2
Oil	101.24	81.54	65.93	62.72	47.13	46.76	40.52	-2.5	-2.3
Natural gas	23.18	50.25	74.03	108.85	111.82	124.02	107.07	7.1	1.8
Biofuels & waste	18.42	19.91	28.16	31.39	34.16	38.04	35.39	2.5	1.1
Electricity	28.83	40.62	54.92	65.97	75.98	78.51	75.05	3.9	1.5
Heat	7.75	13.60	19.45	19.39	18.18	20.65	18.36	5.6	-0.3
Agriculture & fishing	**20.79**	**26.26**	**32.15**	**32.25**	**30.65**	**31.36**	**30.70**	**2.6**	**-0.2**
Geothermal	0.02	0.02	0.06	0.15	0.16	0.14	0.14	5.8	4.4
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	17.3
Coal	1.62	1.78	1.73	1.08	1.17	1.38	1.13	0.4	-2.0
Oil	16.59	20.42	20.69	20.79	19.23	19.30	19.23	1.3	-0.3
Natural gas	0.12	0.33	3.79	4.10	3.30	3.73	3.56	22.7	-0.3
Biofuels & waste	0.08	0.14	0.78	1.19	1.60	1.74	1.63	14.3	3.6
Electricity	1.98	3.08	4.10	4.48	4.91	4.79	4.75	4.4	0.7
Heat	0.37	0.49	1.00	0.47	0.29	0.27	0.24	6.0	-6.5
Other	**35.82**	**37.63**	**12.23**	**13.14**	**10.09**	**11.80**	**12.41**	**-6.1**	**0.1**
Geothermal	-	-	0.20	0.00	0.00	0.00	0.05	-	-6.3
Solar thermal	-	-	0.01	0.06	0.07	0.09	0.12	-	10.2
Coal	4.46	3.41	1.22	0.31	0.23	0.19	0.20	-7.3	-8.2
Oil	14.84	5.16	2.05	1.81	1.80	1.79	1.84	-11.0	-0.5
Natural gas	11.23	21.14	5.30	6.47	3.38	4.18	3.34	-4.3	-2.2
Biofuels & waste	4.01	3.51	1.67	0.04	0.02	0.02	1.19	-5.0	-1.6
Electricity	0.39	0.53	0.45	0.41	0.59	0.82	0.96	0.9	3.6
Heat	0.88	3.88	1.31	4.04	4.01	4.70	4.71	2.4	6.3
Non-energy use(1)	**81.17**	**90.18**	**99.87**	**112.24**	**108.14**	**113.95**	**109.93**	**1.23**	**0.46**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**1022.01**	**1080.61**	**1123.40**	**1225.97**	**1282.18**	**1216.15**	**1275.12**	**1222.40**
Total industry (Mtoe)	**372.65**	**356.43**	**322.37**	**324.31**	**312.82**	**272.53**	**293.48**	**293.70**
Iron and steel	74.34	63.12	52.73	44.57	41.39	31.01	36.19	37.75
Chem. and petrochemical	64.82	62.70	57.72	57.65	57.22	50.37	54.07	56.27
Non-ferrous metals	12.75	15.11	13.96	14.37	14.22	12.51	13.34	13.76
Non-metallic minerals	45.84	46.09	41.75	43.73	45.21	37.25	37.97	38.69
Transport equipment	8.37	8.56	7.97	9.38	8.87	7.69	8.33	8.03
Machinery	22.44	24.10	23.00	19.47	20.48	17.82	21.30	20.80
Mining and quarrying	8.13	7.85	6.42	3.74	3.35	2.88	3.40	3.36
Food and tobacco	26.26	29.03	28.35	31.48	29.73	28.74	29.91	29.77
Paper, pulp and printing	24.63	24.36	28.05	36.80	38.19	34.87	36.91	34.25
Wood and wood products	4.47	4.78	5.31	6.43	7.72	7.36	7.77	7.90
Construction	7.02	6.91	6.41	7.43	8.95	7.99	8.50	8.86
Textile and leather	14.97	14.12	12.01	11.75	7.08	6.47	6.69	6.42
Non specified/other	58.61	49.69	38.69	37.50	30.39	27.58	29.09	27.86
Electricity consumption (Mtoe)	**115.43**	**146.95**	**191.78**	**233.08**	**266.62**	**253.54**	**265.87**	**261.34**
Total industry (Mtoe)	**63.41**	**73.69**	**87.25**	**98.54**	**106.50**	**92.34**	**98.70**	**99.74**
Iron and steel	9.65	10.76	10.73	12.08	12.70	10.09	11.46	12.09
Chem. and petrochemical	15.40	16.77	17.80	17.79	18.01	15.59	17.23	17.04
Non-ferrous metals	6.27	8.19	8.37	8.56	9.66	8.00	8.47	8.52
Non-metallic minerals	3.98	4.78	5.85	7.31	7.80	6.79	6.94	7.17
Transport equipment	2.27	2.80	3.14	4.56	4.68	4.00	4.28	4.19
Machinery	5.11	6.09	8.65	8.36	9.80	8.51	11.11	11.45
Mining and quarrying	1.67	1.92	1.94	1.32	1.43	1.28	1.56	1.40
Food and tobacco	3.25	4.41	6.87	8.95	9.92	9.94	10.15	10.27
Paper, pulp and printing	5.69	6.41	9.42	12.25	12.64	11.31	11.71	11.39
Wood and wood products	1.03	1.38	1.82	1.99	2.40	1.95	2.01	1.95
Construction	0.58	0.86	1.03	1.17	1.74	1.69	1.77	1.69
Textile and leather	3.46	3.55	4.02	4.14	3.28	2.94	3.16	3.05
Non specified/other	5.06	5.78	7.62	10.08	12.45	10.24	8.87	9.54
Total industry (TWh)	**737.32**	**856.91**	**1014.57**	**1145.81**	**1238.32**	**1073.76**	**1147.72**	**1159.78**
Iron and steel	112.20	125.17	124.73	140.48	147.68	117.35	133.23	140.53
Chem. and petrochemical	179.09	195.00	206.95	206.83	209.46	181.30	200.35	198.12
Non-ferrous metals	72.94	95.25	97.28	99.54	112.37	93.06	98.48	99.04
Non-metallic minerals	46.23	55.54	68.07	84.95	90.66	79.00	80.67	83.37
Transport equipment	26.39	32.51	36.54	53.02	54.39	46.53	49.72	48.75
Machinery	59.36	70.78	100.62	97.18	113.97	99.00	129.17	133.13
Mining and quarrying	19.38	22.30	22.56	15.38	16.58	14.87	18.09	16.28
Food and tobacco	37.83	51.22	79.84	104.04	115.31	115.54	118.03	119.43
Paper, pulp and printing	66.19	74.49	109.49	142.39	146.93	131.55	136.13	132.47
Wood and wood products	11.98	16.10	21.14	23.09	27.91	22.70	23.35	22.62
Construction	6.70	10.00	11.92	13.64	20.23	19.65	20.63	19.65
Textile and leather	40.24	41.30	46.79	48.13	38.09	34.16	36.71	35.46
Non specified/other	58.79	67.25	88.62	117.16	144.77	119.07	103.19	110.95

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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OECD EUROPE

13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**68330**	**106547**	**217676**	**204376**	**282197**	**326661**	**312469**	**321396**	**349495**
Imports from:									
Total from OECD	**16611**	**40995**	**172007**	**194102**	**268913**	**295138**	**278979**	**287804**	**317430**
Austria	498	991	6910	8924	16332	18077	22360	20511	19594
Belgium	89	7810	4488	3550	4452	6544	11289	11826	10652
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	2975	6116	18634	19986	22225	21449	27497
Denmark	289	1372	4940	5648	8177	11006	10174	11741	10229
Estonia	-	-	-	-	-	2250	1785	1967	1650
Finland	260	1163	362	276	1004	3226	3220	4983	3663
France	2496	4338	55503	77740	77719	56967	43322	48741	64186
Germany	1238	5067	22161	27167	39909	59782	51146	56858	52515
Greece	-	-	-	-	-	209	2192	2312	2553
Hungary	-	-	212	622	843	722	238	696	703
Ireland	-	-	-	30	41	152	85	146	120
Italy	318	736	253	384	476	3464	1536	1217	1859
Luxembourg	-	-	965	778	738	1629	1868	1845	1532
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	215	3906	3499	3902	4031	9272	10511	12772	11758
Norway	5401	1503	16413	8573	20486	15700	13867	5776	13119
Poland	-	828	7878	7150	9658	9632	9820	7514	11958
Portugal	78	514	1697	1742	3767	1314	2801	3189	3930
Slovak Republic	303	549	778	2484	8825	7487	6063	5017	8144
Slovenia	-	-	1363	816	4554	5599	7240	8066	5178
Spain	2239	3631	3606	3031	5293	12405	9941	9315	9200
Sweden	20	1321	14605	8627	12955	16480	10632	14581	20921
Switzerland	3071	7247	23354	26496	29785	31559	32365	31676	31069
Turkey	-	-	-	-	-	-	-	736	2590
United Kingdom	96	19	45	46	1234	1676	4299	4870	2810
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**5384**	**11425**	**18244**	**10274**	**12985**	**29829**	**31991**	**32270**	**29934**
Albania	-	151	165	198	50	-	61	404	4
Azerbaijan	-	-	-	-	-	94	125	156	330
Belarus	-	-	-	-	163	554	-	-	-
Bulgaria	-	750	320	652	4364	4628	3418	3454	4918
Croatia	-	-	1	59	403	4921	5198	6586	4602
F.Y.R. of Macedonia	-	-	-	-	-	1188	3810	3856	1488
Georgia	-	649	176	-	204	215	182	303	219
Lativia	-	-	-	-	-	83	562	664	815
Lithuania	-	-	-	-	120	1207	2328	172	374
Romania	1428	955	-	283	-	720	586	1252	866
Russian Federation	46	49	4531	5084	4893	11059	11931	11847	10968
Serbia	115	545	891	496	612	-	75	544	267
Turkmenistan	-	-	-	-	-	450	505	685	1074
Ukraine	3795	8326	12160	3502	2176	4710	3210	2347	4009
Non-specified/others	**46335**	**54127**	**27425**	**-**	**299**	**1694**	**1499**	**1322**	**2131**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**62585**	**90906**	**202504**	**201182**	**280502**	**316899**	**300556**	**306726**	**344349**
Exports to:									
Total to OECD	**26328**	**37668**	**170664**	**195875**	**266453**	**295050**	**279076**	**287984**	**316665**
Austria	614	1067	7789	9751	15198	23206	22337	22388	27201
Belgium	1320	1086	2322	6058	11557	17021	9507	12427	13314
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	47	4405	8699	8523	8234	6685	10440
Denmark	918	1841	12106	3825	8571	12432	10490	10260	11549
Estonia	-	-	-	-	-	10	87	246	484
Finland	4136	678	6481	3873	8365	4671	3104	3684	6975
France	2686	9845	7019	3256	3676	10563	19460	20463	9482
Germany	3211	3930	24998	39439	45612	38627	38127	40816	47890
Greece	-	-	-	-	-	1810	311	67	2064
Hungary	-	-	233	1288	7826	8304	7407	5946	9747
Ireland	-	-	-	-	133	373	452	378	366
Italy	761	1425	34226	38000	42078	43585	47259	46298	47768
Luxembourg	913	1073	4364	5651	6409	5666	5000	5384	5562
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	1288	10	12657	15497	21835	25231	15562	15486	20829
Norway	165	991	407	1911	1231	1824	4815	13258	10074
Poland	-	4	13	4088	2494	7673	7071	6173	6676
Portugal	132	2342	1734	2661	4698	10753	7608	5823	6744
Slovak Republic	552	3652	4602	2101	5967	7830	8762	6695	10813
Slovenia	-	-	2089	2805	3307	1309	2594	2136	2452
Spain	322	2337	3209	7632	12271	5884	6782	5191	7927
Sweden	5256	1825	12749	8221	17688	14686	15468	16801	13985
Switzerland	3893	5540	21694	19083	24070	31317	30751	32796	34286
Turkey	-	-	-	-	-	30	-	-	-
United Kingdom	161	22	11925	16330	14768	13722	7888	8583	10037
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**60**	**193**	**1891**	**4840**	**11212**	**13922**	**13038**	**10756**	**19024**
Albania	-	-	541	391	1111	1657	1035	491	2125
Azerbaijan	-	-	-	495	437	-	-	-	20
Belarus	-	-	-	-	-	-	-	-	18
Bulgaria	-	-	573	9	205	-	-	-	622
Croatia	-	-	-	2398	7079	7523	6883	5690	9290
F.Y.R. of Macedonia	-	-	-	-	-	95	6	8	109
Georgia	-	-	122	178	-	54	-	-	-
Lativia	-	-	-	529	813	572	1724	2695	2084
Lithuania	-	-	-	-	-	-	-	-	1482
Romania	2	15	256	88	-	105	308	146	340
Russian Federation	-	-	-	477	374	-	-	-	-
Serbia	58	154	389	258	1189	2653	1364	392	697
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	24	10	17	4	1263	1718	1334	2237
Non-specified/others	**36197**	**53045**	**29949**	**467**	**2837**	**7927**	**8442**	**7986**	**8660**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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OECD EUROPE

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total Capacity [1]	**328.33**	**417.44**	**557.11**	**606.87**	**678.58**	**809.44**	**833.54**	**880.19**	**916.68**
Nuclear	14.15	42.05	120.52	128.25	133.94	131.82	131.25	131.67	123.62
Hydro	99.49	119.07	149.59	163.16	175.56	185.52	187.71	192.34	195.32
of which: pumped storage	*2.36*	*6.49*	*30.89*	*37.29*	*39.10*	*42.82*	*43.09*	*43.44*	*43.89*
Geothermal	0.39	0.44	0.56	0.55	0.79	1.31	1.38	1.43	1.54
Solar	-	-	0.01	0.05	0.17	9.47	15.66	28.68	48.78
Tide, wave, ocean	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Wind	-	-	0.41	1.08	12.28	63.22	72.88	82.53	91.67
Other (e.g. fuel cells)	-	-	-	0.03	0.17	0.42	0.43	1.59	2.82
Combustible fuels	214.06	255.65	285.77	313.52	355.43	417.43	424.00	441.72	452.69
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993 and for Slovak Republic before 1995.

(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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OECD EUROPE

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total Capacity [1]	**49.39**	**51.49**	**52.96**	**59.18**	**48.24**	**55.48**	**57.89**	**60.36**	**62.26**
Nuclear	0.54	0.84	0.77	0.54	-	-	-	-	-
Hydro	6.63	7.06	9.07	8.99	4.07	3.80	3.68	3.89	3.81
of which: pumped storage	-	-	*0.07*	*0.23*	*0.27*	*0.12*	*0.11*	*0.10*	*0.10*
Geothermal	-	0.01	-	-	-	-	-	-	-
Solar	-	-	-	0.02	0.04	0.22	0.62	1.29	3.33
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.06	1.37	0.48	1.78	2.89	2.72	2.73
Other (e.g. fuel cells)	-	-	-	0.11	0.03	0.22	0.22	2.80	2.78
Combustible fuels	42.22	43.59	43.05	48.16	43.63	49.46	50.48	49.66	49.62
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993 and for Slovak Republic before 2001.
(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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IEA TOTAL

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	3670.60	3953.70	4356.85	5089.63	5155.03	5043.20	4970.33	1.0	0.6
GDP (billion 2005 USD)	14749.64	17719.79	24078.45	31237.00	36290.91	36881.04	37262.36	2.9	2.0
TPES/GDP(1)	0.25	0.22	0.18	0.16	0.14	0.14	0.13	-1.9	-1.4
Population (millions)	848.85	898.93	961.08	1028.20	1096.84	1102.55	1107.33	0.7	0.6
TPES/population(2)	4.32	4.40	4.53	4.95	4.70	4.57	4.49	0.3	-0.0
TPES/GDP (2005 = 100)	164	147	119	107	93	90	88	-1.9	-1.4
Ele.TFC/GDP(2005=100)(3)	100	105	103	103	99	96	..	0.2	..
Ele.TFC/population(4)	4389	5207	6519	7864	8265	8140	..	2.4	..
Elec. generated (TWh)(5)	4414.62	5573.93	7439.88	9411.77	10418.86	10334.97	10301.10	3.1	1.5

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**3670.60**	**3953.70**	**4356.85**	**5089.63**	**5155.03**	**5043.20**	**4970.33**	**1.0**	**0.6**
Coal	841.56	962.00	1064.36	1079.68	1058.42	1034.30	992.10	1.4	-0.3
Oil	1921.71	1867.71	1768.91	1998.69	1834.18	1790.86	1755.21	-0.5	-0.0
Natural gas	695.26	758.10	816.45	1120.35	1254.97	1251.11	1282.08	0.9	2.1
Biofuels & waste	79.83	101.95	134.78	167.97	249.21	251.06	254.31	3.1	2.9
Nuclear	49.22	162.25	449.24	582.80	593.49	539.77	504.84	13.9	0.5
Geothermal	5.59	8.76	20.85	23.63	22.55	23.29	24.33	8.1	0.7
Solar, wind, tide(1)	0.05	0.07	1.87	5.75	30.09	38.19	44.62	24.0	15.5
Hydro	76.88	91.56	98.22	110.09	109.71	113.07	113.25	1.5	0.6
Net electricity imports(2)	0.51	1.30	2.13	0.19	1.74	0.92	-1.06	8.7	-
Heat	-	-	0.06	0.49	0.67	0.63	0.66	-	11.7

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**4427.8**	**5589.7**	**7482.9**	**9481.3**	**10196.2**	**10486.1**	**10399.6**	**10363.2**
Nuclear	188.5	620.7	1721.9	2236.2	2334.9	2276.8	2070.7	1936.7
Hydro	907.2	1080.4	1185.1	1349.6	1309.9	1343.0	1379.4	1378.9
of which:								
pumped storage production	*13.2*	*15.7*	*43.0*	*69.6*	*74.3*	*67.2*	*64.6*	*62.0*
Geothermal	6.4	10.1	23.2	25.8	28.7	32.4	33.3	35.0
Solar	-	-	0.7	1.2	4.2	32.2	59.6	93.1
Tide, wave, ocean	0.6	0.5	0.6	0.6	0.6	0.6	0.6	0.5
Wind	-	0.0	3.8	28.5	93.6	266.7	326.0	367.7
Combustible fuels	3325.2	3877.9	4547.4	5838.0	6416.4	6528.3	6522.8	6544.3
Coal	*1693.8*	*2317.5*	*3049.3*	*3721.6*	*3893.3*	*3634.8*	*3512.0*	*3344.5*
Oil	*1109.8*	*939.9*	*620.7*	*485.6*	*458.8*	*251.6*	*286.2*	*298.2*
Natural gas	*515.0*	*607.3*	*754.7*	*1485.1*	*1871.6*	*2372.7*	*2440.6*	*2608.3*
Biofuels & waste	*6.6*	*13.3*	*122.8*	*145.8*	*192.8*	*269.2*	*284.0*	*293.3*
Other (e.g. fuel cells)	-	-	0.2	1.4	7.8	6.2	7.3	6.8
- Own use by power plant	217.9	290.9	401.1	482.3	468.7	475.3	475.8	..
Net production	**4209.9**	**5298.7**	**7081.8**	**8999.0**	**9727.4**	**10010.8**	**9923.8**	**..**
Nuclear	..	580.1	1627.7	2119.8	2229.2	2171.7	1974.0	..
Hydro	..	1067.3	1172.5	1333.0	1297.1	1334.0	1368.4	..
Geothermal	..	8.8	21.9	24.5	25.8	29.0	29.7	..
Solar	..	-	0.7	1.2	4.1	32.0	59.2	..
Tide, wave, ocean	..	0.5	0.6	0.6	0.6	0.6	0.6	..
Wind	..	0.0	3.8	28.4	93.5	264.9	324.0	..
Combustible fuels	..	3575.3	4254.5	5490.1	6069.9	6172.9	6161.1	..
Other (e.g. fuel cells)	..	-	0.2	1.4	7.2	5.8	6.9	..
- Used for heat pumps	-	-	0.0	2.3	2.0	1.9	1.6	2.0
- Used for electric boilers	-	-	0.7	3.6	2.1	2.0	1.8	1.9
- Used for pumped storage	19.1	25.5	65.7	92.4	99.0	86.2	83.3	85.0
+ Imports	87.4	139.7	254.8	341.6	412.0	375.4	408.0	423.6
- Exports	81.4	124.6	230.0	339.4	393.4	355.2	397.4	436.0
Electrical energy supplied	**4196.8**	**5288.3**	**7040.2**	**8902.9**	**9643.0**	**9941.0**	**9847.8**	**..**
- Transmission & distr. losses	344.2	429.9	563.2	589.8	634.2	614.0	609.8	..
- Statistical difference	-	-0.0	2.3	0.6	-0.4	1.8	0.1	..
Total consumption	**3852.5**	**4858.4**	**6474.7**	**8312.5**	**9009.2**	**9325.2**	**9237.9**	**..**
- Energy industry consumption[2]	128.7	179.1	211.7	229.8	254.2	263.1	265.9	..
Final consumption	**3723.9**	**4679.4**	**6263.0**	**8082.7**	**8755.0**	**9062.1**	**8972.0**	**..**
Industry	1816.5	2127.4	2503.1	3081.7	2962.8	2858.7	2863.6	..
Transport	61.1	69.9	88.8	105.1	108.3	106.5	106.0	..
Commercial & publ. serv.	726.7	996.6	1666.3	2369.3	2680.1	2923.5	2903.6	..
Residential	1072.9	1432.4	1939.3	2448.1	2770.6	2940.4	2869.4	..
Agriculture & fishing	42.2	46.9	62.3	72.4	76.2	79.9	79.8	..
Sector non specified	4.4	6.1	3.3	6.1	157.0	153.0	149.6	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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IEA TOTAL

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**4470.74**	**5589.65**	**7482.91**	**9481.34**	**10043.25**	**10486.06**	**10399.60**	**3.3**	**1.6**
- Hydro pumped storage	*10.79*	*15.73*	*43.04*	*69.58*	*64.90*	*67.21*	*64.63*	*9.0*	*2.0*
Total generation(1)	**4459.95**	**5573.93**	**7439.88**	**9411.77**	**9978.35**	**10418.86**	**10334.97**	**3.2**	**1.6**
Main activity producers									
Gross production	4109.19	5228.30	6869.02	8846.58	9408.05	9794.47	9693.39	3.3	1.7
- Hydro pumped storage	*10.79*	*15.73*	*42.96*	*69.48*	*64.87*	*67.18*	*64.60*	*9.0*	*2.0*
Total generation(1)	4098.41	5212.58	6826.06	8777.10	9343.17	9727.30	9628.80	3.2	1.7
Nuclear	237.85	615.44	1715.37	2235.44	2225.90	2276.84	2070.67	13.1	0.9
Hydro	919.12	985.50	1059.50	1213.18	1198.53	1214.86	1249.78	0.9	0.8
Geothermal	6.49	10.11	15.96	25.48	30.54	32.15	33.05	5.8	3.5
Solar, wind, tide(2)	0.60	0.51	1.42	29.50	235.03	285.51	366.50	5.6	30.3
Coal	1501.59	2184.06	2891.17	3554.89	3385.14	3498.31	3384.07	4.2	0.8
Oil	934.37	837.89	533.30	379.53	180.07	171.69	210.43	-3.4	-4.3
Natural gas	496.34	574.94	602.86	1288.22	1967.36	2107.74	2164.97	1.2	6.3
Biofuels & waste	2.06	4.13	6.48	50.86	120.60	140.21	149.33	7.4	16.1
Autoproducers									
Gross production	361.54	361.35	613.89	634.76	635.20	691.59	706.21	3.4	0.7
- Hydro pumped storage	*-*	*-*	*0.08*	*0.10*	*0.02*	*0.03*	*0.03*	*-*	*-4.1*
Total generation(1)	361.54	361.35	613.82	634.67	635.18	691.56	706.18	3.4	0.7
Nuclear	4.23	5.23	6.52	0.71	-	-	-	2.7	-
Hydro	71.26	79.20	82.58	66.89	58.98	60.90	64.95	0.9	-1.1
Geothermal	-	-	7.23	0.27	0.25	0.22	0.21	-	-15.5
Solar, wind, tide(2)	-	-	3.90	2.32	16.31	20.12	27.02	-	9.7
Coal	137.55	133.41	158.13	166.67	116.27	136.52	127.93	0.9	-1.0
Oil	113.46	101.99	87.37	106.02	84.87	79.88	75.77	-1.6	-0.7
Natural gas	29.78	32.39	151.80	196.89	246.63	264.94	275.65	10.7	2.9
Biofuels & waste	5.27	9.13	116.29	94.89	111.88	128.99	134.65	21.3	0.7

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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IEA TOTAL

5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**281022 e**	**272566 e**	**581621 e**	**615492 e**	**614110 e**	**664151 e**	**678256 e**	**0.7**
Total energy	**12901**	**11999**	**47911 e**	**42688 e**	**117954**	**118015**	**117653**	**4.4**
Coal mines	-	-	1	3102 e	9961	10759	9518	54.7
Oil and gas extraction	-	-	857	1499	13867	15164	14952	14.6
Patent fuel plants	-	-	-	-	34	34	24	-
Coke ovens	-	-	-	481 e	502	637	581	-
Gas works	-	-	-	-	-	1135	1112	-
BKB	-	-	13	34	7	6	5	-4.4
Oil refineries	30	27	7887	28328 e	66591	67829	67293	10.7
Energy non specified/other	12871	11972	39153 e	9244 e	26992	22451	24168	-2.3
Total industry	**224583 e**	**213654 e**	**450805 e**	**426033 e**	**404316 e**	**445204 e**	**444310 e**	**-0.1**
Iron and steel	25416 e	31657 e	40676 e	57760 e	58000	63960	62580	2.1
Chemical and petrochemical	54090 e	65274 e	80492 e	87854 e	124188 e	136761 e	137365 e	2.6
Non-ferrous metals	7944 e	14797 e	7493 e	19855 e	18777 e	18622 e	18081 e	4.3
Non-metallic minerals	1089 e	2999	9824	17918 e	17645 e	17879 e	17195 e	2.7
Transport equipment	690 e	586 e	812	1338	2341	2687	2593	5.7
Machinery	447 e	481	3494	6155 e	5175 e	5038 e	5022 e	1.7
Mining and quarrying	40859 e	40552 e	21969	18041	6693	6788	7771	-4.8
Food and tobacco	4361 e	5459 e	6282 e	13743 e	23793 e	23588 e	24694 e	6.7
Pulp and printing	12807	26928	36777 e	65236 e	107825 e	112040 e	112900 e	5.5
Wood and wood products	2144 e	2179 e	2858	3760 e	5365	5431	5501	3.2
Construction	-	-	-	354	303	524	674	-
Textile and leather	3604 e	2140 e	1985	8926 e	5480	5779	5253	4.7
Non specified/other industries	71132 e	20602 e	238143 e	125093 e	28731 e	46107 e	44681 e	-7.7
Total transport	**-**	**-**	**1869**	**2468**	**2768**	**2809 e**	**2977 e**	**2.2**
Rail and pipeline	-	-	-	-	44	85	340	-
Transport non specified	-	-	1869	2468	2724	2724 e	2637 e	1.7
Other	**43538 e**	**46913 e**	**81036 e**	**144303 e**	**89072 e**	**98123 e**	**113316 e**	**1.6**
Commerce and pub. services	29 e	36 e	2694 e	14931 e	28719	34036 e	37370	13.3
Residential	-	-	3	82	575	649 e	835	30.7
Agriculture and fishing	-	-	108	2342	12603	14356	15787	26.8
Sector non specified	43509 e	46877 e	78231 e	126948 e	47175 e	49082 e	59324 e	-1.3

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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IEA TOTAL
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**1669762**	**1941659**	**2362350**	**3170563**	**3224638**	**3055701**	**3107632**	**2.2**
Nuclear	..	..	1706	5098	5368	5815	4944	..
Geothermal	..	..	745	1494	2870	1804	1669	..
Coal	..	..	884036	839215	911274	838381	851526	..
Oil	..	..	217511	308714	257197	226056	225631	..
Natural gas	..	..	927008	1334214	1417390	1353299	1321606	..
Biofuels & waste	..	..	282011	382671	574519	577098	646105	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	7000	..
Chemical processes	..	..	5486	10133	14040	13164	13819	..
Heat pumps	..	..	27439	22962	23974	22056	24081	..
Electric boilers	..	..	12409	7096	7065	6289	7236	..
Other sources(1)	..	..	3999	4242	4012	4784	4015	..
of which:								
Main activity producers								
Total	1139667	1400794	1870208	2196986	2659033	2486102	..	2.8
Nuclear	..	..	1706	5098	5368	5815	..	..
Geothermal	..	..	694	1374	2752	1736	..	..
Coal	..	..	762499	721883	806180	730374	..	..
Oil	..	..	106119	117290	127905	100871	..	..
Natural gas	..	..	764580	1044888	1230755	1161029	..	..
Biofuels & waste	..	..	194897	275973	454041	456137	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	27288	22832	23791	21852	..	..
Electric boilers	..	..	12401	7091	7064	6288	..	..
Other sources(1)	..	..	24	557	1177	2000	..	..
Autoproducers								
Total	530095	540865	492142	973577	565605	569599	..	0.2
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	51	120	118	68	..	..
Coal	..	..	121537	117332	105094	108007	..	..
Oil	..	..	111392	191424	129292	125185	..	..
Natural gas	..	..	162428	289326	186635	192270	..	..
Biofuels & waste	..	..	87114	106698	120478	120961	..	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	..	..
Chemical processes	..	..	5486	10133	14040	13164	..	..
Heat pumps	..	..	151	130	183	204	..	..
Electric boilers	..	..	8	5	1	1	..	..
Other sources(1)	..	..	3975	3685	2835	2784	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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IEA TOTAL
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**820.27**	**959.05**	**1105.17**	**1337.18**	**1366.00**	**1433.49**	**1423.94**	**1.8**	**1.2**
Coal	447.22	594.28	746.64	877.53	824.27	852.21	827.36	3.1	0.5
Oil	251.08	220.40	134.55	109.45	61.14	59.17	64.77	-3.6	-3.4
Natural gas	119.02	138.76	171.50	304.49	408.96	439.68	449.50	2.2	4.7
Biofuels & waste	2.96	5.60	52.49	45.71	71.64	82.43	82.31	18.4	2.2
of which: ***main activity prod.***									
Total	**..**	**878.39**	**956.59**	**1206.30**	**1250.74**	**1307.93**	**1295.47**	**..**	**1.5**
Coal	..	549.77	699.56	840.39	798.70	822.30	797.80	..	0.6
Oil	..	194.91	116.80	80.14	42.11	40.98	47.00	..	-4.2
Natural gas	..	131.80	136.60	266.67	364.32	391.98	399.38	..	5.2
Biofuels & waste	..	1.92	3.63	19.10	45.61	52.67	51.29	..	13.4

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**54.76**	**170.94**	**468.83**	**604.37**	**600.39**	**615.87**	**565.26**	**13.5**	**0.9**
Nuclear	49.22	162.25	449.24	582.80	580.20	593.49	539.75	13.9	0.9
Geothermal	5.54	8.69	19.41	21.38	18.30	19.27	19.88	7.7	0.1
Solar	-	-	0.17	0.19	1.89	3.12	5.64	-	18.0
Non-Thermal									
Total	**76.93**	**91.61**	**98.60**	**112.61**	**127.59**	**132.73**	**141.19**	**1.5**	**1.7**
Hydro	76.88	91.56	98.22	110.09	108.15	109.71	113.07	1.5	0.7
Tide, wave, ocean	0.05	0.04	0.05	0.05	0.05	0.05	0.05	0.4	-0.3
Wind	-	0.00	0.33	2.45	19.38	22.94	28.04	-	23.5
Other (e.g. fuel cells)	-	-	-	0.02	0.02	0.03	0.04	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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IEA TOTAL

8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	710657	903246 e	1139108 e	1132376	1169582	1129174	1.1
Fuel input (TJ)	17621704	21840907 e	27435603 e	25942598 e	26783601 e	25688931 e	0.8
Electricity production (GWh)	1750140	2272168 e	2866582 e	2704358 e	2807530 e	2682091 e	0.8
Brown coal							
Fuel input (1000 t)	408193	501266 e	497589 e	467294	451069	467461	-0.3
Fuel input (TJ)	3933268	4883354 e	5024690 e	4631430 e	4598625 e	4759707 e	-0.1
Electricity production (GWh)	353011	455513 e	481904 e	450791	447707	460169	0.0
Peat							
Fuel input (1000 t)	3534	3814	3532	4326	4932	4560	0.9
Fuel input (TJ)	29600	32308	29815	35038	43602	40607	1.1
Electricity production (GWh)	2236	3025 e	2829	3888	4846	4426	1.8
Coal manufactured gases(1)							
Fuel input (TJ)	582015	540262 e	623972 e	457683	604894	596296	0.5
Electricity production (GWh)	53218 e	54775 e	65946 e	48520	63816 e	62408	0.6
Petroleum products							
Fuel input (1000 t)	208755	126989 e	94418 e	46935 e	43906 e	50913	-4.3
Fuel input (TJ)	8619389	5556834 e	4005707 e	1924180 e	1818671 e	2158936 e	-4.4
Electricity production (GWh)	884582	582787 e	416692 e	207457 e	195443 e	235080 e	-4.2
Natural gas (1)							
Fuel input (TJ)	6118695	6035841 e	10065404 e	13881159	14890315	15536818	4.6
Electricity production (GWh)	576977	595751 e	1091646 e	1690722	1806256	1889798	5.7
Wood and other solid waste							
Fuel input (TJ)	9630	353672 e	313040 e	645823	803831	806565	4.0
Electricity production (GWh)	1300	25568 e	31947	54779	74275	75883	5.3
Industrial waste							
Fuel input (TJ)	24560	33243	60395 e	41625	57867	65200	3.3
Electricity production (GWh)	2585	3403	5510 e	3581	4867	5677	2.5
Municipal waste							
Fuel input (TJ)	35978 e	228784 e	392362 e	528447 e	522924	546974	4.2
Electricity production (GWh)	3105 e	15264	29393 e	38276 e	38584	39301	4.6
Biogases and liquid biofuels							
Fuel input (TJ)	379	40066 e	121685 e	403888 e	516719	381064	11.3
Electricity production (GWh)	32	2989 e	10112 e	34290 e	39896	35620	12.5
Total combustible fuels(2)							
Electricity production (GWh)	3629978	4011243 e	5002561 e	5236662 e	5483220	5490453	1.5

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	95159	102257 e	96621 e	92044	97022	92824	-0.5
Fuel input (TJ)	1933892	2309026 e	2302843 e	2109652 e	2212778 e	2085060 e	-0.5
Electricity production (GWh)	125653	179129 e	199571 e	188226 e	199776 e	186824 e	0.2
CHP Heat production (TJ)	566114 e	608325 e	496976 e	540531 e	560824 e	516977 e	-0.8
Brown coal							
Fuel input (1000 t)	55527	113172 e	89704 e	93119	96744	104629	-0.4
Fuel input (TJ)	452337	1011368 e	840686 e	852110	869489	923549	-0.4
Electricity production (GWh)	25901	68640 e	73797 e	76518	76219	82248	0.9
CHP Heat production (TJ)	161041	296773 e	170061 e	99375	106538	106604	-4.8
Peat							
Fuel input (1000 t)	3192	2375	3962	5346	6163	5329	3.9
Fuel input (TJ)	26726	25768	40531	57341	64091	54223	3.6
Electricity production (GWh)	4194	2050 e	2976	3853	4435	3839	3.0
CHP Heat production (TJ)	6866	14414 e	23326	33835	37621	31766	3.8
Coal manufactured gases(1)							
Fuel input (TJ)	61263 e	192063 e	288789 e	257274	312487	317411	2.4
Electricity production (GWh)	3120 e	13994 e	27955 e	25252	30495	30002	3.7
CHP Heat production (TJ)	25865 e	31765 e	21671 e	29316	37418 e	39383	1.0
Petroleum products							
Fuel input (1000 t)	16886	9668 e	18640 e	15783	16010	14343	1.9
Fuel input (TJ)	680827 e	392120 e	719621 e	645845	627442	561204	1.7
Electricity production (GWh)	55294	37879 e	68861 e	57486	56133	51121	1.4
CHP Heat production (TJ)	217857 e	106375 e	157647 e	234140 e	216978 e	200753	3.1
Natural gas(1)							
Fuel input (TJ)	396231	1847109 e	3820453 e	4825390	5200706	5039300	4.9
Electricity production (GWh)	30356 e	158903 e	393459 e	523274	566416	550815	6.1
CHP Heat production (TJ)	97176	177395 e	706899 e	1075773	1145660	1112952	9.1
Wood and other solid waste							
Fuel input (TJ)	25368	1262649 e	604618 e	663027	755725	758731	-2.4
Electricity production (GWh)	1970 e	67767 e	50290 e	70652	76668	79982	0.8
CHP Heat production (TJ)	7069 e	13788 e	87940	170403	216490	199387	13.6
Industrial waste							
Fuel input (TJ)	5289	80136	79645	68790	77885	86578	0.4
Electricity production (GWh)	161	4262	7724	6452	6857	7675	2.8
CHP Heat production (TJ)	3077	3693	5176	12250	14371	17925	7.8
Municipal waste							
Fuel input (TJ)	21105	89446 e	194003 e	344755 e	366661	394400	7.3
Electricity production (GWh)	1313 e	2849 e	7805 e	16721 e	18674	20753	9.9
CHP Heat production (TJ)	3895 e	37009 e	92361 e	138878 e	146562	156887	7.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	6882	30481 e	78440 e	92091	159825	16.2
Electricity production (GWh)	-	663	2972	7720 e	9375	19086	17.4
CHP Heat production (TJ)	-	125	3886	10342 e	10710	23127	28.2
Total combustible fuels(2)							
Electricity production (GWh)	247962 e	536136 e	835410 e	976154 e	1045048 e	1032345	3.2
CHP Heat production (TJ)	1137281	1370970 e	1765943 e	2358685 e	2500101	2412716	2.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	18562	19918 e	8183 e	6983	8124	7063	-4.8
Fuel input (TJ)	418375	428364 e	181727 e	162318	189852	166345	-4.4
Heat production (TJ)	281870	307095 e	147526 e	120469	150233	125445	-4.2
Brown coal							
Fuel input (1000 t)	4739	2769 e	727 e	675	506	424	-8.5
Fuel input (TJ)	54336	30408 e	10280 e	8608	7164	6390	-7.2
Heat production (TJ)	39968	21674 e	7752 e	5511	5504	5105	-6.7
Peat							
Fuel input (1000 t)	-	1029	733	761	962	881	-0.7
Fuel input (TJ)	-	11849	7916	7995	9248	8937	-1.3
Heat production (TJ)	-	10121 e	6814	6859	7865	7582	-1.4
Coal manufactured gases(1)							
Fuel input (TJ)	7266	7614 e	12127 e	6854	7901	8107	0.3
Heat production (TJ)	5116 e	5339 e	9910 e	4590	5271	5519	0.2
Petroleum products							
Fuel input (1000 t)	2233	1632 e	1874 e	1012	1174	767	-3.5
Fuel input (TJ)	92509	67284 e	77570 e	42219	48886	31649	-3.5
Heat production (TJ)	70446 e	52084 e	59864 e	33992	40219	25303	-3.4
Natural gas(1)							
Fuel input (TJ)	111244	111890 e	286651 e	323515	368701	340376	5.4
Heat production (TJ)	79694 e	79188 e	220109 e	236260	271730	240347	5.4
Wood and other solid waste							
Fuel input (TJ)	1073	28018 e	59593	107137	129587	129018	7.5
Heat production (TJ)	750 e	22852 e	50694	88408	106379	100807	7.3
Industrial waste							
Fuel input (TJ)	476	261	4679 e	5771	9806	18178	22.4
Heat production (TJ)	323	183	3787 e	3776	6981	14157	23.0
Municipal waste							
Fuel input (TJ)	26121 e	72881 e	46578 e	93968 e	102744	88168	0.9
Heat production (TJ)	14148 e	44560 e	31925 e	56712 e	60829	55485	1.0
Biogases and liquid biofuels							
Fuel input (TJ)	-	1991	7277	13349	15647	11819	8.9
Heat production (TJ)	-	1313	6242	11519	12197	9323	9.8
Total combustible fuels(2)							
Heat production (TJ)	511522 e	544409 e	544623 e	568096 e	667208	589073	0.4

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**2764.70**	**2862.56**	**2995.12**	**3505.37**	**3403.95**	**3552.07**	**3485.25**	**0.5**	**0.7**
Geothermal	0.05	0.07	1.43	2.21	3.01	3.16	3.34	21.8	4.1
Solar thermal	-	0.03	1.43	3.03	3.60	3.82	4.22	-	5.3
Coal	301.23	256.68	231.81	136.97	111.50	124.50	120.13	-1.5	-3.1
Oil	1554.54	1525.84	1526.73	1768.28	1649.74	1680.00	1645.77	-0.1	0.4
Natural gas	491.13	545.67	572.83	729.02	684.64	732.43	713.60	0.9	1.1
Biofuels & waste	76.78	96.23	82.05	122.20	153.59	166.44	168.39	0.4	3.5
Electricity	320.25	402.42	538.62	695.11	740.30	779.34	771.59	3.1	1.7
Heat	20.71	35.62	40.22	48.54	57.58	62.38	58.21	4.0	1.8
of which:									
Total industry	**940.41**	**915.05**	**793.01**	**873.26**	**727.75**	**794.31**	**793.00**	**-1.0**	**-0.0**
Geothermal	-	-	0.12	0.25	0.27	0.28	0.28	-	4.3
Solar thermal	-	-	0.01	0.10	0.00	0.01	0.01	-	1.7
Coal	180.97	158.24	157.16	116.98	86.65	97.97	96.20	-0.8	-2.3
Oil	307.59	270.37	158.59	134.94	104.03	105.94	102.32	-3.8	-2.1
Natural gas	244.07	240.51	214.19	271.62	225.35	251.12	254.69	-0.8	0.8
Biofuels & waste	40.69	47.54	33.91	67.68	64.34	69.26	69.43	-1.1	3.5
Electricity	156.22	182.96	215.26	265.03	223.17	245.85	246.27	1.9	0.6
Heat	10.86	15.44	13.77	16.66	23.93	23.89	23.80	1.4	2.6
Transport	**679.80**	**755.85**	**904.70**	**1098.81**	**1103.86**	**1125.92**	**1116.03**	**1.7**	**1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	7.21	2.55	0.28	0.10	0.19	0.18	0.13	-17.3	-3.6
Oil	650.33	730.33	878.09	1064.75	1038.14	1054.25	1041.54	1.8	0.8
Natural gas	17.00	16.96	18.69	20.89	21.37	23.10	23.53	0.6	1.1
Biofuels & waste	0.00	0.00	0.01	4.03	35.10	39.23	41.71	5.4	52.2
Electricity	5.26	6.01	7.63	9.04	9.07	9.16	9.11	2.2	0.8
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**283.83**	**291.61**	**349.80**	**430.18**	**476.32**	**484.73**	**472.81**	**1.2**	**1.4**
Geothermal	-	-	0.19	0.59	0.57	0.51	0.53	-	5.1
Solar thermal	-	-	0.06	0.07	0.19	0.22	0.25	-	6.6
Coal	19.93	20.06	16.14	3.06	4.76	4.01	3.80	-1.2	-6.7
Oil	129.80	104.55	83.67	81.24	61.11	58.98	55.80	-2.5	-1.9
Natural gas	69.95	77.97	100.35	131.22	148.65	153.06	148.04	2.1	1.9
Biofuels & waste	0.81	1.08	0.35	2.72	4.67	4.79	4.81	-4.8	13.2
Electricity	62.49	85.71	143.30	203.76	246.16	251.42	249.71	5.0	2.7
Heat	0.84	2.25	5.74	7.51	10.22	11.74	9.88	11.9	2.6

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**537.71**	**542.16**	**576.40**	**668.27**	**674.83**	**706.53**	**669.00**	**0.4**	**0.7**
Geothermal	0.05	0.07	0.54	1.17	1.94	2.19	2.30	15.0	7.1
Solar thermal	-	0.03	1.34	2.79	3.33	3.49	3.85	-	5.2
Coal	76.63	63.83	47.21	13.76	16.02	18.02	15.95	-2.8	-5.0
Oil	194.96	144.58	112.29	118.33	88.23	87.76	79.12	-3.2	-1.7
Natural gas	143.72	173.37	197.64	256.75	257.38	269.34	252.17	1.9	1.2
Biofuels & waste	22.33	23.53	31.80	45.05	47.52	51.03	49.25	2.1	2.1
Electricity	92.27	123.19	166.78	210.54	241.24	252.87	246.77	3.5	1.9
Heat	7.75	13.57	18.81	19.88	19.16	21.82	19.60	5.4	0.2
Agriculture & fishing	**42.24**	**47.34**	**59.34**	**61.36**	**57.38**	**60.55**	**59.09**	**2.0**	**-0.0**
Geothermal	0.00	0.00	0.05	0.19	0.22	0.18	0.19	51.0	6.2
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	17.3
Coal	1.62	1.78	1.70	1.09	1.19	1.42	1.20	0.3	-1.7
Oil	36.42	40.29	46.43	47.45	43.01	45.39	44.31	1.4	-0.2
Natural gas	0.12	0.60	4.34	4.74	3.85	4.33	4.32	23.7	-0.0
Biofuels & waste	0.08	0.14	0.77	1.19	1.93	2.11	1.99	14.2	4.6
Electricity	3.63	4.03	5.36	6.22	6.91	6.87	6.87	2.3	1.2
Heat	0.37	0.49	0.70	0.47	0.27	0.24	0.22	3.8	-5.4
Other	**62.75**	**72.20**	**32.42**	**16.17**	**24.16**	**25.12**	**25.44**	**-3.8**	**-1.1**
Geothermal	-	-	0.54	0.00	0.00	0.00	0.05	-	-10.6
Solar thermal	-	-	0.01	0.06	0.07	0.09	0.12	-	10.2
Coal	11.77	7.94	6.89	0.31	0.23	0.19	0.20	-3.1	-15.5
Oil	25.60	14.75	2.98	3.24	2.71	2.78	2.97	-11.9	-0.0
Natural gas	11.25	21.16	5.29	6.47	3.38	4.18	3.34	-4.3	-2.2
Biofuels & waste	12.86	23.95	15.21	1.54	0.02	0.02	1.19	1.0	-11.4
Electricity	0.38	0.52	0.29	0.52	13.75	13.16	12.87	-1.6	19.9
Heat	0.88	3.88	1.21	4.03	4.00	4.69	4.71	1.9	6.7
Non-energy use(1)	**217.97**	**238.35**	**279.45**	**357.33**	**339.65**	**354.90**	**349.87**	**1.47**	**1.08**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**2764.70**	**2862.56**	**2995.12**	**3505.37**	**3562.77**	**3403.95**	**3552.07**	**3485.25**
Total industry (Mtoe)	**940.41**	**915.05**	**793.01**	**873.26**	**810.69**	**727.75**	**794.31**	**793.00**
Iron and steel	160.50	132.80	101.08	105.37	96.59	79.99	93.27	95.72
Chem. and petrochemical	102.72	105.90	154.27	182.98	162.26	148.24	160.13	163.34
Non-ferrous metals	29.97	38.65	33.52	49.76	43.86	40.02	42.40	42.84
Non-metallic minerals	66.48	72.21	69.84	86.54	90.69	77.35	81.36	82.33
Transport equipment	14.38	15.13	12.51	25.25	22.12	19.63	21.72	22.01
Machinery	28.40	32.78	46.65	55.87	56.42	50.61	57.49	57.91
Mining and quarrying	13.29	18.17	16.76	17.65	21.84	21.56	24.97	26.29
Food and tobacco	38.58	44.76	46.22	69.55	70.51	66.59	71.21	71.35
Paper, pulp and printing	62.25	62.74	73.49	125.32	119.09	107.27	113.29	110.13
Wood and wood products	6.97	8.73	8.71	21.11	22.46	21.60	23.41	22.38
Construction	10.37	12.47	14.98	15.45	16.79	15.86	16.67	17.33
Textile and leather	24.91	24.28	18.40	24.90	15.93	14.61	15.27	14.92
Non specified/other	381.59	346.44	196.58	93.49	72.12	64.42	73.11	66.45
Electricity consumption (Mtoe)	**320.25**	**402.42**	**538.62**	**695.11**	**772.49**	**740.30**	**779.34**	**771.59**
Total industry (Mtoe)	**156.22**	**182.96**	**215.26**	**265.03**	**250.27**	**223.17**	**245.85**	**246.27**
Iron and steel	22.10	24.81	24.97	28.77	29.85	25.62	29.07	30.33
Chem. and petrochemical	32.88	35.42	43.35	50.31	48.75	43.65	47.93	48.39
Non-ferrous metals	19.24	23.84	19.94	25.50	25.89	23.34	24.75	25.11
Non-metallic minerals	7.99	9.71	11.74	13.97	14.88	13.31	13.93	14.22
Transport equipment	5.79	6.91	6.57	10.80	10.16	8.93	9.81	9.99
Machinery	10.38	12.87	24.99	28.49	30.79	27.74	32.31	33.04
Mining and quarrying	4.85	5.72	8.08	8.38	7.48	5.98	7.49	7.63
Food and tobacco	7.33	9.55	13.69	17.85	19.86	18.97	19.93	20.21
Paper, pulp and printing	14.06	16.96	28.14	33.58	31.16	27.85	29.13	28.85
Wood and wood products	2.81	3.62	4.32	4.95	5.11	4.44	4.73	4.71
Construction	0.58	0.87	1.18	1.33	1.82	1.76	1.85	1.76
Textile and leather	7.38	7.70	8.17	9.01	6.85	6.18	6.68	6.65
Non specified/other	20.83	24.98	20.12	32.09	17.66	15.39	18.24	15.37
Total industry (TWh)	**1816.52**	**2127.44**	**2503.05**	**3081.70**	**2910.07**	**2595.01**	**2858.74**	**2863.59**
Iron and steel	256.99	288.47	290.31	334.58	347.08	297.96	338.00	352.67
Chem. and petrochemical	382.27	411.89	504.11	584.97	566.84	507.61	557.31	562.73
Non-ferrous metals	223.68	277.22	231.92	296.48	301.06	271.37	287.73	291.96
Non-metallic minerals	92.94	112.96	136.50	162.44	173.08	154.79	161.97	165.30
Transport equipment	67.37	80.34	76.38	125.56	118.17	103.83	114.13	116.17
Machinery	120.69	149.63	290.54	331.26	358.01	322.53	375.75	384.18
Mining and quarrying	56.45	66.50	93.95	97.41	86.99	69.53	87.11	88.69
Food and tobacco	85.23	111.04	159.13	207.53	230.93	220.58	231.70	235.02
Paper, pulp and printing	163.52	197.23	327.23	390.44	362.32	323.88	338.69	335.48
Wood and wood products	32.68	42.13	50.28	57.61	59.43	51.64	55.02	54.82
Construction	6.77	10.10	13.75	15.51	21.14	20.52	21.55	20.51
Textile and leather	85.78	89.50	95.00	104.73	79.69	71.82	77.67	77.30
Non specified/other	242.16	290.45	233.96	373.19	205.35	178.97	212.10	178.76

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**87427**	**139668**	**254772**	**257573**	**341641**	**399950**	**372018**	**375440**	**408032**
Imports from:									
Total from OECD	**35708**	**74116**	**212294**	**247602**	**329026**	**374633**	**346604**	**349177**	**381747**
Austria	498	991	6910	8597	12517	16863	19826	18503	17214
Belgium	89	7810	4488	3550	4452	6544	11289	11826	10652
Canada	16848	30181	20555	44503	48515	55732	51109	43763	51077
Czech Republic	-	-	2975	6116	18634	19986	22225	21449	27497
Denmark	289	1372	4940	5648	8177	11006	10174	11741	10229
Estonia	-	-	-	-	-	2250	1785	1967	1650
Finland	260	1163	362	276	1004	3147	3085	4719	3162
France	2496	4338	55503	77740	77719	56967	43322	48741	64186
Germany	1238	5067	22161	27167	39909	59782	51146	56858	52515
Greece	-	-	-	-	-	209	2192	2312	2553
Hungary	-	-	212	622	843	722	238	696	703
Ireland	-	-	-	30	41	152	85	146	120
Italy	318	736	253	357	470	3369	1476	1093	1794
Luxembourg	-	-	965	778	738	1629	1868	1845	1532
Mexico	-	-	1951	2257	77	1287	1082	1320	1224
Netherlands	215	3906	3499	3902	4031	9272	10511	12772	11758
Norway	5401	1503	16413	8573	20486	15700	13867	5776	13119
Poland	-	828	7878	7150	9658	9632	9820	7514	11958
Portugal	78	514	1697	1742	3767	1314	2801	3189	3930
Slovak Republic	303	549	778	2484	8825	7487	6063	5017	8144
Slovenia	-	-	1363	816	4554	5599	7240	8066	5178
Spain	2239	3631	3606	3031	5293	12405	9941	9315	9200
Sweden	20	1321	14605	8627	12955	16480	10632	14581	20921
Switzerland	3071	7247	23354	26168	29785	31559	32365	31676	31069
Turkey	-	-	-	-	-	-	-	736	2590
United Kingdom	96	19	45	46	1234	1676	4299	4870	2810
United States	2249	2940	17781	7422	15342	23864	18163	18686	14962
Total from non-OECD	**5384**	**11425**	**18244**	**9971**	**12324**	**23623**	**23915**	**24941**	**24154**
Albania	-	151	165	198	50	-	61	404	4
Azerbaijan	-	-	-	-	-	94	125	156	330
Belarus	-	-	-	-	163	554	-	-	-
Bulgaria	-	750	320	652	4364	4628	3418	3454	4918
Croatia	-	-	1	1	-	5	12	93	11
F.Y.R. of Macedonia	-	-	-	-	-	1188	3810	3856	1488
Georgia	-	649	176	-	204	215	182	303	219
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	1428	955	-	283	-	720	586	1252	866
Russian Federation	46	49	4531	4839	4755	11059	11931	11847	10968
Serbia	115	545	891	496	612	-	75	544	267
Turkmenistan	-	-	-	-	-	450	505	685	1074
Ukraine	3795	8326	12160	3502	2176	4710	3210	2347	4009
Non-specified/others	**46335**	**54127**	**24234**	**-**	**291**	**1694**	**1499**	**1322**	**2131**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**81441**	**124551**	**229979**	**250375**	**339423**	**386299**	**356694**	**355151**	**397354**
Exports to:									
Total to OECD	**45184**	**71313**	**209320**	**248364**	**329168**	**367245**	**340512**	**341750**	**376355**
Austria	614	1067	7789	9750	13922	22333	21869	21805	26800
Belgium	1320	1086	2322	6058	11557	17021	9507	12427	13314
Canada	2570	3461	19936	7992	12685	23499	17490	18482	14385
Czech Republic	-	-	47	4405	8699	8523	8234	6685	10440
Denmark	918	1841	12106	3825	8571	12432	10490	10260	11549
Estonia	-	-	-	-	-	10	87	246	484
Finland	4136	678	6481	3873	8365	2933	1885	2025	5289
France	2686	9845	7019	3256	3676	10563	19460	20463	9482
Germany	3211	3930	24998	39439	45612	38627	38127	40816	47890
Greece	-	-	-	-	-	1810	311	67	2064
Hungary	-	-	233	1288	7826	8304	7407	5946	9747
Ireland	-	-	-	-	133	373	452	378	366
Italy	761	1425	34226	37900	40408	38857	40462	38810	42990
Luxembourg	913	1073	4364	5651	6409	5666	5000	5384	5562
Mexico	-	-	590	1154	1993	699	648	625	653
Netherlands	1288	10	12657	15497	21835	25231	15562	15486	20829
Norway	165	991	407	1911	1231	1824	4815	13258	10074
Poland	-	4	13	4088	2494	7673	7071	6173	6676
Portugal	132	2342	1734	2661	4698	10753	7608	5823	6744
Slovak Republic	552	3652	4602	2101	5967	7830	8762	6695	10813
Slovenia	-	-	2089	2805	3307	1309	2594	2136	2452
Spain	322	2337	3209	7632	12271	5884	6782	5191	7927
Sweden	5256	1825	12749	8221	17688	14686	15468	16801	13985
Switzerland	3893	5540	21694	19083	24070	31317	30751	32796	34286
Turkey	-	-	-	-	-	30	-	-	-
United Kingdom	161	22	11925	16330	14768	13722	7888	8583	10037
United States	16286	30184	18130	43444	50983	55336	51782	44389	51517
Total to non-OECD	**60**	**193**	**1891**	**1554**	**7418**	**11127**	**7740**	**5415**	**12339**
Albania	-	-	541	391	1111	1657	1035	491	2125
Azerbaijan	-	-	-	495	437	-	-	-	20
Belarus	-	-	-	-	-	-	-	-	18
Bulgaria	-	-	573	9	205	-	-	-	622
Croatia	-	-	-	117	4472	5300	3309	3044	6171
F.Y.R. of Macedonia	-	-	-	-	-	95	6	8	109
Georgia	-	-	122	178	-	54	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	2	15	256	88	-	105	308	146	340
Russian Federation	-	-	-	1	-	-	-	-	-
Serbia	58	154	389	258	1189	2653	1364	392	697
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	24	10	17	4	1263	1718	1334	2237
Non-specified/others	**36197**	**53045**	**18768**	**457**	**2837**	**7927**	**8442**	**7986**	**8660**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total Capacity [1]	**915.93**	**1275.80**	**1564.75**	**1700.46**	**1725.01**	**2269.82**	**2322.87**	**2380.92**	**2433.67**
Nuclear	52.37	119.91	265.16	293.30	300.56	310.91	310.82	311.51	304.70
Hydro	162.77	275.52	346.55	377.51	391.03	416.71	420.03	422.79	427.39
of which: pumped storage	*2.36*	*17.99*	*50.02*	*83.68*	*86.19*	*94.98*	*95.53*	*95.65*	*97.90*
Geothermal	0.56	1.70	2.63	2.98	4.32	4.05	4.31	4.49	4.51
Solar	-	-	0.01	0.05	0.60	10.34	16.80	30.37	51.42
Tide, wave, ocean	0.24	0.24	0.26	0.26	0.26	0.26	0.26	0.26	0.26
Wind	-	-	0.41	1.11	14.82	92.13	112.95	128.35	145.54
Other (e.g. fuel cells)	-	-	-	0.08	0.17	0.45	0.47	1.63	2.88
Combustible fuels	699.99	878.42	949.73	1025.17	1013.25	1434.98	1457.24	1481.52	1496.98
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993, Korea before 1994 and for Slovak Republic before 1995.

(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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IEA TOTAL

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total Capacity [1]	**66.98**	**73.66**	**124.79**	**163.64**	**287.74**	**149.81**	**154.09**	**170.45**	**177.94**
Nuclear	0.55	1.01	0.95	0.70	0.17	-	-	-	-
Hydro	12.10	14.17	16.21	18.18	16.84	10.67	10.48	13.68	13.49
of which: pumped storage	-	-	*0.07*	*0.23*	*0.27*	*0.12*	*0.11*	*0.10*	*0.10*
Geothermal	-	0.03	1.09	1.27	0.05	0.04	0.04	0.04	0.04
Solar	-	-	0.34	0.47	0.57	3.59	4.92	7.70	13.05
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	1.97	3.09	0.57	3.64	4.88	4.95	5.11
Other (e.g. fuel cells)	-	-	-	0.11	0.03	0.64	0.59	3.17	3.16
Combustible fuels	54.34	58.45	104.23	139.83	269.53	131.24	133.19	140.91	143.09
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993, Korea before 1996 and Slovak Republic before 2001.
(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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IEA AMERICAS

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	1889.29	1996.64	2123.56	2524.78	2466.50	2443.04	2385.10	0.7	0.5
GDP (billion 2005 USD)	5320.27	6364.65	8712.49	12158.03	14195.89	14460.68	14775.46	2.9	2.4
TPES/GDP(1)	0.36	0.31	0.24	0.21	0.17	0.17	0.16	-2.2	-1.9
Population (millions)	234.43	252.24	277.87	313.08	343.90	346.52	349.88	1.0	1.1
TPES/population(2)	8.06	7.92	7.64	8.06	7.17	7.05	6.82	-0.3	-0.5
TPES/GDP (2005 = 100)	188	166	129	110	92	89	85	-2.2	-1.9
Ele.TFC/GDP(2005=100)(3)	115	119	113	106	98	97	..	-0.1	..
Ele.TFC/population(4)	8054	9235	10986	12720	12531	12439	..	1.8	..
Elec. generated (TWh)(5)	2235.59	2800.60	3684.85	4631.48	4956.25	4963.50	4927.35	3.0	1.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**1889.29**	**1996.64**	**2123.56**	**2524.78**	**2466.50**	**2443.04**	**2385.10**	**0.7**	**0.5**
Coal	326.31	396.81	484.48	565.29	524.96	498.60	445.21	2.4	-0.4
Oil	896.88	885.45	833.36	958.25	891.34	867.96	844.41	-0.4	0.1
Natural gas	551.79	522.34	492.96	621.82	634.60	652.30	678.23	-0.7	1.5
Biofuels & waste	45.31	62.14	70.41	84.92	101.35	103.75	101.95	2.6	1.7
Nuclear	27.31	79.77	178.78	226.86	242.26	238.45	233.54	11.7	1.2
Geothermal	2.11	4.60	14.10	13.09	8.41	8.55	9.59	11.8	-1.7
Solar, wind, tide(1)	-	-	0.32	2.10	10.79	13.38	16.23	-	19.5
Hydro	39.56	45.57	49.01	52.61	52.77	59.98	56.76	1.3	0.7
Net electricity imports(2)	0.02	-0.05	0.14	-0.15	0.02	0.06	-0.82	11.9	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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IEA AMERICAS

3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**2235.7**	**2800.7**	**3700.8**	**4658.4**	**4920.5**	**4980.4**	**4986.6**	**4945.6**
Nuclear	104.4	304.2	684.6	870.5	902.8	929.6	915.0	896.2
Hydro	460.2	530.0	585.8	638.6	661.7	637.8	720.5	678.2
of which:								
pumped storage production	*0.1*	*0.1*	*15.9*	*26.9*	*25.6*	*24.2*	*23.1*	*18.2*
Geothermal	2.5	5.4	16.0	14.6	16.8	17.6	17.9	19.6
Solar	-	-	0.7	0.7	1.1	4.1	6.4	15.2
Tide, wave, ocean	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Wind	-	-	3.1	5.9	19.4	103.9	131.0	152.6
Combustible fuels	1668.7	1961.1	2410.6	3128.0	3318.1	3286.6	3193.5	3181.4
Coal	*942.3*	*1302.7*	*1781.9*	*2247.1*	*2263.9*	*2077.5*	*1951.8*	*1716.9*
Oil	*345.0*	*277.0*	*147.1*	*133.2*	*156.6*	*55.5*	*46.1*	*35.6*
Natural gas	*381.1*	*379.7*	*391.3*	*667.8*	*817.2*	*1069.0*	*1107.4*	*1339.4*
Biofuels & waste	*0.3*	*1.8*	*90.3*	*79.9*	*80.4*	*84.5*	*88.3*	*89.5*
Other (e.g. fuel cells)	-	-	-	-	0.6	0.9	2.3	2.3
- Own use by power plant	107.7	147.4	203.2	255.0	226.5	239.0	234.3	..
Net production	**2128.0**	**2653.3**	**3497.6**	**4403.4**	**4694.0**	**4741.5**	**4752.3**	**..**
Nuclear	..	287.0	645.8	822.6	868.8	892.5	878.5	..
Hydro	..	527.0	580.0	630.1	655.8	635.2	716.9	..
Geothermal	..	5.1	15.1	14.1	14.7	15.2	15.4	..
Solar	..	-	0.7	0.7	1.1	4.0	6.3	..
Tide, wave, ocean	..	-	0.0	0.0	0.0	0.0	0.0	..
Wind	..	-	3.0	5.9	19.3	103.3	130.3	..
Combustible fuels	..	1834.2	2252.9	2930.1	3133.7	3090.4	3002.8	..
Other (e.g. fuel cells)	..	-	-	-	0.6	0.9	2.1	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.3	0.2	22.8	32.0	32.2	29.8	29.1	29.1
+ Imports	19.1	33.1	40.3	63.9	64.2	63.8	67.3	63.1
- Exports	18.9	33.6	38.7	65.7	63.3	63.5	66.6	72.7
Electrical energy supplied	**2128.0**	**2652.6**	**3476.4**	**4369.7**	**4662.7**	**4712.0**	**4723.9**	**..**
- Transmission & distr. losses	188.9	245.3	330.8	276.4	311.8	286.0	294.2	..
- Statistical difference	-	-	-0.0	-0.0	-0.0	-	-	..
Total consumption	**1939.1**	**2407.3**	**3145.6**	**4093.3**	**4350.8**	**4425.9**	**4429.7**	**..**
- Energy industry consumption[2]	51.7	78.5	93.9	112.2	122.5	118.1	120.9	..
Final consumption	**1887.4**	**2328.7**	**3051.7**	**3981.1**	**4228.3**	**4307.9**	**4308.8**	**..**
Industry	751.7	881.8	1034.5	1345.4	1135.4	1082.1	1104.4	..
Transport	7.5	5.4	7.4	8.9	11.8	11.5	11.5	..
Commercial & publ. serv.	480.5	631.4	947.2	1286.1	1410.1	1473.3	1474.8	..
Residential	631.2	802.3	1053.8	1330.7	1510.2	1592.5	1575.8	..
Agriculture & fishing	16.5	7.8	8.6	9.6	10.2	9.4	9.4	..
Sector non specified	-	-	0.1	0.3	150.6	139.0	132.8	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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IEA AMERICAS

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**2240.96**	**2800.70**	**3700.77**	**4658.37**	**4802.26**	**4980.43**	**4986.56**	**3.2**	**1.4**
- Hydro pumped storage	*0.11*	*0.10*	*15.92*	*26.89*	*22.93*	*24.18*	*23.06*	*36.7*	*1.8*
Total generation(1)	**2240.85**	**2800.60**	**3684.85**	**4631.48**	**4779.33**	**4956.25**	**4963.50**	**3.2**	**1.4**
Main activity producers									
Gross production	2201.89	2762.03	3428.14	4419.03	4600.53	4766.72	4765.09	2.8	1.6
- Hydro pumped storage	*0.11*	*0.10*	*15.92*	*26.89*	*22.93*	*24.18*	*23.06*	*36.7*	*1.8*
Total generation(1)	2201.78	2761.93	3412.22	4392.13	4577.60	4742.54	4742.03	2.8	1.6
Nuclear	135.95	304.22	684.44	870.52	920.30	929.59	914.99	10.6	1.4
Hydro	482.01	499.25	532.38	576.22	610.52	584.63	665.06	0.6	1.1
Geothermal	2.60	5.35	9.10	14.62	17.05	17.58	17.89	8.1	3.3
Solar, wind, tide(2)	-	-	0.03	6.49	81.98	105.30	134.45	-	49.2
Coal	899.29	1302.61	1756.80	2191.76	1959.90	2052.47	1930.84	4.3	0.5
Oil	328.77	274.58	139.83	124.57	49.67	45.25	36.47	-5.2	-6.2
Natural gas	352.90	375.47	287.44	574.61	900.58	968.71	1003.65	-1.3	6.1
Biofuels & waste	0.26	0.46	2.21	33.34	37.61	39.02	38.68	14.2	14.6
Autoproducers									
Gross production	39.07	38.67	272.64	239.35	201.73	213.71	221.47	12.9	-1.0
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	39.07	38.67	272.64	239.35	201.73	213.71	221.47	12.9	-1.0
Nuclear	-	-	0.12	-	-	-	-	-	-
Hydro	32.73	30.68	37.51	35.49	33.72	28.99	32.36	0.9	-0.7
Geothermal	-	-	6.92	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	3.73	0.18	2.17	3.57	5.29	-	1.7
Coal	0.18	0.07	25.07	55.32	18.96	25.05	20.94	36.0	-0.9
Oil	3.52	2.43	7.29	8.60	11.15	10.29	9.59	4.7	1.3
Natural gas	2.64	4.19	103.89	93.16	93.30	100.32	103.71	25.8	-0.0
Biofuels & waste	-	1.30	88.12	46.60	42.42	45.49	49.59	-	-2.7

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**5924**	**7991**	**257151 e**	**232136 e**	**192351 e**	**201101 e**	**209501 e**	**-1.0**
Total energy	**-**	**-**	**-**	**4203 e**	**35800**	**31734**	**32223**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	6314	6721	6360	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	17566	18353	18497	-
Energy non specified/other	-	-	-	4203 e	11920	6660	7366	-
Total industry	**5924**	**7991**	**219491**	**110922 e**	**109267**	**120218**	**119631**	**-2.8**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	53242	58158	59562	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	203	216	236	-
Transport equipment	-	-	-	-	254	208	168	-
Machinery	-	-	-	-	51	43	57	-
Mining and quarrying	-	-	-	-	2122	2061	2168	-
Food and tobacco	-	-	-	-	5051	5779	6197	-
Pulp and printing	-	-	-	-	40670	41295	41006	-
Wood and wood products	-	-	-	-	1327	1355	1273	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	370	570	213	-
Non specified/other industries	5924	7991	219491	110922 e	5977	10533	8751	-14.2
Total transport	**-**	**-**	**-**	**-**	**381**	**412**	**393**	**-**
Rail and pipeline	-	-	-	-	1	2	3	-
Transport non specified	-	-	-	-	380	410	390	-
Other	**-**	**-**	**37660 e**	**117011 e**	**46903**	**48737**	**57254**	**2.0**
Commerce and pub. services	-	-	23	708	7761	8059	8251	32.3
Residential	-	-	-	-	22	103	141	-
Agriculture and fishing	-	-	-	-	235	258	259	-
Sector non specified	-	-	37637 e	116303 e	38885 e	40317 e	48603 e	1.2

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**43140**	**129895**	**359761**	**290819**	**529891**	**532822**	**532822**	**7.0**
Nuclear	..	..	-	-	-	-	-	..
Geothermal	..	..	-	-	-	-	-	..
Coal	..	..	81572	50316	102689	96134	96134	..
Oil	..	..	9181	29596	37621	38342	38342	..
Natural gas	..	..	239876	192185	343425	353704	353704	..
Biofuels & waste	..	..	29132	18722	46156	44642	44642	..
Non-spec. comb. fuels	..	..	-	-	-	-	-	..
Chemical processes	..	..	-	-	-	-	-	..
Heat pumps	..	..	-	-	-	-	-	..
Electric boilers	..	..	-	-	-	-	-	..
Other sources(1)	..	..	-	-	-	-	-	..
of which:								
Main activity producers								
Total	43140	114236	357747	288805	527779	530710	..	7.6
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	81572	50316	102689	96134	..	..
Oil	..	..	9181	29596	37621	38342	..	..
Natural gas	..	..	239876	192185	343425	353704	..	..
Biofuels & waste	..	..	27118	16708	44044	42530	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	-	-	-	-	..	..
Other sources(1)	..	..	-	-	-	-	..	..
Autoproducers								
Total	-	15659	2014	2014	2112	2112	..	-9.1
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	-	-	-	-	..	..
Oil	..	..	-	-	-	-	..	..
Natural gas	..	..	-	-	-	-	..	..
Biofuels & waste	..	..	2014	2014	2112	2112	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	-	-	-	-	..	..
Other sources(1)	..	..	-	-	-	-	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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IEA AMERICAS
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**397.27**	**458.44**	**579.26**	**728.57**	**675.42**	**713.45**	**690.25**	**2.2**	**0.8**
Coal	225.21	307.07	415.98	528.55	458.42	481.72	453.42	3.7	0.4
Oil	84.14	63.68	31.04	32.48	13.74	12.98	10.64	-5.7	-5.0
Natural gas	87.66	87.34	91.60	144.23	182.24	196.36	203.01	0.3	3.9
Biofuels & waste	0.27	0.34	40.64	23.31	21.01	22.39	23.18	34.4	-2.6
of which: ***main activity prod.***									
Total	**..**	**457.44**	**509.36**	**675.16**	**646.38**	**681.32**	**657.15**	**..**	**1.2**
Coal	..	307.06	411.63	516.67	455.32	477.30	449.60	..	0.4
Oil	..	63.41	30.57	20.81	11.19	10.57	8.38	..	-6.0
Natural gas	..	86.86	66.58	127.14	166.35	179.48	185.32	..	5.0
Biofuels & waste	..	0.11	0.57	10.54	13.52	13.97	13.86	..	16.4

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**29.42**	**84.37**	**192.72**	**239.58**	**248.11**	**250.91**	**247.46**	**11.7**	**1.2**
Nuclear	27.31	79.77	178.78	226.86	239.84	242.26	238.45	11.7	1.4
Geothermal	2.11	4.60	13.77	12.57	7.94	8.19	8.33	11.7	-2.4
Solar	-	-	0.17	0.15	0.34	0.47	0.67	-	6.7
Non-Thermal									
Total	**39.56**	**45.57**	**49.28**	**53.12**	**62.36**	**61.71**	**71.25**	**1.3**	**1.8**
Hydro	39.56	45.57	49.01	52.61	55.40	52.77	59.98	1.3	1.0
Tide, wave, ocean	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Wind	-	-	0.26	0.51	6.95	8.93	11.27	-	19.6
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	491319	637760 e	820878 e	777244	812845	766757	0.9
Fuel input (TJ)	12580392	15543746 e	19560650 e	17198834 e	18061254 e	16860692 e	0.4
Electricity production (GWh)	1229549	1600793 e	2006661 e	1779037 e	1867438 e	1742476 e	0.4
Brown coal							
Fuel input (1000 t)	53019	100889	108847	95454	99738	103874	0.1
Fuel input (TJ)	801533	1553703 e	1667206 e	1467902 e	1538642 e	1604985 e	0.2
Electricity production (GWh)	73097	143310	154372	149091	154783	159340	0.5
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	356	577 e	13541 e	4243	6526	6831	12.5
Electricity production (GWh)	33 e	51	1188	233	340	339	9.4
Petroleum products							
Fuel input (1000 t)	65796	32621	28701	11781	11920	9547	-5.7
Fuel input (TJ)	2902892	1484887 e	1202753 e	452896 e	453002 e	356229 e	-6.6
Electricity production (GWh)	277011	141666	119232	45215	42913	33883	-6.6
Natural gas (1)							
Fuel input (TJ)	4104270	3115611	4632581	6571618	7162484	7457258	4.2
Electricity production (GWh)	379655	291999	449606	780577	845767	884460	5.4
Wood and other solid waste							
Fuel input (TJ)	9630	258964 e	184654 e	209926	241150	251137	-0.1
Electricity production (GWh)	1300	15368	17877	17054	19116	20440	1.4
Industrial waste							
Fuel input (TJ)	-	9138	10421	15050	21683	22084	4.3
Electricity production (GWh)	-	749	923	1426	1598	1668	3.9
Municipal waste							
Fuel input (TJ)	-	162000 e	219034 e	242100 e	241385	249665	2.1
Electricity production (GWh)	-	9693	14561 e	14967 e	14945	15297	2.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	30950 e	58319 e	99833 e	107687	114595	6.4
Electricity production (GWh)	-	2517 e	4613 e	8700 e	9506	10264	6.9
Total combustible fuels(2)							
Electricity production (GWh)	1961102	2206146 e	2769033 e	2796300	2956406	2868167	1.3

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	11445 e	30402 e	22012	23375	21865	3.1
Fuel input (TJ)	-	302045 e	788540 e	489858 e	524444 e	471610 e	2.1
Electricity production (GWh)	-	35063 e	75408 e	48127 e	51750 e	46120 e	1.3
CHP Heat production (TJ)	-	19742 e	81572 e	95870 e	95149 e	89528 e	7.5
Brown coal							
Fuel input (1000 t)	-	1096 e	1246 e	-	-	13	-19.0
Fuel input (TJ)	-	16154 e	18583 e	-	-	101	-21.5
Electricity production (GWh)	-	2651 e	3134 e	-	-	9	-23.7
CHP Heat production (TJ)	-	258 e	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	83858 e	32604	38442	40727	-
Electricity production (GWh)	-	-	6323	2370	3207	3493	-
CHP Heat production (TJ)	-	-	-	8167	7540	6606	-
Petroleum products							
Fuel input (1000 t)	283	77	4020	3161	2288	2193	17.3
Fuel input (TJ)	12311 e	3190	145721	121682	92133	88027	17.1
Electricity production (GWh)	-	5451	13940	15608	12628	12172	3.9
CHP Heat production (TJ)	8618 e	2943	9181 e	41029	37621	38342	13.0
Natural gas(1)							
Fuel input (TJ)	-	1147018	2078966	1908755	1975003	1989670	2.7
Electricity production (GWh)	-	99324	218156	213308	223255	222905	3.9
CHP Heat production (TJ)	-	7601	239876 e	365014	343425	353704	20.1
Wood and other solid waste							
Fuel input (TJ)	-	1153493 e	388431	222928	231045	232740	-7.3
Electricity production (GWh)	-	57006	32074	30227	31363	32106	-2.7
CHP Heat production (TJ)	-	-	9489	30839	26954	23028	-
Industrial waste							
Fuel input (TJ)	-	71583	58985	38004	44934	49986	-1.7
Electricity production (GWh)	-	3961	6247	4106	4772	5227	1.3
CHP Heat production (TJ)	-	-	187	3818	3807	4927	-
Municipal waste							
Fuel input (TJ)	-	13083 e	40737 e	34740 e	31454	30148	4.1
Electricity production (GWh)	-	1037 e	2319 e	2106 e	1842	1761	2.6
CHP Heat production (TJ)	-	633 e	15884 e	12437 e	12063	12715	15.4
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	12790	14568 e	15380	17502	-
Electricity production (GWh)	-	-	1325	1443 e	1371	1503	-
CHP Heat production (TJ)	-	-	2191	1049 e	1921	2561	-
Total combustible fuels(2)							
Electricity production (GWh)	-	204493 e	358926 e	317295 e	330188	325296	2.2
CHP Heat production (TJ)	22654	112485 e	358380 e	558223 e	528480	531411	7.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	2629 e	2629 e	2591 e	2591	2591	-0.1
Heat production (TJ)	-	1381 e	1381 e	1411 e	1411	1411	0.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Heat production (TJ)	-	1381 e	1381 e	1411 e	1411	1411	0.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**1446.80**	**1466.35**	**1452.46**	**1735.86**	**1650.24**	**1717.98**	**1707.68**	**0.0**	**0.8**
Geothermal	-	-	0.34	0.52	0.22	0.22	0.22	-	-2.0
Solar thermal	-	-	-	1.44	1.37	1.39	1.44	-	-
Coal	79.50	60.49	58.74	36.09	26.86	30.14	27.69	-1.8	-3.5
Oil	769.15	769.13	752.08	874.20	822.19	850.33	837.31	-0.1	0.5
Natural gas	390.69	373.63	346.29	413.30	363.90	379.33	382.70	-0.7	0.5
Biofuels & waste	45.04	61.80	29.77	61.85	74.78	78.97	80.57	-2.4	4.9
Electricity	162.32	200.27	262.45	342.37	353.24	370.48	370.55	2.9	1.7
Heat	0.10	1.03	2.79	6.09	7.67	7.12	7.19	21.9	4.6
of which:									
Total industry	**439.50**	**437.44**	**330.84**	**387.25**	**310.24**	**343.81**	**343.48**	**-1.7**	**0.2**
Geothermal	-	-	-	0.11	0.11	0.11	0.11	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	65.14	52.34	48.73	33.57	24.50	27.95	25.73	-1.7	-3.0
Oil	86.27	101.08	51.04	32.12	33.89	37.02	36.53	-3.0	-1.6
Natural gas	189.07	167.73	126.74	157.19	126.26	141.33	142.59	-2.3	0.6
Biofuels & waste	34.28	39.45	14.74	43.57	36.59	38.61	37.76	-4.8	4.6
Electricity	64.64	75.84	88.97	115.71	82.65	93.06	94.98	1.9	0.3
Heat	0.10	1.00	0.63	4.98	6.25	5.73	5.79	11.7	11.1
Transport	**447.87**	**469.59**	**530.69**	**640.38**	**632.56**	**654.16**	**648.18**	**1.0**	**1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.12	-	-	-	-	-	-	-	-
Oil	430.25	452.74	511.75	616.35	591.30	608.90	600.78	1.0	0.8
Natural gas	16.84	16.38	18.31	19.93	17.30	18.76	19.03	0.5	0.2
Biofuels & waste	-	-	-	3.32	22.96	25.50	27.38	-	-
Electricity	0.65	0.46	0.64	0.77	1.00	0.99	0.99	-0.1	2.1
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**165.61**	**160.85**	**180.99**	**220.47**	**232.33**	**231.27**	**231.87**	**0.5**	**1.2**
Geothermal	-	-	-	0.19	0.08	0.08	0.08	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	3.42	1.84	2.42	0.89	1.59	1.51	1.30	-2.0	-2.9
Oil	55.06	36.96	25.38	22.43	18.36	17.92	17.24	-4.5	-1.8
Natural gas	65.81	67.72	69.57	83.99	82.62	81.45	82.99	0.3	0.8
Biofuels & waste	-	-	-	1.24	2.27	2.20	2.03	-	-
Electricity	41.32	54.30	81.46	110.61	125.98	126.71	126.84	4.1	2.1
Heat	-	0.03	2.16	1.12	1.43	1.39	1.39	-	-2.1

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**262.94**	**243.88**	**238.60**	**294.91**	**294.52**	**299.05**	**296.37**	**-0.6**	**1.0**
Geothermal	-	-	-	0.22	0.03	0.03	0.03	-	-
Solar thermal	-	-	-	1.44	1.37	1.39	1.44	-	-
Coal	3.57	1.65	1.53	1.36	0.03	0.03	0.03	-4.9	-16.7
Oil	84.20	52.13	31.03	35.15	25.31	24.21	22.40	-5.7	-1.5
Natural gas	118.97	119.19	113.91	130.09	125.25	124.15	123.89	-0.3	0.4
Biofuels & waste	1.91	1.91	1.49	12.21	12.61	12.28	13.05	-1.4	10.9
Electricity	54.28	69.00	90.63	114.44	129.91	136.96	135.52	3.1	1.9
Heat	-	-	0.00	-	0.00	-	-	-	-
Agriculture & fishing	**17.41**	**16.03**	**17.65**	**18.30**	**18.15**	**20.30**	**19.52**	**0.1**	**0.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	15.99	15.09	16.41	16.89	16.48	18.55	17.64	0.2	0.3
Natural gas	-	0.27	0.50	0.59	0.51	0.57	0.72	-	1.8
Biofuels & waste	-	-	-	-	0.34	0.37	0.34	-	-
Electricity	1.42	0.67	0.74	0.83	0.82	0.81	0.81	-3.8	0.4
Heat	-	-	0.00	0.00	0.00	-	-	-	-
Other	**17.44**	**24.97**	**19.62**	**1.52**	**12.87**	**11.96**	**11.42**	**0.7**	**-2.5**
Geothermal	-	-	0.34	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	7.24	4.53	5.74	-	-	-	-	-1.4	-
Oil	1.35	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	8.85	20.44	13.54	1.50	-	-	-	2.5	-
Electricity	-	-	0.01	0.03	12.87	11.96	11.42	-	41.0
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**96.03**	**113.60**	**134.07**	**173.02**	**149.55**	**157.44**	**156.84**	**1.98**	**0.75**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**1446.80**	**1466.35**	**1452.46**	**1735.86**	**1738.51**	**1650.24**	**1717.98**	**1707.68**
Total industry (Mtoe)	**439.50**	**437.44**	**330.84**	**387.25**	**346.10**	**310.24**	**343.81**	**343.48**
Iron and steel	47.69	36.73	22.73	33.11	24.44	20.75	24.61	24.46
Chem. and petrochemical	22.71	30.91	72.78	97.52	78.85	71.33	78.40	78.69
Non-ferrous metals	12.60	15.90	10.51	24.99	18.72	17.00	18.39	18.78
Non-metallic minerals	8.08	12.16	11.94	26.00	28.72	24.46	27.46	27.26
Transport equipment	5.12	5.12	4.24	13.25	11.01	9.81	10.89	10.98
Machinery	5.14	7.03	11.47	24.82	21.23	18.92	21.00	21.21
Mining and quarrying	4.62	8.74	8.33	11.23	15.84	15.77	18.57	19.37
Food and tobacco	8.29	8.90	9.27	27.45	31.99	28.67	32.12	32.29
Paper, pulp and printing	31.56	32.67	32.97	74.62	68.64	61.37	64.98	64.65
Wood and wood products	2.36	3.07	2.78	13.63	13.65	12.69	14.00	12.91
Construction	-	1.14	2.48	1.67	2.71	2.73	2.92	3.16
Textile and leather	4.07	5.40	3.77	8.67	6.00	5.28	5.84	5.88
Non specified/other	287.27	269.66	137.57	30.29	24.30	21.47	24.63	23.84
Electricity consumption (Mtoe)	**162.32**	**200.27**	**262.45**	**342.37**	**370.89**	**353.24**	**370.48**	**370.55**
Total industry (Mtoe)	**64.64**	**75.84**	**88.97**	**115.71**	**93.84**	**82.65**	**93.06**	**94.98**
Iron and steel	6.00	6.70	6.98	7.38	7.60	6.64	7.34	7.50
Chem. and petrochemical	12.89	14.20	19.19	24.28	22.92	20.48	22.40	22.96
Non-ferrous metals	10.58	12.66	7.98	12.49	11.56	10.57	11.25	11.55
Non-metallic minerals	2.71	3.04	3.11	3.60	3.79	3.32	3.64	3.72
Transport equipment	2.66	2.84	3.30	5.18	3.98	3.47	3.82	3.90
Machinery	4.46	5.36	10.30	11.83	9.84	8.59	9.46	9.66
Mining and quarrying	2.98	3.33	5.36	6.06	4.96	3.48	4.65	4.77
Food and tobacco	3.55	4.08	5.13	6.52	7.25	6.33	6.97	7.12
Paper, pulp and printing	6.54	8.22	15.06	16.75	14.38	12.66	13.51	13.60
Wood and wood products	1.65	1.96	2.47	2.83	2.49	2.18	2.39	2.45
Construction	-	-	-	-	-	-	-	-
Textile and leather	3.16	3.07	3.21	3.28	2.45	2.14	2.35	2.40
Non specified/other	7.46	10.40	6.87	15.50	2.63	2.79	5.27	5.35
Total industry (TWh)	**751.66**	**881.81**	**1034.49**	**1345.42**	**1091.12**	**961.09**	**1082.15**	**1104.38**
Iron and steel	69.75	77.89	81.22	85.80	88.41	77.22	85.38	87.18
Chem. and petrochemical	149.87	165.15	223.13	282.31	266.55	238.14	260.52	266.95
Non-ferrous metals	123.06	147.17	92.78	145.28	134.38	122.93	130.79	134.26
Non-metallic minerals	31.48	35.31	36.20	41.90	44.06	38.59	42.33	43.24
Transport equipment	30.92	33.01	38.38	60.18	46.23	40.37	44.43	45.40
Machinery	51.85	62.32	119.78	137.54	114.40	99.92	109.96	112.36
Mining and quarrying	34.69	38.71	62.33	70.43	57.62	40.49	54.10	55.49
Food and tobacco	41.25	47.39	59.62	75.83	84.31	73.64	81.04	82.81
Paper, pulp and printing	76.08	95.53	175.09	194.82	167.17	147.21	157.10	158.14
Wood and wood products	19.20	22.74	28.75	32.85	28.96	25.29	27.84	28.45
Construction	-	-	-	-	-	-	-	-
Textile and leather	36.73	35.65	37.34	38.19	28.44	24.84	27.34	27.94
Non specified/other	86.79	120.95	79.88	180.29	30.60	32.46	61.31	62.18

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**19097**	**33121**	**40287**	**54182**	**63934**	**80883**	**70354**	**63769**	**67263**
Imports from:									
Total from OECD	**19097**	**33121**	**40287**	**54182**	**63934**	**80883**	**70354**	**63769**	**67263**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	16848	30181	20555	44503	48515	55732	51109	43763	51077
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	1951	2257	77	1287	1082	1320	1224
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	2249	2940	17781	7422	15342	23864	18163	18686	14962
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**18856**	**33645**	**38656**	**52590**	**65661**	**79534**	**69920**	**63496**	**66555**
Exports to:									
Total to OECD	**18856**	**33645**	**38656**	**52590**	**65661**	**79534**	**69920**	**63496**	**66555**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	2570	3461	19936	7992	12685	23499	17490	18482	14385
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	590	1154	1993	699	648	625	653
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	16286	30184	18130	43444	50983	55336	51782	44389	51517
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**471.76**	**699.70**	**788.48**	**815.02**	**724.95**	**1100.20**	**1122.79**	**1136.83**	**1150.77**
Nuclear	34.33	62.36	113.16	115.91	108.48	114.10	113.67	113.83	114.08
Hydro	32.38	118.27	145.98	156.96	154.90	168.69	169.86	170.57	170.47
of which: pumped storage	*-*	*-*	*0.19*	*21.56*	*19.70*	*22.04*	*22.34*	*22.38*	*22.47*
Geothermal	-	1.01	1.61	1.75	2.79	2.23	2.38	2.41	2.41
Solar	-	-	-	0.01	0.43	0.57	0.71	1.15	2.02
Tide, wave, ocean	-	-	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Wind	-	-	-	0.03	2.47	27.02	37.61	43.09	50.91
Other (e.g. fuel cells)	-	-	-	0.05	-	0.03	0.03	-	-
Combustible fuels	405.05	518.07	527.70	540.30	455.87	787.55	798.50	805.77	810.85
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**5.87**	**7.86**	**49.25**	**76.82**	**199.00**	**38.66**	**39.48**	**41.28**	**43.19**
Nuclear	-	-	0.02	-	-	-	-	-	-
Hydro	4.40	6.00	5.77	7.85	11.39	5.50	5.50	5.53	5.55
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	1.06	1.22	-	-	-	-	-
Solar	-	-	0.34	0.40	0.17	1.08	1.47	2.51	4.18
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	1.91	1.72	-	-	-	0.01	0.03
Other (e.g. fuel cells)	-	-	-	-	-	0.40	0.35	0.35	0.36
Combustible fuels	1.47	1.86	40.17	65.63	187.44	31.68	32.16	32.88	33.09
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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IEA ASIA OCEANIA

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	406.99	464.32	631.51	832.29	889.85	862.96	866.75	2.6	1.4
GDP (billion 2005 USD)	2355.39	2981.84	4732.40	5720.28	6655.67	6696.73	6783.12	4.2	1.6
TPES/GDP(1)	0.17	0.16	0.13	0.15	0.13	0.13	0.13	-1.5	-0.2
Population (millions)	159.59	173.14	187.02	197.07	204.26	204.79	204.75	0.9	0.4
TPES/population(2)	2.55	2.68	3.38	4.22	4.36	4.21	4.23	1.7	1.0
TPES/GDP (2005 = 100)	126	114	97	106	98	94	93	-1.5	-0.2
Ele.TFC/GDP(2005=100)(3)	85	87	85	99	103	100	..	0.0	..
Ele.TFC/population(4)	3111	3725	5356	7177	8312	8107	..	3.2	..
Elec. generated (TWh)(5)	563.15	727.60	1127.44	1586.62	1902.36	1859.86	1850.73	4.2	2.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**406.99**	**464.32**	**631.51**	**832.29**	**889.85**	**862.96**	**866.75**	**2.6**	**1.4**
Coal	89.84	101.38	138.34	188.07	239.75	237.27	241.22	2.6	2.6
Oil	292.99	294.41	334.90	394.08	343.94	347.31	354.77	0.8	0.3
Natural gas	8.74	29.65	65.54	106.98	154.57	171.96	188.66	12.6	4.9
Biofuels & waste	3.53	4.13	10.44	13.39	18.72	19.51	19.84	6.6	3.0
Nuclear	2.53	22.43	66.50	112.32	113.84	66.84	43.29	21.2	-1.9
Geothermal	1.30	1.79	3.05	5.05	6.12	6.33	6.19	5.1	3.3
Solar, wind, tide(1)	-	0.02	1.26	0.99	2.11	2.46	2.48	-	3.1
Hydro	8.07	10.50	11.44	11.36	10.67	11.15	10.17	2.1	-0.5
Net electricity imports(2)	-	-	-	-	-	-	-	-	-
Heat	-	-	0.04	0.04	0.13	0.13	0.13	-	5.6

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**568.4**	**732.2**	**1134.7**	**1598.1**	**1760.8**	**1913.7**	**1871.7**	**1861.3**
Nuclear	9.7	86.1	255.2	431.0	451.5	436.8	256.5	166.1
Hydro	99.1	126.8	140.3	143.6	130.5	135.4	141.4	128.8
of which:								
pumped storage production	*5.3*	*4.6*	*7.3*	*11.5*	*11.7*	*11.3*	*11.8*	*10.6*
Geothermal	1.5	2.1	3.9	6.3	6.4	8.5	8.8	8.7
Solar	-	-	0.0	0.4	1.6	4.9	6.9	6.9
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.3	3.4	11.5	13.2	13.3
Combustible fuels	458.1	517.3	735.3	1016.5	1167.3	1316.2	1444.3	1536.9
Coal	*88.5*	*127.6*	*256.5*	*519.4*	*639.7*	*700.1*	*681.1*	*693.7*
Oil	*355.8*	*299.2*	*270.3*	*173.4*	*166.5*	*117.0*	*174.1*	*196.5*
Natural gas	*13.5*	*89.8*	*196.8*	*306.6*	*334.3*	*458.7*	*547.8*	*605.0*
Biofuels & waste	*0.3*	*0.7*	*11.8*	*17.0*	*26.7*	*40.3*	*41.3*	*41.7*
Other (e.g. fuel cells)	-	-	0.1	0.1	0.1	0.4	0.5	0.5
- Own use by power plant	20.5	30.4	48.1	67.7	75.1	79.3	76.9	..
Net production	**548.0**	**701.8**	**1086.6**	**1530.4**	**1685.7**	**1834.4**	**1794.8**	**..**
Nuclear	..	81.9	244.2	412.2	429.8	416.4	242.7	..
Hydro	..	126.0	139.2	142.6	129.6	134.7	140.7	..
Geothermal	..	1.2	3.6	5.9	5.9	7.9	8.2	..
Solar	..	-	0.0	0.4	1.6	4.9	6.9	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.3	3.4	11.4	13.2	..
Combustible fuels	..	492.7	699.4	969.1	1115.3	1258.7	1382.6	..
Other (e.g. fuel cells)	..	-	0.1	0.1	0.1	0.4	0.5	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	0.3	1.1	1.1	1.1	1.0	1.0
- Used for pumped storage	5.3	7.4	13.4	17.5	16.0	13.6	14.0	12.6
+ Imports	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**542.7**	**694.4**	**1072.9**	**1511.9**	**1668.6**	**1819.7**	**1779.7**	**..**
- Transmission & distr. losses	39.8	39.8	56.3	77.4	82.5	86.0	82.0	..
- Statistical difference	-	-0.0	0.6	0.2	-0.5	0.9	1.4	..
Total consumption	**502.9**	**654.6**	**1016.1**	**1434.2**	**1586.6**	**1732.7**	**1696.3**	**..**
- Energy industry consumption[2]	6.5	9.9	14.7	20.4	23.6	35.4	36.7	..
Final consumption	**496.4**	**644.8**	**1001.4**	**1413.9**	**1563.0**	**1697.3**	**1659.6**	**..**
Industry	329.0	390.7	465.5	603.1	614.5	650.0	621.2	..
Transport	14.1	16.5	19.7	23.0	25.2	25.0	24.8	..
Commercial & publ. serv.	43.8	75.9	258.7	420.6	508.2	561.5	565.3	..
Residential	106.9	158.4	250.6	355.0	400.9	441.2	426.9	..
Agriculture & fishing	2.6	3.2	6.2	11.1	11.9	15.2	15.6	..
Sector non specified	-	-	0.8	1.1	2.3	4.4	5.8	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**564.76**	**732.24**	**1134.70**	**1598.15**	**1797.04**	**1913.66**	**1871.66**	**4.5**	**2.4**
- Hydro pumped storage	*2.51*	*4.64*	*7.26*	*11.52*	*9.83*	*11.31*	*11.80*	*6.9*	*2.3*
Total generation(1)	**562.24**	**727.60**	**1127.44**	**1586.62**	**1787.21**	**1902.36**	**1859.86**	**4.4**	**2.4**
Main activity producers									
Gross production	496.24	659.46	1037.04	1441.44	1630.83	1724.93	1679.93	4.7	2.3
- Hydro pumped storage	*2.51*	*4.64*	*7.26*	*11.52*	*9.83*	*11.31*	*11.80*	*6.9*	*2.3*
Total generation(1)	493.72	654.82	1029.77	1429.92	1621.00	1713.63	1668.13	4.7	2.3
Nuclear	19.70	85.49	254.29	430.30	427.52	436.83	256.48	17.3	0.0
Hydro	105.82	115.14	125.91	124.57	106.43	107.59	112.29	1.1	-0.5
Geothermal	1.39	2.09	3.56	6.00	7.51	8.30	8.58	6.0	4.3
Solar, wind, tide(2)	-	-	-	0.19	6.58	8.41	9.71	-	-
Coal	76.83	107.27	225.80	462.72	618.00	634.04	615.86	7.0	4.9
Oil	271.31	255.73	226.19	110.01	67.01	73.33	130.88	-1.1	-2.6
Natural gas	18.57	89.08	193.42	294.00	381.18	432.93	520.24	15.8	4.8
Biofuels & waste	0.11	0.03	0.61	2.14	6.77	12.20	14.10	11.6	16.2
Autoproducers									
Gross production	68.52	72.78	97.67	156.70	166.21	188.73	191.73	2.2	3.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	68.52	72.78	97.67	156.70	166.21	188.73	191.73	2.2	3.3
Nuclear	-	0.58	0.87	0.71	-	-	-	-	-
Hydro	6.17	7.01	7.09	7.49	9.31	16.52	17.34	0.9	4.4
Geothermal	-	-	0.31	0.27	0.25	0.22	0.21	-	-1.8
Solar, wind, tide(2)	-	-	0.07	0.57	6.74	8.32	10.91	-	27.3
Coal	12.09	20.34	30.71	56.72	60.43	66.04	65.26	6.0	3.7
Oil	49.12	43.49	44.12	63.43	45.09	43.71	43.19	-0.7	-0.1
Natural gas	0.53	0.70	3.34	12.62	25.60	25.81	27.61	12.2	10.6
Biofuels & waste	0.61	0.67	11.16	14.89	18.81	28.11	27.20	19.9	4.3

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**58528**	**61242**	**96981 e**	**155875 e**	**164987**	**187258**	**189250**	**3.2**
Total energy	**-**	**-**	**5113**	**11682**	**22137**	**22165**	**22564**	**7.3**
Coal mines	-	-	1	1	48	36	89	23.8
Oil and gas extraction	-	-	831	1252	3053	3183	4052	7.8
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	4281	10429	18997	18903	18423	7.2
Energy non specified/other	-	-	-	-	39	43	-	-
Total industry	**58223**	**58171**	**91430**	**142715 e**	**139156**	**159800**	**159421**	**2.7**
Iron and steel	970	11969	21717	39140 e	40229	43482	42929	3.3
Chemical and petrochemical	240	17419	28214	39935 e	29838	32999	32667	0.7
Non-ferrous metals	1953	8604	2648	6240 e	7153	6866	6176	4.1
Non-metallic minerals	246	2155	8889	12557 e	13161	13177	12824	1.8
Transport equipment	-	2	-	-	-	-	-	-
Machinery	6	9	2006	4389 e	3672	3596	3584	2.8
Mining and quarrying	2228	3200	36	1991	2974	2984	4166	25.4
Food and tobacco	287	769	80	538 e	2147	1995	2292	17.3
Pulp and printing	473	11061	17111	26816 e	22446	22031	22195	1.2
Wood and wood products	25	21	390	583 e	521	508	518	1.4
Construction	-	-	-	-	7	26	5	-
Textile and leather	-	30	-	2328 e	1908	1897	1839	-
Non specified/other industries	51795	2932	10339	8198	15100	30239	30226	5.2
Total transport	**-**	**-**	**1**	**1**	**44**	**40**	**325**	**31.7**
Rail and pipeline	-	-	-	-	40	35	300	-
Transport non specified	-	-	1	1	4	5	25	16.6
Other	**305 e**	**3071 e**	**437 e**	**1477 e**	**3650**	**5253**	**6940**	**14.1**
Commerce and pub. services	-	-	317 e	510 e	905	1475	1840	8.7
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	2	-	1	-
Sector non specified	305 e	3071 e	120	967 e	2743	3778	5099	19.5

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**9713**	**11676**	**164294**	**219421**	**218207**	**227728**	**227728**	**15.2**
Nuclear	..	..	-	-	-	-	-	..
Geothermal	..	..	-	-	-	-	-	..
Coal	..	..	33715	35764	53342	58543	58543	..
Oil	..	..	67224	101557	53514	50395	50395	..
Natural gas	..	..	49482	62339	76814	82492	82492	..
Biofuels & waste	..	..	8765	13707	25185	27405	27405	..
Non-spec. comb. fuels	..	..	-	-	-	-	-	..
Chemical processes	..	..	1610	2449	5295	5285	5285	..
Heat pumps	..	..	-	-	-	-	-	..
Electric boilers	..	..	3498	3605	4057	3608	3608	..
Other sources(1)	..	..	-	-	-	-	-	..
of which:								
Main activity producers								
Total	9713	10066	70151	89255	94388	94187	..	11.2
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	613	539	-	-	..	..
Oil	..	..	11202	16998	8619	6146	..	..
Natural gas	..	..	49426	62110	76114	79474	..	..
Biofuels & waste	..	..	5412	6003	5598	4959	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	3498	3605	4057	3608	..	..
Other sources(1)	..	..	-	-	-	-	..	..
Autoproducers								
Total	-	1610	94143	130166	123819	133541	..	23.4
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	-	-	-	-	..	..
Coal	..	..	33102	35225	53342	58543	..	..
Oil	..	..	56022	84559	44895	44249	..	..
Natural gas	..	..	56	229	700	3018	..	..
Biofuels & waste	..	..	3353	7704	19587	22446	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	1610	2449	5295	5285	..	..
Heat pumps	..	..	-	-	-	-	..	..
Electric boilers	..	..	-	-	-	-	..	..
Other sources(1)	..	..	-	-	-	-	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**103.89**	**120.16**	**159.86**	**216.95**	**262.90**	**277.66**	**304.37**	**2.6**	**3.1**
Coal	26.47	31.67	60.44	117.82	159.04	161.49	159.33	5.0	4.7
Oil	74.51	70.86	56.10	36.09	22.75	23.89	35.55	-1.7	-2.1
Natural gas	2.87	17.45	40.17	58.91	75.24	83.38	100.22	16.8	4.5
Biofuels & waste	0.03	0.19	3.16	4.14	5.86	8.91	9.27	30.3	5.3
of which: ***main activity prod.***									
Total	**..**	**105.02**	**139.47**	**188.25**	**232.87**	**244.64**	**270.05**	**..**	**3.2**
Coal	..	28.66	52.74	106.44	146.32	147.47	144.81	..	4.9
Oil	..	59.05	47.21	25.07	14.70	15.90	27.29	..	-2.6
Natural gas	..	17.30	39.34	56.14	70.20	78.55	94.83	..	4.3
Biofuels & waste	..	0.01	0.18	0.60	1.65	2.73	3.13	..	14.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**3.83**	**24.22**	**69.30**	**116.99**	**116.93**	**119.94**	**73.32**	**18.6**	**0.3**
Nuclear	2.53	22.43	66.50	112.32	111.41	113.84	66.84	21.2	0.0
Geothermal	1.30	1.79	2.80	4.63	5.21	5.68	5.88	4.6	3.6
Solar	-	-	0.00	0.03	0.30	0.42	0.60	-	47.4
Non-Thermal									
Total	**8.07**	**10.50**	**11.44**	**11.38**	**10.79**	**11.68**	**12.31**	**2.1**	**0.3**
Hydro	8.07	10.50	11.44	11.36	9.95	10.67	11.15	2.1	-0.1
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.03	0.83	0.99	1.13	-	-
Other (e.g. fuel cells)	-	-	-	-	0.01	0.02	0.03	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	38017	77154	152723 e	224736	226283	221771	5.2
Fuel input (TJ)	685708	1733776	3764009 e	5447206	5434349	5331411	5.5
Electricity production (GWh)	81428	184450	414274 e	572086	582378	564493	5.5
Brown coal							
Fuel input (1000 t)	29798	43043	66446 e	70807	70184	68808	2.3
Fuel input (TJ)	285435	402415	644763 e	730067	723538	709383	2.7
Electricity production (GWh)	19034	33341	50476 e	55844	54949	54194	2.3
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	278254	300575	359932 e	280452	366323	357335	0.8
Electricity production (GWh)	27084	32099	40774 e	32777	41367	39921	1.0
Petroleum products							
Fuel input (1000 t)	70969	55073 e	33423 e	20810 e	21619 e	33243	-2.4
Fuel input (TJ)	2846517	2474013 e	1503670 e	926464 e	964929 e	1496801	-2.4
Electricity production (GWh)	299211	270304 e	165401 e	106467 e	110816 e	169165	-2.2
Natural gas (1)							
Fuel input (TJ)	919706	1870284	2582325 e	3238150	3563239	4311633	4.1
Electricity production (GWh)	89757	196697	293150 e	383780	429635	514951	4.7
Wood and other solid waste							
Fuel input (TJ)	-	78705	85269 e	111335	237682	239323	5.4
Electricity production (GWh)	-	8713	10456	14187	29157	29230	5.9
Industrial waste							
Fuel input (TJ)	-	-	814	4790	13052	20163	-
Electricity production (GWh)	-	-	97	616	1567	2376	-
Municipal waste							
Fuel input (TJ)	-	16439 e	40934 e	57455	47398	52352	5.7
Electricity production (GWh)	-	1807	4706	6837	5626	6012	5.9
Biogases and liquid biofuels							
Fuel input (TJ)	379	288	942	17041	16484	17797	21.7
Electricity production (GWh)	32	27	87	1583	1516	1593	21.4
Total combustible fuels(2)							
Electricity production (GWh)	516931	727438	979421 e	1174177	1257011	1381935	3.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	28	1957	3837	4579	5556	28.6
Fuel input (TJ)	-	585	53971	90279	109168	136548	29.6
Electricity production (GWh)	-	52	2072	4067	5841	7091	26.4
CHP Heat production (TJ)	-	-	33102	50690	53342	57270	-
Brown coal							
Fuel input (1000 t)	-	1249	13	1463	1447	1505	0.9
Fuel input (TJ)	-	12396	185	15126	14967	17595	1.7
Electricity production (GWh)	-	548	17	1161	1140	1211	3.8
CHP Heat production (TJ)	5443	2269	-	-	-	811	-4.8
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	724 e	87437	101235	104427	123888	129369	1.9
Electricity production (GWh)	60 e	6019	11823	12496	14404	14209	4.2
CHP Heat production (TJ)	-	-	-	488	-	462	-
Petroleum products							
Fuel input (1000 t)	-	-	3396 e	2369	2348	2050	-
Fuel input (TJ)	-	-	154012 e	111624	101483	97691	-
Electricity production (GWh)	-	-	8044	5637	6217	4907	-
CHP Heat production (TJ)	-	-	59190	63464	49799	47739	-
Natural gas(1)							
Fuel input (TJ)	272	714	140503 e	243128	293304	332589	34.0
Electricity production (GWh)	30 e	60	13463	22998	29112	32893	35.0
CHP Heat production (TJ)	-	-	36767	51117	57308	65264	-
Wood and other solid waste							
Fuel input (TJ)	2876	33742 e	28472 e	25619	22706	17261	-3.1
Electricity production (GWh)	280	1110	1163 e	2018	1976	1431	1.2
CHP Heat production (TJ)	-	-	-	1333	1077	988	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	25	1815	-
Electricity production (GWh)	-	-	-	-	1	129	-
CHP Heat production (TJ)	-	-	-	-	9	1081	-
Municipal waste							
Fuel input (TJ)	-	-	344 e	7391	7125	11497	-
Electricity production (GWh)	-	-	36 e	186	207	253	-
CHP Heat production (TJ)	-	-	-	2516	2295	4575	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1229	6143	1668	2973	2995	4.3
Electricity production (GWh)	-	113	482	148	264	274	4.3
CHP Heat production (TJ)	-	-	-	-	515	401	-
Total combustible fuels(2)							
Electricity production (GWh)	370 e	7902	37100 e	48711	59162	62398	10.3
CHP Heat production (TJ)	5443	2269	129059	169608	164345	178591	23.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	38	32	27	-	-	-	-
Fuel input (TJ)	960	804	690	-	-	-	-
Heat production (TJ)	637	515	613	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	40	57	213	124	117	67	0.8
Fuel input (TJ)	1816	2534	9634	5164	4915	2838	0.5
Heat production (TJ)	1201	1609	8034	4128	3715	2656	2.4
Natural gas(1)							
Fuel input (TJ)	2946	6169	15750	20049	23186	19528	5.6
Heat production (TJ)	1949	3556	12715	17112	19506	17228	7.8
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	1206	-
Heat production (TJ)	-	-	-	-	-	564	-
Industrial waste							
Fuel input (TJ)	-	80	172	77	2596	7656	24.3
Heat production (TJ)	-	51	153	74	2081	6147	25.6
Municipal waste							
Fuel input (TJ)	-	-	4191	12926	17686	11195	-
Heat production (TJ)	-	-	3353 e	10341	14149	9345	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1946	6098	6885	5537	4738	4.3
Heat production (TJ)	-	1279	5259	6083	5059	4304	5.9
Total combustible fuels(2)							
Heat production (TJ)	4270	7010	30127 e	37738	44510	40244	8.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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IEA ASIA OCEANIA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**296.92**	**316.87**	**430.60**	**552.88**	**548.34**	**569.94**	**566.02**	**2.2**	**1.3**
Geothermal	-	-	0.25	0.41	0.47	0.44	0.45	-	2.9
Solar thermal	-	0.02	1.26	0.93	0.68	0.69	0.71	-	-2.7
Coal	36.66	40.32	48.53	39.00	36.52	40.50	40.04	1.7	-0.9
Oil	208.71	205.82	260.68	329.45	295.83	297.93	295.19	1.3	0.6
Natural gas	5.34	11.21	26.35	48.42	64.38	69.65	71.63	9.8	4.9
Biofuels & waste	3.49	3.94	7.23	9.24	9.05	9.85	10.24	4.4	1.7
Electricity	42.69	55.45	86.12	121.59	136.41	145.97	142.72	4.2	2.4
Heat	0.03	0.10	0.19	3.83	5.00	4.93	5.04	11.9	17.0
of which:									
Total industry	**128.54**	**121.54**	**144.29**	**164.42**	**148.05**	**160.17**	**158.98**	**0.7**	**0.5**
Geothermal	-	-	0.11	0.14	0.15	0.15	0.15	-	1.4
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	24.64	27.41	38.10	37.24	34.10	38.07	37.73	2.6	-0.0
Oil	71.13	52.49	50.72	49.67	33.60	33.33	32.76	-2.0	-2.1
Natural gas	2.98	5.82	10.56	16.45	21.04	23.28	25.19	7.7	4.2
Biofuels & waste	1.49	2.22	4.76	6.94	6.53	7.11	7.30	7.1	2.1
Electricity	28.30	33.60	40.03	51.86	49.93	55.90	53.42	2.1	1.4
Heat	-	-	-	2.12	2.70	2.34	2.43	-	-
Transport	**58.12**	**77.87**	**110.39**	**143.92**	**139.08**	**140.64**	**139.75**	**3.8**	**1.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.23	0.01	0.07	0.09	0.18	0.17	0.12	-6.5	2.4
Oil	56.68	76.43	108.56	141.55	134.94	136.26	135.33	3.9	1.1
Natural gas	-	0.01	0.07	0.30	1.34	1.47	1.54	-	16.1
Biofuels & waste	-	-	-	-	0.46	0.59	0.63	-	-
Electricity	1.21	1.42	1.69	1.98	2.18	2.15	2.13	2.0	1.1
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**22.74**	**26.00**	**58.97**	**85.05**	**91.21**	**93.01**	**93.19**	**5.8**	**2.2**
Geothermal	-	-	0.09	0.17	0.20	0.19	0.19	-	3.7
Solar thermal	-	-	0.05	0.03	0.03	0.03	0.04	-	-1.3
Coal	1.09	1.11	1.10	0.70	0.59	0.59	0.57	0.1	-3.1
Oil	17.26	17.11	30.43	35.38	22.22	20.65	20.39	3.4	-1.9
Natural gas	0.59	1.13	4.85	11.83	20.02	21.88	21.91	13.2	7.4
Biofuels & waste	-	0.02	0.05	0.17	0.49	0.58	0.70	-	13.1
Electricity	3.76	6.52	22.25	36.17	46.94	48.29	48.62	11.0	3.8
Heat	0.03	0.10	0.16	0.60	0.72	0.80	0.77	10.7	7.9

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**33.06**	**42.05**	**59.63**	**74.07**	**77.15**	**81.28**	**79.52**	**3.5**	**1.4**
Geothermal	-	-	0.01	0.01	0.01	0.01	0.01	-	2.2
Solar thermal	-	0.02	1.21	0.90	0.65	0.66	0.67	-	-2.8
Coal	10.62	11.79	8.85	0.61	0.92	0.87	0.86	-1.1	-10.5
Oil	9.69	10.98	15.78	20.87	16.09	17.11	16.47	2.9	0.2
Natural gas	1.57	3.93	9.78	17.92	20.47	21.34	21.37	11.4	3.8
Biofuels & waste	2.00	1.70	2.41	2.13	1.58	1.57	1.59	1.1	-2.0
Electricity	9.19	13.62	21.55	30.53	35.86	37.94	36.71	5.1	2.6
Heat	-	-	0.03	1.10	1.57	1.79	1.83	-	21.5
Agriculture & fishing	**4.17**	**5.22**	**10.36**	**11.25**	**9.03**	**9.34**	**9.32**	**5.5**	**-0.5**
Geothermal	-	-	0.04	0.10	0.11	0.09	0.10	-	4.2
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.01	0.01	0.02	0.04	0.06	-	9.5
Oil	3.94	4.94	9.73	10.12	7.64	7.86	7.76	5.5	-1.1
Natural gas	-	-	0.04	0.06	0.05	0.04	0.04	-	-0.2
Biofuels & waste	-	-	-	-	-	-	0.02	-	-
Electricity	0.23	0.28	0.53	0.95	1.22	1.31	1.34	5.1	4.5
Heat	-	-	-	-	-	-	-	-	-
Other	**9.50**	**9.61**	**1.12**	**1.57**	**1.24**	**1.40**	**1.64**	**-11.8**	**1.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.07	-	-	-	-	-	-	-	-
Oil	9.41	9.59	1.06	1.47	0.94	1.01	1.15	-12.1	0.4
Natural gas	0.02	0.02	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	0.07	0.10	0.30	0.38	0.50	-	10.1
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**40.79**	**34.58**	**45.84**	**72.61**	**82.57**	**84.10**	**83.62**	**0.69**	**2.90**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**296.92**	**316.87**	**430.60**	**552.88**	**553.69**	**548.34**	**569.94**	**566.02**
Total industry (Mtoe)	**128.54**	**121.54**	**144.29**	**164.42**	**155.31**	**148.05**	**160.17**	**158.98**
Iron and steel	38.48	32.98	25.95	28.03	31.07	28.51	32.78	33.82
Chem. and petrochemical	15.19	12.31	24.06	28.03	26.46	26.75	27.88	28.58
Non-ferrous metals	4.71	7.75	9.40	10.83	12.06	11.65	11.80	11.51
Non-metallic minerals	12.57	13.95	16.41	17.16	17.25	15.97	16.25	16.72
Transport equipment	0.89	1.45	0.30	2.65	2.28	2.17	2.55	3.05
Machinery	0.82	1.65	12.39	11.73	14.91	14.04	15.38	16.08
Mining and quarrying	0.55	1.58	2.00	2.74	2.68	2.93	3.03	3.57
Food and tobacco	4.04	6.82	9.00	10.90	8.98	9.36	9.36	9.46
Paper, pulp and printing	6.06	5.71	12.66	14.16	12.51	11.27	11.65	11.47
Wood and wood products	0.14	0.88	0.74	1.18	1.28	1.69	1.81	1.74
Construction	3.34	4.42	6.37	6.53	5.29	5.27	5.35	5.42
Textile and leather	5.87	4.76	2.81	4.63	2.93	2.91	2.80	2.67
Non specified/other	35.89	27.28	22.20	25.85	17.60	15.52	19.53	14.89
Electricity consumption (Mtoe)	**42.69**	**55.45**	**86.12**	**121.59**	**138.00**	**136.41**	**145.97**	**142.72**
Total industry (Mtoe)	**28.30**	**33.60**	**40.03**	**51.86**	**51.80**	**49.93**	**55.90**	**53.42**
Iron and steel	6.45	7.37	7.41	9.47	9.69	9.02	10.41	10.89
Chem. and petrochemical	4.58	4.46	6.49	8.31	7.90	7.67	8.38	8.48
Non-ferrous metals	2.48	3.10	3.87	4.86	5.77	5.85	6.12	6.21
Non-metallic minerals	1.31	1.90	2.79	3.12	3.37	3.25	3.41	3.38
Transport equipment	0.87	1.28	0.13	1.08	1.53	1.48	1.74	1.92
Machinery	0.82	1.42	6.12	8.37	11.25	10.72	11.86	12.03
Mining and quarrying	0.20	0.47	0.78	1.00	1.11	1.23	1.29	1.46
Food and tobacco	0.53	1.07	1.75	2.46	2.78	2.78	2.89	2.90
Paper, pulp and printing	1.83	2.34	3.74	4.65	4.23	3.96	4.00	3.94
Wood and wood products	0.13	0.28	0.07	0.18	0.26	0.35	0.37	0.36
Construction	0.01	0.01	0.20	0.18	0.10	0.09	0.09	0.09
Textile and leather	0.76	1.08	1.00	1.63	1.16	1.13	1.20	1.22
Non specified/other	8.34	8.82	5.69	6.56	2.64	2.41	4.15	0.54
Total industry (TWh)	**329.04**	**390.70**	**465.49**	**603.07**	**602.33**	**580.56**	**649.95**	**621.21**
Iron and steel	75.05	85.68	86.16	110.16	112.64	104.87	121.07	126.64
Chem. and petrochemical	53.30	51.86	75.51	96.67	91.85	89.15	97.40	98.55
Non-ferrous metals	28.78	36.02	44.96	56.46	67.15	68.08	71.21	72.21
Non-metallic minerals	15.23	22.11	32.40	36.23	39.18	37.77	39.61	39.30
Transport equipment	10.06	14.83	1.46	12.53	17.83	17.18	20.24	22.29
Machinery	9.48	16.53	71.18	97.34	130.86	124.64	137.86	139.92
Mining and quarrying	2.37	5.49	9.06	11.66	12.90	14.28	15.03	17.03
Food and tobacco	6.15	12.43	20.33	28.58	32.32	32.34	33.60	33.75
Paper, pulp and printing	21.26	27.21	43.48	54.03	49.24	46.07	46.48	45.86
Wood and wood products	1.50	3.30	0.79	2.07	3.04	4.05	4.28	4.22
Construction	0.06	0.10	2.38	2.10	1.16	1.05	1.06	1.01
Textile and leather	8.81	12.55	11.62	19.01	13.48	13.08	13.90	14.16
Non specified/other	96.98	102.59	66.18	76.25	30.70	28.02	48.22	6.27

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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IEA ASIA OCEANIA

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**116.33**	**159.32**	**220.08**	**282.03**	**328.03**	**368.24**	**374.62**	**372.21**	**374.73**
Nuclear	3.89	15.51	31.48	49.81	58.80	65.65	66.56	66.68	67.68
Hydro	31.28	38.72	51.73	59.00	62.40	65.30	65.30	62.91	64.62
of which: pumped storage	*-*	*11.50*	*18.95*	*24.83*	*27.40*	*30.13*	*30.10*	*30.01*	*31.71*
Geothermal	0.18	0.27	0.50	0.73	0.91	1.08	1.13	1.23	1.23
Solar	-	-	-	-	-	0.30	0.42	0.55	0.62
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.07	1.96	2.56	2.84	3.13
Other (e.g. fuel cells)	-	-	-	-	-	-	0.02	0.04	0.06
Combustible fuels	80.97	104.81	136.38	172.49	205.86	233.94	238.64	237.97	237.40
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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IEA ASIA OCEANIA

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**11.74**	**14.34**	**22.62**	**27.79**	**40.75**	**55.87**	**56.93**	**69.01**	**72.73**
Nuclear	0.01	0.18	0.17	0.17	0.17	-	-	-	-
Hydro	1.07	1.11	1.38	1.37	1.47	1.47	1.41	4.37	4.25
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	0.03	0.04	0.05	0.05	0.04	0.04	0.04	0.04
Solar	-	-	-	0.06	0.36	2.28	2.84	3.91	5.60
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.09	1.86	1.99	2.21	2.35
Other (e.g. fuel cells)	-	-	-	-	-	0.02	0.02	0.02	0.03
Combustible fuels	10.66	13.02	21.04	26.14	38.61	50.19	50.63	58.45	60.46
of which:									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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IEA EUROPE

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	1374.32	1492.75	1601.78	1732.56	1798.68	1737.20	1718.49	0.9	0.3
GDP (billion 2005 USD)	7073.98	8373.30	10633.57	13358.69	15439.35	15723.63	15703.78	2.4	1.8
TPES/GDP(1)	0.19	0.18	0.15	0.13	0.12	0.11	0.11	-1.5	-1.4
Population (millions)	454.83	473.56	496.19	518.05	548.68	551.24	552.70	0.5	0.5
TPES/population(2)	3.02	3.15	3.23	3.34	3.28	3.15	3.11	0.4	-0.2
TPES/GDP (2005 = 100)	156	143	121	104	94	89	88	-1.5	-1.4
Ele.TFC/GDP(2005=100)(3)	94	101	103	100	98	95	..	0.5	..
Ele.TFC/population(4)	2947	3604	4455	5190	5573	5451	..	2.5	..
Elec. generated (TWh)(5)	1615.87	2045.73	2627.58	3193.66	3560.25	3511.61	3523.03	2.9	1.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**1374.32**	**1492.75**	**1601.78**	**1732.56**	**1798.68**	**1737.20**	**1718.49**	**0.9**	**0.3**
Coal	425.41	463.80	441.54	326.32	293.71	298.43	305.67	0.2	-1.7
Oil	731.84	687.85	600.65	646.36	598.89	575.59	556.03	-1.2	-0.4
Natural gas	134.73	206.11	257.94	391.55	465.80	426.86	415.18	3.9	2.2
Biofuels & waste	30.99	35.68	53.92	69.65	129.13	127.80	132.53	3.3	4.2
Nuclear	19.38	60.05	203.96	243.61	237.39	234.47	228.00	14.8	0.5
Geothermal	2.18	2.37	3.69	5.49	8.03	8.41	8.55	3.1	3.9
Solar, wind, tide(1)	0.05	0.05	0.28	2.66	17.19	22.34	25.92	11.0	22.8
Hydro	29.25	35.49	37.77	46.12	46.27	41.94	46.32	1.5	0.9
Net electricity imports(2)	0.49	1.35	1.99	0.34	1.72	0.86	-0.24	8.5	-
Heat	-	-	0.02	0.45	0.54	0.50	0.53	-	16.3

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**1623.7**	**2056.7**	**2647.4**	**3224.8**	**3514.8**	**3592.0**	**3541.4**	**3556.3**
Nuclear	74.4	230.4	782.2	934.6	980.6	910.4	899.2	874.4
Hydro	347.9	423.6	459.1	567.5	517.8	569.8	517.5	571.9
of which:								
pumped storage production	*7.8*	*11.0*	*19.9*	*31.2*	*37.1*	*31.7*	*29.8*	*33.2*
Geothermal	2.5	2.7	3.3	4.9	5.5	6.3	6.6	6.6
Solar	-	-	0.0	0.1	1.5	23.3	46.2	70.9
Tide, wave, ocean	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5
Wind	-	0.0	0.8	22.3	70.9	151.4	181.8	201.8
Combustible fuels	1198.3	1399.5	1401.4	1693.5	1931.0	1925.5	1885.0	1826.1
Coal	*663.1*	*887.2*	*1010.9*	*955.0*	*989.6*	*857.2*	*879.1*	*933.8*
Oil	*408.9*	*363.7*	*203.2*	*178.9*	*135.6*	*79.0*	*66.1*	*66.2*
Natural gas	*120.4*	*137.9*	*166.6*	*510.7*	*720.1*	*844.9*	*785.4*	*663.9*
Biofuels & waste	*6.0*	*10.8*	*20.7*	*48.8*	*85.7*	*144.4*	*154.4*	*162.1*
Other (e.g. fuel cells)	-	-	0.1	1.4	7.1	4.8	4.6	4.1
- Own use by power plant	89.8	113.2	149.8	159.6	167.2	157.1	164.6	..
Net production	**1533.9**	**1943.6**	**2497.6**	**3065.2**	**3347.7**	**3434.9**	**3376.8**	**..**
Nuclear	..	211.2	737.7	885.1	930.6	862.8	852.7	..
Hydro	..	414.3	453.2	560.4	511.7	564.1	510.9	..
Geothermal	..	2.6	3.1	4.6	5.2	5.8	6.1	..
Solar	..	-	0.0	0.1	1.5	23.2	46.0	..
Tide, wave, ocean	..	0.5	0.6	0.6	0.5	0.5	0.5	..
Wind	..	0.0	0.8	22.3	70.8	150.1	180.6	..
Combustible fuels	..	1248.4	1302.1	1590.9	1821.0	1823.8	1775.7	..
Other (e.g. fuel cells)	..	-	0.1	1.3	6.5	4.5	4.3	..
- Used for heat pumps	-	-	0.0	2.3	2.0	1.9	1.6	2.0
- Used for electric boilers	-	-	0.3	2.5	1.0	0.9	0.8	0.9
- Used for pumped storage	13.6	17.8	29.6	43.0	50.8	42.8	40.2	43.4
+ Imports	68.3	106.5	214.5	277.7	347.8	311.7	340.8	360.5
- Exports	62.6	90.9	191.3	273.8	330.1	291.7	330.8	363.3
Electrical energy supplied	**1526.1**	**1941.4**	**2490.9**	**3021.4**	**3311.7**	**3409.3**	**3344.2**	**..**
- Transmission & distr. losses	115.6	144.8	176.1	236.0	239.9	241.9	233.6	..
- Statistical difference	-	-	1.7	0.3	0.1	0.9	-1.4	..
Total consumption	**1410.5**	**1796.5**	**2313.0**	**2785.0**	**3071.8**	**3166.6**	**3112.0**	**..**
- Energy industry consumption[2]	70.4	90.6	103.2	97.2	108.0	109.6	108.3	..
Final consumption	**1340.1**	**1705.9**	**2209.9**	**2687.8**	**2963.7**	**3056.9**	**3003.6**	**..**
Industry	735.8	854.9	1003.1	1133.2	1212.9	1126.6	1138.0	..
Transport	39.5	48.0	61.7	73.2	71.3	70.1	69.6	..
Commercial & publ. serv.	202.4	289.4	460.3	662.6	761.9	888.7	863.4	..
Residential	334.9	471.7	634.8	762.4	859.4	906.7	866.6	..
Agriculture & fishing	23.1	35.8	47.5	51.7	54.1	55.3	54.8	..
Sector non specified	4.4	6.1	2.5	4.7	4.1	9.6	11.1	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**1665.02**	**2056.71**	**2647.44**	**3224.82**	**3443.95**	**3591.98**	**3541.39**	**2.9**	**1.4**
- Hydro pumped storage	*8.17*	*10.99*	*19.86*	*31.16*	*32.13*	*31.72*	*29.78*	*5.7*	*1.9*
Total generation(1)	**1656.86**	**2045.73**	**2627.58**	**3193.66**	**3411.82**	**3560.25**	**3511.61**	**2.9**	**1.4**
Main activity producers									
Gross production	1411.07	1806.81	2403.85	2986.11	3176.69	3302.82	3248.38	3.4	1.4
- Hydro pumped storage	*8.17*	*10.99*	*19.78*	*31.06*	*32.11*	*31.69*	*29.75*	*5.7*	*2.0*
Total generation(1)	1402.91	1795.83	2384.07	2955.05	3144.58	3271.13	3218.63	3.4	1.4
Nuclear	82.20	225.74	776.64	934.63	878.08	910.42	899.19	15.1	0.7
Hydro	331.29	371.11	401.21	512.39	481.59	522.64	472.43	1.2	0.8
Geothermal	2.50	2.67	3.31	4.86	5.98	6.27	6.58	1.8	3.3
Solar, wind, tide(2)	0.60	0.51	1.39	22.82	146.48	171.81	222.35	5.4	27.3
Coal	525.47	774.19	908.57	900.41	807.24	811.80	837.37	3.5	-0.4
Oil	334.29	307.58	167.28	144.95	63.39	53.11	43.08	-4.2	-6.3
Natural gas	124.86	110.39	122.00	419.61	685.60	706.10	641.08	-0.1	8.2
Biofuels & waste	1.69	3.64	3.66	15.39	76.22	88.99	96.55	4.9	16.9
Autoproducers									
Gross production	253.95	249.90	243.59	238.71	267.26	289.16	293.01	-0.3	0.9
- Hydro pumped storage	*-*	*-*	*0.08*	*0.10*	*0.02*	*0.03*	*0.03*	*-*	*-4.1*
Total generation(1)	253.95	249.90	243.52	238.62	267.24	289.13	292.98	-0.3	0.9
Nuclear	4.23	4.65	5.54	-	-	-	-	1.7	-
Hydro	32.36	41.52	37.99	23.91	15.95	15.39	15.25	1.0	-4.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.11	1.57	7.40	8.23	10.82	-	24.7
Coal	125.28	113.00	102.35	54.63	36.88	45.43	41.74	-1.3	-4.2
Oil	60.82	56.07	35.96	33.99	28.63	25.89	22.99	-3.2	-2.1
Natural gas	26.60	27.50	44.58	91.12	127.73	138.81	144.32	3.3	5.8
Biofuels & waste	4.65	7.17	17.00	33.40	50.64	55.38	57.86	8.4	6.0

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**216570 e**	**203333 e**	**227489 e**	**227481 e**	**256772**	**275792 e**	**279505**	**1.0**
Total energy	**12901**	**11999**	**42798 e**	**26803**	**60017**	**64116**	**62866**	**1.8**
Coal mines	-	-	-	3101 e	9913	10723	9429	-
Oil and gas extraction	-	-	26	247	4500	5260	4540	27.9
Patent fuel plants	-	-	-	-	34	34	24	-
Coke ovens	-	-	-	481 e	502	637	581	-
Gas works	-	-	-	-	-	1135	1112	-
BKB	-	-	13	34	7	6	5	-4.4
Oil refineries	30	27	3606	17899 e	30028	30573	30373	10.7
Energy non specified/other	12871	11972	39153 e	5041	15033	15748	16802	-3.9
Total industry	**160436 e**	**147492 e**	**139884 e**	**172396 e**	**155893 e**	**165186 e**	**165258 e**	**0.8**
Iron and steel	24446 e	19688 e	18959 e	18620	17771	20478	19651	0.2
Chemical and petrochemical	53850 e	47855 e	52278 e	47919 e	41108 e	45604 e	45136 e	-0.7
Non-ferrous metals	5991 e	6193 e	4845 e	13615 e	11624 e	11756 e	11905 e	4.4
Non-metallic minerals	843 e	844	935	5361 e	4281 e	4486 e	4135 e	7.3
Transport equipment	690 e	584 e	812	1338	2087	2479	2425	5.3
Machinery	441 e	472	1488	1766 e	1452 e	1399 e	1381 e	-0.4
Mining and quarrying	38631 e	37352 e	21933	16050	1597	1743	1437	-12.2
Food and tobacco	4074 e	4690 e	6202 e	13205 e	16595 e	15814 e	16205 e	4.7
Pulp and printing	12334	15867	19666 e	38420 e	44709 e	48714 e	49699 e	4.5
Wood and wood products	2119 e	2158 e	2468	3177	3517	3568	3710	2.0
Construction	-	-	-	354	296	498	669	-
Textile and leather	3604 e	2110 e	1985	6598	3202	3312	3201	2.3
Non specified/other industries	13413 e	9679 e	8313 e	5973	7654 e	5335 e	5704 e	-1.8
Total transport	**-**	**-**	**1868**	**2467**	**2343**	**2357 e**	**2259 e**	**0.9**
Rail and pipeline	-	-	-	-	3	48	37	-
Transport non specified	-	-	1868	2467	2340	2309 e	2222 e	0.8
Other	**43233 e**	**43842**	**42939**	**25815 e**	**38519 e**	**44133 e**	**49122 e**	**0.6**
Commerce and pub. services	29 e	36 e	2354	13713 e	20053	24502 e	27279	12.4
Residential	-	-	3	82	553	546 e	694	29.6
Agriculture and fishing	-	-	108	2342	12366	14098	15527	26.7
Sector non specified	43204	43806	40474	9678 e	5547 e	4987 e	5622 e	-9.0

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**1616909**	**1800088**	**1838295**	**2660323**	**2476540**	**2295151**	**2347082**	**1.2**
Nuclear	..	..	1706	5098	5368	5815	4944	..
Geothermal	..	..	745	1494	2870	1804	1669	..
Coal	..	..	768749	753135	755243	683704	696849	..
Oil	..	..	141106	177561	166062	137319	136894	..
Natural gas	..	..	637650	1079690	997151	917103	885410	..
Biofuels & waste	..	..	244114	350242	503178	505051	574058	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	7000	..
Chemical processes	..	..	3876	7684	8745	7879	8534	..
Heat pumps	..	..	27439	22962	23974	22056	24081	..
Electric boilers	..	..	8911	3491	3008	2681	3628	..
Other sources(1)	..	..	3999	4242	4012	4784	4015	..
of which:								
Main activity producers								
Total	1086814	1276492	1442310	1818926	2036866	1861205	..	1.8
Nuclear	..	..	1706	5098	5368	5815	..	..
Geothermal	..	..	694	1374	2752	1736	..	..
Coal	..	..	680314	671028	703491	634240	..	..
Oil	..	..	85736	70696	81665	56383	..	..
Natural gas	..	..	475278	790593	811216	727851	..	..
Biofuels & waste	..	..	162367	253262	404399	408648	..	..
Non-spec. comb. fuels	..	..	-	-	-	-	..	..
Chemical processes	..	..	-	-	-	-	..	..
Heat pumps	..	..	27288	22832	23791	21852	..	..
Electric boilers	..	..	8903	3486	3007	2680	..	..
Other sources(1)	..	..	24	557	1177	2000	..	..
Autoproducers								
Total	530095	523596	395985	841397	439674	433946	..	-0.9
Nuclear	..	..	-	-	-	-	..	..
Geothermal	..	..	51	120	118	68	..	..
Coal	..	..	88435	82107	51752	49464	..	..
Oil	..	..	55370	106865	84397	80936	..	..
Natural gas	..	..	162372	289097	185935	189252	..	..
Biofuels & waste	..	..	81747	96980	98779	96403	..	..
Non-spec. comb. fuels	..	..	-	254724	6929	6955	..	..
Chemical processes	..	..	3876	7684	8745	7879	..	..
Heat pumps	..	..	151	130	183	204	..	..
Electric boilers	..	..	8	5	1	1	..	..
Other sources(1)	..	..	3975	3685	2835	2784	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**319.11**	**380.45**	**366.04**	**391.66**	**427.69**	**442.38**	**429.32**	**0.8**	**0.8**
Coal	195.53	255.54	270.23	231.17	206.80	209.00	214.61	1.9	-1.1
Oil	92.43	85.86	47.40	40.88	24.65	22.31	18.58	-3.9	-4.4
Natural gas	28.49	33.97	39.72	101.35	151.47	159.94	146.26	2.0	6.4
Biofuels & waste	2.66	5.08	8.69	18.27	44.78	51.13	49.87	7.2	8.7
of which: ***main activity prod.***									
Total	**..**	**315.94**	**307.76**	**342.88**	**371.49**	**381.96**	**368.26**	**..**	**0.9**
Coal	..	214.05	235.19	217.28	197.06	197.53	203.39	..	-0.7
Oil	..	72.45	39.01	34.26	16.23	14.51	11.34	..	-5.7
Natural gas	..	27.64	30.68	83.39	127.77	133.95	119.23	..	6.7
Biofuels & waste	..	1.80	2.87	7.96	30.44	35.97	34.31	..	12.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**21.51**	**62.35**	**206.81**	**247.80**	**235.36**	**245.02**	**244.49**	**14.2**	**0.8**
Nuclear	19.38	60.05	203.96	243.61	228.95	237.39	234.45	14.8	0.7
Geothermal	2.13	2.30	2.84	4.18	5.15	5.40	5.67	1.7	3.3
Solar	-	-	0.00	0.01	1.25	2.23	4.37	-	48.3
Non-Thermal									
Total	**29.30**	**35.53**	**37.89**	**48.11**	**54.44**	**59.35**	**57.64**	**1.5**	**2.0**
Hydro	29.25	35.49	37.77	46.12	42.79	46.27	41.94	1.5	0.5
Tide, wave, ocean	0.05	0.04	0.05	0.05	0.04	0.05	0.05	0.1	-0.3
Wind	-	0.00	0.07	1.92	11.60	13.02	15.64	-	29.7
Other (e.g. fuel cells)	-	-	-	0.02	0.01	0.01	0.01	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	181321	188332 e	165507 e	130396	130454	140646	-1.4
Fuel input (TJ)	4355604	4563385 e	4110944 e	3296558	3287998	3496828	-1.3
Electricity production (GWh)	439163	486925 e	445647	353235 e	357714 e	375122	-1.2
Brown coal							
Fuel input (1000 t)	325376	357334 e	322296 e	301033	281147	294779	-0.9
Fuel input (TJ)	2846300	2927236 e	2712721 e	2433461	2336445	2445339	-0.9
Electricity production (GWh)	260880	278862 e	277056 e	245856	237975	246635	-0.6
Peat							
Fuel input (1000 t)	3534	3814	3532	4326	4932	4560	0.9
Fuel input (TJ)	29600	32308	29815	35038	43602	40607	1.1
Electricity production (GWh)	2236	3025 e	2829	3888	4846	4426	1.8
Coal manufactured gases(1)							
Fuel input (TJ)	303405	239110 e	250499 e	172988	232045	232130	-0.1
Electricity production (GWh)	26101	22625 e	23984 e	15510	22109 e	22148	-0.1
Petroleum products							
Fuel input (1000 t)	71990	39295 e	32294 e	14344	10367	8123	-7.2
Fuel input (TJ)	2869980	1597934 e	1299284 e	544820	400740	305906	-7.6
Electricity production (GWh)	308360	170817 e	132059 e	55775	41714	32032 e	-7.7
Natural gas (1)							
Fuel input (TJ)	1094719	1049946 e	2850498 e	4071391	4164592	3767927	6.3
Electricity production (GWh)	107565	107055 e	348890 e	526365	530854	490387	7.5
Wood and other solid waste							
Fuel input (TJ)	-	16003	43117 e	324562	324999	316105	15.3
Electricity production (GWh)	-	1487 e	3614	23538	26002	26213	14.6
Industrial waste							
Fuel input (TJ)	24560	24105	49160 e	21785	23132	22953	-0.2
Electricity production (GWh)	2585	2654	4490 e	1539	1702	1633	-2.3
Municipal waste							
Fuel input (TJ)	35978 e	50345 e	132394 e	228892	234141	244957	7.8
Electricity production (GWh)	3105 e	3764	10126	16472	18013	17992	7.7
Biogases and liquid biofuels							
Fuel input (TJ)	-	8828 e	62424 e	287014	392548	248672	17.2
Electricity production (GWh)	-	445	5412 e	24007	28874	23763	20.9
Total combustible fuels(2)							
Electricity production (GWh)	1151945	1077659 e	1254107 e	1266185 e	1269803	1240351	0.7

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	95159	90784 e	64262 e	66195	69068	65403	-1.5
Fuel input (TJ)	1933892	2006396 e	1460332 e	1529515	1579166	1476902	-1.4
Electricity production (GWh)	125653	144014 e	122091 e	136032 e	142185	133613	-0.4
CHP Heat production (TJ)	566114 e	588583 e	382302 e	393971	412333	370179	-2.2
Brown coal							
Fuel input (1000 t)	55527	110827 e	88445 e	91656	95297	103111	-0.3
Fuel input (TJ)	452337	982818 e	821918 e	836984	854522	905853	-0.4
Electricity production (GWh)	25901	65441 e	70646 e	75357	75079	81028	1.0
CHP Heat production (TJ)	155598	294246 e	170061 e	99375	106538	105793	-4.8
Peat							
Fuel input (1000 t)	3192	2375	3962	5346	6163	5329	3.9
Fuel input (TJ)	26726	25768	40531	57341	64091	54223	3.6
Electricity production (GWh)	4194	2050 e	2976	3853	4435	3839	3.0
CHP Heat production (TJ)	6866	14414 e	23326	33835	37621	31766	3.8
Coal manufactured gases(1)							
Fuel input (TJ)	60539	104626 e	103696 e	120243	150157	147315	1.6
Electricity production (GWh)	3060	7975 e	9809 e	10386	12884	12300	2.1
CHP Heat production (TJ)	25865 e	31765 e	21671 e	20661	29878 e	32315	0.1
Petroleum products							
Fuel input (1000 t)	16603	9591 e	11224 e	10253	11374	10100	0.2
Fuel input (TJ)	668516	388930 e	419888 e	412539	433826	375486	-0.2
Electricity production (GWh)	55294	32428 e	46877 e	36241	37288	34042	0.2
CHP Heat production (TJ)	209239 e	103432 e	89276 e	129647 e	129558 e	114672	0.5
Natural gas(1)							
Fuel input (TJ)	395959	699377 e	1600984 e	2673507	2932399	2717041	6.7
Electricity production (GWh)	30326	59519 e	161840 e	286968	314049	295017	7.9
CHP Heat production (TJ)	97176	169794 e	430256 e	659642	744927	693984	6.9
Wood and other solid waste							
Fuel input (TJ)	22492	75414 e	187715 e	414480	501974	508730	9.5
Electricity production (GWh)	1690 e	9651 e	17053	38407	43329	46445	7.8
CHP Heat production (TJ)	7069 e	13788 e	78451	138231	188459	175371	12.9
Industrial waste							
Fuel input (TJ)	5289	8553	20660	30786	32926	34777	6.9
Electricity production (GWh)	161	301	1477	2346	2084	2319	10.2
CHP Heat production (TJ)	3077	3693	4989	8432	10555	11917	5.7
Municipal waste							
Fuel input (TJ)	21105	76363	152922 e	302624	328082	352755	7.6
Electricity production (GWh)	1313 e	1812	5450	14429	16625	18739	11.8
CHP Heat production (TJ)	3895 e	36376	76477 e	123925	132204	139597	6.6
Biogases and liquid biofuels							
Fuel input (TJ)	-	5653	11548 e	62204	73738	139328	16.5
Electricity production (GWh)	-	550	1165	6129	7740	17309	17.8
CHP Heat production (TJ)	-	125	1695	9293	8274	20165	27.4
Total combustible fuels(2)							
Electricity production (GWh)	247592	323741 e	439384 e	610148 e	655698 e	644651	3.3
CHP Heat production (TJ)	1109184	1256216 e	1278504 e	1630854	1807276	1702714	1.5

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	18524	19886 e	8156 e	6983	8124	7063	-4.8
Fuel input (TJ)	417415	427560 e	181037 e	162318	189852	166345	-4.4
Heat production (TJ)	281233	306580 e	146913 e	120469	150233	125445	-4.2
Brown coal							
Fuel input (1000 t)	4739	2769 e	727 e	675	506	424	-8.5
Fuel input (TJ)	54336	30408 e	10280 e	8608	7164	6390	-7.2
Heat production (TJ)	39968	21674 e	7752 e	5511	5504	5105	-6.7
Peat							
Fuel input (1000 t)	-	1029	733	761	962	881	-0.7
Fuel input (TJ)	-	11849	7916	7995	9248	8937	-1.3
Heat production (TJ)	-	10121 e	6814	6859	7865	7582	-1.4
Coal manufactured gases(1)							
Fuel input (TJ)	7266	7614 e	12127 e	6854	7901	8107	0.3
Heat production (TJ)	5116 e	5339 e	9910 e	4590	5271	5519	0.2
Petroleum products							
Fuel input (1000 t)	2193	1575 e	1661 e	888	1057	700	-3.8
Fuel input (TJ)	90693	64750 e	67936 e	37055	43971	28811	-3.8
Heat production (TJ)	69245 e	50475 e	51830 e	29864	36504	22647	-3.7
Natural gas(1)							
Fuel input (TJ)	108298	105721 e	270901 e	303466	345515	320848	5.4
Heat production (TJ)	77745 e	75632 e	207394 e	219148	252224	223119	5.3
Wood and other solid waste							
Fuel input (TJ)	1073	28018 e	59593	107137	129587	127812	7.5
Heat production (TJ)	750 e	22852 e	50694	88408	106379	100243	7.3
Industrial waste							
Fuel input (TJ)	476	181	4507 e	5694	7210	10522	21.3
Heat production (TJ)	323	132	3634 e	3702	4900	8010	21.6
Municipal waste							
Fuel input (TJ)	26121 e	70252 e	39758 e	78451	82467	74382	0.3
Heat production (TJ)	14148 e	43179 e	27191	44960	45269	44729	0.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	45	1179	6464	10110	7081	27.2
Heat production (TJ)	-	34	983	5436	7138	5019	26.9
Total combustible fuels(2)							
Heat production (TJ)	507252 e	536018 e	513115 e	528947	621287	547418	0.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC(1)	**1020.99**	**1079.33**	**1112.06**	**1216.63**	**1205.38**	**1264.15**	**1211.55**	**0.5**	**0.4**
Geothermal	0.05	0.07	0.85	1.28	2.32	2.50	2.67	18.1	5.6
Solar thermal	-	0.01	0.17	0.66	1.55	1.74	2.08	-	12.7
Coal	185.08	155.87	124.53	61.88	48.12	53.86	52.39	-2.3	-4.0
Oil	576.68	550.88	513.97	564.62	531.72	531.74	513.26	-0.7	-0.0
Natural gas	95.09	160.82	200.18	267.30	256.36	283.45	259.27	4.5	1.2
Biofuels & waste	28.25	30.49	45.05	51.12	69.76	77.63	77.58	2.8	2.6
Electricity	115.25	146.71	190.05	231.15	250.65	262.90	258.31	3.0	1.5
Heat	20.59	34.49	37.25	38.62	44.91	50.33	45.98	3.6	1.0
of which:									
Total industry	**372.38**	**356.07**	**317.88**	**321.59**	**269.46**	**290.32**	**290.54**	**-0.9**	**-0.4**
Geothermal	-	-	0.00	0.01	0.02	0.02	0.02	-	7.4
Solar thermal	-	-	0.01	0.10	0.00	0.01	0.01	-	1.5
Coal	91.20	78.48	70.33	46.17	28.05	31.95	32.74	-1.5	-3.6
Oil	150.20	116.80	56.82	53.16	36.54	35.58	33.04	-5.6	-2.5
Natural gas	52.01	66.96	76.89	97.98	78.06	86.50	86.91	2.3	0.6
Biofuels & waste	4.92	5.87	14.41	17.17	21.22	23.55	24.37	6.5	2.5
Electricity	63.28	73.52	86.26	97.46	90.59	96.89	97.87	1.8	0.6
Heat	10.77	14.43	13.14	9.56	14.97	15.82	15.58	1.2	0.8
Transport	**173.81**	**208.40**	**263.62**	**314.51**	**332.22**	**331.13**	**328.09**	**2.5**	**1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	6.85	2.54	0.21	0.01	0.01	0.01	0.01	-18.6	-13.9
Oil	163.39	201.16	257.78	306.85	311.91	309.09	305.43	2.7	0.8
Natural gas	0.16	0.57	0.32	0.65	2.73	2.86	2.97	4.2	11.2
Biofuels & waste	0.00	0.00	0.01	0.71	11.68	13.14	13.69	5.4	44.4
Electricity	3.40	4.13	5.31	6.29	5.89	6.03	5.99	2.7	0.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**95.48**	**104.76**	**109.83**	**124.66**	**152.78**	**160.44**	**147.75**	**0.8**	**1.4**
Geothermal	-	-	0.10	0.23	0.29	0.24	0.25	-	4.7
Solar thermal	-	-	0.02	0.05	0.16	0.18	0.21	-	12.9
Coal	15.41	17.11	12.61	1.46	2.58	1.91	1.93	-1.2	-8.6
Oil	57.49	50.48	27.86	23.42	20.53	20.41	18.17	-4.2	-2.0
Natural gas	3.55	9.12	25.93	35.41	46.01	49.72	43.14	12.4	2.5
Biofuels & waste	0.81	1.05	0.30	1.31	1.92	2.01	2.08	-5.7	9.7
Electricity	17.41	24.89	39.59	56.98	73.24	76.43	74.25	5.0	3.0
Heat	0.82	2.12	3.43	5.79	8.07	9.54	7.71	8.8	3.9

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**241.71**	**256.23**	**278.18**	**299.28**	**303.16**	**326.20**	**293.11**	**0.8**	**0.2**
Geothermal	0.05	0.07	0.53	0.95	1.90	2.15	2.25	14.9	7.1
Solar thermal	-	0.01	0.13	0.45	1.31	1.45	1.73	-	13.2
Coal	62.44	50.39	36.83	11.79	15.07	17.12	15.05	-3.1	-4.2
Oil	101.07	81.47	65.48	62.31	46.83	46.44	40.25	-2.5	-2.3
Natural gas	23.18	50.25	73.95	108.74	111.66	123.85	106.90	7.1	1.8
Biofuels & waste	18.42	19.91	27.89	30.70	33.32	37.18	34.61	2.5	1.0
Electricity	28.80	40.57	54.60	65.57	75.47	77.98	74.53	3.8	1.5
Heat	7.75	13.57	18.78	18.78	17.59	20.03	17.77	5.3	-0.3
Agriculture & fishing	**20.66**	**26.08**	**31.33**	**31.81**	**30.19**	**30.91**	**30.25**	**2.5**	**-0.2**
Geothermal	0.00	0.00	0.01	0.09	0.12	0.09	0.09	38.2	10.1
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	17.3
Coal	1.62	1.78	1.69	1.08	1.17	1.38	1.13	0.3	-1.9
Oil	16.49	20.26	20.29	20.44	18.89	18.98	18.91	1.2	-0.3
Natural gas	0.12	0.33	3.79	4.10	3.29	3.72	3.55	22.7	-0.3
Biofuels & waste	0.08	0.14	0.77	1.19	1.59	1.74	1.63	14.2	3.6
Electricity	1.98	3.08	4.08	4.45	4.87	4.76	4.72	4.3	0.7
Heat	0.37	0.49	0.70	0.47	0.27	0.24	0.22	3.8	-5.4
Other	**35.80**	**37.62**	**11.68**	**13.08**	**10.06**	**11.77**	**12.39**	**-6.4**	**0.3**
Geothermal	-	-	0.20	0.00	0.00	0.00	0.05	-	-6.3
Solar thermal	-	-	0.01	0.06	0.07	0.09	0.12	-	10.2
Coal	4.46	3.41	1.15	0.31	0.23	0.19	0.20	-7.7	-8.0
Oil	14.84	5.16	1.92	1.77	1.77	1.76	1.83	-11.3	-0.2
Natural gas	11.23	21.14	5.29	6.47	3.38	4.18	3.34	-4.3	-2.2
Biofuels & waste	4.01	3.51	1.67	0.04	0.02	0.02	1.19	-5.0	-1.6
Electricity	0.38	0.52	0.21	0.40	0.59	0.82	0.96	-3.4	7.5
Heat	0.88	3.88	1.21	4.03	4.00	4.69	4.71	1.9	6.7
Non-energy use(1)	**81.15**	**90.17**	**99.54**	**111.70**	**107.52**	**113.37**	**109.42**	**1.21**	**0.45**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**1020.99**	**1079.33**	**1112.06**	**1216.63**	**1270.58**	**1205.38**	**1264.15**	**1211.55**
Total industry (Mtoe)	**372.38**	**356.07**	**317.88**	**321.59**	**309.28**	**269.46**	**290.32**	**290.54**
Iron and steel	74.34	63.08	52.41	44.23	41.08	30.73	35.88	37.44
Chem. and petrochemical	64.82	62.69	57.42	57.44	56.94	50.16	53.84	56.07
Non-ferrous metals	12.66	15.01	13.62	13.93	13.08	11.37	12.21	12.56
Non-metallic minerals	45.84	46.09	41.49	43.38	44.72	36.92	37.65	38.35
Transport equipment	8.37	8.56	7.97	9.35	8.82	7.65	8.28	7.98
Machinery	22.44	24.10	22.79	19.33	20.28	17.66	21.11	20.62
Mining and quarrying	8.13	7.85	6.42	3.67	3.33	2.85	3.37	3.34
Food and tobacco	26.26	29.03	27.95	31.21	29.54	28.56	29.73	29.60
Paper, pulp and printing	24.63	24.36	27.86	36.54	37.94	34.63	36.66	34.01
Wood and wood products	4.47	4.78	5.18	6.31	7.53	7.22	7.60	7.73
Construction	7.02	6.91	6.13	7.24	8.79	7.86	8.40	8.75
Textile and leather	14.97	14.12	11.82	11.61	7.00	6.41	6.64	6.38
Non specified/other	58.43	49.50	36.81	37.35	30.22	27.44	28.94	27.72
Electricity consumption (Mtoe)	**115.25**	**146.71**	**190.05**	**231.15**	**263.60**	**250.65**	**262.90**	**258.31**
Total industry (Mtoe)	**63.28**	**73.52**	**86.26**	**97.46**	**104.63**	**90.59**	**96.89**	**97.87**
Iron and steel	9.65	10.74	10.57	11.92	12.56	9.96	11.31	11.94
Chem. and petrochemical	15.40	16.76	17.67	17.72	17.93	15.51	17.15	16.96
Non-ferrous metals	6.18	8.09	8.10	8.15	8.56	6.91	7.37	7.35
Non-metallic minerals	3.98	4.78	5.84	7.25	7.73	6.75	6.88	7.12
Transport equipment	2.27	2.80	3.14	4.55	4.65	3.98	4.25	4.17
Machinery	5.11	6.09	8.56	8.29	9.70	8.43	11.00	11.34
Mining and quarrying	1.67	1.92	1.94	1.32	1.42	1.27	1.55	1.39
Food and tobacco	3.25	4.41	6.81	8.87	9.83	9.86	10.07	10.19
Paper, pulp and printing	5.69	6.41	9.35	12.18	12.55	11.23	11.62	11.31
Wood and wood products	1.03	1.38	1.78	1.95	2.36	1.92	1.97	1.91
Construction	0.58	0.86	0.98	1.15	1.72	1.67	1.76	1.68
Textile and leather	3.46	3.55	3.96	4.09	3.25	2.91	3.13	3.03
Non specified/other	5.02	5.75	7.56	10.03	12.39	10.19	8.82	9.49
Total industry (TWh)	**735.82**	**854.93**	**1003.08**	**1133.21**	**1216.62**	**1053.35**	**1126.64**	**1138.01**
Iron and steel	112.20	124.90	122.93	138.62	146.02	115.86	131.56	138.85
Chem. and petrochemical	179.09	194.87	205.47	205.99	208.44	180.32	199.39	197.23
Non-ferrous metals	71.84	94.03	94.18	94.74	99.53	80.36	85.74	85.49
Non-metallic minerals	46.23	55.54	67.90	84.30	89.85	78.43	80.03	82.76
Transport equipment	26.39	32.51	36.54	52.85	54.11	46.29	49.46	48.48
Machinery	59.36	70.78	99.58	96.37	112.76	97.98	127.93	131.91
Mining and quarrying	19.38	22.30	22.56	15.32	16.48	14.77	17.98	16.17
Food and tobacco	37.83	51.22	79.19	103.12	114.30	114.60	117.07	118.46
Paper, pulp and printing	66.19	74.49	108.67	141.59	145.91	130.60	135.11	131.48
Wood and wood products	11.98	16.10	20.74	22.69	27.43	22.30	22.90	22.15
Construction	6.70	10.00	11.37	13.42	19.98	19.47	20.49	19.50
Textile and leather	40.24	41.30	46.04	47.53	37.76	33.89	36.43	35.21
Non specified/other	58.39	66.90	87.91	116.66	144.05	118.49	102.56	110.32

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**68330**	**106547**	**214485**	**203391**	**277707**	**319067**	**301664**	**311671**	**340769**
Imports from:									
Total from OECD	**16611**	**40995**	**172007**	**193420**	**265092**	**293750**	**276250**	**285408**	**314484**
Austria	498	991	6910	8597	12517	16863	19826	18503	17214
Belgium	89	7810	4488	3550	4452	6544	11289	11826	10652
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	2975	6116	18634	19986	22225	21449	27497
Denmark	289	1372	4940	5648	8177	11006	10174	11741	10229
Estonia	-	-	-	-	-	2250	1785	1967	1650
Finland	260	1163	362	276	1004	3147	3085	4719	3162
France	2496	4338	55503	77740	77719	56967	43322	48741	64186
Germany	1238	5067	22161	27167	39909	59782	51146	56858	52515
Greece	-	-	-	-	-	209	2192	2312	2553
Hungary	-	-	212	622	843	722	238	696	703
Ireland	-	-	-	30	41	152	85	146	120
Italy	318	736	253	357	470	3369	1476	1093	1794
Luxembourg	-	-	965	778	738	1629	1868	1845	1532
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	215	3906	3499	3902	4031	9272	10511	12772	11758
Norway	5401	1503	16413	8573	20486	15700	13867	5776	13119
Poland	-	828	7878	7150	9658	9632	9820	7514	11958
Portugal	78	514	1697	1742	3767	1314	2801	3189	3930
Slovak Republic	303	549	778	2484	8825	7487	6063	5017	8144
Slovenia	-	-	1363	816	4554	5599	7240	8066	5178
Spain	2239	3631	3606	3031	5293	12405	9941	9315	9200
Sweden	20	1321	14605	8627	12955	16480	10632	14581	20921
Switzerland	3071	7247	23354	26168	29785	31559	32365	31676	31069
Turkey	-	-	-	-	-	-	-	736	2590
United Kingdom	96	19	45	46	1234	1676	4299	4870	2810
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**5384**	**11425**	**18244**	**9971**	**12324**	**23623**	**23915**	**24941**	**24154**
Albania	-	151	165	198	50	-	61	404	4
Azerbaijan	-	-	-	-	-	94	125	156	330
Belarus	-	-	-	-	163	554	-	-	-
Bulgaria	-	750	320	652	4364	4628	3418	3454	4918
Croatia	-	-	1	1	-	5	12	93	11
F.Y.R. of Macedonia	-	-	-	-	-	1188	3810	3856	1488
Georgia	-	649	176	-	204	215	182	303	219
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	1428	955	-	283	-	720	586	1252	866
Russian Federation	46	49	4531	4839	4755	11059	11931	11847	10968
Serbia	115	545	891	496	612	-	75	544	267
Turkmenistan	-	-	-	-	-	450	505	685	1074
Ukraine	3795	8326	12160	3502	2176	4710	3210	2347	4009
Non-specified/others	**46335**	**54127**	**24234**	**-**	**291**	**1694**	**1499**	**1322**	**2131**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**62585**	**90906**	**191323**	**197785**	**273762**	**306765**	**286774**	**291655**	**330799**
Exports to:									
Total to OECD	**26328**	**37668**	**170664**	**195774**	**263507**	**287711**	**270592**	**278254**	**309800**
Austria	614	1067	7789	9750	13922	22333	21869	21805	26800
Belgium	1320	1086	2322	6058	11557	17021	9507	12427	13314
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	47	4405	8699	8523	8234	6685	10440
Denmark	918	1841	12106	3825	8571	12432	10490	10260	11549
Estonia	-	-	-	-	-	10	87	246	484
Finland	4136	678	6481	3873	8365	2933	1885	2025	5289
France	2686	9845	7019	3256	3676	10563	19460	20463	9482
Germany	3211	3930	24998	39439	45612	38627	38127	40816	47890
Greece	-	-	-	-	-	1810	311	67	2064
Hungary	-	-	233	1288	7826	8304	7407	5946	9747
Ireland	-	-	-	-	133	373	452	378	366
Italy	761	1425	34226	37900	40408	38857	40462	38810	42990
Luxembourg	913	1073	4364	5651	6409	5666	5000	5384	5562
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	1288	10	12657	15497	21835	25231	15562	15486	20829
Norway	165	991	407	1911	1231	1824	4815	13258	10074
Poland	-	4	13	4088	2494	7673	7071	6173	6676
Portugal	132	2342	1734	2661	4698	10753	7608	5823	6744
Slovak Republic	552	3652	4602	2101	5967	7830	8762	6695	10813
Slovenia	-	-	2089	2805	3307	1309	2594	2136	2452
Spain	322	2337	3209	7632	12271	5884	6782	5191	7927
Sweden	5256	1825	12749	8221	17688	14686	15468	16801	13985
Switzerland	3893	5540	21694	19083	24070	31317	30751	32796	34286
Turkey	-	-	-	-	-	30	-	-	-
United Kingdom	161	22	11925	16330	14768	13722	7888	8583	10037
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**60**	**193**	**1891**	**1554**	**7418**	**11127**	**7740**	**5415**	**12339**
Albania	-	-	541	391	1111	1657	1035	491	2125
Azerbaijan	-	-	-	495	437	-	-	-	20
Belarus	-	-	-	-	-	-	-	-	18
Bulgaria	-	-	573	9	205	-	-	-	622
Croatia	-	-	-	117	4472	5300	3309	3044	6171
F.Y.R. of Macedonia	-	-	-	-	-	95	6	8	109
Georgia	-	-	122	178	-	54	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	2	15	256	88	-	105	308	146	340
Russian Federation	-	-	-	1	-	-	-	-	-
Serbia	58	154	389	258	1189	2653	1364	392	697
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	24	10	17	4	1263	1718	1334	2237
Non-specified/others	**36197**	**53045**	**18768**	**457**	**2837**	**7927**	**8442**	**7986**	**8660**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total Capacity [1]	**327.85**	**416.77**	**556.20**	**603.41**	**672.03**	**801.38**	**825.46**	**871.88**	**908.17**
Nuclear	14.15	42.05	120.52	127.58	133.28	131.15	130.58	131.00	122.94
Hydro	99.11	118.53	148.84	161.55	173.74	182.72	184.88	189.31	192.29
of which: pumped storage	*2.36*	*6.49*	*30.89*	*37.29*	*39.10*	*42.82*	*43.09*	*43.26*	*43.71*
Geothermal	0.38	0.43	0.52	0.50	0.62	0.73	0.81	0.86	0.88
Solar	-	-	0.01	0.05	0.17	9.47	15.66	28.68	48.78
Tide, wave, ocean	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24
Wind	-	-	0.41	1.08	12.28	63.15	72.78	82.42	91.49
Other (e.g. fuel cells)	-	-	-	0.03	0.17	0.42	0.43	1.59	2.82
Combustible fuels	213.97	255.53	285.66	312.39	351.52	413.49	420.10	437.78	448.73
of which [2] *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993 and for Slovak Republic before 1995.

(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total Capacity (1)	**49.37**	**51.46**	**52.92**	**59.04**	**47.99**	**55.28**	**57.69**	**60.16**	**62.01**
Nuclear	0.54	0.84	0.77	0.54	-	-	-	-	-
Hydro	6.62	7.06	9.06	8.96	3.97	3.69	3.57	3.77	3.69
of which: pumped storage	-	-	*0.07*	*0.23*	*0.27*	*0.12*	*0.11*	*0.10*	*0.10*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.02	0.04	0.22	0.62	1.28	3.27
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.06	1.37	0.48	1.78	2.89	2.72	2.73
Other (e.g. fuel cells)	-	-	-	0.11	0.03	0.22	0.22	2.80	2.78
Combustible fuels	42.21	43.57	43.03	48.05	43.48	49.37	50.40	49.58	49.55
of which (2) *:*									
Single-fired:									
Coal and coal products	..	..	..	..	..	..	..	..	..
Liquid fuels	..	..	..	..	..	..	..	..	..
Natural gas	..	..	..	..	..	..	..	..	..
Biofuels & waste	..	..	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	..	..	..	..	..	..	..	..	..
Solid / natural gas	..	..	..	..	..	..	..	..	..
Liquid / natural gas	..	..	..	..	..	..	..	..	..
Solid / liquid / gas	..	..	..	..	..	..	..	..	..
Type of generation									
Steam	..	..	..	..	..	..	..	..	..
Internal combustion	..	..	..	..	..	..	..	..	..
Gas turbine	..	..	..	..	..	..	..	..	..
Combined cycle	..	..	..	..	..	..	..	..	..
Other	..	..	..	..	..	..	..	..	..
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Capacity data are not available for Czech Republic before 1993 and for Slovak Republic before 2001.
(2) Breakdown of electrical capacity by type of fuel are shown in the individual country chapters.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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AUSTRALIA

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	57.06	69.60	86.23	108.11	122.51	122.89	133.68	2.5	2.0
GDP (billion 2005 USD)	277.36	334.14	451.06	640.15	869.84	899.11	868.09	2.9	3.0
TPES/GDP(1)	0.21	0.21	0.19	0.17	0.14	0.14	0.15	-0.4	-1.0
Population (millions)	13.61	14.81	17.17	19.27	22.43	22.76	23.08	1.4	1.4
TPES/population(2)	4.19	4.70	5.02	5.61	5.46	5.40	5.79	1.1	0.7
TPES/GDP (2005 = 100)	138	139	128	113	94	91	103	-0.4	-1.0
Ele.TFC/GDP(2005=100)(3)	76	95	115	108	97	94	..	2.5	..
Ele.TFC/population(4)	3855	5353	7528	8968	9327	9271	..	4.0	..
Elec. generated (TWh)(5)	64.41	95.23	154.29	209.86	252.11	252.57	252.26	5.3	2.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**57.06**	**69.60**	**86.23**	**108.11**	**122.51**	**122.89**	**133.68**	**2.5**	**2.0**
Coal	22.58	27.32	34.98	48.16	50.05	48.18	48.84	2.6	1.5
Oil	26.58	30.07	31.20	34.15	40.22	41.35	43.97	0.9	1.6
Natural gas	3.38	7.46	14.79	19.27	26.21	27.02	34.69	9.1	4.0
Biofuels & waste	3.53	3.61	3.96	5.03	4.17	4.06	4.06	0.7	0.1
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar, wind, tide(1)	-	0.02	0.08	0.09	0.70	0.84	0.92	-	11.7
Hydro	0.98	1.11	1.22	1.41	1.16	1.44	1.21	1.3	-0.0
Net electricity imports(2)	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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AUSTRALIA

3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**64.8**	**96.1**	**155.0**	**210.2**	**228.7**	**252.2**	**252.6**	**252.3**
Nuclear	-	-	-	-	-	-	-	-
Hydro	11.8	13.8	14.9	16.7	15.6	13.5	16.8	14.1
of which:								
pumped storage production	*0.4*	*0.8*	*0.7*	*0.4*	*0.3*	*0.0*	*0.1*	*0.1*
Geothermal	-	-	-	-	-	0.0	0.0	-
Solar	-	-	-	0.0	0.1	0.3	0.9	1.5
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.1	0.9	5.1	5.8	6.1
Combustible fuels	53.0	82.3	140.1	193.4	212.1	233.3	229.2	230.6
Coal	*48.2*	*69.8*	*121.5*	*174.2 e*	*181.6*	*180.9*	*173.3*	*175.8*
Oil	*1.7*	*5.2*	*3.6*	*1.8 e*	*2.8*	*4.4*	*4.1*	*3.6*
Natural gas	*2.8*	*7.0*	*14.4*	*16.2 e*	*23.8*	*45.2*	*49.7*	*48.9*
Biofuels & waste	*0.3*	*0.4*	*0.8*	*1.1 e*	*3.8*	*2.8*	*2.1*	*2.3*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	3.6	3.6	10.1	14.8	14.1	16.4	16.7	..
Net production	**61.2**	**92.5**	**144.9**	**195.4**	**214.5**	**235.8**	**235.9**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	13.6	14.9	16.7	15.6	13.5	16.8	..
Geothermal	..	-	-	-	-	0.0	0.0	..
Solar	..	-	-	0.0	0.1	0.3	0.9	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.1	0.9	5.1	5.8	..
Combustible fuels	..	78.8	130.0	178.6	198.0	216.9	212.5	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.6	1.2	1.1	0.6	0.5	0.1	0.1	0.1
+ Imports	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**60.7**	**91.3**	**143.8**	**194.8**	**214.0**	**235.7**	**235.9**	**..**
- Transmission & distr. losses	8.2	9.2	9.5	15.0	15.4	15.5	13.3	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**52.5**	**82.1**	**134.3**	**179.9**	**198.7**	**220.2**	**222.5**	**..**
- Energy industry consumption[2]	-	2.9	5.1	7.1	9.4	11.1	11.6	..
Final consumption	**52.5**	**79.2**	**129.2**	**172.7**	**189.2**	**209.1**	**210.9**	**..**
Industry	23.2	32.5	59.2	77.0	74.1	80.0	81.8	..
Transport	0.7	0.9	1.8	2.3	3.5	3.9	3.9	..
Commercial & publ. serv.	8.9	15.5	27.3	41.7	54.5	61.4	61.1	..
Residential	18.7	29.0	38.5	48.8	54.8	61.4	62.0	..
Agriculture & fishing	1.0	1.4	2.4	2.9	2.4	2.4	2.2	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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AUSTRALIA

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**70.02**	**96.07**	**155.02**	**210.22**	**248.75**	**252.16**	**252.62**	**5.1**	**2.4**
- Hydro pumped storage	*0.41*	*0.84*	*0.73*	*0.36*	*0.07*	*0.05*	*0.05*	*3.6*	*-11.9*
Total generation(1)	**69.60**	**95.23**	**154.29**	**209.86**	**248.69**	**252.11**	**252.57**	**5.1**	**2.4**
Main activity producers									
Gross production	63.13	88.14	148.55	200.72	232.68	235.87	235.23	5.5	2.2
- Hydro pumped storage	*0.41*	*0.84*	*0.73*	*0.36*	*0.07*	*0.05*	*0.05*	*3.6*	*-11.9*
Total generation(1)	62.71	87.30	147.82	200.36	232.61	235.82	235.18	5.5	2.2
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	13.16	12.88	14.15	16.36	11.80	13.50	16.76	0.5	0.8
Geothermal	-	-	-	-	-	0.00	0.00	-	-
Solar, wind, tide(2)	-	-	-	0.06	3.83	5.06	5.81	-	-
Coal	44.53	66.47	119.27	172.56	185.46	180.47	172.91	6.4	1.8
Oil	1.83	1.64	1.49	0.76	1.03	0.82	0.39	-1.3	-6.3
Natural gas	3.10	6.30	12.91	10.62	29.38	34.88	38.28	9.3	5.3
Biofuels & waste	0.10	-	-	-	1.12	1.10	1.04	-	-
Autoproducers									
Gross production	6.89	7.94	6.47	9.50	16.07	16.29	17.39	-0.4	4.8
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	6.89	7.94	6.47	9.50	16.07	16.29	17.39	-0.4	4.8
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.04	0.06	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.04	0.16	0.28	0.85	-	-
Coal	2.65	3.29	2.21	1.68	0.37	0.42	0.38	-1.1	-8.0
Oil	3.33	3.53	2.06	1.02	3.16	3.54	3.72	-3.0	2.9
Natural gas	0.53	0.67	1.45	5.63	10.69	10.37	11.38	6.5	10.3
Biofuels & waste	0.33	0.39	0.75	1.13	1.70	1.68	1.07	5.2	1.7

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**6655**	**7675**	**6003**	**8778**	**14937**	**15166**	**16188**	**4.8**
Total energy	**-**	**-**	**1134**	**1695**	**3195**	**3350**	**4229**	**6.5**
Coal mines	-	-	1	1	48	36	89	23.8
Oil and gas extraction	-	-	831	1252	3053	3183	4052	7.8
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	302	442	55	88	88	-5.7
Energy non specified/other	-	-	-	-	39	43	-	-
Total industry	**6637**	**7650**	**4658**	**6782**	**11283**	**10799**	**10558**	**4.0**
Iron and steel	970	774	24	197	461	428	405	14.4
Chemical and petrochemical	240	267	41	61	415	546	765	15.0
Non-ferrous metals	1953	3035	304	4325	5534	5131	4231	13.4
Non-metallic minerals	246	148	-	-	-	1	1	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	6	5	-	-	-	-	-	-
Mining and quarrying	2228	2219	36	1991	2974	2984	4166	25.4
Food and tobacco	287	296	80	123	1640	1435	891	12.2
Pulp and printing	473	626	56	85	252	248	92	2.4
Wood and wood products	25	21	-	-	-	-	-	-
Construction	-	-	-	-	7	26	5	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	209	259	4117	-	-	-	2	-30.5
Total transport	**-**	**-**	**1**	**1**	**44**	**40**	**325**	**31.7**
Rail and pipeline	-	-	-	-	40	35	300	-
Transport non specified	-	-	1	1	4	5	25	16.6
Other	**18**	**25**	**210**	**300**	**415**	**977**	**1076**	**8.1**
Commerce and pub. services	-	-	210	300	413	977	1075	8.1
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	2	-	1	-
Sector non specified	18	25	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**5443**	**2269**	**-**	**-**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	..	..	..	..
Geothermal	-	-	-	-	..	..	..	..
Coal	5443	2269	-	-	..	..	..	..
Oil	-	-	-	-	..	..	..	..
Natural gas	-	-	-	-	..	..	..	..
Biofuels & waste	-	-	-	-	..	..	..	..
Non-spec. comb. fuels	-	-	-	-	..	..	..	..
Chemical processes	-	-	-	-	..	..	..	..
Heat pumps	-	-	-	-	..	..	..	..
Electric boilers	-	-	-	-	..	..	..	..
Other sources(1)	-	-	-	-	..	..	..	..
of which:								
Main activity producers								
Total	5443	2269	-	-	-	-	..	-
Nuclear	-	-	-	-	..	..	..	..
Geothermal	-	-	-	-	..	..	..	..
Coal	5443	2269	-	-	..	..	..	..
Oil	-	-	-	-	..	..	..	..
Natural gas	-	-	-	-	..	..	..	..
Biofuels & waste	-	-	-	-	..	..	..	..
Non-spec. comb. fuels	-	-	-	-	..	..	..	..
Chemical processes	-	-	-	-	..	..	..	..
Heat pumps	-	-	-	-	..	..	..	..
Electric boilers	-	-	-	-	..	..	..	..
Other sources(1)	-	-	-	-	..	..	..	..
Autoproducers								
Total	-	-	-	-	-	-	..	-
Nuclear	-	-	-	-	..	..	..	..
Geothermal	-	-	-	-	..	..	..	..
Coal	-	-	-	-	..	..	..	..
Oil	-	-	-	-	..	..	..	..
Natural gas	-	-	-	-	..	..	..	..
Biofuels & waste	-	-	-	-	..	..	..	..
Non-spec. comb. fuels	-	-	-	-	..	..	..	..
Chemical processes	-	-	-	-	..	..	..	..
Heat pumps	-	-	-	-	..	..	..	..
Electric boilers	-	-	-	-	..	..	..	..
Other sources(1)	-	-	-	-	..	..	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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AUSTRALIA
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**15.06**	**22.96**	**34.01**	**47.31**	**61.27**	**57.73**	**56.95**	**4.9**	**2.5**
Coal	13.80	20.17	28.89	42.03 e	50.37	46.92	44.77	4.4	2.1
Oil	0.43	1.15	0.95	0.53	0.90	0.79	0.79	4.7	-0.9
Natural gas	0.79	1.53	3.47	4.06	9.20	9.29	10.79	9.1	5.6
Biofuels & waste	0.03	0.11	0.71 e	0.69	0.80	0.73	0.60	19.4	-0.8
of which: ***main activity prod.***									
Total	**..**	**21.70**	**31.73**	**44.19**	**57.63**	**54.52**	**53.40**	**..**	**2.5**
Coal	..	19.67	28.26	41.55 e	50.29	46.83	44.70	..	2.2
Oil	..	0.64	0.43	0.21	0.29	0.22	0.09	..	-7.4
Natural gas	..	1.39	3.03	2.43	6.75	7.16	8.32	..	4.9
Biofuels & waste	..	-	-	-	0.31	0.30	0.30	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**0.00**	**0.01**	**0.03**	**0.07**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar	-	-	-	0.00	0.01	0.02	0.07	-	-
Non-Thermal									
Total	**0.98**	**1.11**	**1.22**	**1.41**	**1.34**	**1.60**	**1.94**	**1.3**	**2.2**
Hydro	0.98	1.11	1.22	1.41	1.01	1.16	1.44	1.3	0.8
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00	0.33	0.43	0.50	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	23866	38197	51100 e	62850	56596	53164	1.6
Fuel input (TJ)	381346	794476	1115347 e	1353149	1215227	1139759	1.7
Electricity production (GWh)	50728	87573	123833 e	127716	123595	116780	1.4
Brown coal							
Fuel input (1000 t)	29798	43037	66416 e	70807	70184	68808	2.3
Fuel input (TJ)	285435	402188	643650 e	730067	723538	709383	2.7
Electricity production (GWh)	19034	33317	50346 e	55844	54949	54194	2.3
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	524	596 e	3186	3442	3061	8.8
Electricity production (GWh)	-	57	66 e	368	418	381	9.5
Petroleum products							
Fuel input (1000 t)	1117	930 e	516 e	839	750	744	-1.1
Fuel input (TJ)	46055	38504 e	19954 e	37413	33402	33202	-0.7
Electricity production (GWh)	5169	3552 e	1784 e	3298	3046	3029	-0.8
Natural gas[2]							
Fuel input (TJ)	71247	161478	188882 e	356197	364996	424092	4.7
Electricity production (GWh)	6976	14359	16245 e	33338	38204	41931	5.2
Wood and other solid waste							
Fuel input (TJ)	-	-	-	1957	1885	1276	-
Electricity production (GWh)	-	-	-	162	177	109	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	11112	10830	11353	-
Electricity production (GWh)	-	-	-	956	923	927	-
Total combustible fuels[3]							
Electricity production (GWh)	82292	138858	192274	221682	221312	217351	2.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	413	408	417	-
Fuel input (TJ)	-	-	-	8026	7944	8116	-
Electricity production (GWh)	-	-	-	758	808	832	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	1236	-	1444	1431	1403	0.6
Fuel input (TJ)	-	12211	-	14870	14741	14452	0.8
Electricity production (GWh)	-	531	-	1137	1119	1104	3.5
CHP Heat production (TJ)	5443	2269	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	- e	50	24	32	-
Fuel input (TJ)	-	-	- e	2350	1144	1490	-
Electricity production (GWh)	-	-	-	892	1312	1074	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Natural gas[2]							
Fuel input (TJ)	-	-	- e	71953	67281	78157	-
Electricity production (GWh)	-	-	-	6734	7042	7727	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	29683 e	23310 e	19637	16927	11286	-4.5
Electricity production (GWh)	-	750	685 e	1622	1585	968	1.2
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	5780	875	1083	1201	-
Electricity production (GWh)	-	-	449	75	92	98	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Electricity production (GWh)	-	1281	1134	11218	11958	11803	11.2
CHP Heat production (TJ)	5443	2269	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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AUSTRALIA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**39.58**	**46.79**	**56.55**	**69.56**	**75.11**	**76.32**	**77.85**	**2.1**	**1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	0.02	0.08	0.08	0.20	0.24	0.26	-	5.7
Coal	5.20	4.51	4.46	4.18	3.44	3.12	3.41	-0.9	-1.3
Oil	24.26	26.92	29.00	34.72	37.98	38.72	39.58	1.1	1.5
Natural gas	2.11	5.03	8.64	11.39	12.38	12.82	13.00	8.6	2.0
Biofuels & waste	3.49	3.50	3.25	4.34	3.35	3.43	3.45	-0.4	0.3
Electricity	4.51	6.81	11.11	14.86	17.76	17.98	18.14	5.4	2.4
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**15.27**	**17.59**	**19.21**	**23.78**	**22.22**	**22.64**	**23.12**	**1.4**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	4.89	4.09	4.18	4.03	3.22	2.91	3.26	-0.9	-1.2
Oil	5.57	5.38	2.89	3.55	3.25	3.60	3.51	-3.8	0.9
Natural gas	1.31	3.42	5.56	7.11	7.28	7.50	7.60	8.9	1.5
Biofuels & waste	1.49	1.90	1.48	2.46	1.70	1.75	1.72	-0.0	0.7
Electricity	1.99	2.80	5.09	6.62	6.77	6.88	7.03	5.7	1.6
Heat	-	-	-	-	-	-	-	-	-
Transport	**12.93**	**16.82**	**21.11**	**25.66**	**28.99**	**29.29**	**29.93**	**2.9**	**1.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.02	0.00	0.07	0.09	0.18	0.17	0.12	7.6	2.5
Oil	12.85	16.74	20.87	25.06	27.77	28.04	28.67	2.9	1.5
Natural gas	-	-	0.01	0.30	0.44	0.44	0.46	-	20.1
Biofuels & waste	-	-	-	-	0.23	0.29	0.34	-	-
Electricity	0.06	0.08	0.16	0.20	0.37	0.34	0.34	6.1	3.8
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**1.13**	**2.40**	**3.48**	**5.04**	**6.96**	**7.01**	**6.99**	**6.9**	**3.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.01	0.01	0.01	-	-
Coal	0.09	0.22	0.15	0.05 e	0.04	0.03	0.03	2.7	-7.3
Oil	0.11	0.51	0.26	0.31	0.62	0.62	0.63	5.0	4.3
Natural gas	0.15	0.32	0.73	1.08	1.01	1.04	1.06	9.6	1.8
Biofuels & waste	-	0.02	-	0.01	0.02	0.02	0.01	-	-
Electricity	0.77	1.33	2.35	3.59	5.26	5.28	5.25	6.8	3.9
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**5.05**	**6.04**	**7.49**	**9.06**	**10.07**	**10.27**	**10.43**	**2.3**	**1.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	0.02	0.08	0.08	0.19	0.23	0.25	-	5.6
Coal	0.19	0.19	0.06	0.02 e	0.01	0.00	0.00	-6.8	-12.5
Oil	0.79	0.78	0.38	0.35	0.28	0.28	0.29	-4.2	-1.2
Natural gas	0.47	0.97	1.89	2.55	3.03	3.10	3.18	8.6	2.5
Biofuels & waste	2.00	1.58	1.77	1.87	1.39	1.37	1.37	-0.7	-1.2
Electricity	1.61	2.49	3.31	4.19	5.17	5.28	5.33	4.4	2.3
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**1.14**	**1.06**	**1.30**	**1.61**	**2.14**	**2.19**	**2.25**	**0.8**	**2.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.05	0.94	1.10	1.36	1.94	1.99	2.06	0.2	3.0
Natural gas	-	-	0.00	0.00	0.00	0.00	0.00	-	4.7
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.09	0.12	0.20	0.25	0.20	0.20	0.19	5.2	-0.4
Heat	-	-	-	-	-	-	-	-	-
Other	**1.52**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.52	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**2.54**	**2.88**	**3.95**	**4.43**	**4.73**	**4.91**	**5.12**	**2.63**	**1.24**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**39.58**	**46.79**	**56.55**	**69.56**	**76.10**	**75.11**	**76.32**	**77.85**
Total industry (Mtoe)	**15.27**	**17.59**	**19.21**	**23.78**	**23.14**	**22.22**	**22.64**	**23.12**
Iron and steel	3.27	3.07	2.27	2.30	1.67	1.58	1.57	2.08
Chem. and petrochemical	0.68	1.55	1.66	1.98	2.59	2.14	2.42	2.25
Non-ferrous metals	0.75	4.02	6.10	8.07	8.71	8.31	8.32	7.97
Non-metallic minerals	0.63	2.05	2.14	2.03	2.68	2.51	2.63	2.68
Transport equipment	-	0.23	0.27	0.29	-	-	-	-
Machinery	-	0.39	0.42	0.39	0.37	0.38	0.37	0.36
Mining and quarrying	-	1.02	1.26	2.13	2.12	2.36	2.39	2.90
Food and tobacco	0.13	2.69	2.30	3.32	2.45	2.41	2.37	2.39
Paper, pulp and printing	0.24	1.03	1.43	1.74	1.68	1.21	1.30	1.27
Wood and wood products	0.01	0.34	0.10	0.03	0.00	0.48	0.47	0.41
Construction	-	0.85	0.91	1.13	0.59	0.58	0.57	0.57
Textile and leather	-	0.35	0.35	0.35	0.24	0.22	0.20	0.21
Non specified/other	9.56	-	-	0.01	0.05	0.05	0.03	0.03
Electricity consumption (Mtoe)	**4.51**	**6.81**	**11.11**	**14.86**	**17.40**	**17.76**	**17.98**	**18.14**
Total industry (Mtoe)	**1.99**	**2.80**	**5.09**	**6.62**	**6.73**	**6.77**	**6.88**	**7.03**
Iron and steel	-	0.39	0.42	0.45	0.32	0.30	0.34	0.38
Chem. and petrochemical	-	0.23	0.33	0.40	0.50	0.41	0.43	0.38
Non-ferrous metals	-	0.82	2.26	3.08	3.38	3.46	3.46	3.49
Non-metallic minerals	-	0.18	0.25	0.30	0.40	0.38	0.40	0.41
Transport equipment	-	0.09	0.12	0.27	-	-	-	-
Machinery	-	0.17	0.22	0.16	0.24	0.23	0.22	0.20
Mining and quarrying	-	0.26	0.51	0.78	0.88	1.01	1.04	1.20
Food and tobacco	-	0.27	0.39	0.48	0.48	0.46	0.47	0.48
Paper, pulp and printing	-	0.22	0.43	0.52	0.42	0.33	0.35	0.35
Wood and wood products	-	0.06	-	-	-	0.09	0.09	0.07
Construction	-	0.00	0.00	0.01	0.01	0.01	0.01	0.01
Textile and leather	-	0.12	0.16	0.18	0.07	0.07	0.06	0.06
Non specified/other	1.99	-	-	0.01	0.02	0.02	0.00	0.00
Total industry (TWh)	**23.19**	**32.51**	**59.18**	**77.03**	**78.20**	**78.71**	**79.97**	**81.75**
Iron and steel	-	4.56	4.87	5.25	3.77	3.53	3.92	4.36
Chem. and petrochemical	-	2.68	3.83	4.69	5.86	4.75	5.04	4.41
Non-ferrous metals	-	9.51	26.27	35.76	39.30	40.23	40.27	40.63
Non-metallic minerals	-	2.05	2.92	3.49	4.66	4.47	4.68	4.76
Transport equipment	-	0.99	1.38	3.09	..	..	..	-
Machinery	-	1.97	2.60	1.84	2.74	2.70	2.55	2.34
Mining and quarrying	-	3.03	5.97	9.08	10.26	11.69	12.12	13.90
Food and tobacco	-	3.12	4.49	5.59	5.56	5.29	5.48	5.53
Paper, pulp and printing	-	2.55	4.95	6.02	4.84	3.83	4.05	4.09
Wood and wood products	-	0.69	-	-	-	1.05	1.00	0.87
Construction	-	0.02	0.03	0.06	0.08	0.09	0.09	0.08
Textile and leather	-	1.34	1.87	2.07	0.87	0.79	0.74	0.74
Non specified/other	23.19	-	-	0.08	0.25	0.28	0.03	0.03

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**19.25**	**24.14**	**35.50**	**39.21**	**42.83**	**50.65**	**52.99**	**55.73**	**56.49**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	5.32	6.10	8.32	8.56	9.20	8.55	8.62	8.77	8.79
of which: pumped storage	*-*	*-*	*0.94*	*0.94*	*1.49*	*0.74*	*0.74*	*0.74*	*0.74*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.03	1.44	1.70	1.86	2.13
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	13.93	18.04	27.17	30.65	33.60	40.65	42.66	45.09	45.57
of which:									
Single-fired:									
Coal and coal products	11.50	13.90	22.14	24.66	25.36	29.20	29.41	29.68	29.90
Liquid fuels	1.43	1.65	1.07	1.32	1.67	0.74	0.74	0.86	0.86
Natural gas	0.10	0.16	2.93	3.86	4.14	9.24	11.29	13.32	13.59
Biofuels & waste	0.02	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	0.15	0.56	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	1.92	0.88	0.64	0.64	0.64
Liquid / natural gas	0.72	1.79	0.16	0.16	0.51	0.59	0.59	0.59	0.59
Solid / liquid / gas	-	-	0.88	0.64	-	-	-	-	-
Type of generation									
Steam	13.34	16.79	25.11	28.01	29.50	32.51	32.24	32.51	32.73
Internal combustion	0.28	0.29	0.25	0.33	0.29	0.13	0.13	0.13	0.13
Gas turbine	0.31	0.96	1.62	2.21	3.13	5.86	7.18	8.56	8.71
Combined cycle	-	-	0.19	0.10	0.68	2.15	3.12	3.89	4.01
Other	-	-	-	-	-	-	-	-	-
Peak load	12.46	15.31	25.01	30.18	33.63	40.59	43.21	42.05	42.44
Available capacity	19.25	24.14	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**2.96**	**2.98**	**3.37**	**3.70**	**4.07**	**4.13**	**4.63**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.01	0.03	0.08	0.11	0.19	0.57
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	2.96	2.97	3.35	3.62	3.97	3.94	4.06
of which:									
Single-fired:									
Coal and coal products	-	-	1.90	1.81	1.37	0.09	0.32	0.36	0.33
Liquid fuels	-	-	0.52	0.54	0.26	0.33	0.60	0.59	0.70
Natural gas	-	-	0.30	0.39	1.36 e	2.47	2.52	2.46	2.69
Biofuels & waste	-	-	0.24	0.23	0.36	0.73	0.53	0.53	0.34
Multi-fired:									
Solid / liquid	-	-	..	-	-	-	-	-	-
Solid / natural gas	-	-	..	-	-	-	-	-	-
Liquid / natural gas	-	-	..	-	-	-	-	-	-
Solid / liquid / gas	-	-	..	-	-	-	-	-	-
Type of generation									
Steam	-	-	2.30	2.31	2.48	0.85	0.86	0.81	0.80
Internal combustion	-	-	0.32	0.32	0.14	0.92	1.03	1.04	1.01
Gas turbine	-	-	0.33	0.33	0.73	1.70	1.91	1.93	2.10
Combined cycle	-	-	..	..	-	0.16	0.17	0.16	0.15
Other	-	-	..	..	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Australian Dollars/ unit					
Steam coal (t)	8.91	11.97	35.11	..	..	..	..	..	..
Heavy fuel oil (t)	80	174	..	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				Australian Dollars/ toe					
Steam coal	13.50	18.14	53.20	..	..	..	..	..	..
Heavy fuel oil	83.56	181.50	..	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Australian Dollars/ MWh					
Industry									
Price	23.40	27.00	58.90	78.00	..	..	..	..	..
of which: tax	-	-	-	-	..	..	..	..	..
Household									
Price	33.80	38.00	91.90	109.10	..	..	..	..	..
of which: tax	-	-	-	-	..	..	..	..	..

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	21.48	23.15	24.84	28.56	34.23	33.02	32.90	0.9	1.3
GDP (billion 2005 USD)	141.61	172.38	215.29	280.62	326.59	335.39	338.05	2.5	2.1
TPES/GDP(1)	0.15	0.13	0.12	0.10	0.10	0.10	0.10	-1.6	-0.8
Population (millions)	7.59	7.55	7.68	8.01	8.39	8.42	8.41	0.1	0.4
TPES/population(2)	2.83	3.07	3.24	3.56	4.08	3.92	3.91	0.8	0.9
TPES/GDP (2005 = 100)	137	121	104	92	95	89	88	-1.6	-0.8
Ele.TFC/GDP(2005=100)(3)	93	100	104	96	98	96	..	0.6	..
Ele.TFC/population(4)	3336	4375	5572	6435	7313	7310	..	3.1	..
Elec. generated (TWh)(5)	30.92	41.60	49.30	59.87	67.93	62.16	64.47	2.8	1.2

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**21.48**	**23.15**	**24.84**	**28.56**	**34.23**	**33.02**	**32.90**	**0.9**	**1.3**
Coal	3.87	3.65	4.10	3.59	3.38	3.47	3.24	0.3	-1.1
Oil	12.11	12.08	10.37	11.73	12.39	11.48	11.41	-0.9	0.4
Natural gas	3.30	4.15	5.18	6.52	8.21	7.75	7.42	2.7	1.6
Biofuels & waste	0.72	1.14	2.50	3.13	6.36	6.29	6.75	7.6	4.6
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	0.00	0.02	0.03	0.03	0.03	-	9.3
Solar, wind, tide(1)	-	-	0.01	0.07	0.35	0.35	0.41	-	16.3
Hydro	1.61	2.47	2.71	3.60	3.30	2.94	3.40	3.1	1.0
Net electricity imports(2)	-0.13	-0.34	-0.04	-0.12	0.20	0.70	0.24	-6.9	-
Heat	-	-	-	0.00	0.00	0.00	0.00	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**31.3**	**42.0**	**50.3**	**61.3**	**66.4**	**71.1**	**65.7**	**68.4**
Nuclear	-	-	-	-	-	-	-	-
Hydro	19.2	29.1	32.5	43.2	39.0	41.6	37.7	43.4
of which:								
pumped storage production	*0.4*	*0.4*	*1.0*	*1.4*	*2.3*	*3.2*	*3.5*	*3.9*
Geothermal	-	-	-	-	0.0	0.0	0.0	0.0
Solar	-	-	-	0.0	0.0	0.1	0.2	0.3
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.1	1.3	2.1	1.9	2.5
Combustible fuels	12.2	12.9	17.8	17.9	26.0	27.4	25.9	22.1
Coal	*3.2*	*2.9*	*7.0*	*6.7*	*8.5*	*6.7*	*7.3*	*6.2*
Oil	*4.3*	*5.8*	*1.9*	*1.7*	*1.6*	*1.3*	*1.0*	*0.7*
Natural gas	*4.4*	*3.8*	*7.7*	*7.9*	*13.0*	*14.3*	*12.4*	*9.7*
Biofuels & waste	*0.2*	*0.3*	*1.2*	*1.7*	*2.9*	*5.1*	*5.1*	*5.4*
Other (e.g. fuel cells)	-	-	-	0.0	0.0	0.0	0.0	0.0
- Own use by power plant	1.0	1.2	1.9	2.2	2.9	2.6	2.4	..
Net production	**30.3**	**40.8**	**48.4**	**59.1**	**63.5**	**68.6**	**63.3**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	28.9	31.7	41.7	37.3	40.2	36.4	..
Geothermal	..	-	-	-	0.0	0.0	0.0	..
Solar	..	-	-	0.0	0.0	0.1	0.2	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.1	1.3	2.1	1.9	..
Combustible fuels	..	11.9	16.7	17.2	24.9	26.2	24.8	..
Other (e.g. fuel cells)	..	-	-	0.0	0.0	0.0	0.0	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	0.0	0.0	-	-	-	-
- Used for pumped storage	0.6	0.5	1.4	1.9	3.3	4.6	5.1	5.6
+ Imports	3.3	3.2	6.8	13.8	20.4	19.9	25.0	23.3
- Exports	4.8	7.1	7.3	15.2	17.7	17.6	16.8	20.5
Electrical energy supplied	**28.2**	**36.3**	**46.5**	**55.8**	**62.9**	**66.3**	**66.5**	**..**
- Transmission & distr. losses	2.3	2.6	2.9	3.2	3.4	3.6	3.5	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**25.9**	**33.7**	**43.6**	**52.6**	**59.4**	**62.7**	**63.0**	**..**
- Energy industry consumption[2]	0.6	0.6	0.8	1.0	1.1	1.4	1.4	..
Final consumption	**25.3**	**33.0**	**42.8**	**51.5**	**58.3**	**61.3**	**61.5**	**..**
Industry	12.1	14.2	18.0	20.7	25.5	26.9	26.8	..
Transport	1.8	2.3	2.8	3.5	3.4	3.4	3.1	..
Commercial & publ. serv.	4.5	6.7	9.1	11.6	11.0	12.1	13.0	..
Residential	6.1	8.8	11.9	15.0	17.5	18.1	17.8	..
Agriculture & fishing	0.8	1.1	1.1	0.8	0.8	0.8	0.8	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**33.88**	**41.97**	**50.29**	**61.26**	**69.08**	**71.12**	**65.70**	**2.5**	**1.3**
- Hydro pumped storage	*0.48*	*0.37*	*1.00*	*1.38*	*2.77*	*3.20*	*3.54*	*4.7*	*6.2*
Total generation(1)	**33.41**	**41.60**	**49.30**	**59.87**	**66.31**	**67.93**	**62.16**	**2.5**	**1.1**
Main activity producers									
Gross production	28.48	36.36	43.40	52.81	60.60	61.73	56.32	2.7	1.2
- Hydro pumped storage	*0.48*	*0.37*	*1.00*	*1.38*	*2.77*	*3.20*	*3.54*	*4.7*	*6.2*
Total generation(1)	28.01	35.99	42.41	51.43	57.82	58.53	52.78	2.6	1.0
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	20.12	26.65	29.11	39.75	39.62	37.31	33.20	2.3	0.6
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar, wind, tide(2)	-	-	-	0.07	2.02	2.15	2.11	-	-
Coal	2.85	2.50	5.97	5.43	3.57	4.72	5.22	4.7	-0.6
Oil	1.83	4.27	1.30	0.92	0.46	0.58	0.29	-2.1	-6.9
Natural gas	3.20	2.58	5.99	5.14	9.62	11.24	9.45	4.0	2.2
Biofuels & waste	-	-	0.03	0.12	2.54	2.53	2.52	-	24.3
Autoproducers									
Gross production	5.40	5.61	6.89	8.45	8.48	9.40	9.38	1.5	1.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	5.40	5.61	6.89	8.45	8.48	9.40	9.38	1.5	1.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2.06	2.08	2.40	2.09	1.26	1.08	0.98	0.9	-4.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.02	0.02	0.02	0.01	-	-
Coal	0.51	0.42	1.03	1.31	1.46	1.98	2.11	4.5	3.5
Oil	1.24	1.54	0.58	0.78	0.68	0.69	0.72	-4.6	1.1
Natural gas	1.38	1.24	1.73	2.71	2.72	3.10	2.95	1.4	2.6
Biofuels & waste	0.21	0.32	1.15	1.54	2.35	2.54	2.61	11.1	4.0

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**3090**	**3272**	**6061**	**8399**	**8427**	**9334**	**9316**	**2.1**
Total energy	**-**	**-**	**563**	**694**	**848**	**921**	**957**	**2.6**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	26	42	47	48	56	3.7
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	537	652	801	873	901	2.5
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**3048**	**3246**	**3581**	**6114**	**6398**	**7433**	**7451**	**3.6**
Iron and steel	865	850	1038	1419	1488	2120	2105	3.4
Chemical and petrochemical	643	667	371	328	692	1023	710	3.1
Non-ferrous metals	-	-	-	252	-	-	-	-
Non-metallic minerals	144	72	-	106	139	141	136	-
Transport equipment	6	8	33	10	26	29	28	-0.8
Machinery	7	9	2	94	33	38	42	15.6
Mining and quarrying	47	24	23	11	-	-	-	-
Food and tobacco	116	121	140	283	161	174	173	1.0
Pulp and printing	1080	1382	1874	3293	3517	3487	3844	3.5
Wood and wood products	28	27	30	150	322	404	398	13.1
Construction	-	-	-	-	-	-	-	-
Textile and leather	109	76	65	122	13	11	9	-9.0
Non specified/other industries	3	10	5	46	7	6	6	0.9
Total transport	**-**	**-**	**861**	**1034**	**622**	**532**	**486**	**-2.7**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	861	1034	622	532	486	-2.7
Other	**42**	**26**	**1056**	**557**	**559**	**448**	**422**	**-4.3**
Commerce and pub. services	-	-	1029	525	538	430	406	-4.3
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	27	32	21	18	16	-2.5
Sector non specified	42	26	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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AUSTRIA
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**7817**	**28447**	**47883**	**61603**	**86727**	**79859**	**83993**	**5.0**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	416	447	581	568	352	-
Coal	-	5146	2987	3405	3067	3020	2841	-2.5
Oil	-	8471	9998	8809	7965	5319	4639	-2.2
Natural gas	-	10883	24465	33222	33467	30222	30651	5.0
Biofuels & waste	-	3939	9788	15687	41449	40529	45312	11.7
Non-spec. comb. fuels	7817	-	-	-	-	-	-	-
Chemical processes	-	-	190	33	155	156	156	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	8	39	-	-	-	-	-
Other sources(1)	-	-	-	-	43	45	42	-
of which:								
Main activity producers								
Total	7817	24427	42197	56987	80160	74072	..	5.4
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	365	387	520	512	..	-
Coal	-	4765	2682	3060	2567	2693	..	-2.7
Oil	-	5982	7107	7014	5673	3330	..	-2.8
Natural gas	-	10482	23636	31855	31797	29238	..	5.0
Biofuels & waste	-	3190	8368	14671	39560	38254	..	12.6
Non-spec. comb. fuels	7817	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	8	39	-	-	-	..	-
Other sources(1)	-	-	-	-	43	45	..	-
Autoproducers								
Total	-	4020	5686	4616	6567	5787	..	1.8
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	51	60	61	56	..	-
Coal	-	381	305	345	500	327	..	-0.7
Oil	-	2489	2891	1795	2292	1989	..	-1.1
Natural gas	-	401	829	1367	1670	984	..	4.4
Biofuels & waste	-	749	1420	1016	1889	2275	..	5.4
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	190	33	155	156	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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AUSTRIA
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**3.25**	**2.97**	**4.45**	**4.59**	**5.89**	**6.89**	**6.81**	**1.9**	**2.0**
Coal	0.87	0.84	1.70	1.42	1.11	1.42	1.52	4.0	-0.5
Oil	1.21	1.16	0.67	0.55	0.41	0.44	0.34	-3.4	-3.2
Natural gas	1.15	0.89	1.77	1.97	2.43	2.77	2.62	2.5	1.9
Biofuels & waste	0.03	0.08	0.32	0.64	1.95	2.26	2.33	15.7	9.9
of which: ***main activity prod.***									
Total	**..**	**2.31**	**3.33**	**3.27**	**4.41**	**5.21**	**5.04**	**..**	**2.0**
Coal	..	0.70	1.46	1.15	0.78	0.99	1.09	..	-1.4
Oil	..	0.88	0.36	0.34	0.20	0.23	0.13	..	-4.8
Natural gas	..	0.74	1.41	1.47	2.00	2.28	2.08	..	1.9
Biofuels & waste	..	-	0.10	0.30	1.44	1.72	1.74	..	14.8

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**0.00**	**0.01**	**0.01**	**0.02**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar	-	-	-	0.00	0.00	0.01	0.01	-	-
Non-Thermal									
Total	**1.61**	**2.47**	**2.71**	**3.60**	**3.68**	**3.48**	**3.11**	**3.1**	**0.7**
Hydro	1.61	2.47	2.71	3.60	3.52	3.30	2.94	3.1	0.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.17	0.18	0.17	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	14	964	1213	1020	1396	1524	2.2
Fuel input (TJ)	343	26997	32394	28548	37650	41644	2.1
Electricity production (GWh)	26	2773	3989	3432	4594	5077	2.9
Brown coal							
Fuel input (1000 t)	2104	1189	1168	-	-	-	-
Fuel input (TJ)	25422	13013	11340	-	-	-	-
Electricity production (GWh)	2570	1528	1213	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	8267	11833	15848	16108	-
Electricity production (GWh)	325	-	880	1211	1715	1766	-
Petroleum products							
Fuel input (1000 t)	916	28	173	123	72	79	5.1
Fuel input (TJ)	37170	1146	7056	4980	2867	3143	4.9
Electricity production (GWh)	5806	136	901	559	348	358	4.7
Natural gas (1)							
Fuel input (TJ)	24706	41466	41108	48803	48641	46754	0.6
Electricity production (GWh)	3824	4166	4735	6889	7054	6425	2.1
Wood and other solid waste							
Fuel input (TJ)	-	2618	3516	13258	12886	15529	8.8
Electricity production (GWh)	-	533	363	1377	1197	1135	3.7
Industrial waste							
Fuel input (TJ)	-	-	437	1941	2343	3072	-
Electricity production (GWh)	-	-	41	62	76	75	-
Municipal waste							
Fuel input (TJ)	-	-	719	6855	7036	7145	-
Electricity production (GWh)	-	-	45	376	362	336	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	676	5423	5208	5367	-
Electricity production (GWh)	-	-	45	596	609	564	-
Total combustible fuels(2)							
Electricity production (GWh)	12551	9136	12212	14502	15955	15736	2.6

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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AUSTRIA

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	457	209	180	180	184	-4.2
Fuel input (TJ)	-	12782	5694	5043	4819	5031	-4.3
Electricity production (GWh)	-	1037	446	324	320	341	-5.2
CHP Heat production (TJ)	-	2590	2416	2628	2580	2703	0.2
Brown coal							
Fuel input (1000 t)	-	935	61	-	-	-	-
Fuel input (TJ)	-	10185	792	-	-	-	-
Electricity production (GWh)	-	853	79	-	-	-	-
CHP Heat production (TJ)	-	1926	270	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	8207	1289	1194	1204	1311	-8.4
Electricity production (GWh)	-	815	132	65	72	137	-8.1
CHP Heat production (TJ)	-	381	261	515	487	317	-0.9
Petroleum products							
Fuel input (1000 t)	-	563	298	237	316	227	-4.2
Fuel input (TJ)	-	23400	11775	9285	12394	8837	-4.5
Electricity production (GWh)	-	1744	801	577	923	653	-4.6
CHP Heat production (TJ)	-	4778	7147	5058	6010	3871	-1.0
Natural gas(1)							
Fuel input (TJ)	-	32408	39907	54034	67175	59781	3.0
Electricity production (GWh)	-	3555	3117	5445	7285	5969	2.5
CHP Heat production (TJ)	-	5460	15548	19759	23102	21545	6.8
Wood and other solid waste							
Fuel input (TJ)	3257	4200	8930	27629	32168	32310	10.2
Electricity production (GWh)	324	583	1073	2043	2380	2539	7.3
CHP Heat production (TJ)	-	-	929	12277	16388	15964	-
Industrial waste							
Fuel input (TJ)	-	2542	1018	2620	2725	2362	-0.3
Electricity production (GWh)	-	38	28	259	228	230	9.0
CHP Heat production (TJ)	-	749	642	608	771	653	-0.7
Municipal waste							
Fuel input (TJ)	-	1724	2233	4828	5005	6275	6.3
Electricity production (GWh)	-	26	46	125	145	179	9.6
CHP Heat production (TJ)	-	1345	1595	3427	3826	4335	5.7
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	95	913	874	666	-
Electricity production (GWh)	-	-	15	55	70	76	-
CHP Heat production (TJ)	-	-	-	489	407	243	-
Total combustible fuels(2)							
Electricity production (GWh)	324	8651	5737	8893	11423	10124	0.8
CHP Heat production (TJ)	7817	17229	28808	44761	53571	49631	5.2

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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AUSTRIA
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	21	-	-	-	-	-
Fuel input (TJ)	..	273	-	-	-	-	-
Heat production (TJ)	..	249	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	50	-	-	-	-
Heat production (TJ)	..	-	40	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	101	88	59	67	43	-4.0
Fuel input (TJ)	..	4178	3563	2547	2953	2027	-3.4
Heat production (TJ)	..	3693	2851	1842	1955	1448	-4.4
Natural gas(1)							
Fuel input (TJ)	..	8307	10606	10015	13189	15287	2.9
Heat production (TJ)	..	5423	8917	7264	10365	8677	2.3
Wood and other solid waste							
Fuel input (TJ)	..	1628	7672	15796	23993	22716	13.4
Heat production (TJ)	..	1404	5446	11838	18269	17634	12.8
Industrial waste							
Fuel input (TJ)	..	-	-	2	4	2	-
Heat production (TJ)	..	-	-	2	2	2	-
Municipal waste							
Fuel input (TJ)	..	690	1692	1861	1874	2039	5.3
Heat production (TJ)	..	441	1176	1440	1474	1485	6.0
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	-	312	449	238	-
Heat production (TJ)	..	-	-	216	312	213	-
Total combustible fuels(2)							
Heat production (TJ)	..	11210	18430	22602	32377	29459	4.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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AUSTRIA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**16.61**	**18.64**	**19.72**	**23.54**	**26.42**	**28.11**	**26.80**	**1.0**	**1.5**
Geothermal	-	-	0.00	0.00	0.01	0.01	0.01	-	3.7
Solar thermal	-	-	0.01	0.06	0.15	0.16	0.16	-	12.1
Coal	2.35	1.97	1.35	0.88	0.52	0.46	0.45	-3.2	-5.1
Oil	9.95	9.76	8.84	10.38	10.91	11.15	10.46	-0.7	0.8
Natural gas	1.45	2.83	3.04	4.27	4.59	5.06	4.72	4.5	2.1
Biofuels & waste	0.69	1.06	2.18	2.49	3.68	4.10	3.96	7.0	2.9
Electricity	2.18	2.84	3.68	4.43	5.07	5.27	5.29	3.1	1.7
Heat	-	0.19	0.61	1.02	1.49	1.90	1.75	-	5.1
of which:									
Total industry	**5.22**	**4.93**	**5.18**	**6.02**	**7.43**	**7.56**	**7.42**	**-0.0**	**1.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.76	0.92	0.64	0.62	0.45	0.38	0.37	-1.1	-2.5
Oil	2.23	0.99	0.67	0.57	0.74	0.65	0.62	-6.8	-0.4
Natural gas	1.15	1.59	1.63	2.09	2.29	2.33	2.20	2.1	1.4
Biofuels & waste	0.03	0.21	0.61	0.84	1.41	1.63	1.68	18.5	5.0
Electricity	1.04	1.22	1.55	1.78	2.29	2.31	2.31	2.3	1.9
Heat	-	-	0.08	0.12	0.25	0.25	0.24	-	5.4
Transport	**3.87**	**4.09**	**4.85**	**6.49**	**7.92**	**8.14**	**7.94**	**1.3**	**2.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.11	0.01	0.00	0.00	-	-	-	-21.1	-
Oil	3.58	3.84	4.51	6.03	6.96	7.22	7.02	1.4	2.1
Natural gas	0.02	0.03	0.10	0.14	0.18	0.14	0.17	9.9	2.8
Biofuels & waste	0.00	0.00	0.01	0.02	0.48	0.48	0.48	5.4	23.1
Electricity	0.15	0.20	0.24	0.30	0.29	0.30	0.27	2.7	0.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.50**	**1.83**	**1.71**	**2.54**	**2.57**	**3.02**	**2.94**	**7.6**	**2.6**
Geothermal	-	-	0.00	0.00	0.01	0.01	0.01	-	3.7
Solar thermal	-	-	0.01	0.03	0.06	0.06	0.07	-	11.8
Coal	0.04	0.11	0.03	0.03	0.00	0.01	0.00	-3.1	-8.6
Oil	0.01	0.84	0.39	0.43	0.36	0.28	0.23	22.0	-2.5
Natural gas	0.05	0.30	0.18	0.59	0.55	0.85	0.81	8.2	7.4
Biofuels & waste	-	-	0.08	0.08	0.07	0.08	0.07	-	-0.2
Electricity	0.39	0.58	0.78	1.00	0.90	1.04	1.12	4.2	1.7
Heat	-	-	0.25	0.38	0.63	0.70	0.63	-	4.5

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**5.72**	**5.10**	**5.84**	**6.32**	**6.25**	**7.05**	**6.44**	**0.1**	**0.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.01	0.04	0.09	0.10	0.10	-	12.4
Coal	1.42	0.93	0.66	0.21	0.05	0.05	0.05	-4.4	-11.8
Oil	3.03	2.18	1.70	1.72	1.24	1.37	1.19	-3.3	-1.7
Natural gas	0.09	0.39	0.76	1.12	1.22	1.34	1.19	13.1	2.1
Biofuels & waste	0.65	0.85	1.39	1.43	1.51	1.69	1.52	4.6	0.4
Electricity	0.52	0.75	1.02	1.29	1.52	1.55	1.53	4.0	1.9
Heat	-	-	0.28	0.51	0.61	0.94	0.87	-	5.5
Agriculture & fishing	**0.08**	**0.91**	**0.58**	**0.52**	**0.54**	**0.57**	**0.54**	**12.6**	**-0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	12.0
Coal	0.01	0.00	0.01	0.00	0.00	0.00	0.00	3.1	-10.4
Oil	-	0.81	0.37	0.31	0.24	0.25	0.24	-	-2.0
Natural gas	-	0.00	0.01	0.01	0.01	0.02	0.01	-	2.1
Biofuels & waste	0.00	0.00	0.10	0.12	0.21	0.23	0.20	38.0	3.6
Electricity	0.07	0.09	0.09	0.07	0.07	0.07	0.07	1.6	-1.2
Heat	-	-	0.00	0.01	0.01	0.01	0.01	-	4.6
Other	**-**	**0.19**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	0.19	-	-	-	-	-	-	-
Non-energy use[1]	**1.23**	**1.61**	**1.55**	**1.64**	**1.72**	**1.77**	**1.52**	**1.39**	**-0.09**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**16.61**	**18.64**	**19.72**	**23.54**	**27.38**	**26.42**	**28.11**	**26.80**
Total industry (Mtoe)	**5.22**	**4.93**	**5.18**	**6.02**	**7.62**	**7.43**	**7.56**	**7.42**
Iron and steel	1.40	1.36	0.78	0.93	1.06	0.99	0.90	1.06
Chem. and petrochemical	0.48	0.42	0.52	0.81	0.96	0.84	0.92	0.88
Non-ferrous metals	0.17	0.19	0.17	0.13	0.18	0.18	0.17	0.18
Non-metallic minerals	1.07	0.66	0.69	0.74	0.99	0.98	0.96	1.09
Transport equipment	0.06	0.10	0.09	0.11	0.13	0.15	0.13	0.09
Machinery	0.22	0.19	0.29	0.38	0.53	0.58	0.61	0.59
Mining and quarrying	0.23	0.17	0.11	0.12	0.15	0.13	0.16	0.16
Food and tobacco	0.36	0.33	0.44	0.45	0.51	0.57	0.58	0.53
Paper, pulp and printing	0.57	0.79	1.21	1.44	1.61	1.48	1.66	1.43
Wood and wood products	0.11	0.09	0.18	0.31	0.62	0.62	0.64	0.62
Construction	0.01	0.09	0.19	0.29	0.53	0.54	0.48	0.46
Textile and leather	0.26	0.16	0.17	0.13	0.10	0.10	0.09	0.09
Non specified/other	0.30	0.39	0.33	0.17	0.24	0.25	0.25	0.23
Electricity consumption (Mtoe)	**2.18**	**2.84**	**3.68**	**4.43**	**5.27**	**5.07**	**5.27**	**5.29**
Total industry (Mtoe)	**1.04**	**1.22**	**1.55**	**1.78**	**2.25**	**2.29**	**2.31**	**2.31**
Iron and steel	0.16	0.18	0.10	0.23	0.30	0.32	0.31	0.35
Chem. and petrochemical	0.18	0.22	0.18	0.27	0.33	0.32	0.34	0.34
Non-ferrous metals	0.16	0.18	0.12	0.06	0.07	0.07	0.07	0.08
Non-metallic minerals	0.10	0.11	0.12	0.15	0.18	0.18	0.16	0.16
Transport equipment	0.02	0.02	0.04	0.06	0.06	0.07	0.06	0.04
Machinery	0.08	0.10	0.14	0.19	0.28	0.29	0.30	0.30
Mining and quarrying	0.04	0.04	0.04	0.05	0.07	0.08	0.10	0.10
Food and tobacco	0.05	0.07	0.13	0.10	0.15	0.18	0.18	0.17
Paper, pulp and printing	0.15	0.19	0.31	0.40	0.41	0.39	0.42	0.41
Wood and wood products	0.03	0.05	0.06	0.08	0.15	0.14	0.14	0.13
Construction	0.01	0.01	0.04	0.03	0.05	0.06	0.05	0.05
Textile and leather	0.06	0.05	0.06	0.05	0.04	0.05	0.04	0.04
Non specified/other	0.01	0.01	0.22	0.10	0.14	0.15	0.14	0.13
Total industry (TWh)	**12.12**	**14.17**	**17.98**	**20.68**	**26.20**	**26.66**	**26.90**	**26.81**
Iron and steel	1.85	2.05	1.18	2.67	3.53	3.68	3.61	4.03
Chem. and petrochemical	2.07	2.51	2.14	3.08	3.85	3.72	3.96	3.97
Non-ferrous metals	1.85	2.04	1.39	0.65	0.86	0.84	0.85	0.94
Non-metallic minerals	1.17	1.24	1.38	1.79	2.05	2.10	1.88	1.89
Transport equipment	0.21	0.28	0.42	0.71	0.73	0.79	0.73	0.50
Machinery	0.96	1.22	1.57	2.25	3.30	3.36	3.49	3.45
Mining and quarrying	0.44	0.49	0.43	0.57	0.77	0.93	1.16	1.14
Food and tobacco	0.59	0.78	1.50	1.20	1.77	2.05	2.06	1.97
Paper, pulp and printing	1.80	2.25	3.63	4.69	4.80	4.53	4.85	4.80
Wood and wood products	0.40	0.55	0.65	0.95	1.79	1.68	1.67	1.55
Construction	0.08	0.09	0.46	0.39	0.55	0.73	0.60	0.59
Textile and leather	0.64	0.64	0.72	0.59	0.52	0.57	0.43	0.45
Non specified/other	0.07	0.06	2.52	1.14	1.67	1.70	1.62	1.54

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**3261**	**3164**	**6839**	**7287**	**13824**	**19796**	**19542**	**19898**	**24972**
Imports from:									
Total from OECD	**-**	**-**	**6839**	**7287**	**13824**	**19796**	**19542**	**19898**	**24972**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	2975	2081	5385	5336	6856	6527	10054
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	3559	4580	7363	12757	11956	12093	13707
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	212	270	843	722	238	640	698
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	1	-	2	-	3	11
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	17	65	21	873	468	582	400
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	76	290	212	106	24	53	102
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**3261**	**3164**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**4808**	**7136**	**7298**	**9757**	**15192**	**14933**	**18762**	**17567**	**16777**
Exports to:									
Total to OECD	**-**	**-**	**7298**	**9757**	**15192**	**14729**	**18528**	**17304**	**16516**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	47	9	2	56	260	251	86
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	3179	4010	5410	3804	4483	4791	3979
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	233	580	426	848	1406	1011	1629
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	1703	1323	1945	1360	1192	1327	1074
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	1370	1861	3235	1214	2534	2012	2386
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	766	1974	4174	7447	8653	7912	7362
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**4808**	**7136**	**-**	**-**	**-**	**204**	**234**	**263**	**261**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**7.70**	**11.36**	**15.09**	**15.61**	**16.17**	**18.84**	**18.88**	**19.10**	**20.41**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	5.50	7.72	10.35	10.58	11.06	11.93	12.11	12.38	12.68
of which: pumped storage	-	-	*2.17*	*2.17*	*2.17*	*2.65*	*2.78*	*3.02*	*3.37*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	0.05	0.07	0.15	0.32
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.05	0.99	0.99	0.98	1.08
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	2.20	3.64	4.74	5.03	5.06	5.87	5.70	5.58	6.34
of which:									
Single-fired:									
Coal and coal products	0.80	0.68	1.72	1.82	1.83	1.29	1.23	1.17	1.17
Liquid fuels	0.51	0.10	0.38	0.40	0.40	0.35	0.22	0.22	0.20
Natural gas	0.90	0.50	2.12	2.25	2.26	3.90	3.97	3.40	4.64
Biofuels & waste	-	-	-	-	0.01	0.24	0.22	0.29	0.26
Multi-fired:									
Solid / liquid	-	-	-	-	-	0.03	0.04	0.06	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	0.51	0.54	0.54	0.07	0.01	0.45	0.02
Solid / liquid / gas	-	2.36	0.02	0.03	0.03	-	0.02	-	0.05
Type of generation									
Steam	2.20 e	3.64 e	4.25	4.16	4.22	2.64	2.67	2.34	2.29
Internal combustion	-	-	0.03	0.08	0.06	0.25	0.12	0.09	0.08
Gas turbine	-	-	0.47	0.28	0.25	0.49	0.56	0.40	0.39
Combined cycle	-	-	-	0.51	0.54	2.50	2.36	2.75	3.58
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	6.91	..	9.41	9.66	9.75	9.72
Available capacity	..	..	..	9.00	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**1.29**	**1.57**	**1.60**	**1.79**	**1.63**	**1.92**	**2.12**	**2.31**	**2.37**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.48	0.48	0.60	0.68	0.56	0.54	0.55	0.55	0.54
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.81	1.09	1.00	1.11	1.07	1.37	1.57	1.76	1.84
of which:									
Single-fired:									
Coal and coal products	-	-	0.10	0.11	0.11	0.15	0.18	0.19	0.31
Liquid fuels	-	-	0.10	0.11	0.11	0.12	-	-	0.12
Natural gas	-	-	0.36	0.40	0.38	0.40	0.52	0.52	0.55
Biofuels & waste	-	-	0.11	0.13	0.12	0.37	0.18	0.16	0.22
Multi-fired:									
Solid / liquid	-	-	0.08	0.08	0.08	0.14	0.24	0.28	0.32
Solid / natural gas	-	-	0.06	0.06	0.06	0.03	0.08	0.08	0.08
Liquid / natural gas	-	-	0.07	0.07	0.07	-	0.12	0.29	-
Solid / liquid / gas	0.81	1.09	0.13	0.14	0.13	0.17	0.25	0.25	0.23
Type of generation									
Steam	0.81 e	1.09 e	0.92	0.60	0.57	0.86	0.80	1.00	1.05
Internal combustion	-	-	0.07	0.05	0.06	0.04	0.06	0.19	0.20
Gas turbine	-	-	0.01	0.01	0.01	0.03	-	-	0.02
Combined cycle	-	-	..	0.45	0.43	0.44	0.70	0.57	0.57
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	172.67	157.05	63.15	58.33	83.53	96.07	82.37	91.96	93.20
Heavy fuel oil (t)	100.14	154.79	104.94	76.31	234.14	151.74	279.65	327.76	363.92
Natural gas (MWh)(1)	8.67	17.13	10.55	..	..	..	..	..	..
				Euro/ toe					
Steam coal	261	238	96	88	126	145	125	139	141
Heavy fuel oil	104	161	109	79	244	158	291	341	379
Natural gas(2)	112	221	136	..	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	41.70	47.60	54.00	41.50	105.40	..	..	..	..
of which: tax	-	-	-	-	18.10	..	..	..	..
Household									
Price	84.30	95.20	128.60	127.50	175.80	184.04	194.51	196.10	197.55
of which: tax	6.20	7.00	21.40	36.80	49.50	51.62	53.55	53.34	54.87

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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BELGIUM

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	45.99	46.77	48.28	58.51	60.89	59.09	57.29	0.3	0.8
GDP (billion 2005 USD)	190.80	229.35	279.85	348.63	400.81	407.96	407.15	2.3	1.7
TPES/GDP(1)	0.24	0.20	0.17	0.17	0.15	0.14	0.14	-1.9	-0.9
Population (millions)	9.73	9.86	9.97	10.25	10.88	10.98	11.04	0.1	0.5
TPES/population(2)	4.73	4.74	4.84	5.71	5.60	5.38	5.19	0.1	0.3
TPES/GDP (2005 = 100)	155	131	111	108	98	93	90	-1.9	-0.9
Ele.TFC/GDP(2005=100)(3)	84	89	97	105	98	92	..	0.9	..
Ele.TFC/population(4)	3518	4398	5819	7571	7658	7300	..	3.0	..
Elec. generated (TWh)(5)	40.62	53.09	70.29	82.77	93.76	89.01	77.27	3.3	0.4

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**45.99**	**46.77**	**48.28**	**58.51**	**60.89**	**59.09**	**57.29**	**0.3**	**0.8**
Coal	11.18	11.40	10.57	7.88	3.18	2.91	2.74	-0.3	-5.9
Oil	27.69	23.34	17.96	23.26	24.80	22.60	23.09	-2.5	1.2
Natural gas	7.14	8.91	8.17	13.36	16.99	15.12	14.32	0.8	2.6
Biofuels & waste	0.01	0.06	0.75	1.04	3.11	5.27	5.26	30.1	9.2
Nuclear	0.02	3.27	11.13	12.55	12.49	12.57	10.50	45.1	-0.3
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	2.8
Solar, wind, tide(1)	-	-	0.00	0.00	0.17	0.31	0.40	-	29.1
Hydro	0.01	0.02	0.02	0.04	0.03	0.02	0.03	2.6	1.6
Net electricity imports(2)	-0.06	-0.23	-0.32	0.37	0.05	0.22	0.85	9.8	-
Heat	-	-	-	-	0.07	0.07	0.09	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**41.1**	**53.6**	**70.9**	**84.0**	**87.0**	**95.1**	**90.2**	**78.6**
Nuclear	0.1	12.5	42.7	48.2	47.6	47.9	48.2	40.3
Hydro	0.6	0.8	0.9	1.7	1.6	1.7	1.4	1.7
of which:								
pumped storage production	*0.5*	*0.6*	*0.6*	*1.2*	*1.3*	*1.4*	*1.2*	*1.3*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.0	0.6	1.2	1.7
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.0	0.2	1.3	2.3	2.8
Combustible fuels	40.4	40.3	27.3	34.1	37.3 e	43.4	37.0	32.0
Coal	*8.8*	*15.6*	*19.9*	*16.0*	*10.5*	*5.9*	*5.4*	*5.5*
Oil	*21.8*	*18.4*	*1.3*	*0.8*	*1.7*	*0.4*	*0.3*	*0.1*
Natural gas	*9.6*	*6.0*	*5.4*	*16.0*	*22.8*	*31.4*	*25.4*	*20.6*
Biofuels & waste	*0.1*	*0.3*	*0.7*	*1.3*	*2.3*	*5.6*	*5.9*	*5.8*
Other (e.g. fuel cells)	-	-	-	-	0.3	0.3	0.1	0.2
- Own use by power plant	1.9	2.6	3.7	3.7	3.6	3.7	3.5	..
Net production	**39.1**	**51.0**	**67.3**	**80.3**	**83.4**	**91.4**	**86.7**	**..**
Nuclear	..	11.9	40.5	45.7	45.3	45.7	45.9	..
Hydro	..	0.8	0.9	1.7	1.6	1.6	1.4	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	0.0	0.6	1.2	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.0	0.2	1.3	2.3	..
Combustible fuels	..	38.3	25.8	32.8	36.0	42.0	35.8	..
Other (e.g. fuel cells)	..	-	-	-	0.2	0.2	0.1	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.6	0.7	0.8	1.6	1.8	1.8	1.6	1.7
+ Imports	1.7	6.3	4.8	11.6	14.3	12.4	13.2	16.8
- Exports	2.4	8.9	8.5	7.3	8.0	11.8	10.7	6.9
Electrical energy supplied	**37.7**	**47.6**	**62.7**	**83.0**	**87.9**	**90.2**	**87.6**	**..**
- Transmission & distr. losses	1.9	2.8	3.6	3.8	4.2	4.3	4.2	..
- Statistical difference	-	-	-	-	0.1	-	0.1	..
Total consumption	**35.8**	**44.9**	**59.1**	**79.2**	**83.6**	**85.9**	**83.4**	**..**
- Energy industry consumption[2]	1.6	1.5	1.1	1.6	3.4	2.6	3.3	..
Final consumption	**34.2**	**43.3**	**58.0**	**77.5**	**80.2**	**83.3**	**80.1**	**..**
Industry	22.4	23.9	30.5	39.9	39.4	38.1	37.3	..
Transport	0.8	1.0	1.2	1.4	1.7	1.7	1.6	..
Commercial & publ. serv.	3.4	5.3	7.8	12.2	12.7	22.2	21.7	..
Residential	7.6	13.1	18.4	23.7	26.0	20.3	19.3	..
Agriculture & fishing	-	-	-	0.3	0.4	0.8	0.3	..
Sector non specified	-	-	-	-	-	0.2	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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BELGIUM

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**42.76**	**53.64**	**70.92**	**84.01**	**91.23**	**95.12**	**90.24**	**3.2**	**1.2**
- Hydro pumped storage	*0.45*	*0.55*	*0.63*	*1.24*	*1.43*	*1.36*	*1.23*	*2.2*	*3.2*
Total generation(1)	**42.31**	**53.09**	**70.29**	**82.77**	**89.80**	**93.76**	**89.01**	**3.2**	**1.1**
Main activity producers									
Gross production	31.02	49.88	68.18	82.30	87.40	89.94	83.76	5.0	1.0
- Hydro pumped storage	*0.45*	*0.55*	*0.63*	*1.24*	*1.43*	*1.36*	*1.23*	*2.2*	*3.2*
Total generation(1)	30.58	49.33	67.55	81.07	85.97	88.59	82.53	5.1	1.0
Nuclear	0.14	12.55	42.72	48.16	47.22	47.94	48.23	43.2	0.6
Hydro	0.24	0.28	0.27	0.46	0.33	0.31	0.20	0.7	-1.4
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.01	0.01	1.00	1.29	2.30	-	31.8
Coal	6.18 e	13.95	18.61	15.66	5.95	5.69	5.18	7.1	-5.9
Oil	16.47	17.68	0.82	0.42	0.16	0.27	0.23	-17.1	-5.9
Natural gas	7.51	4.83	4.77	15.48	27.07	28.73	21.99	-2.8	7.6
Biofuels & waste	0.05	0.04	0.36	0.87	4.25	4.36	4.40	13.6	12.6
Autoproducers									
Gross production	11.74	3.76	2.75	1.71	3.82	5.18	6.48	-8.7	4.2
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	11.74	3.76	2.75	1.71	3.82	5.18	6.48	-8.7	4.2
Nuclear	0.01	-	-	-	-	-	-	-	-
Hydro	0.00	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.00	0.25	0.82	1.31	-	-
Coal	4.88	1.64	1.25	0.37	0.20	0.26	0.20	-8.2	-8.4
Oil	3.41	0.73	0.50	0.38	0.12	0.14	0.06	-11.4	-9.5
Natural gas	3.37	1.14	0.64	0.49	2.24	2.69	3.45	-9.9	8.4
Biofuels & waste	0.06	0.26	0.36	0.46	1.01	1.26	1.46	11.8	6.9

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**11103**	**3527**	**2565**	**1548**	**3620**	**4989**	**6420**	**4.5**
Total energy	**1914**	**597**	**569**	**88**	**978**	**982**	**954**	**2.5**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	142	88	954	982	954	9.5
Energy non specified/other	1914	597	427	-	24	-	-	-
Total industry	**9187**	**2928**	**1995**	**1150**	**1768**	**2379**	**2500**	**1.1**
Iron and steel	1693	1140	761	244	108	228	133	-8.0
Chemical and petrochemical	873	755	602	371	304	726	607	0.0
Non-ferrous metals	453	248	147	95	58	97	108	-1.5
Non-metallic minerals	-	-	-	4	21	9	10	-
Transport equipment	-	-	-	-	4	5	5	-
Machinery	18	29	4	1	14	18	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	168	205	298	235	388	451	526	2.7
Pulp and printing	335	219	178	191	444	687	729	6.9
Wood and wood products	-	-	-	-	157	158	166	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	118	106	5	-	5	-	5	-
Non specified/other industries	5529	226	-	9	265	-	211	-
Total transport	**-**	**-**	**-**	**1**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	1	-	-	-	-
Other	**2**	**2**	**1**	**309**	**874**	**1628**	**2966**	**46.3**
Commerce and pub. services	-	-	-	37	95	65	155	-
Residential	-	-	-	-	432	352	250	-
Agriculture and fishing	-	-	-	12	347	969	1729	-
Sector non specified	2	2	1	260	-	242	832	37.7

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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BELGIUM
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**17128**	**9742**	**23171**	**22366**	**38304**	**38083**	**31415**	**6.7**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	43	53	51	90	55	55	1.2
Coal	1679	1579	-	-	-	-	-	-
Oil	6301	2762	85	64	518	694	198	-6.4
Natural gas	8729	4990	22201	15793	31443	30521	23686	9.0
Biofuels & waste	419	368	832	3556	3522	3883	3868	11.9
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	2902	2731	2930	3608	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	17128	9742	23171	19464	35573	35153	..	6.3
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	43	53	51	90	55	..	1.2
Coal	1679	1579	-	-	-	-	..	-
Oil	6301	2762	85	64	518	694	..	-6.4
Natural gas	8729	4990	22201	15793	31443	30521	..	9.0
Biofuels & waste	419	368	832	3556	3522	3883	..	11.9
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	2902	2731	2930	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	2902	2731	2930	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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BELGIUM
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**9.93**	**9.34**	**6.49**	**7.11**	**8.04**	**8.43**	**7.26**	**-2.5**	**0.5**
Coal	2.76	3.83	4.54	3.27	1.45	1.33	1.18	3.0	-6.2
Oil	4.90	3.85	0.26	0.17	0.06	0.08	0.07	-16.0	-5.9
Natural gas	2.26	1.60	1.32	3.17	4.98	5.29	4.06	-3.1	5.5
Biofuels & waste	0.01	0.06	0.38 e	0.50 e	1.56	1.72	1.95	24.9	8.1
of which: ***main activity prod.***									
Total	**..**	**8.29**	**5.80**	**6.67**	**7.56**	**7.88**	**6.58**	**..**	**0.6**
Coal	..	3.34	4.18	3.15	1.37	1.25	1.12	..	-6.1
Oil	..	3.69	0.18	0.10	0.04	0.06	0.06	..	-5.2
Natural gas	..	1.23	1.16	3.04	4.73	5.02	3.70	..	5.7
Biofuels & waste	..	0.02	0.29 e	0.38 e	1.43	1.54	1.71	..	8.9

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**0.02**	**3.27**	**11.13**	**12.55**	**12.32**	**12.54**	**12.67**	**45.1**	**0.6**
Nuclear	0.02	3.27	11.13	12.55	12.31	12.49	12.57	45.1	0.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	0.05	0.10	-	-
Non-Thermal									
Total	**0.01**	**0.02**	**0.02**	**0.04**	**0.11**	**0.14**	**0.22**	**2.8**	**11.1**
Hydro	0.01	0.02	0.02	0.04	0.03	0.03	0.02	2.6	-1.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.00	0.09	0.11	0.20	-	31.8
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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BELGIUM

8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	3771	4459	4309	1663	1469	1234	-5.9
Fuel input (TJ)	86493	108892	108004	48190	38524	31567	-5.7
Electricity production (GWh)	9337	11585	12827	5063	4095	3365	-5.7
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	26747	18233	27480	9006	13938	15308	-0.8
Electricity production (GWh)	2397	1674	3114	889	1594	1813	0.4
Petroleum products							
Fuel input (1000 t)	3749	157	77	37	32	25	-8.4
Fuel input (TJ)	151204	6349	3120	1518	1457	1147	-7.8
Electricity production (GWh)	15987	839	369	156	142	114	-9.1
Natural gas[2]							
Fuel input (TJ)	61950	53411	103829 e	148761	154318	97831	2.9
Electricity production (GWh)	5968	5160	11310	18243	19398	13754	4.8
Wood and other solid waste							
Fuel input (TJ)	-	608	114	17923	18671	20164	18.1
Electricity production (GWh)	-	135	11	1797	1900	1958	13.6
Industrial waste							
Fuel input (TJ)	-	3226	965	5460	6478	6743	3.6
Electricity production (GWh)	-	231	72	279	274	414	2.8
Municipal waste							
Fuel input (TJ)	-	11434	12466	16684	23758	27955	4.3
Electricity production (GWh)	-	350	657	958	1420	1253	6.3
Biogases and liquid biofuels							
Fuel input (TJ)	-	146 e	831	4297	2048	1681	12.3
Electricity production (GWh)	-	7	78	454	201	183	16.8
Total combustible fuels[3]							
Electricity production (GWh)	33989	19981	28438	27839	29024	22854	0.6

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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BELGIUM

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	1806	2178	65	78	52	34	-18.0
Fuel input (TJ)	37926	53348	1659	2291	1340	879	-17.8
Electricity production (GWh)	3477	5510	89	105	95	39	-21.0
CHP Heat production (TJ)	1650	1508	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	3657	10487	-	1081	1961	1899	-7.8
Electricity production (GWh)	378	1086	-	90	164	158	-8.8
CHP Heat production (TJ)	29	71	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	505	171	77	23	50	41	-6.6
Fuel input (TJ)	20200	6836	3029	947	2216	1920	-5.9
Electricity production (GWh)	2420	475	428	124	264	176	-4.6
CHP Heat production (TJ)	6301	2762	69	-	518	694	-6.4
Natural gas[2]							
Fuel input (TJ)	12722	7938	42407 e	82786	91817	90073	12.3
Electricity production (GWh)	-	245	4667	11067	12022	11684	20.2
CHP Heat production (TJ)	8729	4990	21133	27538	31370	29767	8.9
Wood and other solid waste							
Fuel input (TJ)	-	-	652	5652	7466	9525	-
Electricity production (GWh)	-	-	153	860	1004	1167	-
CHP Heat production (TJ)	-	-	-	266	292	295	-
Industrial waste							
Fuel input (TJ)	-	-	4719	3426	2476	2432	-
Electricity production (GWh)	-	-	313	205	173	170	-
CHP Heat production (TJ)	-	-	78	579	329	256	-
Municipal waste							
Fuel input (TJ)	-	-	592	9505	7114	9406	-
Electricity production (GWh)	-	-	32	334	21	145	-
CHP Heat production (TJ)	-	-	270	2313	2559	3060	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	249	2423	4112	3715	-
Electricity production (GWh)	-	-	20	375	634	570	-
CHP Heat production (TJ)	-	-	41	242	342	272	-
Total combustible fuels[3]							
Electricity production (GWh)	6275	7316	5702	13160	14377	14109	3.2
CHP Heat production (TJ)	17128	9331	21591	30938	35410	34344	6.4

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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BELGIUM
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	1	-	-	-	-
Fuel input (TJ)	-	-	23	-	-	-	-
Heat production (TJ)	-	-	16	-	-	-	-
Natural gas[2]							
Fuel input (TJ)	-	-	1382	82	89	870	-
Heat production (TJ)	-	-	1068	70	73	754	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	88	21	-	-	-	-
Heat production (TJ)	-	68	19	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	330 e	471	-	-	-	-
Heat production (TJ)	-	300	424	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Heat production (TJ)	-	368	1527	70	73	754	3.5

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.
(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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BELGIUM
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**33.73**	**32.29**	**32.07**	**41.38**	**39.27**	**42.20**	**42.64**	**-0.3**	**1.4**
Geothermal	-	-	-	-	-	-	0.00	-	-
Solar thermal	-	-	0.00	0.00	0.01	0.01	0.01	-	14.5
Coal	5.71	4.23	3.54	2.58	0.79	0.79	0.73	-2.8	-7.2
Oil	20.16	16.85	16.13	20.95	19.93	20.57	20.07	-1.3	1.0
Natural gas	4.60	7.08	6.82	10.16	10.11	11.60	10.94	2.3	2.3
Biofuels & waste	-	-	0.38	0.53	1.21	1.40	3.32	-	10.9
Electricity	2.94	3.73	4.99	6.67	6.64	7.16	6.89	3.2	1.6
Heat	0.32	0.39	0.22	0.49	0.57	0.67	0.66	-2.1	5.4
of which:									
Total industry	**13.59**	**11.20**	**10.51**	**12.82**	**9.12**	**10.46**	**12.57**	**-1.5**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	3.54	3.20	3.01	2.38	0.54	0.66	0.63	-1.0	-7.2
Oil	5.22	2.56	1.61	1.60	0.65	0.61	0.41	-6.7	-6.3
Natural gas	2.57	3.03	2.88	4.61	3.99	4.62	5.13	0.7	2.8
Biofuels & waste	-	-	0.19	0.38	0.65	0.74	2.68	-	13.4
Electricity	1.93	2.06	2.62	3.43	2.81	3.28	3.20	1.8	1.0
Heat	0.32	0.36	0.19	0.43	0.47	0.55	0.52	-3.1	5.0
Transport	**4.42**	**5.40**	**6.78**	**8.18**	**9.14**	**9.20**	**9.16**	**2.6**	**1.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.01	0.00	-	-	-	-	-	-	-
Oil	4.34	5.32	6.67	8.06	8.71	8.69	8.67	2.6	1.3
Natural gas	-	-	-	-	-	-	0.01	-	-
Biofuels & waste	-	-	-	-	0.29	0.36	0.35	-	-
Electricity	0.07	0.08	0.11	0.12	0.15	0.15	0.14	2.5	1.3
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**1.06**	**2.98**	**2.88**	**3.44**	**4.60**	**5.03**	**4.40**	**6.0**	**2.0**
Geothermal	-	-	-	-	-	-	0.00	-	-
Solar thermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	0.00	0.00	-	-	-	-	-	-	-
Oil	0.42	1.56	1.16	0.83	0.95	1.09	0.90	6.2	-1.2
Natural gas	0.36	0.94	1.03	1.54	1.72	1.95	1.54	6.4	1.9
Biofuels & waste	-	-	-	0.00	0.01	0.01	0.01	-	-
Electricity	0.29	0.46	0.67	1.05	1.85	1.91	1.86	5.1	5.0
Heat	-	0.02	0.01	0.01	0.07	0.08	0.09	-	9.0

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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BELGIUM

11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**11.05**	**9.59**	**8.28**	**9.47**	**8.28**	**8.97**	**7.40**	**-1.7**	**-0.5**
Geothermal	-	-	-	-	-	-	0.00	-	-
Solar thermal	-	-	-	0.00	0.01	0.01	0.01	-	-
Coal	2.15	1.03	0.52	0.20	0.23	0.12	0.10	-8.0	-7.4
Oil	7.15	4.90	3.48	3.77	2.75	3.01	2.59	-4.1	-1.4
Natural gas	1.09	2.51	2.48	3.29	3.31	3.82	2.79	5.0	0.6
Biofuels & waste	-	-	0.19	0.15	0.23	0.26	0.24	-	1.3
Electricity	0.65	1.13	1.58	2.04	1.74	1.74	1.66	5.3	0.2
Heat	-	0.02	0.02	0.02	0.01	0.01	0.01	-	-1.5
Agriculture & fishing	**0.45**	**0.51**	**0.49**	**0.69**	**0.81**	**0.84**	**0.82**	**0.5**	**2.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.45	0.51	0.49	0.67	0.43	0.44	0.38	0.5	-1.2
Natural gas	-	-	-	-	0.23	0.29	0.37	-	-
Biofuels & waste	-	-	-	-	0.03	0.03	0.03	-	-
Electricity	-	-	-	0.02	0.09	0.07	0.03	-	-
Heat	-	-	-	-	0.02	0.01	0.00	-	-
Other	**-**	**-**	**0.00**	**0.03**	**0.06**	**0.10**	**0.62**	**-**	**31.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	-	-	0.01	0.01	-	9.9
Coal	-	-	-	-	0.01	0.01	0.00	-	-
Oil	-	-	-	-	0.05	-	-	-	-
Natural gas	-	-	-	-	-	0.04	0.58	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	0.01	0.01	-	-	-
Heat	-	-	0.00	0.03	-	0.03	0.04	-	18.4
Non-energy use(1)	**3.16**	**2.61**	**3.13**	**6.74**	**7.25**	**7.59**	**7.66**	**-0.06**	**4.34**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**33.73**	**32.29**	**32.07**	**41.38**	**42.50**	**39.27**	**42.20**	**42.64**
Total industry (Mtoe)	**13.59**	**11.20**	**10.51**	**12.82**	**10.84**	**9.12**	**10.46**	**12.57**
Iron and steel	4.55	3.45	3.25	3.57	2.08	1.19	1.42	1.28
Chem. and petrochemical	2.03	2.13	2.29	3.27	3.45	3.12	4.08	6.12
Non-ferrous metals	0.35	0.38	0.35	0.33	0.33	0.23	0.27	0.33
Non-metallic minerals	2.17	2.37	1.50	1.42	1.39	1.08	0.91	1.27
Transport equipment	0.10	0.12	0.19	0.21	0.20	0.18	0.21	0.16
Machinery	0.46	0.44	0.33	0.26	0.29	0.24	0.27	0.22
Mining and quarrying	0.05	0.04	0.04	0.03	0.08	0.06	0.21	0.16
Food and tobacco	0.51	0.54	0.75	0.73	0.95	1.08	1.10	1.21
Paper, pulp and printing	0.24	0.24	0.37	0.53	0.73	0.75	0.83	0.80
Wood and wood products	0.03	0.03	0.05	0.10	0.23	0.18	0.18	0.14
Construction	0.14	0.15	0.09	0.16	0.26	0.37	0.38	0.30
Textile and leather	0.14	0.21	0.27	0.25	0.26	0.21	0.22	0.19
Non specified/other	2.84	1.10	1.02	1.96	0.61	0.43	0.40	0.40
Electricity consumption (Mtoe)	**2.94**	**3.73**	**4.99**	**6.67**	**7.11**	**6.64**	**7.16**	**6.89**
Total industry (Mtoe)	**1.93**	**2.06**	**2.62**	**3.43**	**3.36**	**2.81**	**3.28**	**3.20**
Iron and steel	0.44	0.42	0.44	0.59	0.55	0.45	0.51	0.43
Chem. and petrochemical	0.63	0.67	0.85	1.16	1.05	0.75	1.16	1.10
Non-ferrous metals	0.13	0.14	0.18	0.18	0.19	0.11	0.15	0.16
Non-metallic minerals	0.15	0.16	0.18	0.22	0.21	0.17	0.09	0.26
Transport equipment	0.05	0.05	0.08	0.10	0.09	0.09	0.09	0.07
Machinery	0.12	0.15	0.17	0.18	0.19	0.15	0.16	0.16
Mining and quarrying	0.02	0.02	0.03	0.03	0.07	0.05	0.10	0.04
Food and tobacco	0.11	0.15	0.24	0.34	0.38	0.40	0.41	0.41
Paper, pulp and printing	0.11	0.11	0.18	0.22	0.23	0.20	0.22	0.23
Wood and wood products	0.02	0.03	0.05	0.06	0.12	0.07	0.06	0.03
Construction	0.01	0.01	0.01	0.03	0.07	0.11	0.12	0.08
Textile and leather	0.11	0.10	0.15	0.17	0.13	0.11	0.11	0.09
Non specified/other	0.02	0.04	0.06	0.16	0.07	0.15	0.09	0.15
Total industry (TWh)	**22.42**	**23.94**	**30.52**	**39.87**	**39.02**	**32.68**	**38.14**	**37.26**
Iron and steel	5.09	4.87	5.14	6.88	6.35	5.20	5.99	5.03
Chem. and petrochemical	7.35	7.80	9.88	13.48	12.22	8.68	13.50	12.83
Non-ferrous metals	1.51	1.67	2.11	2.05	2.21	1.33	1.78	1.86
Non-metallic minerals	1.76	1.86	2.09	2.52	2.45	1.96	1.06	2.97
Transport equipment	0.63	0.62	0.97	1.14	1.10	1.02	1.06	0.77
Machinery	1.44	1.72	2.00	2.09	2.19	1.76	1.90	1.87
Mining and quarrying	0.25	0.28	0.33	0.38	0.76	0.63	1.19	0.42
Food and tobacco	1.28	1.78	2.79	3.95	4.45	4.65	4.72	4.82
Paper, pulp and printing	1.24	1.28	2.12	2.53	2.67	2.38	2.60	2.64
Wood and wood products	0.26	0.34	0.62	0.64	1.38	0.78	0.66	0.39
Construction	0.08	0.12	0.08	0.29	0.87	1.28	1.41	0.90
Textile and leather	1.31	1.17	1.69	2.01	1.54	1.25	1.25	1.06
Non specified/other	0.23	0.44	0.72	1.92	0.84	1.77	1.03	1.71

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**1650**	**6285**	**4785**	**9398**	**11645**	**17158**	**9486**	**12395**	**13189**
Imports from:									
Total from OECD	**1650**	**6285**	**4785**	**9398**	**11645**	**17158**	**9486**	**12395**	**13189**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	1322	1098	2311	5707	8512	7411	1832	3167	7143
Germany	113	1281	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	1629	1867	1845	1532
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	215	3906	2474	3691	3133	8118	5787	7383	4514
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**2405**	**8920**	**8509**	**5326**	**7319**	**6561**	**11321**	**11844**	**10652**
Exports to:									
Total to OECD	**2405**	**8920**	**8509**	**5326**	**7319**	**6561**	**11321**	**11844**	**10652**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	89	7823	3544	1244	201	2039	6642	5409	2330
Germany	115	16	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	913	1071	832	1371	1967	1518	910	1122	1318
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	1288	10	4133	2711	5151	3004	3769	5313	7004
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**7.03**	**10.14**	**13.40**	**14.25**	**15.24**	**15.79**	**16.17**	**16.20**	**16.73**
Nuclear	0.01	1.67	5.50	5.63	5.71	5.83	5.90	5.93	5.93
Hydro	0.44	1.13	1.40	1.40	1.41	1.42	1.42	1.43	1.43
of which: pumped storage	*0.40*	*1.06*	*1.31*	*1.31*	*1.31*	*1.31*	*1.31*	*1.31*	*1.31*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.01	0.01	0.09	0.23
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.01	0.01	0.01	0.32	0.60	0.90	1.06
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	6.57	7.34	6.49	7.21	8.11	8.21	8.24	7.85	8.08
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	..	..	..	..
Liquid fuels	1.12	0.39	0.37	0.37	0.38	..	..	..	..
Natural gas	-	0.08	0.08	0.07	0.99	..	..	..	..
Biofuels & waste	-	0.01	0.07	0.07	0.12	..	..	..	..
Multi-fired:									
Solid / liquid	0.49	1.07	1.49	1.04	0.38	..	..	..	..
Solid / natural gas	-	0.06	0.06	0.11	0.17	..	..	..	..
Liquid / natural gas	1.73	1.52	1.62	2.03	4.35	..	..	..	..
Solid / liquid / gas	3.23	4.23	2.81	3.52	1.71	..	..	..	..
Type of generation									
Steam	-	-	5.64	5.33	3.95	3.28	3.31	2.88	2.70
Internal combustion	-	-	0.17	0.19	0.20	0.31	0.25	0.13	0.20
Gas turbine	-	-	0.28	0.28	1.28	1.37	1.43	1.18	1.13
Combined cycle	-	-	0.12	1.14	2.67	3.26	3.25	3.66	3.90
Other	-	-	0.28	0.28	-	-	-	-	0.17
Peak load	..	7.92	10.43	11.76	12.65	13.65	13.93	13.59	13.00
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**1.08**	**0.88**	**0.75**	**0.67**	**0.44**	**0.97**	**1.33**	**2.13**	**3.37**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.05	0.38	0.81	1.16
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	0.01	0.01	0.01
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	1.08	0.88	0.75	0.67	0.44	0.92	0.95	1.31	2.20
of which:									
Single-fired:									
Coal and coal products	0.08	-	-	-	-	..	..	..	..
Liquid fuels	0.13	0.17	0.10	0.15	0.15	..	..	..	..
Natural gas	0.02	0.02	0.01	-	0.02	..	..	..	..
Biofuels & waste	-	-	0.01	0.09	0.06	..	..	..	..
Multi-fired:									
Solid / liquid	0.12	0.11	0.04	0.02	0.02	..	..	..	..
Solid / natural gas	0.11	0.08	0.06	-	-	..	..	..	..
Liquid / natural gas	0.09	0.07	0.08	0.07	0.02	..	..	..	..
Solid / liquid / gas	0.54	0.43	0.45	0.34	0.19	..	..	..	..
Type of generation									
Steam	-	-	0.68	0.60	0.32	0.12	0.13	0.27	0.50
Internal combustion	-	-	-	-	-	0.18	0.17	0.16	0.48
Gas turbine	-	-	-	-	-	0.30	0.31	0.55	0.63
Combined cycle	-	-	0.06	0.06	0.12	0.20	0.22	0.22	0.43
Other	-	-	-	-	-	0.12	0.12	0.12	0.17
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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BELGIUM

16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	31.61	34.56	37.68	35.54	89.29	55.31	..	..	..
Heavy fuel oil (t)	72.53	130.02	105.23	196.15	x	x	x	x	x
Natural gas (MWh)(1)	5.65	9.87	8.81	c	c	c	c	c	c
				Euro/ toe					
Steam coal	59	65	71	67	167	104	..	..	..
Heavy fuel oil	74	133	108	201	x	x	x	x	x
Natural gas(2)	73	128	114	c	c	c	c	c	c
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	34.80	42.00	58.10	51.80	94.80	99.90	94.00	99.55	98.50
of which: tax	-	-	-	-	10.10	8.40	10.40	11.60	12.15
Household									
Price	89.70	102.20	138.10	143.50	181.70	167.40	174.90	190.00	194.45
of which: tax	12.40	14.10	20.10	26.30	45.10	44.20	47.50	50.70	50.20

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	159.35	191.96	208.57	251.45	250.99	251.85	252.65	1.6	0.9
GDP (billion 2005 USD)	448.57	568.25	749.89	999.93	1203.89	1234.78	1257.46	3.1	2.4
TPES/GDP(1)	0.36	0.34	0.28	0.25	0.21	0.20	0.20	-1.4	-1.5
Population (millions)	22.49	24.52	27.69	30.69	34.13	34.48	34.81	1.2	1.0
TPES/population(2)	7.08	7.83	7.53	8.19	7.35	7.30	7.26	0.4	-0.2
TPES/GDP (2005 = 100)	148	141	116	105	87	85	84	-1.4	-1.5
Ele.TFC/GDP(2005=100)(3)	109	118	123	107	93	93	..	0.8	..
Ele.TFC/population(4)	9788	12372	15105	15701	14831	15053	..	2.6	..
Elec. generated (TWh)(5)	270.08	373.28	482.04	605.60	601.89	636.88	645.65	3.5	1.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**159.35**	**191.96**	**208.57**	**251.45**	**250.99**	**251.85**	**252.65**	**1.6**	**0.9**
Coal	15.26	20.58	24.28	31.66	22.32	19.60	19.13	2.8	-1.1
Oil	79.39	88.52	76.51	87.10	85.56	81.92	83.61	-0.2	0.4
Natural gas	37.27	45.55	54.73	74.24	78.68	83.57	83.45	2.3	1.9
Biofuels & waste	7.81	7.65	8.16	11.69	12.05	12.30	11.63	0.3	1.6
Nuclear	4.07	10.40	19.40	18.97	23.63	24.39	25.13	9.6	1.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	0.00	0.03 e	0.76	0.90	1.04	-	32.2
Hydro	16.74	21.60	25.52	30.83	30.22	32.31	32.68	2.5	1.1
Net electricity imports(2)	-1.21	-2.34	-0.03	-3.07	-2.21	-3.14	-4.02	-19.5	24.9
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**270.2**	**373.4**	**482.2 e**	**605.7 e**	**626.1 e**	**602.0**	**637.0**	**645.8**
Nuclear	15.3	38.0	73.0	72.8	92.0	90.7	93.6	96.4
Hydro	194.8	251.2	296.8	358.6	363.7	351.5	375.8	380.1
of which:								
pumped storage production	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.1	0.3	0.3
Tide, wave, ocean	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Wind	-	-	-	0.3	1.5	8.7	10.2	11.8
Combustible fuels	60.2	84.1	112.3 e	174.0 e	168.8 e	151.0	155.8	155.8
Coal	*34.9*	*59.8 e*	*82.2 e*	*117.6 e*	*110.0*	*83.3*	*76.4*	*76.4*
Oil	*9.1*	*13.8*	*16.5 e*	*14.7*	*15.3 e*	*7.5*	*6.5*	*6.5*
Natural gas	*16.2*	*9.2*	*9.7*	*33.5*	*34.4*	*51.2*	*62.1*	*62.1*
Biofuels & waste	*-*	*1.3*	*4.0 e*	*8.2 e*	*9.2 e*	*9.1*	*10.8*	*10.8*
Other (e.g. fuel cells)	-	-	-	-	-	-	1.4	1.4
- Own use by power plant	6.9	6.2	14.4 e	19.1 e	20.1 e	17.8	18.4	..
Net production	**263.3**	**367.2**	**467.7 e**	**586.7 e**	**606.1 e**	**584.2**	**618.6**	**..**
Nuclear	..	35.9	68.8	68.7	86.8	85.5	88.3	..
Hydro	..	251.0	293.9	355.1	360.0	351.0	374.6	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.1	0.3	..
Tide, wave, ocean	..	-	0.0	0.0	0.0	0.0	0.0	..
Wind	..	-	-	0.3	1.5	8.6	10.1	..
Combustible fuels	..	80.3	105.0 e	162.6 e	157.7 e	138.9	144.0	..
Other (e.g. fuel cells)	..	-	-	-	-	-	1.3	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.3	0.2	0.2	0.2	0.2	0.2	0.2	0.2
+ Imports	2.2	2.9	17.8	15.3	19.7	18.7	15.0	10.8
- Exports	16.3	30.2	18.1	51.0	43.5	44.4	51.5	57.6
Electrical energy supplied	**249.0**	**339.7**	**467.2 e**	**550.8 e**	**582.0 e**	**558.3**	**581.8**	**..**
- Transmission & distr. losses	25.8	32.2	34.1	47.3	42.7	25.0	34.7	..
- Statistical difference	-	-	-0.0	-0.0	-0.0	-	-	..
Total consumption	**223.2**	**307.5**	**433.1 e**	**503.5 e**	**539.4 e**	**533.3**	**547.1**	**..**
- Energy industry consumption[2]	3.2	4.3	14.9	21.9	27.2	27.3	28.2	..
Final consumption	**220.1**	**303.2**	**418.1 e**	**481.6 e**	**512.2 e**	**506.0**	**518.9**	**..**
Industry	105.9	135.7	167.9	203.3	211.6	202.7	205.8	..
Transport	3.2	2.3	3.3	4.5	4.3	3.8	3.9	..
Commercial & publ. serv.	57.0	72.6	108.4	125.8	135.0	143.3	146.8	..
Residential	51.9	84.8	129.8	138.2	151.0	146.8	153.0	..
Agriculture & fishing	2.1	7.8	8.6	9.6	10.2	9.4	9.4	..
Sector non specified	-	-	0.1 e	0.1 e	0.1 e	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**283.62**	**373.38**	**482.15**	**605.71**	**614.05**	**602.00**	**636.99**	**3.4**	**1.3**
- Hydro pumped storage	*0.11*	*0.10*	*0.11*	*0.11*	*0.11*	*0.11*	*0.11*	*0.2*	-
Total generation(1)	**283.52**	**373.28**	**482.04**	**605.60**	**613.94**	**601.89**	**636.88**	**3.4**	**1.3**
Main activity producers									
Gross production	244.55	334.71	440.17	556.91	561.52	552.25	580.09	3.7	1.3
- Hydro pumped storage	*0.11*	*0.10*	*0.11*	*0.11*	*0.11*	*0.11*	*0.11*	*0.2*	-
Total generation(1)	244.45	334.61	440.06	556.80	561.41	552.14	579.98	3.7	1.3
Nuclear	14.70	38.03	72.97	72.80	90.09	90.66	93.59	10.5	1.2
Hydro	177.94	220.47	265.46	327.30	336.90	324.14	345.17	2.5	1.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.03	0.31 e	6.77	8.87	11.82	-	33.8
Coal	34.61	59.74	82.12	117.26	86.19	83.32	76.36	5.5	-0.3
Oil	6.77	11.37	14.62	12.48	8.29	5.47	4.62	4.9	-5.3
Natural gas	10.43	5.01	4.86	26.65	33.11	39.65	48.38	-4.7	11.6
Biofuels & waste	-	-	-	-	0.04 e	0.03	0.03	-	-
Autoproducers									
Gross production	39.07	38.67	41.99	48.80	52.53	49.75	56.90	0.5	1.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	39.07	38.67	41.99	48.80	52.53	49.75	56.90	0.5	1.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	32.73	30.68	31.27	31.21	31.75	27.21	30.52	-0.3	-0.1
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.18 e	0.07 e	0.10	0.33	0.00	0.01	0.00	-3.8	-19.7
Oil	3.52	2.43	1.85	2.21	2.09	1.99	1.91	-3.9	0.1
Natural gas	2.64	4.19	4.79	6.82	11.00	11.50	13.73	3.8	5.1
Biofuels & waste	-	1.30	3.97 e	8.23 e	7.69 e	9.05	10.74	-	4.9

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**5924**	**7991**	**40974 e**	**47050 e**	**50855**	**45799**	**53310**	**1.3**
Total energy	**-**	**-**	**-**	**-**	**11920**	**6660**	**7366**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-
Energy non specified/other	-	-	-	-	11920	6660	7366	-
Total industry	**5924**	**7991**	**40842**	**46197**	**1591**	**1472**	**1578**	**-14.4**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	1591	1472	1578	-
Food and tobacco	-	-	-	-	-	-	-	-
Pulp and printing	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	5924	7991	40842	46197	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**132 e**	**853 e**	**37344**	**37667**	**44366**	**31.9**
Commerce and pub. services	-	-	23	708	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	-	-	109 e	145 e	37344	37667	44366	33.1

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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CANADA
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**43140 e**	**28587 e**	**35983 e**	**41046**	**21604**	**24185**	**24185**	**-0.8**
Nuclear	20486	16029	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-
Oil	8618 e	2943	2434	2914	1246	1108	1108	-4.5
Natural gas	-	7601	31535	36118	18208	20927	20927	4.9
Biofuels & waste	-	2014 e	2014 e	2014	2150	2150	2150	0.3
Non-spec. comb. fuels	14036	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	43140 e	26573	33969	39032	19492	22073	..	-0.9
Nuclear	20486	16029	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	8618 e	2943	2434	2914	1246	1108	..	-4.5
Natural gas	-	7601	31535	36118	18208	20927	..	4.9
Biofuels & waste	-	-	-	-	38	38	..	-
Non-spec. comb. fuels	14036	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	2014 e	2014 e	2014	2112	2112	..	0.2
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	2014 e	2014 e	2014	2112	2112	..	0.2
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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CANADA
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**15.29**	**20.21**	**26.61**	**39.23**	**32.54**	**34.56**	**35.31**	**3.3**	**1.4**
Coal	8.30	15.03	19.97	26.96	18.70	18.95	17.63	5.3	-0.6
Oil	2.53	3.18	3.80	2.92	2.40	2.14	1.86	2.4	-3.3
Natural gas	4.27	1.77	1.87	7.35	9.61	11.33	13.29	-4.7	9.8
Biofuels & waste	0.20	0.23 e	0.98 e	1.99 e	1.84 e	2.14 e	2.53 e	9.9	4.6
of which: ***main activity prod.***									
Total	**..**	**19.21**	**24.53**	**35.28**	**27.24**	**28.84**	**28.97**	**..**	**0.8**
Coal	..	15.01	19.95	26.88	18.70	18.95	17.63	..	-0.6
Oil	..	2.91	3.32	2.40	1.89	1.59	1.36	..	-4.2
Natural gas	..	1.29	1.26	5.99	6.64	8.29	9.97	..	10.3
Biofuels & waste	..	-	-	-	0.01 e	0.01 e	0.01 e	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**4.07**	**10.40**	**19.40**	**18.97**	**23.49**	**23.64**	**24.41**	**9.6**	**1.1**
Nuclear	4.07	10.40	19.40	18.97	23.48	23.63	24.39	9.6	1.1
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00 e	0.01	0.01	0.02	-	-
Non-Thermal									
Total	**16.74**	**21.60**	**25.52**	**30.86**	**32.28**	**30.97**	**33.19**	**2.5**	**1.3**
Hydro	16.74	21.60	25.52	30.83	31.70	30.22	32.31	2.5	1.1
Tide, wave, ocean	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Wind	-	-	-	0.02	0.57	0.75	0.88	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	12659	12208	15746 e	5796	5927	4391	-4.8
Fuel input (TJ)	359671	343521 e	439187 e	140374 e	143546 e	106345 e	-5.4
Electricity production (GWh)	36393	34897	56987	17003	15894	11553	-5.1
Brown coal							
Fuel input (1000 t)	15242	29946	40083	37415	37822	36663	1.0
Fuel input (TJ)	262981	492133 e	686421 e	642523 e	649874 e	631729 e	1.2
Electricity production (GWh)	23382	47272	60290	69194	67430	64811	1.5
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	356	577 e	3494 e	-	-	-	-
Electricity production (GWh)	33 e	51	311	-	-	-	-
Petroleum products							
Fuel input (1000 t)	3007	3842	3166	2539	2313	2014	-3.0
Fuel input (TJ)	124234	159901 e	130032 e	97154 e	89672 e	77532 e	-3.4
Electricity production (GWh)	13798	16458	14680	10368	7444	6521	-4.3
Natural gas (1)							
Fuel input (TJ)	83966	75992	227749	332103	415513	503686	9.4
Electricity production (GWh)	9192	9423	23418	33091	40215	51132	8.4
Wood and other solid waste							
Fuel input (TJ)	9630	36758 e	70704 e	65290	76257	92475	4.5
Electricity production (GWh)	1300	3829	7365	6803	7943	9633	4.5
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	1088 e	1309 e	1309	1309	-
Electricity production (GWh)	-	-	36 e	46 e	46	46	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	276 e	7787 e	6042 e	7801	7801	17.2
Electricity production (GWh)	-	23 e	708 e	727 e	946	946	19.4
Total combustible fuels(2)							
Electricity production (GWh)	84098	111953 e	163795 e	137232	139918	144642	1.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	283	77	94	61	45	43	-2.7
Fuel input (TJ)	12311 e	3190	3903	2564	1920	1831	-2.6
Electricity production (GWh)	-	10	10	10	11	10	-
CHP Heat production (TJ)	8618 e	2943	2434	1695	1246	1108	-4.5
Natural gas(1)							
Fuel input (TJ)	-	10919	114464	114995	111757	114829	11.9
Electricity production (GWh)	-	231	10054	11018	10938	10979	20.2
CHP Heat production (TJ)	-	7601	31535	35253	18208	20927	4.9
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	1254 e	1254 e	1329 e	1329	1329	0.3
Electricity production (GWh)	-	117 e	117 e	118 e	118	118	0.0
CHP Heat production (TJ)	-	633 e	633 e	701 e	701	701	0.5
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	462 e	321	321	-
Electricity production (GWh)	-	-	-	44 e	31	31	-
CHP Heat production (TJ)	-	-	-	50 e	38	38	-
Total combustible fuels(2)							
Electricity production (GWh)	-	358 e	10181 e	11190 e	11098	11138	17.8
CHP Heat production (TJ)	22654	11177 e	34602 e	37699 e	20193	22774	3.4

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	2629 e	2629 e	2591 e	2591	2591	-0.1
Heat production (TJ)	-	1381 e	1381 e	1411 e	1411	1411	0.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Heat production (TJ)	-	1381 e	1381 e	1411 e	1411	1411	0.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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CANADA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**131.43**	**155.06**	**158.95**	**189.63**	**191.57**	**199.15**	**203.98**	**1.1**	**1.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	5.41	4.33	3.09	3.51	3.33	3.29	3.12	-3.2	0.0
Oil	75.65	79.99	68.79	80.78	85.39	89.80	90.01	-0.6	1.3
Natural gas	23.72	36.22	43.30	53.41	51.91	52.16	55.91	3.6	1.2
Biofuels & waste	7.62	7.42	7.18	9.70	10.05	9.91	9.77	-0.3	1.5
Electricity	18.93	26.08	35.96	41.42	40.01	43.51	44.62	3.8	1.0
Heat	0.10	1.03	0.63	0.81	0.88	0.49	0.55	11.8	-0.7
of which:									
Total industry	**45.70**	**50.07**	**47.11**	**54.99**	**51.08**	**56.36**	**56.48**	**0.2**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	4.89	4.10	2.71	3.21	2.55	2.60	2.45	-3.4	-0.5
Oil	14.04	11.59	6.79	6.46	6.21	6.75	6.07	-4.2	-0.5
Natural gas	11.87	16.20	16.85	19.31	20.57	22.65	23.88	2.1	1.7
Biofuels & waste	5.71	5.51	5.69	7.72	6.94	6.44	5.84	-0.0	0.1
Electricity	9.10	11.67	14.44	17.48	13.93	17.43	17.70	2.8	1.0
Heat	0.10	1.00	0.63	0.80	0.88	0.49	0.55	11.7	-0.7
Transport	**33.60**	**44.32**	**43.12**	**52.14**	**57.49**	**58.82**	**58.81**	**1.5**	**1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.12	-	-	-	-	-	-	-	-
Oil	33.19	42.49	39.94	46.86	53.65	54.80	54.40	1.1	1.5
Natural gas	-	1.63	2.90	4.76	2.72	2.46	2.44	-	-0.8
Biofuels & waste	-	-	-	0.13	0.79	1.23	1.64	-	-
Electricity	0.28	0.20	0.28	0.39	0.33	0.32	0.33	0.1	0.8
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**16.89**	**18.29**	**21.72**	**27.42**	**25.64**	**25.14**	**26.46**	**1.5**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	0.03	0.00	0.00	-	-	-	6.4	-
Oil	6.25	4.96	4.08	5.78	2.53	2.53	3.01	-2.5	-1.4
Natural gas	5.74	7.04	8.32	10.81	10.93	10.28	10.82	2.2	1.3
Biofuels & waste	-	-	-	-	0.00 e	0.01 e	0.01 e	-	-
Electricity	4.90	6.24	9.32	10.82	12.17	12.32	12.62	3.9	1.5
Heat	-	0.03	0.00	0.01	0.00	0.00	0.00	-	-12.9

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**25.44**	**28.30**	**28.72**	**30.87**	**32.17**	**30.80**	**32.78**	**0.7**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.40	0.08	0.05	0.04	0.03	0.03	0.03	-11.9	-1.6
Oil	12.55	10.27	4.66	3.25	2.87	2.70	2.65	-5.7	-2.7
Natural gas	6.11	8.74	11.36	13.86	14.19	13.22	14.66	3.7	1.2
Biofuels & waste	1.91	1.91 e	1.49	1.84	2.32	2.23	2.28	-1.4	2.0
Electricity	4.47	7.30	11.17	11.89	12.75	12.62	13.16	5.5	0.8
Heat	-	-	0.00	-	0.00	-	-	-	-
Agriculture & fishing	**1.14**	**2.43**	**3.25**	**4.20**	**3.72**	**4.23**	**4.82**	**6.3**	**1.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.96	1.49	2.01	2.79	2.39	2.86	3.28	4.4	2.4
Natural gas	-	0.27	0.50	0.59	0.51	0.57	0.72	-	1.8
Biofuels & waste	-	-	-	-	0.00 e	0.00 e	0.00 e	-	-
Electricity	0.18	0.67	0.74	0.83	0.82	0.81	0.81	8.8	0.4
Heat	-	-	0.00	0.00	0.00	-	-	-	-
Other	**1.35**	**-**	**0.01**	**0.01**	**-**	**-**	**-**	**-25.8**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.35	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	0.01 e	0.01 e	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**7.31**	**11.66**	**15.02**	**19.99**	**21.47**	**23.79**	**24.63**	**4.33**	**2.38**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**131.43**	**155.06**	**158.95**	**189.63**	**200.13**	**191.57**	**199.15**	**203.98**
Total industry (Mtoe)	**45.70**	**50.07**	**47.11**	**54.99**	**53.15**	**51.08**	**56.36**	**56.48**
Iron and steel	3.74	5.96	3.80	4.71	3.45	3.26	3.75	3.67
Chem. and petrochemical	2.41	5.15	4.99	5.11	4.07	5.15	5.48	5.53
Non-ferrous metals	3.17	3.81	4.25	5.48	5.45	5.19	5.28	5.52
Non-metallic minerals	2.08	1.66	1.25	1.43	0.96	0.87	1.23	1.22
Transport equipment	0.56	0.43	-	-	-	-	-	-
Machinery	0.33	0.44	-	-	-	-	-	-
Mining and quarrying	2.47	6.89	5.45	8.06	13.65	13.86	16.46	17.22
Food and tobacco	1.09	1.06	-	-	-	-	-	-
Paper, pulp and printing	12.20	13.88	14.87	17.47	13.38	12.50	11.61	10.88
Wood and wood products	0.43	1.01	0.17	0.37	0.41	0.58	0.56	0.04
Construction	-	1.14	1.49	1.11	1.35	1.41	1.64	1.72
Textile and leather	0.18	0.48	-	-	-	-	-	-
Non specified/other	17.03	8.14	10.85	11.25	10.43	8.26	10.36	10.67
Electricity consumption (Mtoe)	**18.93**	**26.08**	**35.96**	**41.42**	**42.98**	**40.01**	**43.51**	**44.62**
Total industry (Mtoe)	**9.10**	**11.67**	**14.44**	**17.48**	**15.16**	**13.93**	**17.43**	**17.70**
Iron and steel	0.52	0.82	0.72	0.88	0.75	0.65	0.75	0.77
Chem. and petrochemical	0.95	1.21	1.57	1.65	1.26	1.56	1.58	1.68
Non-ferrous metals	2.08	2.23	3.18	4.38	4.55	4.45	4.52	4.67
Non-metallic minerals	0.35	0.40	0.16	0.17	0.17	0.16	0.16	0.16
Transport equipment	0.24	0.26	-	-	-	-	-	-
Machinery	0.26	0.39	-	-	-	-	-	-
Mining and quarrying	1.02	1.47	2.47	2.88	2.76	1.57	2.55	2.62
Food and tobacco	0.29	0.42	-	-	-	-	-	-
Paper, pulp and printing	2.47	3.11	4.20	5.30	3.90	3.51	3.44	3.31
Wood and wood products	0.20	0.35	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	0.18	0.22	-	-	-	-	-	-
Non specified/other	0.56	0.78	2.15	2.22	1.76	2.03	4.44	4.50
Total industry (TWh)	**105.86**	**135.67**	**167.94**	**203.31**	**176.22**	**162.02**	**202.73**	**205.79**
Iron and steel	6.02	9.53	8.33	10.26	8.71	7.61	8.77	8.90
Chem. and petrochemical	11.01	14.04	18.21	19.19	14.67	18.15	18.41	19.56
Non-ferrous metals	24.15	25.99	36.97	50.93	52.94	51.80	52.50	54.27
Non-metallic minerals	4.08	4.63	1.90	2.03	1.95	1.81	1.86	1.89
Transport equipment	2.77	3.04	-	-	-	-	-	-
Machinery	3.06	4.55	-	-	-	-	-	-
Mining and quarrying	11.81	17.14	28.75	33.48	32.12	18.22	29.60	30.45
Food and tobacco	3.36	4.88	-	-	-	-	-	-
Paper, pulp and printing	28.71	36.19	48.84	61.58	45.32	40.78	39.97	38.45
Wood and wood products	2.28	4.12	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	2.14	2.51	-	-	-	-	-	-
Non specified/other	6.48	9.06	24.96	25.84	20.52	23.65	51.62	52.27

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports (1)	**2249**	**2940**	**17781**	**7422**	**15342**	**23864**	**18163**	**18686**	**14962**
Imports from:									
Total from OECD	**2249**	**2940**	**17781**	**7422**	**15342**	**23864**	**18163**	**18686**	**14962**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	2249	2940	17781	7422	15342	23864	18163	18686	14962
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**16286**	**30184**	**18130**	**43444**	**50983**	**55336**	**51782**	**44389**	**51517**
Exports to:									
Total to OECD	**16286**	**30184**	**18130**	**43444**	**50983**	**55336**	**51782**	**44389**	**51517**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	16286	30184	18130	43444	50983	55336	51782	44389	51517
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**51.66**	**73.78**	**98.01**	**108.91**	**103.48**	**118.94**	**126.59**	**128.18**	**129.76**
Nuclear	2.67	5.87	13.54	16.39	10.62	13.35	12.67	12.67	12.67
Hydro	32.38	41.92	55.09	60.30	63.14	69.26	69.54	69.91	69.91
of which: pumped storage	-	-	*0.19*	*0.18*	*0.18*	*0.18*	*0.18*	*0.18*	*0.18*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	0.03	0.10	0.28	0.56
Tide, wave, ocean	-	-	0.02	0.02	0.02 e	0.02	0.02	0.02	0.02
Wind	-	-	-	0.02	0.09	2.37	3.32	3.97	5.27
Other (e.g. fuel cells)	-	-	-	0.05	-	-	-	-	-
Combustible fuels	16.62	25.99	29.36	32.12	29.60	33.91	40.95	41.34	41.34
of which:									
Single-fired:									
Coal and coal products	9.06	12.43	17.71	21.12	..	..	..	..	..
Liquid fuels	3.90	7.53	6.87	7.89	..	..	-	-	-
Natural gas	0.96	3.11	2.56	1.68	..	..	..	..	..
Biofuels & waste	-	0.05	0.28	0.03	-	2.07	2.74	2.98	2.98
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	1.63	1.63	1.53	0.99	..	..	..	..	..
Liquid / natural gas	0.93	1.09	0.43	0.43	..	..	..	..	..
Solid / liquid / gas	0.14	0.14	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	27.21	28.53	25.52	24.09	26.86	25.49	25.49
Internal combustion	-	-	0.52	0.56	0.50	0.48	0.46	0.46	0.46
Gas turbine	-	-	1.64	3.04	3.58	7.27	10.89	12.41	12.41
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	2.07	2.74	2.98	2.98
Peak load	..	..	80.13	80.62	..	..	..	..	..
Available capacity	..	..	97.21	99.04	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**5.87**	**7.86**	**6.13**	**6.60**	**7.85**	**8.67**	**8.81**	**8.93**	**8.93**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	4.40	6.00	4.29	4.45	4.27	5.15	5.15	5.17	5.17
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	1.47	1.86	1.84	2.15	3.58	3.52	3.66	3.76	3.76
of which:									
Single-fired:									
Coal and coal products	0.07	0.36	-	-	-	-	-	-	-
Liquid fuels	0.76	0.77	0.29	0.18	..	0.10	0.13	0.14	0.14
Natural gas	0.63	0.38	0.91	1.00	..	2.30	2.28	2.37	2.37
Biofuels & waste	-	0.36	0.64	0.96	..	1.12	1.25	1.25	1.25
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	1.38	1.65	2.20	1.84	1.93	1.94	1.94
Internal combustion	-	-	0.06	0.04	0.15	0.26	0.30	0.30	0.30
Gas turbine	-	-	0.40	0.45	1.23	1.42	1.43	1.52	1.52
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	3.96	6.60	..	..	..	..	..
Available capacity	..	..	3.95	6.60	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Canadian Dollars/ unit					
Steam coal (t)	37.62	49.49	62.00	26.55	30.85	28.49	31.97	28.54	..
Heavy fuel oil (t)	79.95	93.37	..	178.28	295.83	336.19	439.72	533.74	..
Natural gas (MWh)(1)	4.34	4.25	6.31	17.21	24.24	19.35	18.11	15.71	..
				Canadian Dollars/ toe					
Steam coal	61.73	81.21	101.74	43.57	50.62	46.75	52.46	46.83	..
Heavy fuel oil	83.28	97.26	..	185.71	308.16	350.20	458.04	555.98	..
Natural gas(2)	56.10	54.94	81.52	222.39	313.23	250.05	234.02	203.01	..
End-user prices of electricity									
				Canadian Dollars/ MWh					
Industry									
Price	17.40	22.90	43.70	57.00	74.70	67.20	72.00	..	..
of which: tax	..	..	1.80	6.10	6.60	6.30	6.40	..	..
Household									
Price	27.50	33.20	62.00	78.60	96.10	96.50	97.40	..	..
of which: tax	..	..	1.70	8.00	7.80	8.20	7.70	..	..

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	8.50	9.48	14.01	25.17	30.92	33.57	32.72	3.0	3.9
GDP (billion 2005 USD)	28.43	36.67	53.08	98.66	148.34	157.22	165.95	3.7	5.3
TPES/GDP(1)	0.30	0.26	0.26	0.26	0.21	0.21	0.20	-0.7	-1.3
Population (millions)	10.12	11.19	13.18	15.40	17.09	17.27	17.44	1.6	1.3
TPES/population(2)	0.84	0.85	1.06	1.63	1.81	1.94	1.88	1.4	2.6
TPES/GDP (2005 = 100)	130	112	115	111	90	93	86	-0.7	-1.3
Ele.TFC/GDP(2005=100)(3)	65	68	74	95	94	94	..	0.8	..
Ele.TFC/population(4)	722	873	1176	2388	3203	3356	..	2.9	..
Elec. generated (TWh)(5)	8.77	11.75	18.37	40.08	60.43	65.71	68.39	4.4	6.2

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**8.50**	**9.48**	**14.01**	**25.17**	**30.92**	**33.57**	**32.72**	**3.0**	**3.9**
Coal	1.20	1.22	2.50	3.07	4.56	5.35	5.58	4.4	3.7
Oil	4.97	5.07	6.47	10.48	15.01	15.85	14.93	1.6	3.9
Natural gas	0.53	0.72	1.14	5.21	4.47	4.56	4.24	4.7	6.1
Biofuels & waste	1.32	1.79	3.13	4.73	4.90	5.92	6.22	5.2	3.2
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	-	-	0.03	0.03	0.03	-	-
Hydro	0.48	0.68	0.77	1.59	1.87	1.81 e	1.65	2.8	3.5
Net electricity imports(2)	0.00	-	-	0.10	0.08	0.06	0.06	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**8.8**	**11.8**	**18.4**	**40.1**	**52.5**	**60.4**	**65.7**	**68.4**
Nuclear	-	-	-	-	-	-	-	-
Hydro	5.6	7.9	8.9	18.5	26.5	21.7	21.0 e	19.2
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.0	0.3	0.3	0.4
Combustible fuels	3.2	3.9	9.4	21.6	26.0 e	38.3	44.4	48.8
Coal	*1.2*	*1.9*	*6.5*	*8.5*	*7.2*	*16.9*	*19.6*	*24.0*
Oil	*1.8*	*1.7*	*1.8*	*1.7*	*3.4 e*	*8.5*	*6.4*	*6.2*
Natural gas	*0.1*	*0.2*	*0.2*	*10.4*	*13.6*	*10.7*	*13.7*	*12.5*
Biofuels & waste	*0.1*	*0.1*	*1.0*	*0.9*	*1.8 e*	*2.2*	*4.7*	*6.0*
Other (e.g. fuel cells)	-	-	-	-	-	0.1	-	-
- Own use by power plant	0.2	0.3	0.6	1.2	1.2	2.1	2.5	..
Net production	**8.6**	**11.5**	**17.8**	**38.9**	**51.3**	**58.3**	**63.2**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	7.7	8.9	18.4	25.9 e	21.6	20.9	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	-	0.0 e	0.3	0.3	..
Combustible fuels	..	3.8	8.9	20.5	25.4 e	36.2	41.9	..
Other (e.g. fuel cells)	..	-	-	-	-	0.1	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	0.0	-	-	1.2	2.2	1.0	0.7	0.7
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**8.6**	**11.5**	**17.8**	**40.1**	**53.4**	**59.3**	**63.9**	**..**
- Transmission & distr. losses	1.0	1.4	1.9	2.9	4.5	5.0	4.7	..
- Statistical difference	-0.0	-	0.0	-	-	-1.0	0.7	..
Total consumption	**7.6**	**10.0**	**15.8**	**37.1**	**48.9**	**55.3**	**58.5**	**..**
- Energy industry consumption[2]	0.3	0.3	0.3	0.4	0.6	0.6	0.6	..
Final consumption	**7.3**	**9.8**	**15.5**	**36.8**	**48.3**	**54.7**	**57.9**	**..**
Industry	4.8	6.4	10.2	25.7	32.6	35.9	38.4	..
Transport	0.2	0.2	0.2	0.2	0.3	0.4	0.5	..
Commercial & publ. serv.	1.0	1.4	0.7	4.5	7.1	9.0	9.4	..
Residential	1.2	1.8	4.3	6.2	8.3	9.4	9.5	..
Agriculture & fishing	0.2	0.0	0.1	0.2	0.1	0.1	0.1	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**9.30**	**11.75**	**18.37**	**40.08**	**60.72**	**60.43**	**65.71**	**4.3**	**6.3**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**9.30**	**11.75**	**18.37**	**40.08**	**60.72**	**60.43**	**65.71**	**4.3**	**6.3**
Main activity producers									
Gross production	6.42	8.69	13.74	37.95	55.19	56.76	59.65	4.9	7.2
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	6.42	8.69	13.74	37.95	55.19	56.76	59.65	4.9	7.2
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	5.20	6.56	8.36	18.18	24.80	21.38	20.32	3.0	4.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.08	0.33	0.33	-	-
Coal	1.05	1.88	4.30	8.44	14.90	16.87	19.62	9.2	7.5
Oil	0.17	0.26	0.98	1.13	11.35	7.40	5.53	11.6	8.6
Natural gas	-	-	0.09	10.12	3.83	10.59	13.67	-	26.8
Biofuels & waste	-	-	-	0.08	0.24	0.19	0.18	-	-
Autoproducers									
Gross production	2.88	3.06	4.63	2.13	5.54	3.67	6.06	3.0	1.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	2.88	3.06	4.63	2.13	5.54	3.67	6.06	3.0	1.3
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.16	1.32	0.57	0.33	0.50	0.34	0.69 e	-4.4	1.0
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.10	0.11	0.01	-	-
Coal	0.01	0.01	2.22	0.02 e	-	-	-	38.6	-
Oil	1.56	1.47	0.79	0.58	0.80	1.07	0.82	-4.1	0.2
Natural gas	0.10	0.15	0.10	0.33	0.10	0.10	0.05	-0.4	-3.1
Biofuels & waste	0.05	0.11	0.96	0.86	4.04	2.06	4.49	20.9	7.6

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**2816**	**2990**	**4333**	**1913**	**4958**	**3244**	**5382**	**1.0**
Total energy	**-**	**-**	**-**	**-**	**110**	**78**	**18**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	106	78	18	-
Energy non specified/other	-	-	-	-	4	-	-	-
Total industry	**-**	**-**	**838**	**777**	**4791**	**3143**	**5262**	**9.1**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	37	38	43	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	40	40	55	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	911	755	1065	-
Food and tobacco	-	-	-	-	-	-	-	-
Pulp and printing	-	-	838	777	3794	1955	3871	7.6
Wood and wood products	-	-	-	-	2	1	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	7	354	228	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**2816**	**2990**	**3495**	**1136**	**57**	**23**	**102**	**-15.5**
Commerce and pub. services	-	-	-	-	38	11	81	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	19	12	21	-
Sector non specified	2816	2990	3495	1136	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.96**	**1.14**	**2.37**	**4.63**	**7.31**	**7.73**	**9.25**	**5.4**	**6.7**
Coal	0.31	0.47	1.74	2.19	3.35	3.86	4.79	10.8	4.9
Oil	0.61	0.59	0.48	0.46	2.47	1.75	1.44	-1.5	5.4
Natural gas	0.03	0.04	0.06	1.65	0.76	1.75	2.41	5.5	19.0
Biofuels & waste	0.02	0.04	0.09	0.33	0.73	0.37	0.62	10.3	9.4
of which: ***main activity prod.***									
Total	**..**	**0.55**	**1.49**	**4.09**	**6.39**	**7.19**	**8.47**	**..**	**8.6**
Coal	..	0.46	1.19	2.19	3.35	3.86	4.79	..	6.9
Oil	..	0.09	0.26	0.30	2.27	1.59	1.30	..	8.0
Natural gas	..	-	0.04	1.57	0.72	1.72	2.35	..	21.5
Biofuels & waste	..	-	-	0.03	0.04	0.03	0.02	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**0.48**	**0.68**	**0.77**	**1.59**	**2.18**	**1.90**	**1.84**	**2.8**	**4.2**
Hydro	0.48	0.68	0.77	1.59	2.18	1.87	1.81 e	2.8	4.2
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.01	0.03	0.03	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	661	2481	3132	5849	7423	8563	6.1
Fuel input (TJ)	18791	72712	91796	140284	161435	200383	4.9
Electricity production (GWh)	1825	6525	8467 e	14897	16866	19619	5.4
Brown coal							
Fuel input (1000 t)	40	-	-	-	-	-	-
Fuel input (TJ)	687	-	-	-	-	-	-
Electricity production (GWh)	57	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	96	46	-	-	-	-	-
Electricity production (GWh)	8	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	610	482	507	2381	1695	1514	5.6
Fuel input (TJ)	24801	21545	19493	101865	67729	61833	5.1
Electricity production (GWh)	1732	1768	1705	11533	7617	6355	6.3
Natural gas (1)							
Fuel input (TJ)	1838	2910	76891	34876	80612	112011	19.0
Electricity production (GWh)	153	188	10449	3902	10619	13719	22.7
Wood and other solid waste							
Fuel input (TJ)	1509	-	-	-	-	-	-
Electricity production (GWh)	105	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	3880	8481	20621	30332	35102	39693	7.6

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	114	103	-	-
Fuel input (TJ)	-	-	-	4857	4291	-	-
Electricity production (GWh)	-	-	-	616	853	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	-	-	314	936	-	-
Electricity production (GWh)	-	-	-	28	71	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	3902	13853	30672	15373	25947	9.4
Electricity production (GWh)	-	963	941	4274	2247	4673	7.8
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	-	963	941	4918	3171	4673	7.8
CHP Heat production (TJ)	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**6.52**	**7.29**	**11.10**	**20.39**	**22.52**	**23.84**	**25.18**	**3.2**	**4.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.70	0.57	0.63	0.64	0.27	0.42	0.35	-0.7	-2.7
Oil	3.84	4.03	5.49	9.19	11.65	12.10	12.88	2.1	4.1
Natural gas	0.04	0.10	0.90	3.29	1.45	2.35	1.95	20.2	3.8
Biofuels & waste	1.31	1.76	2.75	4.11	4.50	4.25	5.01	4.5	2.9
Electricity	0.63	0.84	1.33	3.16	4.65	4.71	4.98	4.5	6.5
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**2.31**	**2.78**	**3.41**	**6.65**	**8.21**	**8.72**	**9.67**	**2.3**	**5.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.46	0.44	0.52	0.59	0.24	0.40	0.34	0.7	-2.1
Oil	1.20	1.25	1.34	2.05	3.17	3.04	3.37	0.6	4.5
Natural gas	0.00	0.01	0.00	0.67	0.15	1.10	0.99	3.1	32.1
Biofuels & waste	0.24	0.53	0.67	1.14	1.50	1.09	1.67	6.4	4.4
Electricity	0.41	0.55	0.87	2.21	3.15	3.08	3.31	4.6	6.5
Heat	-	-	-	-	-	-	-	-	-
Transport	**1.84**	**2.09**	**3.05**	**5.67**	**6.89**	**7.14**	**7.27**	**3.0**	**4.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.13	0.05	-	-	-	-	-	-	-
Oil	1.69	2.02	3.02	5.64	6.84	7.09	7.22	3.5	4.2
Natural gas	-	-	0.01	0.01	0.02	0.02	0.02	-	5.4
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.02	0.02	0.02	0.02	0.04	0.04	0.04	0.6	3.9
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.11**	**0.15**	**0.48**	**0.62**	**1.16**	**1.37**	**1.59**	**9.2**	**5.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.02	0.02	0.01	0.02	0.01	0.01	0.01	-2.7	-0.4
Oil	-	-	0.12	0.16	0.33	0.46	0.65	-	8.3
Natural gas	0.01	0.02	0.02	0.06	0.13	0.12	0.12	6.8	8.5
Biofuels & waste	-	-	0.26	0.00	-	-	0.00	-	-23.5
Electricity	0.09	0.12	0.06	0.39	0.68	0.78	0.80	-2.0	13.1
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**2.12**	**2.19**	**3.12**	**4.86**	**5.10**	**5.30**	**5.56**	**2.3**	**2.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.04	0.04	0.06	0.02	0.01	0.01	0.01	2.1	-9.3
Oil	0.87	0.69	0.75	1.09	0.96	0.93	1.00	-0.9	1.4
Natural gas	0.03	0.07	0.13	0.24	0.37	0.39	0.39	8.8	5.4
Biofuels & waste	1.07	1.23	1.81 e	2.98 e	3.00 e	3.16 e	3.34 e	3.1	3.0
Electricity	0.10	0.15	0.37	0.53	0.77	0.80	0.82	8.0	3.8
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**0.02**	**0.00**	**0.13**	**0.19**	**0.17**	**0.29**	**0.38**	**13.2**	**5.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.04	0.01	0.01	0.00	0.00	-	-12.0
Oil	-	-	0.08	0.17	0.15	0.27	0.36	-	7.7
Natural gas	-	-	-	-	0.01	0.00	0.00	-	-
Biofuels & waste	-	-	0.00	-	-	-	-	-	-
Electricity	0.02	0.00	0.01	0.01	0.01	0.01	0.01	-3.9	1.3
Heat	-	-	-	-	-	-	-	-	-
Other	**0.12**	**0.08**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.06	0.02	-	-	-	-	-	-	-
Oil	0.07	0.06	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.01**	**0.01**	**0.92**	**2.40**	**0.99**	**1.02**	**0.71**	**30.79**	**-1.18**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**6.52**	**7.29**	**11.10**	**20.39**	**22.60**	**22.52**	**23.84**	**25.18**
Total industry (Mtoe)	**2.31**	**2.78**	**3.41**	**6.65**	**8.49**	**8.21**	**8.72**	**9.67**
Iron and steel	0.27	0.32	0.14	0.21	0.18	0.17	0.14	0.24
Chem. and petrochemical	0.02	0.02	0.02	0.06	0.06	0.07	0.16	0.16
Non-ferrous metals	0.23	0.30	-	-	-	-	-	0.04
Non-metallic minerals	0.20	0.18	0.16	0.23	0.32	0.31	0.29	0.35
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	0.33	0.41	1.36	2.49	3.29	3.51	4.50	4.35
Food and tobacco	0.09	0.06	-	-	-	-	-	-
Paper, pulp and printing	0.19	0.63	0.67	1.27	1.88	1.91	1.32	1.95
Wood and wood products	-	-	-	-	-	0.00	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other	0.98	0.86	1.06	2.39	2.75	2.25	2.31	2.59
Electricity consumption (Mtoe)	**0.63**	**0.84**	**1.33**	**3.16**	**4.60**	**4.65**	**4.71**	**4.98**
Total industry (Mtoe)	**0.41**	**0.55**	**0.87**	**2.21**	**3.14**	**3.15**	**3.08**	**3.31**
Iron and steel	0.02	0.05	0.03	0.07	0.05	0.04	0.04	0.05
Chem. and petrochemical	0.01	0.02	0.02	0.05	0.05	0.04	0.04	0.03
Non-ferrous metals	0.15	0.20	-	-	-	-	-	-
Non-metallic minerals	0.02	0.02	0.02	0.03	0.05	0.04	0.05	0.04
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	0.03	0.02	0.46	1.17	1.74	1.80	1.88	1.92
Food and tobacco	0.00	0.00	-	-	-	-	-	-
Paper, pulp and printing	0.05	0.08	0.10	0.27	0.46	0.45	0.38	0.46
Wood and wood products	-	-	-	-	-	0.00	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other	0.13	0.16	0.24	0.61	0.78	0.77	0.70	0.80
Total industry (TWh)	**4.76**	**6.41**	**10.15**	**25.68**	**36.51**	**36.59**	**35.85**	**38.43**
Iron and steel	0.28	0.58	0.38	0.85	0.61	0.51	0.46	0.59
Chem. and petrochemical	0.11	0.21	0.26	0.55	0.60	0.48	0.47	0.33
Non-ferrous metals	1.75	2.35	-	-	-	-	-	-
Non-metallic minerals	0.18	0.21	0.27	0.40	0.61	0.51	0.55	0.52
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	0.30	0.24	5.30	13.59	20.28	20.95	21.84	22.29
Food and tobacco	0.05	0.04	-	-	-	-	-	-
Paper, pulp and printing	0.56	0.88	1.21	3.19	5.35	5.19	4.38	5.40
Wood and wood products	-	-	-	-	-	0.00	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other	1.52	1.91	2.73	7.10	9.07	8.95	8.16	9.31

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**-**	**-**	**-**	**-**	**1190**	**1154**	**1348**	**958**	**732**
Imports from:									
Total from OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**1190**	**1154**	**1348**	**958**	**732**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**3.91**	**5.20**	**9.30**	**12.84**	**14.42**	**14.93**	**16.30**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	2.58	3.49	4.35	5.35	5.36	5.38	5.87
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.02	0.16	0.16	0.18
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	1.33	1.70	4.95	7.47	8.89	9.39	10.24
of which:									
Single-fired:									
Coal and coal products	-	-	0.48	0.48	0.63	0.63	0.63	0.87	1.36
Liquid fuels	-	-	0.42	0.46	0.56	1.12	2.08	2.18	2.22
Natural gas	-	-	0.02	0.06	0.07	0.51	0.51	0.51	0.51
Biofuels & waste	-	-	-	0.02	0.02	0.08	0.10	0.11	0.13
Multi-fired:									
Solid / liquid	-	-	0.41	0.68	1.30	1.38	1.52	1.66	1.97
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	2.37	3.76	4.06	4.06	4.06
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	-	-	-	-	-	-	-
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	5.50	7.69	7.74	8.10	8.56
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**1.19**	**0.66**	**0.59**	**1.18**	**1.31**	**1.30**	**1.28**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.10	0.10	0.08	0.09	0.09	0.08	0.08
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	0.03	0.03	0.03
Combustible fuels	-	-	1.09	0.56	0.51	1.10	1.20	1.19	1.18
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	0.03	-	-
Liquid fuels	-	-	-	-	-	-	0.64	0.66	0.65
Natural gas	-	-	-	-	-	-	0.14	0.11	0.11
Biofuels & waste	-	-	-	-	-	-	0.39	0.42	0.42
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	-	-	-	-	-	-	-
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				1000 Chilean Pesos/ unit					
Steam coal (t)	..	..	..	17.49	61.08	53.34	42.65	51.66	46.82
Heavy fuel oil (t)	..	..	..	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				1000 Chilean Pesos/ toe					
Steam coal	..	..	..	25	87	76	61	74	67
Heavy fuel oil	..	..	..	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				1000 Chilean Pesos/ MWh					
Industry									
Price	..	..	..	25.66	89.35	88.01	77.29	74.61	61.57
of which: tax	..	..	..	-	-	-	-	-	-
Household									
Price	..	..	12.57	46.08	119.63	119.16	106.50	101.90	90.09
of which: tax	..	..	..	7.03	19.10	19.03	17.00	16.27	14.38

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	45.16	46.95	49.57	40.99	44.04	43.43	42.82	0.5	-0.7
GDP (billion 2005 USD)	74.97	88.92	101.03	106.45	148.48	151.18	149.31	1.8	1.8
TPES/GDP(1)	0.60	0.53	0.49	0.39	0.30	0.29	0.29	-1.2	-2.4
Population (millions)	9.92	10.33	10.36	10.27	10.52	10.50	10.51	0.3	0.1
TPES/population(2)	4.55	4.55	4.78	3.99	4.19	4.14	4.08	0.3	-0.7
TPES/GDP (2005 = 100)	174	153	142	111	86	83	83	-1.2	-2.4
Ele.TFC/GDP(2005=100)(3)	93	100	112	109	91	88	..	1.1	..
Ele.TFC/population(4)	2974	3668	4651	4809	5442	5399	..	2.7	..
Elec. generated (TWh)(5)	41.17	52.66	62.27	72.91	85.32	86.75	86.86	2.5	1.5

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**45.16**	**46.95**	**49.57**	**40.99**	**44.04**	**43.43**	**42.82**	**0.5**	**-0.7**
Coal	35.58	33.45	31.47	21.58	18.43	18.34	17.44	-0.7	-2.6
Oil	8.66	10.84	8.73	7.72	8.96	8.72	8.66	0.0	-0.0
Natural gas	1.02	2.59	5.25	7.50	7.59	7.21	6.81	10.1	1.2
Biofuels & waste	-	-	0.81	1.37	2.65	2.81	3.00	-	6.1
Nuclear	-	-	3.28	3.54	7.32	7.39	7.93	-	4.1
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	-	-	0.09	0.23	0.24	-	-
Hydro	0.09	0.21	0.10	0.15	0.24	0.17	0.19	0.4	3.0
Net electricity imports(2)	-0.19	-0.13	-0.06	-0.86	-1.29	-1.47	-1.47	-6.6	15.7
Heat	-	-	-	-0.00	0.03	0.03	0.03	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**41.2**	**52.7**	**62.6**	**73.5**	**82.6**	**85.9**	**87.5**	**87.6**
Nuclear	-	-	12.6	13.6	24.7	28.0	28.3	30.3
Hydro	1.1	2.4	1.4	2.3	3.0	3.4	2.7	3.0
of which:								
pumped storage production	*-*	*-*	*0.3*	*0.6*	*0.6*	*0.6*	*0.7*	*0.7*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.6	2.2	2.2
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.0	0.3	0.4	0.4
Combustible fuels	40.1	50.3	48.5	57.6	54.8	53.6	53.9	51.7
Coal	*35.1*	*44.6*	*47.6*	*54.8*	*52.3*	*50.2*	*49.9*	*46.8*
Oil	*4.7*	*5.0*	*0.5*	*0.4*	*0.3*	*0.2*	*0.1*	*0.1*
Natural gas	*0.4*	*0.6*	*0.4*	*1.7*	*1.5*	*1.1*	*1.2*	*1.5*
Biofuels & waste	*-*	*-*	*-*	*0.7*	*0.7*	*2.2*	*2.8*	*3.4*
Other (e.g. fuel cells)	-	-	-	-	0.0	-	-	-
- Own use by power plant	2.8	3.6	4.4	5.5	6.4	6.4	6.5	..
Net production	**38.4**	**49.1**	**58.1**	**68.0**	**76.2**	**79.5**	**80.9**	**..**
Nuclear	..	-	11.8	12.7	23.3	26.4	26.7	..
Hydro	..	-	1.4	2.3	3.0	3.4	2.7	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	0.6	2.2	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	-	0.0	0.3	0.4	..
Combustible fuels	..	-	44.9	53.0	49.9	48.7	49.0	..
Other (e.g. fuel cells)	..	-	-	-	0.0	-	-	..
- Used for heat pumps	-	-	..	..	..	..	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.1	0.5	0.4	0.7	0.9	0.8	0.9	1.0
+ Imports	2.9	3.7	8.2	8.7	12.4	6.6	10.5	11.6
- Exports	5.1	5.2	8.9	18.7	25.0	21.6	27.5	28.7
Electrical energy supplied	**36.1**	**47.0**	**57.0**	**57.2**	**62.7**	**63.7**	**62.9**	**..**
- Transmission & distr. losses	2.0	3.9	4.0	5.0	5.0	4.5	4.4	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**34.1**	**43.1**	**53.0**	**52.3**	**57.7**	**59.3**	**58.5**	**..**
- Energy industry consumption[2]	4.6	5.3	4.9	2.9	2.4	2.0	1.9	..
Final consumption	**29.5**	**37.9**	**48.2**	**49.4**	**55.3**	**57.2**	**56.7**	**..**
Industry	18.8	22.3	26.9	18.9	23.1	22.6	23.1	..
Transport	1.9	2.3	3.2	2.3	2.2	2.2	2.3	..
Commercial & publ. serv.	2.0	3.3	3.6	11.6	12.5	14.0	13.8	..
Residential	3.9	6.2	9.6	13.8	14.7	15.0	14.2	..
Agriculture & fishing	1.5	2.1	2.9	1.2	1.0	1.1	1.1	..
Sector non specified	1.4	1.8	1.9	1.6	1.7	2.3	2.2	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**43.14**	**52.66**	**62.56**	**73.47**	**82.25**	**85.91**	**87.45**	**2.4**	**1.6**
- Hydro pumped storage	-	-	*0.29*	*0.56*	*0.55*	*0.59*	*0.70*	-	*4.3*
Total generation(1)	**43.14**	**52.66**	**62.27**	**72.91**	**81.70**	**85.32**	**86.75**	**2.3**	**1.6**
Main activity producers									
Gross production	43.09	52.54	55.23	62.99	73.34	76.60	79.33	1.6	1.7
- Hydro pumped storage	-	-	*0.29*	*0.56*	*0.55*	*0.59*	*0.70*	-	*4.3*
Total generation(1)	43.09	52.54	54.95	62.44	72.79	76.01	78.62	1.5	1.7
Nuclear	-	-	12.59	13.59	27.21	28.00	28.28	-	3.9
Hydro	1.77	2.28	1.11	1.37	1.86	2.10	1.46	-2.9	1.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.38	0.95	2.58	-	-
Coal	35.23	44.63	40.61	46.35	41.78	43.15	44.26	0.9	0.4
Oil	5.69	5.03	0.41	0.13	0.11	0.11	0.06	-15.2	-8.7
Natural gas	0.40	0.60	0.23	0.83	0.59	0.74	0.87	-3.4	6.5
Biofuels & waste	-	-	-	0.18	0.87	0.96	1.11	-	-
Autoproducers									
Gross production	0.05	0.12	7.33	10.48	8.91	9.31	8.13	36.6	0.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.05	0.12	7.33	10.48	8.91	9.31	8.13	36.6	0.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.05	0.12	0.05	0.39	0.57	0.69	0.50	-0.3	11.8
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	-	-	6.99	8.43	6.92	7.02	5.63	-	-1.0
Oil	-	-	0.13	0.24	0.05	0.05	0.04	-	-5.6
Natural gas	-	-	0.16	0.86	0.39	0.33	0.30	-	3.2
Biofuels & waste	-	-	-	0.55	0.98	1.23	1.66	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**-**	**-**	**6875**	**9937**	**8101**	**8468**	**7433**	**0.4**
Total energy	**-**	**-**	**6875**	**2980**	**3407**	**3794**	**3481**	**-3.2**
Coal mines	-	-	-	2980	3393	3586	3249	-
Oil and gas extraction	-	-	-	-	-	193	217	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	14	15	15	-
Energy non specified/other	-	-	6875	-	-	-	-	-
Total industry	**-**	**-**	**-**	**4021**	**4067**	**3693**	**3226**	**-**
Iron and steel	-	-	-	1393	1039	322	364	-
Chemical and petrochemical	-	-	-	1595	1818	1821	1513	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	7	2	-	-	-
Transport equipment	-	-	-	-	4	6	4	-
Machinery	-	-	-	40	36	72	73	-
Mining and quarrying	-	-	-	-	-	11	15	-
Food and tobacco	-	-	-	64	63	67	65	-
Pulp and printing	-	-	-	624	772	768	790	-
Wood and wood products	-	-	-	1	1	3	2	-
Construction	-	-	-	-	12	13	19	-
Textile and leather	-	-	-	31	4	5	5	-
Non specified/other industries	-	-	-	266	316	605	376	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**-**	**2936**	**627**	**981**	**726**	**-**
Commerce and pub. services	-	-	-	-	34	35	40	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	13	49	41	-
Sector non specified	-	-	-	2936	580	897	645	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**71602**	**154981**	**139216**	**139236**	**130340**	**123317**	**122609**	**-1.1**
Nuclear	-	-	-	1096	1067	919	981	-
Geothermal	-	-	-	-	-	-	-	-
Coal	25061	121106	88830	89434	90343	84381	83744	-1.7
Oil	7160	11846	7217	5668	1813	1357	1355	-9.8
Natural gas	39381	22029	35429	37446	30831	29010	28824	1.3
Biofuels & waste	-	-	7740	5280	4727	5986	6035	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	20	1127	1209	1210	-
Heat pumps	-	-	-	-	111	122	120	-
Electric boilers	-	-	-	-	1	1	1	-
Other sources(1)	-	-	-	292	320	332	339	-
of which:								
Main activity producers								
Total	71602	110127	113415	115672	116005	109339	..	-0.0
Nuclear	-	-	-	1096	1067	919	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	25061	86298	78855	77273	82629	78070	..	-0.5
Oil	7160	8436	4409	4147	1316	1004	..	-9.6
Natural gas	39381	15393	28449	31236	27575	26064	..	2.5
Biofuels & waste	-	-	1702	1628	2987	2849	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	110	100	..	-
Electric boilers	-	-	-	-	1	1	..	-
Other sources(1)	-	-	-	292	320	332	..	-
Autoproducers								
Total	-	44854	25801	23564	14335	13978	..	-5.4
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	34808	9975	12161	7714	6311	..	-7.8
Oil	-	3410	2808	1521	497	353	..	-10.2
Natural gas	-	6636	6980	6210	3256	2946	..	-3.8
Biofuels & waste	-	-	6038	3652	1740	3137	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	20	1127	1209	..	-
Heat pumps	-	-	-	-	1	22	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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CZECH REPUBLIC
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**9.60**	**13.49**	**15.53**	**16.83**	**15.37**	**16.21**	**16.39**	**2.9**	**0.3**
Coal	8.32 e	10.82 e	14.35 e	14.88	13.75	14.47	14.57	3.3	0.1
Oil	1.15	1.45	0.51	0.30	0.14	0.10	0.07	-4.6	-8.9
Natural gas	0.13	1.22	0.66	1.24	0.96	1.03	0.99	9.8	2.0
Biofuels & waste	-	-	-	0.41	0.52	0.61	0.75	-	-
of which: ***main activity prod.***									
Total	**..**	**13.49**	**12.99**	**14.35**	**13.23**	**14.12**	**14.44**	**..**	**0.5**
Coal	..	10.82 e	12.17 e	13.23	12.10	12.87	13.22	..	0.4
Oil	..	1.45	0.38	0.14	0.10	0.06	0.04	..	-9.8
Natural gas	..	1.22	0.45	0.88	0.75	0.85	0.82	..	3.0
Biofuels & waste	..	-	-	0.10	0.29	0.33	0.36	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**3.28**	**3.54**	**7.12**	**7.37**	**7.58**	**-**	**4.1**
Nuclear	-	-	3.28	3.54	7.11	7.32	7.39	-	3.9
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	0.05	0.19	-	-
Non-Thermal									
Total	**0.09**	**0.21**	**0.10**	**0.15**	**0.23**	**0.27**	**0.20**	**0.4**	**3.4**
Hydro	0.09	0.21	0.10	0.15	0.21	0.24	0.17	0.4	2.5
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.02	0.03	0.03	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	1964	1378	674	1237	1243	-2.2
Fuel input (TJ)	-	41243	28467	16082	26154	26730	-2.0
Electricity production (GWh)	-	3991	2814	1643	2358	2598	-2.0
Brown coal							
Fuel input (1000 t)	37564	29675	29340	25663	26592	26303	-0.6
Fuel input (TJ)	450773	326932	349630	298265	313856	312047	-0.2
Electricity production (GWh)	44100	33021	34452	29585	31074	30284	-0.4
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	9470	148	-	80	107	10	-12.0
Electricity production (GWh)	526	15	-	7	10	1	-12.1
Petroleum products							
Fuel input (1000 t)	1299	61	57	11	7	6	-10.5
Fuel input (TJ)	53269	2442	2293	440	301	216	-10.9
Electricity production (GWh)	5031	210	180	39	27	20	-10.6
Natural gas (1)							
Fuel input (TJ)	7714	312	2106	381	649	634	3.4
Electricity production (GWh)	600	41	217	36	63	68	2.4
Wood and other solid waste							
Fuel input (TJ)	-	-	1513	5292	6588	7939	-
Electricity production (GWh)	-	-	135	522	594	757	-
Industrial waste							
Fuel input (TJ)	-	-	68	-	-	-	-
Electricity production (GWh)	-	-	13	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	473	-	-
Electricity production (GWh)	-	-	-	-	18	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	238	2147	2889	4383	-
Electricity production (GWh)	-	-	27	242	361	550	-
Total combustible fuels(2)							
Electricity production (GWh)	50257	37278	37838	32074	34505	34278	-0.4

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	2562	2366	2820	2591	2432	-0.2
Fuel input (TJ)	..	53804	57946	65615	61092	56864	0.3
Electricity production (GWh)	..	1743	2701	3940	3704	3095	2.8
CHP Heat production (TJ)	..	31707	24030	29041	28559	22763	-1.6
Brown coal							
Fuel input (1000 t)	..	12972	11223	11702	12067	12764	-0.1
Fuel input (TJ)	..	145140	151140	165943	169507	179699	1.0
Electricity production (GWh)	..	8265	12594	10787	9977	11036	1.4
CHP Heat production (TJ)	..	67623	51761	47444	51167	50819	-1.4
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	11443	24367	27728	32739	32987	5.2
Electricity production (GWh)	..	565	2216	2733	3038	2874	8.1
CHP Heat production (TJ)	..	5391	3577	3550	6820	7674	1.7
Petroleum products							
Fuel input (1000 t)	..	278	155	89	75	57	-7.3
Fuel input (TJ)	..	10978	6383	3669	3027	2270	-7.2
Electricity production (GWh)	..	330	192	117	132	79	-6.6
CHP Heat production (TJ)	..	6856	3705	1419	1132	929	-9.1
Natural gas(1)							
Fuel input (TJ)	..	9200	30168	18270	18180	21039	4.0
Electricity production (GWh)	..	344	1474	939	1010	1103	5.7
CHP Heat production (TJ)	..	6145	13468	8042	8236	9562	2.1
Wood and other solid waste							
Fuel input (TJ)	..	-	6111	8090	8869	9382	-
Electricity production (GWh)	..	-	247	874	898	929	-
CHP Heat production (TJ)	..	-	2934	1237	1555	1765	-
Industrial waste							
Fuel input (TJ)	..	-	4824	32	322	776	-
Electricity production (GWh)	..	-	188	2	2	5	-
CHP Heat production (TJ)	..	-	2292	4	23	71	-
Municipal waste							
Fuel input (TJ)	..	-	2700	815	1305	4141	-
Electricity production (GWh)	..	-	5	18	40	150	-
CHP Heat production (TJ)	..	-	1664	698	781	2356	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	1094	1715	2166	3127	-
Electricity production (GWh)	..	-	108	199	275	379	-
CHP Heat production (TJ)	..	-	310	169	206	300	-
Total combustible fuels(2)							
Electricity production (GWh)	..	11247	19725	19609	19076	19650	2.7
CHP Heat production (TJ)	..	117722	103741 e	91604	98479	96239	-1.0

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	413	158	53	55	47	-9.8
Fuel input (TJ)	-	8750	3672	955	1018	947	-10.0
Heat production (TJ)	-	6043	2446	795	866	804	-9.2
Brown coal							
Fuel input (1000 t)	2611	1063	587	204	235	199	-7.7
Fuel input (TJ)	31326	12662	8365	3094	3700	3022	-6.6
Heat production (TJ)	25061	9280	6194	2397	2931	2321	-6.4
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	1404	1082	-	-	-	-
Heat production (TJ)	-	1062	822	-	-	-	-
Petroleum products							
Fuel input (1000 t)	218	198	102	46	22	13	-12.2
Fuel input (TJ)	8950	8017	4178	1852	887	555	-11.9
Heat production (TJ)	7160	4990	3512	1428	681	428	-11.0
Natural gas(1)							
Fuel input (TJ)	49226	21118	25590	26023	28879	24473	0.7
Heat production (TJ)	39381	15884	21961	20409	22595	19448	1.0
Wood and other solid waste							
Fuel input (TJ)	-	-	350	1175	1136	1463	-
Heat production (TJ)	-	-	285	850	903	1223	-
Industrial waste							
Fuel input (TJ)	-	-	213	224	657	400	-
Heat production (TJ)	-	-	181	161	236	268	-
Municipal waste							
Fuel input (TJ)	-	-	-	2342	1129	-	-
Heat production (TJ)	-	-	-	1686	973	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	95	12	59	4	-
Heat production (TJ)	-	-	74	6	50	3	-
Total combustible fuels(2)							
Heat production (TJ)	71602	37259	35475	27732	29235	24495	-2.0

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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CZECH REPUBLIC
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**31.35**	**34.66**	**34.30**	**25.69**	**25.82**	**27.03**	**25.96**	**0.5**	**-1.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.01	0.01	0.01	-	-
Coal	20.25	19.63	13.95	4.66	2.95	2.90	2.92	-2.2	-7.2
Oil	7.75	9.23	8.20	7.29	8.76	8.57	8.33	0.3	0.1
Natural gas	0.81	1.18	4.24	5.91	5.46	6.35	5.68	10.2	1.4
Biofuels & waste	-	-	0.81	0.96	1.85	2.04	2.05	-	4.5
Electricity	2.54	3.26	4.14	4.25	4.72	4.92	4.87	2.9	0.8
Heat	-	1.37	2.96	2.62	2.07	2.25	2.10	-	-1.6
of which:									
Total industry	**17.63**	**18.76**	**15.91**	**9.12**	**7.41**	**7.84**	**7.76**	**-0.6**	**-3.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	11.43	11.69	7.21	3.32	2.13	1.99	2.10	-2.7	-5.7
Oil	4.12	4.87	2.89	0.65	0.43	0.47	0.42	-2.1	-8.7
Natural gas	0.46	0.28	2.42	2.60	1.92	2.29	2.11	10.3	-0.6
Biofuels & waste	-	-	-	0.14	0.53	0.54	0.52	-	-
Electricity	1.61	1.91	2.32	1.63	1.88	1.94	1.99	2.1	-0.7
Heat	-	-	1.08	0.78	0.53	0.60	0.62	-	-2.6
Transport	**2.17**	**2.30**	**2.59**	**4.24**	**6.22**	**5.92**	**5.95**	**1.1**	**4.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.12	0.10	-	-	0.00	0.00	0.00	-	-
Oil	1.89	2.00	2.32	3.94	5.78	5.43	5.38	1.2	4.1
Natural gas	-	-	-	0.03	0.07	0.07	0.07	-	-
Biofuels & waste	-	-	-	0.06	0.20	0.23	0.30	-	-
Electricity	0.16	0.20	0.27	0.20	0.18	0.19	0.19	3.1	-1.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.62**	**1.58**	**3.03**	**2.98**	**2.94**	**3.12**	**3.02**	**9.8**	**-0.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.28 e	0.23 e	1.46 e	0.24	0.02	0.03	0.03	10.3	-17.0
Oil	-	0.09	0.05	0.01	0.01	0.01	0.01	-	-6.2
Natural gas	0.17	0.44	0.73	1.10	1.25	1.38	1.29	8.9	2.7
Biofuels & waste	-	-	-	0.02	0.06	0.07	0.07	-	-
Electricity	0.17	0.28	0.31	0.99	1.17	1.20	1.19	3.6	6.6
Heat	-	0.54	0.47	0.61	0.42	0.44	0.43	-	-0.4

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**7.04**	**7.45**	**8.74**	**6.04**	**6.02**	**6.61**	**5.88**	**1.3**	**-1.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	0.01	0.01	-	-
Coal	6.50 e	5.63 e	4.85 e	0.78	0.54	0.57	0.51	-1.7	-10.2
Oil	0.05	0.09	0.09	0.08	0.01	0.00	0.00	3.6	-13.2
Natural gas	0.15	0.38	0.92	2.05	2.06	2.38	2.00	11.2	3.8
Biofuels & waste	-	-	0.81	0.73	1.04	1.16	1.11	-	1.5
Electricity	0.34	0.53	0.83	1.19	1.26	1.29	1.22	5.4	1.9
Heat	-	0.83	1.25	1.21	1.11	1.20	1.04	-	-0.9
Agriculture & fishing	**1.11**	**1.48**	**1.54**	**0.66**	**0.51**	**0.55**	**0.55**	**1.9**	**-4.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.50 e	0.41 e	0.42 e	0.05	0.01	0.01	0.01	-1.0	-16.1
Oil	0.45	0.81	0.52	0.42	0.33	0.33	0.33	0.8	-2.1
Natural gas	0.03	0.08	0.18	0.07	0.05	0.06	0.05	10.9	-5.5
Biofuels & waste	-	-	-	0.00	0.03	0.04	0.05	-	-
Electricity	0.13	0.18	0.25	0.10	0.08	0.09	0.09	3.9	-4.7
Heat	-	-	0.16	0.02	0.01	0.01	0.01	-	-11.5
Other	**1.63**	**1.84**	**0.76**	**0.52**	**0.22**	**0.28**	**0.27**	**-4.4**	**-4.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	1.42 e	1.56 e	-	0.26	0.00	0.00	0.00	-	-
Oil	0.09	0.13	0.60	0.06	0.02	0.02	0.02	11.6	-15.3
Natural gas	-	-	-	0.06	0.05	0.06	0.05	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.12	0.15	0.16	0.13	0.15	0.20	0.19	1.9	0.7
Heat	-	-	-	-	0.00	0.00	0.00	-	-
Non-energy use(1)	**1.15**	**1.25**	**1.73**	**2.14**	**2.49**	**2.70**	**2.53**	**2.45**	**1.83**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**31.35**	**34.66**	**34.30**	**25.69**	**27.19**	**25.82**	**27.03**	**25.96**
Total industry (Mtoe)	**17.63**	**18.76**	**15.91**	**9.12**	**7.99**	**7.41**	**7.84**	**7.76**
Iron and steel	2.38	2.71	3.95	2.15	1.74	1.58	1.52	1.69
Chem. and petrochemical	0.79	0.66	0.66	1.58	1.33	1.51	1.63	1.54
Non-ferrous metals	0.00	0.00	0.06	0.08	0.07	0.06	0.06	0.06
Non-metallic minerals	0.38	0.47	0.58	1.15	1.25	0.98	1.03	1.00
Transport equipment	0.42	0.35	0.26	0.30	0.41	0.38	0.44	0.45
Machinery	0.82	0.68	0.57	0.66	0.79	0.67	0.72	0.68
Mining and quarrying	0.04	0.03	0.03	0.06	0.07	0.06	0.08	0.07
Food and tobacco	0.40	0.35	0.38	0.78	0.60	0.55	0.57	0.58
Paper, pulp and printing	0.92	0.77	0.37	0.48	0.61	0.59	0.61	0.60
Wood and wood products	0.15	0.13	0.08	0.09	0.22	0.21	0.22	0.19
Construction	0.21	0.18	0.09	0.31	0.23	0.20	0.20	0.18
Textile and leather	1.16	0.97	0.37	0.30	0.18	0.13	0.14	0.13
Non specified/other	9.95	11.47	8.50	1.17	0.49	0.50	0.63	0.59
Electricity consumption (Mtoe)	**2.54**	**3.26**	**4.14**	**4.25**	**4.99**	**4.72**	**4.92**	**4.87**
Total industry (Mtoe)	**1.61**	**1.91**	**2.32**	**1.63**	**2.09**	**1.88**	**1.94**	**1.99**
Iron and steel	-	-	0.44	0.26	0.27	0.27	0.26	0.26
Chem. and petrochemical	-	-	0.30	0.27	0.31	0.29	0.31	0.31
Non-ferrous metals	-	-	0.06	0.02	0.03	0.02	0.02	0.02
Non-metallic minerals	-	-	0.22	0.18	0.23	0.17	0.18	0.19
Transport equipment	-	-	0.11	0.09	0.20	0.19	0.21	0.23
Machinery	-	-	0.35	0.20	0.34	0.27	0.29	0.30
Mining and quarrying	-	-	0.02	0.01	0.03	0.02	0.02	0.02
Food and tobacco	-	-	0.12	0.12	0.15	0.14	0.15	0.15
Paper, pulp and printing	-	-	0.13	0.14	0.16	0.15	0.14	0.13
Wood and wood products	-	-	0.04	0.03	0.05	0.04	0.04	0.04
Construction	-	-	0.05	0.03	0.04	0.04	0.04	0.04
Textile and leather	-	-	0.15	0.10	0.08	0.06	0.06	0.06
Non specified/other	1.61	1.91	0.32	0.19	0.21	0.21	0.23	0.24
Total industry (TWh)	**18.77**	**22.25**	**26.92**	**18.94**	**24.35**	**21.82**	**22.59**	**23.12**
Iron and steel	-	-	5.13	3.00	3.15	3.11	3.07	3.02
Chem. and petrochemical	-	-	3.52	3.20	3.63	3.40	3.58	3.62
Non-ferrous metals	-	-	0.65	0.28	0.31	0.26	0.19	0.22
Non-metallic minerals	-	-	2.56	2.04	2.66	2.00	2.07	2.20
Transport equipment	-	-	1.22	1.02	2.32	2.24	2.40	2.64
Machinery	-	-	4.12	2.33	4.00	3.10	3.38	3.51
Mining and quarrying	-	-	0.22	0.17	0.33	0.26	0.24	0.25
Food and tobacco	-	-	1.43	1.38	1.72	1.63	1.70	1.70
Paper, pulp and printing	-	-	1.55	1.60	1.83	1.72	1.61	1.57
Wood and wood products	-	-	0.50	0.34	0.55	0.48	0.49	0.46
Construction	-	-	0.58	0.32	0.48	0.49	0.48	0.43
Textile and leather	-	-	1.77	1.12	0.90	0.70	0.70	0.73
Non specified/other	18.77	22.25	3.67	2.16	2.47	2.43	2.69	2.77

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**2926**	**3708**	**8179**	**6722**	**8725**	**8520**	**8586**	**6642**	**10457**
Imports from:									
Total from OECD	**-**	**901**	**8179**	**6722**	**8725**	**6841**	**7095**	**5354**	**8342**
Austria	-	28	34	9	2	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	45	267	281	231	-	-	-	145
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	828	7878	4800	7220	6841	7095	5354	8197
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	1632	1272	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**2926**	**2807**	**-**	**-**	**-**	**1679**	**1491**	**1288**	**2115**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**5135**	**5216**	**8871**	**6304**	**18742**	**19989**	**22230**	**21590**	**27501**
Exports to:									
Total to OECD	**-**	**2315**	**8730**	**6304**	**18742**	**18342**	**20745**	**20266**	**25393**
Austria	-	681	2980	2082	5481	6449	6599	6292	9969
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	255	2641	2263	8932	6613	7721	8834	7668
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	4	13	203	64	1	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	1375	3096	1756	4265	5279	6425	5140	7756
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**5135**	**2901**	**141**	**-**	**-**	**1647**	**1485**	**1324**	**2108**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**13.35**	**12.27**	**12.95**	**15.76**	**16.14**	**17.97**	**18.29**
Nuclear	-	-	1.76	1.76	1.76	3.76	3.83	3.90	3.97
Hydro	-	-	1.36	1.37	2.00	2.02	2.02	2.02	2.02
of which: pumped storage	*-*	*-*	*-*	*0.49*	*1.15*	*1.15*	*1.15*	*1.15*	*1.15*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.04	0.47	1.73	1.91
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.15	0.19	0.21	0.21
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	10.23	9.14	9.19	9.78	9.63	10.11	10.18
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	10.23	9.14	9.19	9.78	9.63	10.11	10.18
Type of generation									
Steam	-	-	10.23	9.14	8.98	9.40	9.24	9.71	9.70
Internal combustion	-	-	-	-	-	0.04	0.04	0.05	0.07
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	0.21	0.34	0.34	0.34	0.40
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	9.60	8.83	10.13	10.88	11.16	11.20	10.90
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**1.93**	**1.53**	**2.37**	**1.95**	**2.19**	**1.86**	**1.89**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.05	0.03	0.09	0.15	0.16	0.17	0.17
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	1.88	1.50	2.28	1.80	2.03	1.69	1.71
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	1.88	1.50	2.28	1.80	2.03	1.69	1.71
Type of generation									
Steam	-	-	1.88	1.46	1.88	1.29	1.51	1.06	1.05
Internal combustion	-	-	-	0.05	0.03	0.01	0.01	0.01	0.02
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	0.36	0.50	0.50	0.61	0.65
Other	-	-	-	-	0.01	-	-	-	-
Peak load	..	..	..	1.11	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Czech Crowns/ unit					
Steam coal (t)	54	60	134	308	c	c	c	c	c
Heavy fuel oil (t)	1020	1020	2718	4307	7487	c	c	c	c
Natural gas (MWh)(1)	..	..	187	486	..	..	..	..	..
				Czech Crowns/ toe					
Steam coal	212	235	525	1208	c	c	c	c	c
Heavy fuel oil	1070	1070	2851	4518	7855	c	c	c	c
Natural gas(2)	..	..	2412	6278	..	..	..	..	..
End-user prices of electricity									
				Czech Crowns/ MWh					
Industry									
Price	..	..	530.00	1660.00	2583.30	2813.30	2745.30	2823.69	2830.55
of which: tax	..	..	-	-	28.30	28.30	28.30	28.30	28.30
Household									
Price	495.00	550.00	480.00	2100.00	3270.00	3660.00	3540.00	3720.00	3887.00
of which: tax	-	-	-	379.00	552.00	614.00	620.00	650.00	678.00

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	18.99	19.14	17.36	18.63	19.31	18.00	17.04	-0.5	-0.1
GDP (billion 2005 USD)	136.04	152.56	187.36	242.10	257.30	260.14	258.92	1.9	1.5
TPES/GDP(1)	0.14	0.13	0.09	0.08	0.08	0.07	0.07	-2.4	-1.5
Population (millions)	5.02	5.12	5.14	5.34	5.55	5.57	5.59	0.1	0.4
TPES/population(2)	3.78	3.73	3.38	3.49	3.48	3.23	3.05	-0.7	-0.5
TPES/GDP (2005 = 100)	190	171	126	105	102	94	90	-2.4	-1.5
Ele.TFC/GDP(2005=100)(3)	91	109	117	103	96	93	..	1.5	..
Ele.TFC/population(4)	3207	4222	5520	6082	5794	5639	..	3.2	..
Elec. generated (TWh)(5)	19.12	26.77	25.98	36.05	38.79	35.17	30.40	1.8	0.7

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**18.99**	**19.14**	**17.36**	**18.63**	**19.31**	**18.00**	**17.04**	**-0.5**	**-0.1**
Coal	1.93	5.88	6.09	3.99	3.81	3.23	2.45	7.0	-4.1
Oil	16.72	12.72	7.65	8.02	6.90	6.52	6.11	-4.5	-1.0
Natural gas	0.00	0.00	1.82	4.45	4.42	3.72	3.47	65.0	3.0
Biofuels & waste	0.35	0.64	1.14	1.75	3.57	3.54	3.63	7.1	5.4
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	0.00	0.00	0.01	0.01	0.01	-	8.5
Solar, wind, tide(1)	-	0.00	0.05	0.37	0.69	0.86	0.91	-	13.6
Hydro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.9	-2.2
Net electricity imports(2)	-0.02	-0.11	0.61	0.06	-0.10	0.11	0.45	-	-1.4
Heat	-	-	0.00	0.00	0.00	0.00	0.00	-	0.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**19.1**	**26.8**	**26.0**	**36.1**	**36.2**	**38.8**	**35.2**	**30.4**
Nuclear	-	-	-	-	-	-	-	-
Hydro	0.0	0.0	0.0	0.0	0.0	0.0	0.0	0.0
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.0	0.0	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	0.0	0.6	4.2	6.6	7.8	9.8	10.3
Combustible fuels	19.1	26.7	25.3	31.7	29.6	31.0	25.4	20.1
Coal	*6.8*	*21.9*	*23.6*	*16.7*	*15.5*	*17.0*	*14.0*	*10.6*
Oil	*12.3*	*4.8*	*0.9*	*4.4*	*1.4*	*0.8*	*0.5*	*0.4*
Natural gas	-	-	*0.7*	*8.8*	*8.8*	*7.9*	*5.8*	*4.2*
Biofuels & waste	-	-	*0.2*	*1.9*	*4.0*	*5.3*	*5.1*	*4.9*
Other (e.g. fuel cells)	-	-	-	0.0	-	-	-	-
- Own use by power plant	1.1	1.6	1.7	1.6	1.8	2.0	1.7	..
Net production	**18.0**	**25.2**	**24.3**	**34.4**	**34.4**	**36.8**	**33.5**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	0.0	0.0	0.0	0.0	0.0	0.0	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.0	0.0	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	0.0	0.6	4.2	6.6	7.8	9.8	..
Combustible fuels	..	25.1	23.6	30.1	27.8	29.0	23.7	..
Other (e.g. fuel cells)	..	-	-	0.0	-	-	-	..
- Used for heat pumps	-	-	-	0.0	0.0	0.0	0.0	0.0
- Used for electric boilers	-	-	-	-	-	0.0	0.1	0.1
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	1.0	2.0	12.0	8.4	12.9	10.6	11.7	15.9
- Exports	1.2	3.2	4.9	7.8	11.6	11.7	10.4	10.7
Electrical energy supplied	**17.8**	**23.9**	**31.3**	**35.1**	**35.8**	**35.6**	**34.7**	**..**
- Transmission & distr. losses	1.7	2.0	2.5	2.1	1.5	2.6	2.4	..
- Statistical difference	-	-	0.0	0.0	0.0	-	-0.1	..
Total consumption	**16.1**	**22.0**	**28.9**	**33.0**	**34.2**	**33.1**	**32.4**	**..**
- Energy industry consumption[2]	..	0.3	0.5	0.5	0.8	1.0	1.0	..
Final consumption	**16.1**	**21.6**	**28.4**	**32.5**	**33.5**	**32.1**	**31.4**	**..**
Industry	4.6	5.8	8.4	10.0	10.3	8.6	8.5	..
Transport	0.1	0.1	0.2	0.3	0.4	0.4	0.4	..
Commercial & publ. serv.	3.5	6.1	8.3	9.9	10.4	10.8	10.6	..
Residential	6.6	7.4	9.7	10.2	10.4	10.4	10.1	..
Agriculture & fishing	0.9	1.9	1.7	1.9	1.9	1.9	1.8	..
Sector non specified	0.4	0.3	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**18.30**	**26.77**	**25.98**	**36.05**	**36.38**	**38.79**	**35.17**	**2.2**	**1.5**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**18.30**	**26.77**	**25.98**	**36.05**	**36.38**	**38.79**	**35.17**	**2.2**	**1.5**
Main activity producers									
Gross production	17.89	26.40	25.40	33.22	34.28	36.54	33.06	2.2	1.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	17.89	26.40	25.40	33.22	34.28	36.54	33.06	2.2	1.3
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.02	0.03	0.03	0.03	0.02	0.02	0.02	1.0	-2.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	0.01	0.61	4.24	6.72	7.81	9.77	-	14.1
Coal	5.50	21.76	23.39	16.62	17.67	16.97	13.95	9.5	-2.4
Oil	12.36	4.60	0.72	4.14	0.96	0.59	0.27	-16.3	-4.5
Natural gas	-	-	0.61	7.24	6.07	7.12	5.30	-	10.9
Biofuels & waste	-	-	0.05	0.94	2.85	4.04	3.75	-	23.1
Autoproducers									
Gross production	0.42	0.37	0.58	2.83	2.10	2.25	2.11	2.1	6.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.42	0.37	0.58	2.83	2.10	2.25	2.11	2.1	6.3
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.04	0.00	0.01	0.02	-	-
Coal	0.14	0.14	0.17	0.05	0.01	0.01	0.01	1.0	-11.4
Oil	0.27	0.22	0.16	0.30	0.22	0.18	0.18	-3.2	0.4
Natural gas	-	-	0.09	1.53	0.60	0.76	0.51	-	8.8
Biofuels & waste	-	-	0.16	0.91	1.27	1.29	1.39	-	10.8

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**417**	**365**	**581**	**2830**	**2101**	**2250**	**2109**	**6.3**
Total energy	**-**	**-**	**48**	**214**	**142**	**115**	**111**	**4.1**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	25	-	-	-	-
Oil refineries	-	-	48	189	142	115	111	4.1
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**417**	**365**	**451**	**1357**	**560**	**693**	**497**	**0.5**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	40	40	58	243	111	95	80	1.5
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	50	50	42	6	-	-	1	-16.3
Transport equipment	-	-	-	23	21	13	-	-
Machinery	-	-	-	28	4	4	4	-
Mining and quarrying	-	-	20	221	24	150	3	-8.6
Food and tobacco	252	200	190	479	281	320	305	2.3
Pulp and printing	75	75	62	132	99	91	87	1.6
Wood and wood products	-	-	79	175	18	19	16	-7.3
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	27	2	1	1	-
Non specified/other industries	-	-	-	23	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**82**	**1259**	**1399**	**1442**	**1501**	**14.8**
Commerce and pub. services	-	-	82	816	1182	1207	1300	14.1
Residential	-	-	-	50	48	49	49	-
Agriculture and fishing	-	-	-	393	169	186	152	-
Sector non specified	-	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**30806 e**	**92413**	**119162**	**128456**	**150098**	**132186**	**135179**	**1.7**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	48	58	172	212	166	288	6.1
Coal	26981 e	52906	38874	34187	36051	30957	32609	-2.5
Oil	3825 e	5912	3869	6105	4582	2439	2487	-4.1
Natural gas	-	14075	41620	39377	44641	34792	32662	4.4
Biofuels & waste	-	19466	31017	45380	61863	60690	64343	5.6
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	78	72	38	42	23	-
Electric boilers	-	-	-	-	110	215	650	-
Other sources(1)	-	6	3646	3163	2601	2885	2117	34.2
of which:								
Main activity producers								
Total	30806 e	81413	101273	107670	127722	109187	..	1.4
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	48	58	172	212	166	..	6.1
Coal	26981 e	52859	38874	34187	36051	30957	..	-2.5
Oil	3825 e	5773	3410	5723	4250	2162	..	-4.6
Natural gas	-	14059	41055	38600	43754	33991	..	4.3
Biofuels & waste	-	8668	17852	28724	43105	41136	..	7.7
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	110	215	..	-
Other sources(1)	-	6	24	264	240	560	..	24.1
Autoproducers								
Total	-	11000	17889	20786	22376	22999	..	3.6
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	47	-	-	-	-	..	-
Oil	-	139	459	382	332	277	..	3.3
Natural gas	-	16	565	777	887	801	..	20.5
Biofuels & waste	-	10798	13165	16656	18758	19554	..	2.9
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	78	72	38	42	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	3622	2899	2361	2325	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**4.58**	**7.06**	**7.03**	**7.99**	**7.87**	**8.41**	**7.05**	**2.5**	**0.0**
Coal	1.59	5.57	5.69	3.67	3.90	3.76	3.11	7.8	-2.8
Oil	2.80	1.23	0.33	1.05	0.36	0.30	0.17	-11.8	-3.2
Natural gas	-	-	0.44	2.17	1.72	2.04	1.54	-	6.2
Biofuels & waste	0.19	0.26	0.58	1.09	1.89	2.31	2.24	6.6	6.7
of which: ***main activity prod.***									
Total	**..**	**6.76**	**6.60**	**7.06**	**6.99**	**7.49**	**6.16**	**..**	**-0.3**
Coal	..	5.54	5.65	3.66	3.90	3.76	3.10	..	-2.8
Oil	..	1.18	0.29	0.98	0.30	0.24	0.12	..	-4.2
Natural gas	..	-	0.42	1.87	1.59	1.88	1.42	..	6.0
Biofuels & waste	..	0.04	0.24	0.56	1.21	1.62	1.52	..	9.2

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00	0.00	0.00	0.00	-	-
Non-Thermal									
Total	**0.00**	**0.00**	**0.05**	**0.37**	**0.58**	**0.67**	**0.84**	**21.3**	**13.9**
Hydro	0.00	0.00	0.00	0.00	0.00	0.00	0.00	0.9	-2.3
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	0.00	0.05	0.36	0.58	0.67	0.84	-	14.1
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	730	819	-	-	-	-
Fuel input (TJ)	..	18466	20303	-	-	-	-
Electricity production (GWh)	..	1919	2423	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	45	23	22	27	21	-3.6
Fuel input (TJ)	..	1833	940	932	1159	880	-3.4
Electricity production (GWh)	..	167	41	55	94	69	-4.1
Natural gas (1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	27	4	8	17	-
Electricity production (GWh)	..	-	3	1	1	1	-
Total combustible fuels(2)							
Electricity production (GWh)	..	2086	2467	56	95	70	-14.9

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	9218	8439	5372	6632	6439	5330	-2.2
Fuel input (TJ)	228042	213588	133320	163173	157379	129930	-2.3
Electricity production (GWh)	21905	21639	14250	17687	16976	13966	-2.1
CHP Heat production (TJ)	26981 e	47632	38837	34045	35936	30887	-2.0
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	1140	200	1389	294	190	98	-3.3
Fuel input (TJ)	46243	8192	40825	12402	8136	4274	-3.1
Electricity production (GWh)	4819	715	4398	1115	676	383	-2.9
CHP Heat production (TJ)	3825 e	2549	2172	4596	1929	1079	-4.0
Natural gas(1)							
Fuel input (TJ)	-	8088	98249	70767	84170	62444	10.2
Electricity production (GWh)	-	694	8774	6671	7884	5811	10.6
CHP Heat production (TJ)	-	3287	39102	27283	34917	26402	10.4
Wood and other solid waste							
Fuel input (TJ)	-	1224	6150	23917	39987	37946	17.8
Electricity production (GWh)	-	108	411	1987	3314	3064	17.3
CHP Heat production (TJ)	-	319	3189	11420	20561	20151	21.8
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	991	20908	33880	32653	32727	18.1
Electricity production (GWh)	-	62	1236	1760	1659	1729	17.2
CHP Heat production (TJ)	-	460	13117	22211	21080	21342	20.0
Biogases and liquid biofuels							
Fuel input (TJ)	-	498	2179	3261	3327	3195	9.3
Electricity production (GWh)	-	40	206	363	352	342	10.8
CHP Heat production (TJ)	-	105	691	1019	1009	1047	11.6
Total combustible fuels(2)							
Electricity production (GWh)	26724	23258	29275	29583	30861	25295	0.4
CHP Heat production (TJ)	30806	54352	97108	100574	115432	100908	3.0

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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DENMARK
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	231	2	4	5	3	-18.7
Fuel input (TJ)	..	6017	40	104	134	82	-18.5
Heat production (TJ)	..	5274	37	93	115	70	-18.6
Brown coal							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	95	56	43	79	45	-3.5
Fuel input (TJ)	..	3956	2325	1757	3267	1855	-3.5
Heat production (TJ)	..	3363	1697	1297	2653	1360	-4.2
Natural gas(1)							
Fuel input (TJ)	..	12259	2942	9467	10864	9394	-1.3
Heat production (TJ)	..	10788	2518	8516	9724	8390	-1.2
Wood and other solid waste							
Fuel input (TJ)	..	7809	8433	14654	17397	16054	3.5
Heat production (TJ)	..	7054	7700	14015	16524	15196	3.7
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	13567	7911	3366	3363	3543	-6.2
Heat production (TJ)	..	11504	6108	2520	2541	2791	-6.5
Biogases and liquid biofuels							
Fuel input (TJ)	..	30	237	220	185	201	9.5
Heat production (TJ)	..	24	212	192	148	163	9.6
Total combustible fuels(2)							
Heat production (TJ)	..	38007	18272	26633	31705	27970	-1.4

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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DENMARK
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**15.31**	**14.74**	**13.17**	**14.23**	**14.26**	**14.89**	**14.09**	**-0.9**	**0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	0.00	0.00	0.01	0.01	0.01	0.01	-	9.0
Coal	0.46	0.58	0.43	0.31	0.14	0.15	0.16	-0.3	-4.7
Oil	13.31	11.32	6.86	6.57	6.20	6.14	5.86	-3.8	-0.7
Natural gas	-	-	1.12	1.65	1.57	1.74	1.58	-	1.6
Biofuels & waste	0.16	0.39	0.56	0.65	1.19	1.26	1.28	7.6	4.0
Electricity	1.38	1.86	2.44	2.79	2.70	2.76	2.70	3.4	0.5
Heat	-	0.59	1.76	2.25	2.45	2.84	2.50	-	1.7
of which:									
Total industry	**3.35**	**3.15**	**2.69**	**2.94**	**2.34**	**2.41**	**2.39**	**-1.3**	**-0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.23	0.39	0.32	0.27	0.10	0.11	0.12	2.1	-4.8
Oil	2.67	2.11	0.92	0.75	0.54	0.55	0.52	-6.1	-2.7
Natural gas	-	-	0.53	0.78	0.66	0.71	0.71	-	1.3
Biofuels & waste	0.06	0.08	0.11	0.11	0.20	0.18	0.19	4.0	2.5
Electricity	0.40	0.50	0.73	0.86	0.73	0.74	0.73	3.6	0.0
Heat	-	0.07	0.07	0.16	0.12	0.12	0.12	-	2.4
Transport	**2.70**	**3.03**	**3.45**	**4.03**	**4.41**	**4.33**	**4.25**	**1.4**	**1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	-	-	-	-	-	-	-	-
Oil	2.69	3.02	3.43	4.00	4.36	4.26	4.09	1.4	0.8
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.01	0.03	0.13	-	-
Electricity	0.01	0.01	0.02	0.03	0.03	0.03	0.03	3.9	3.2
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.32**	**1.23**	**1.72**	**1.83**	**1.98**	**2.12**	**1.96**	**10.4**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	8.5
Coal	0.01	0.01	0.00	0.00	0.00	0.00	0.00	-3.4	-7.1
Oil	-	0.50	0.32	0.13	0.07	0.07	0.06	-	-7.7
Natural gas	-	-	0.14	0.16	0.23	0.23	0.21	-	1.9
Biofuels & waste	0.01	0.02	0.03	0.06	0.04	0.04	0.05	4.5	2.3
Electricity	0.30	0.53	0.72	0.85	0.91	0.93	0.91	5.3	1.1
Heat	-	0.17	0.50	0.63	0.72	0.84	0.74	-	1.8

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**6.93**	**5.58**	**4.00**	**4.16**	**4.42**	**4.90**	**4.37**	**-3.2**	**0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	0.00	0.00	0.01	0.01	0.01	0.01	-	9.1
Coal	0.22	0.17	0.05	0.01	0.01	0.01	0.01	-8.5	-6.7
Oil	6.06	4.17	1.27	0.77	0.46	0.48	0.40	-8.8	-5.3
Natural gas	-	-	0.38	0.64	0.63	0.74	0.62	-	2.3
Biofuels & waste	0.08	0.25	0.34	0.42	0.89	0.95	0.86	8.6	4.6
Electricity	0.57	0.64	0.83	0.88	0.87	0.89	0.87	2.3	0.2
Heat	-	0.34	1.13	1.42	1.56	1.82	1.60	-	1.7
Agriculture & fishing	**1.23**	**1.25**	**0.99**	**0.96**	**0.85**	**0.86**	**0.81**	**-1.2**	**-1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.01	0.06	0.02	0.03	0.03	0.03	-	-3.2
Oil	1.14	1.04	0.61	0.61	0.52	0.52	0.50	-3.6	-1.0
Natural gas	-	-	0.05	0.06	0.04	0.04	0.03	-	-2.0
Biofuels & waste	0.01	0.04	0.08	0.06	0.05	0.05	0.05	15.7	-2.0
Electricity	0.08	0.16	0.15	0.17	0.16	0.16	0.16	3.8	0.4
Heat	-	-	0.04	0.05	0.05	0.05	0.04	-	-0.8
Other	**0.07**	**0.09**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**-10.6**	**1.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.03	0.07	-	-	-	-	-	-	-
Natural gas	-	-	0.01	0.01	0.01	0.01	0.01	-	1.1
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.04	0.02	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.71**	**0.41**	**0.30**	**0.30**	**0.25**	**0.26**	**0.29**	**-4.88**	**-0.22**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**15.31**	**14.74**	**13.17**	**14.23**	**14.89**	**14.26**	**14.89**	**14.09**
Total industry (Mtoe)	**3.35**	**3.15**	**2.69**	**2.94**	**2.70**	**2.34**	**2.41**	**2.39**
Iron and steel	0.20	0.20	0.10	0.13	0.06	0.03	0.03	0.03
Chem. and petrochemical	0.35	0.29	0.20	0.26	0.21	0.22	0.23	0.22
Non-ferrous metals	-	0.00	0.02	0.01	0.01	0.01	0.01	0.01
Non-metallic minerals	0.84	0.71	0.49	0.63	0.51	0.41	0.41	0.44
Transport equipment	0.10	0.08	0.04	0.04	0.04	0.04	0.04	0.04
Machinery	0.37	0.29	0.28	0.31	0.34	0.30	0.31	0.30
Mining and quarrying	0.04	0.03	0.09	0.08	0.09	0.07	0.07	0.07
Food and tobacco	0.82	0.85	0.75	0.74	0.76	0.67	0.72	0.69
Paper, pulp and printing	0.20	0.15	0.19	0.14	0.14	0.14	0.14	0.15
Wood and wood products	0.14	0.14	0.12	0.13	0.12	0.10	0.10	0.09
Construction	0.02	0.14	0.15	0.18	0.20	0.17	0.17	0.17
Textile and leather	0.13	0.10	0.07	0.05	0.03	0.03	0.03	0.03
Non specified/other	0.14	0.17	0.20	0.24	0.18	0.15	0.16	0.15
Electricity consumption (Mtoe)	**1.38**	**1.86**	**2.44**	**2.79**	**2.85**	**2.70**	**2.76**	**2.70**
Total industry (Mtoe)	**0.40**	**0.50**	**0.73**	**0.86**	**0.83**	**0.73**	**0.74**	**0.73**
Iron and steel	0.02	0.05	0.05	0.07	0.02	0.01	0.01	0.01
Chem. and petrochemical	0.08	0.08	0.07	0.11	0.11	0.10	0.11	0.11
Non-ferrous metals	-	-	0.01	0.01	0.01	0.00	0.00	0.00
Non-metallic minerals	0.05	0.04	0.06	0.08	0.07	0.06	0.06	0.06
Transport equipment	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Machinery	0.05	0.06	0.13	0.13	0.15	0.13	0.13	0.13
Mining and quarrying	-	-	0.01	0.01	0.01	0.01	0.01	0.01
Food and tobacco	0.07	0.10	0.17	0.20	0.21	0.19	0.19	0.19
Paper, pulp and printing	0.05	0.03	0.06	0.06	0.06	0.05	0.05	0.05
Wood and wood products	0.02	0.03	0.02	0.03	0.02	0.02	0.02	0.02
Construction	0.02	0.02	0.03	0.03	0.04	0.03	0.03	0.03
Textile and leather	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Non specified/other	0.02	0.04	0.09	0.11	0.10	0.09	0.09	0.09
Total industry (TWh)	**4.60**	**5.78**	**8.45**	**10.05**	**9.64**	**8.45**	**8.64**	**8.49**
Iron and steel	0.21	0.60	0.53	0.76	0.23	0.13	0.13	0.13
Chem. and petrochemical	0.88	0.98	0.85	1.29	1.28	1.22	1.25	1.23
Non-ferrous metals	-	-	0.08	0.07	0.08	0.04	0.04	0.04
Non-metallic minerals	0.56	0.45	0.68	0.89	0.81	0.73	0.75	0.74
Transport equipment	0.18	0.25	0.24	0.22	0.27	0.23	0.24	0.23
Machinery	0.53	0.75	1.47	1.54	1.72	1.51	1.54	1.52
Mining and quarrying	-	-	0.10	0.09	0.07	0.07	0.07	0.07
Food and tobacco	0.85	1.20	2.00	2.27	2.43	2.19	2.24	2.20
Paper, pulp and printing	0.59	0.40	0.68	0.74	0.67	0.56	0.57	0.56
Wood and wood products	0.18	0.30	0.24	0.33	0.27	0.24	0.25	0.25
Construction	0.18	0.18	0.29	0.34	0.44	0.37	0.38	0.36
Textile and leather	0.19	0.20	0.23	0.21	0.17	0.15	0.15	0.15
Non specified/other	0.25	0.48	1.04	1.31	1.21	1.01	1.03	1.02

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**1002**	**1980**	**11973**	**4013**	**8417**	**12815**	**11208**	**10599**	**11694**
Imports from:									
Total from OECD	**-**	**-**	**11973**	**4013**	**8417**	**12815**	**11208**	**10599**	**11694**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	93	198	396	1365	3598	6400	2868
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	3958	1676	4631	4813	3828	1452	3598
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	7922	2139	3390	6637	3782	2747	5228
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**1002**	**1980**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**1226**	**3212**	**4925**	**4807**	**7752**	**11360**	**10874**	**11734**	**10374**
Exports to:									
Total to OECD	**-**	**-**	**4925**	**4807**	**7752**	**11360**	**10874**	**11734**	**10374**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	4699	3391	5993	9145	6333	2700	5182
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	7	688	143	423	1448	4049	2411
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	219	728	1616	1792	3093	4985	2781
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**1226**	**3212**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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DENMARK

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**5.81**	**6.92**	**8.98**	**10.54**	**11.78**	**12.34**	**12.74**	**12.80**	**12.94**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01	0.01
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.34	0.62	2.39	3.16	3.48	3.80	3.95
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	5.80	6.91	8.62	9.91	9.38	9.17	9.25	8.98	8.98
of which:									
Single-fired:									
Coal and coal products	0.73	1.05	0.20	0.44	-	-	-	-	-
Liquid fuels	3.01	2.17	0.85	1.10	1.83	1.17	1.07	1.33	1.33
Natural gas	-	-	0.05	0.68	1.25	1.24	1.34	1.26	1.37
Biofuels & waste	-	-	0.10	0.03	0.03	0.06	0.10	0.10	0.10
Multi-fired:									
Solid / liquid	2.06	3.70	6.81	6.71	4.71	5.21	5.35	4.46	4.46
Solid / natural gas	-	-	0.01	0.08	0.20	0.20	0.20	0.19	0.19
Liquid / natural gas	-	-	0.26	0.36	0.73	0.64	0.54	0.61	0.49
Solid / liquid / gas	-	-	0.36	0.51	0.63	0.66	0.66	1.03	1.03
Type of generation									
Steam	-	-	8.29	8.67	7.73	6.61	6.65	6.37	6.37
Internal combustion	-	-	0.07	0.57	0.76	1.05	1.09	1.10	1.10
Gas turbine	-	-	0.27	0.43	0.43	0.49	0.49	0.49	0.49
Combined cycle	-	-	-	0.25	0.46	1.03	1.03	1.03	1.02
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	5.79	6.22	6.27	6.31	6.21	6.27	6.22
Available capacity	..	..	8.55	8.61	8.64	7.30	7.30	7.20	7.20

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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DENMARK

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.15**	**0.15**	**0.16**	**0.30**	**0.54**	**0.66**	**0.65**	**0.64**	**0.64**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	0.01	0.01	0.02
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.15	0.15	0.16	0.30	0.54	0.66	0.65	0.63	0.63
of which:									
Single-fired:									
Coal and coal products	-	-	-	0.01	0.01	-	-	-	-
Liquid fuels	-	-	-	0.05	0.07	0.06	0.06	0.04	0.06
Natural gas	-	-	-	0.10	0.28	0.24	0.24	0.23	0.23
Biofuels & waste	-	-	-	0.06	0.10	0.13	0.10	0.11	0.13
Multi-fired:									
Solid / liquid	0.15	0.15	0.16	0.05	0.04	0.14	0.16	0.16	0.15
Solid / natural gas	-	-	-	0.01	0.03	0.05	0.05	0.05	0.03
Liquid / natural gas	-	-	-	-	0.02	0.03	0.03	0.04	0.04
Solid / liquid / gas	-	-	-	0.01	-	-	-	-	-
Type of generation									
Steam	-	-	0.16	0.15	0.20	0.26	0.25	0.25	0.25
Internal combustion	-	-	-	0.08	0.19	0.23	0.23	0.21	0.21
Gas turbine	-	-	-	0.06	0.10	0.10	0.10	0.10	0.10
Combined cycle	-	-	-	0.01	0.05	0.06	0.06	0.06	0.05
Other	-	-	-	-	-	0.01	0.01	0.01	0.01
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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DENMARK

16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Danish Crowns/ unit					
Steam coal (t)	..	262	..	..	..	..	..	..	..
Heavy fuel oil (t)	..	918	..	..	..	..	..	..	..
Natural gas (MWh)(1)	c	c	c	c	c	c	c	c	c
				Danish Crowns/ toe					
Steam coal	..	450	..	..	..	..	..	..	..
Heavy fuel oil	..	952	..	..	..	..	..	..	..
Natural gas(2)	c	c	c	c	c	c	c	c	c
End-user prices of electricity									
				Danish Crowns/ MWh					
Industry									
Price	269.90	281.50	385.00	466.60	662.00	593.00	643.00	617.00	603.00
of which: tax	..	-	-	79.00	76.00	77.00	57.00	50.00	41.00
Household									
Price	374.20	572.50	1017.50	1596.90	2019.50	1955.00	2003.00	2192.00	2220.00
of which: tax	..	202.50	509.20	956.80	1079.00	1076.00	1122.00	1232.00	1250.00

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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ESTONIA

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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ESTONIA

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	..	..	9.91	4.71	5.57	5.60	5.72	..	-2.5
GDP (billion 2005 USD)	..	..	10.13	9.84	14.00	15.16	15.65	..	2.0
TPES/GDP(1)	..	..	0.98	0.48	0.40	0.37	0.37	..	-4.4
Population (millions)	..	..	1.59	1.37	1.34	1.34	1.34	..	-0.8
TPES/population(2)	..	..	6.24	3.44	4.16	4.18	4.27	..	-1.7
TPES/GDP (2005 = 100)	..	..	263	129	107	99	98	..	-4.4
Ele.TFC/GDP(2005=100)(3)	..	..	159	117	114	101	..	..	..
Ele.TFC/population(4)	..	..	4420	3639	5157	4947	..	..	..
Elec. generated (TWh)(5)	..	..	17.39	8.51	12.96	12.89	11.97	..	-1.7

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**..**	**..**	**9.91**	**4.71**	**5.57**	**5.60**	**5.72**	**..**	**-2.5**
Coal	..	..	6.14	2.97	3.92	4.06	4.04	..	-1.9
Oil	..	..	2.97	0.65	0.52	0.51	0.49	..	-7.8
Natural gas	..	..	1.22	0.66	0.56	0.50	0.55	..	-3.6
Biofuels & waste	..	..	0.19	0.51	0.82	0.80	0.79	..	6.8
Nuclear	..	..	-	-	-	-	-	..	-
Geothermal	..	..	-	-	-	-	-	..	-
Solar, wind, tide(1)	..	..	-	-	0.02	0.03	0.04	..	-
Hydro	..	..	-	0.00	0.00	0.00	0.00	..	-
Net electricity imports(2)	..	..	-0.60	-0.08	-0.28	-0.31	-0.19	..	-5.0
Heat	..	..	-	-	-	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**..**	**..**	**17.4**	**8.5**	**10.2**	**13.0**	**12.9**	**12.0**
Nuclear	..	..	-	-	-	-	-	-
Hydro	..	..	-	0.0	0.0	0.0	0.0	0.0
of which:								
pumped storage production	..	..	-	-	-	-	-	-
Geothermal	..	..	-	-	-	-	-	-
Solar	..	..	-	-	-	-	-	-
Tide, wave, ocean	..	..	-	-	-	-	-	-
Wind	..	..	-	-	0.1	0.3	0.4	0.4
Combustible fuels	..	..	17.4	8.5	10.1	12.7	12.5	11.5
Coal	..	..	*15.0*	*7.8*	*9.5*	*11.6*	*11.4*	*10.3*
Oil	..	..	*1.4*	*0.1*	*0.0*	*0.0*	*0.0*	*0.1*
Natural gas	..	..	*1.0*	*0.6*	*0.5*	*0.3*	*0.3*	*0.1*
Biofuels & waste	..	..	-	*0.0*	*0.0*	*0.7*	*0.8*	*1.0*
Other (e.g. fuel cells)	..	..	-	-	-	-	-	-
- Own use by power plant	..	..	1.7	0.9	1.1	1.2	1.2	..
Net production	**..**	**..**	**15.7**	**7.6**	**9.1**	**11.7**	**11.7**	**..**
Nuclear	..	..	-	-	-	-	-	..
Hydro	..	..	-	0.0	0.0	0.0	0.0	..
Geothermal	..	..	-	-	-	-	-	..
Solar	..	..	-	-	-	-	-	..
Tide, wave, ocean	..	..	-	-	-	-	-	..
Wind	..	..	-	-	0.1	0.3	0.4	..
Combustible fuels	..	..	15.7	7.6	9.0	11.4	11.3	..
Other (e.g. fuel cells)	..	..	-	-	-	-	-	..
- Used for heat pumps	..	..	-	-	-	-	-	-
- Used for electric boilers	..	..	-	0.0	-	-	-	-
- Used for pumped storage	..	..	-	-	-	-	-	-
+ Imports	..	..	1.5	0.3	0.3	1.1	1.7	2.7
- Exports	..	..	8.5	1.2	2.0	4.4	5.3	5.0
Electrical energy supplied	**..**	**..**	**8.7**	**6.6**	**7.5**	**8.5**	**8.1**	**..**
- Transmission & distr. losses	..	..	1.1	1.2	1.1	1.0	0.9	..
- Statistical difference	..	..	-	-	-	-	-	..
Total consumption	**..**	**..**	**7.5**	**5.4**	**6.4**	**7.4**	**7.2**	**..**
- Energy industry consumption[2]	..	..	0.5	0.4	0.4	0.5	0.5	..
Final consumption	**..**	**..**	**7.0**	**5.0**	**6.0**	**6.9**	**6.6**	**..**
Industry	..	..	3.0	1.8	2.2	2.1	2.0	..
Transport	..	..	0.2	0.1	0.1	0.1	0.1	..
Commercial & publ. serv.	..	..	0.2	1.4	1.9	2.5	2.4	..
Residential	..	..	0.9	1.5	1.6	2.0	1.9	..
Agriculture & fishing	..	..	-	0.2	0.2	0.2	0.2	..
Sector non specified	..	..	2.7	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**..**	**..**	**17.39**	**8.51**	**8.78**	**12.96**	**12.89**	**..**	**-1.4**
- Hydro pumped storage	..	..	-	-	-	-	-	..	-
Total generation(1)	**..**	**..**	**17.39**	**8.51**	**8.78**	**12.96**	**12.89**	**..**	**-1.4**
Main activity producers									
Gross production	..	..	17.24	8.38	8.68	12.86	12.79	..	-1.4
- Hydro pumped storage	..	..	-	-	-	-	-	..	-
Total generation(1)	..	..	17.24	8.38	8.68	12.86	12.79	..	-1.4
Nuclear	..	..	-	-	-	-	-	..	-
Hydro	..	..	-	0.01	0.03	0.03	0.03	..	-
Geothermal	..	..	-	-	-	-	-	..	-
Solar, wind, tide(2)	..	..	-	-	0.19	0.28	0.37	..	-
Coal	..	..	15.00	7.79	8.05	11.54	11.38	..	-1.3
Oil	..	..	1.41	0.05	0.04	0.04	0.04	..	-15.3
Natural gas	..	..	0.83	0.54	0.08	0.26	0.21	..	-6.3
Biofuels & waste	..	..	-	-	0.29	0.72	0.76	..	-
Autoproducers									
Gross production	..	..	0.15	0.13	0.10	0.11	0.11	..	-1.8
- Hydro pumped storage	..	..	-	-	-	-	-	..	-
Total generation(1)	..	..	0.15	0.13	0.10	0.11	0.11	..	-1.8
Nuclear	..	..	-	-	-	-	-	..	-
Hydro	..	..	-	-	-	-	-	..	-
Geothermal	..	..	-	-	-	-	-	..	-
Solar, wind, tide(2)	..	..	-	-	0.00	0.00	-	..	-
Coal	..	..	-	0.05	0.04	0.04	0.04	..	-
Oil	..	..	0.03	0.00	0.01	0.00	-	..	-
Natural gas	..	..	0.13	0.06	0.03	0.04	0.04	..	-5.5
Biofuels & waste	..	..	-	0.01	0.02	0.02	0.03	..	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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ESTONIA

5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**-**	**-**	**154**	**109**	**92**	**90**	**95**	**-2.3**
Total energy	**-**	**-**	**-**	**55**	**35**	**36**	**38**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	22	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	18	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-
Energy non specified/other	-	-	-	15	35	36	38	-
Total industry	**-**	**-**	**154**	**36**	**47**	**39**	**42**	**-6.0**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	154	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	9	-	1	5	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-
Pulp and printing	-	-	-	27	47	38	37	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**-**	**18**	**10**	**15**	**15**	**-**
Commerce and pub. services	-	-	-	8	-	1	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	10	10	14	15	-
Sector non specified	-	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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ESTONIA
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**103826**	**27031**	**26777**	**25548**	**22887**	**24473**	**-6.9**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	46115	8348	6874	6946	5445	5044	-9.7
Oil	-	31448	3914	2397	1753	1241	1156	-14.3
Natural gas	-	26263	12016	13651	10893	9111	10810	-4.9
Biofuels & waste	-	-	2681	3855	5956	7090	7463	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	72	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	101500	23406	23171	23507	21194	..	-7.2
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	46115	7839	6629	6524	5144	..	-9.9
Oil	-	29387	2764	2067	1628	1116	..	-14.4
Natural gas	-	25998	10445	11026	9772	8108	..	-5.4
Biofuels & waste	-	-	2340	3449	5583	6826	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	18	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	2326	3625	3606	2041	1693	..	-1.5
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	509	245	422	301	..	-
Oil	-	2061	1150	330	125	125	..	-12.5
Natural gas	-	265	1571	2625	1121	1003	..	6.5
Biofuels & waste	-	-	341	406	373	264	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	54	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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ESTONIA
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**..**	**..**	**6.63**	**2.86**	**2.92**	**3.88**	**4.00**	**..**	**-2.4**
Coal	..	..	4.76	2.27	2.36	3.21	3.37	..	-1.6
Oil	..	..	1.08	0.13	0.06	0.06	0.04	..	-14.1
Natural gas	..	..	0.78	0.38	0.32	0.34	0.29	..	-4.6
Biofuels & waste	..	..	-	0.09	0.18	0.27	0.30	..	-
of which: ***main activity prod.***									
Total	**..**	**..**	**6.46**	**2.74**	**2.82**	**3.81**	**3.94**	**..**	**-2.3**
Coal	..	..	4.76	2.24	2.34	3.19	3.35	..	-1.7
Oil	..	..	0.94	0.09	0.05	0.06	0.04	..	-13.8
Natural gas	..	..	0.76	0.33	0.26	0.31	0.26	..	-5.1
Biofuels & waste	..	..	-	0.07	0.16	0.25	0.29	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**..**	**..**	**-**	**-**	**-**	**-**	**-**	**..**	**-**
Nuclear	..	..	-	-	-	-	-	..	-
Geothermal	..	..	-	-	-	-	-	..	-
Solar	..	..	-	-	-	-	-	..	-
Non-Thermal									
Total	**..**	**..**	**-**	**0.00**	**0.02**	**0.03**	**0.03**	**..**	**-**
Hydro	..	..	-	0.00	0.00	0.00	0.00	..	-
Tide, wave, ocean	..	..	-	-	-	-	-	..	-
Wind	..	..	-	-	0.02	0.02	0.03	..	-
Other (e.g. fuel cells)	..	..	-	-	-	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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ESTONIA

8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	-	9147	9078	12770	13758	-
Fuel input (TJ)	..	-	76594	85122	118816	128004	-
Electricity production (GWh)	..	-	7128	7300	10729	10663	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	1140	3397	3963	3765	-
Electricity production (GWh)	..	-	125	318	327	357	-
Petroleum products							
Fuel input (1000 t)	..	-	9	10	10	8	-
Fuel input (TJ)	..	-	365	390	399	315	-
Electricity production (GWh)	..	-	51	42	38	41	-
Natural gas (1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	..	-	2	619	1443	1714	-
Electricity production (GWh)	..	-	-	108	255	327	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	..	-	7304	7768	11349	11388	-

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	22565	1650	756	758	612	-15.8
Fuel input (TJ)	..	188950	13816	6566	7057	5689	-15.4
Electricity production (GWh)	..	14920	531	325	316	239	-17.9
CHP Heat production (TJ)	..	38636	5870	3438	3462	2714	-11.9
Peat							
Fuel input (1000 t)	..	-	29	88	134	103	-
Fuel input (TJ)	..	-	293	880	1345	1026	-
Electricity production (GWh)	..	-	19	62	122	86	-
CHP Heat production (TJ)	..	-	125	557	747	611	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	3870	1292	1784	1980	1650	-4.0
Electricity production (GWh)	..	75	36	80	82	76	0.1
CHP Heat production (TJ)	..	2654	826	1074	1261	993	-4.6
Petroleum products							
Fuel input (1000 t)	..	220	3	2	2	1	-22.7
Fuel input (TJ)	..	8843	121	63	70	45	-22.2
Electricity production (GWh)	..	1440	5	3	3	2	-26.9
CHP Heat production (TJ)	..	1650	53	29	38	26	-17.9
Natural gas(1)							
Fuel input (TJ)	..	12734	8061	4034	3771	3026	-6.6
Electricity production (GWh)	..	957	596	108	303	250	-6.2
CHP Heat production (TJ)	..	6413	4102	2855	1722	1376	-7.1
Wood and other solid waste							
Fuel input (TJ)	..	-	85	2749	5895	5690	-
Electricity production (GWh)	..	-	13	199	475	439	-
CHP Heat production (TJ)	..	-	-	1837	3183	3267	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	-	65	111	93	-
Electricity production (GWh)	..	-	-	7	10	15	-
CHP Heat production (TJ)	..	-	-	18	61	16	-
Total combustible fuels(2)							
Electricity production (GWh)	..	17392	1200	784	1311	1107	-12.3
CHP Heat production (TJ)	..	49353	10976	9808	10474	9003	-7.8

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	171	11	2	2	1	-21.7
Fuel input (TJ)	..	4181	269	38	37	18	-22.9
Heat production (TJ)	..	3345	181	23	24	11	-23.8
Brown coal							
Fuel input (1000 t)	..	-	47	15	22	23	-
Fuel input (TJ)	..	-	394	143	210	214	-
Heat production (TJ)	..	-	269	101	148	148	-
Peat							
Fuel input (1000 t)	..	333	63	82	74	40	-9.6
Fuel input (TJ)	..	2788	636	900	777	429	-8.5
Heat production (TJ)	..	1480	441	739	634	317	-7.1
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	875	709	827	820	-
Heat production (TJ)	..	-	636	580	670	651	-
Petroleum products							
Fuel input (1000 t)	..	913	120	49	53	38	-14.0
Fuel input (TJ)	..	36730	4861	1943	2099	1502	-14.1
Heat production (TJ)	..	29798	3861	1615	1715	1215	-14.1
Natural gas(1)							
Fuel input (TJ)	..	23636	9460	10744	12230	10400	-3.8
Heat production (TJ)	..	19850	7914	8395	9171	7735	-4.4
Wood and other solid waste							
Fuel input (TJ)	..	-	3487	4078	3803	5003	-
Heat production (TJ)	..	-	2620	3464	2709	3807	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	76	2	4	-	-
Heat production (TJ)	..	-	61	1	3	-	-
Total combustible fuels(2)							
Heat production (TJ)	..	54473	15983	14918	15074	13884	-6.3

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC(1)	**..**	**..**	**6.00**	**2.58**	**2.78**	**2.91**	**2.85**	**..**	**-3.5**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.71	0.15	0.11	0.10	0.13	..	-7.9
Oil	..	..	1.98	0.79	0.89	0.93	0.98	..	-3.3
Natural gas	..	..	0.44	0.28	0.20	0.21	0.20	..	-3.6
Biofuels & waste	..	..	0.19	0.42	0.52	0.55	0.50	..	4.7
Electricity	..	..	0.60	0.43	0.57	0.59	0.57	..	-0.3
Heat	..	..	2.09	0.51	0.49	0.53	0.47	..	-6.8
of which:									
Total industry	**..**	**..**	**2.54**	**0.57**	**0.54**	**0.58**	**0.61**	**..**	**-6.6**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.37	0.08	0.09	0.07	0.11	..	-5.6
Oil	..	..	0.70	0.09	0.05	0.06	0.06	..	-11.0
Natural gas	..	..	0.19	0.12	0.10	0.11	0.11	..	-2.4
Biofuels & waste	..	..	0.01	0.08	0.09	0.10	0.11	..	14.6
Electricity	..	..	0.25	0.16	0.17	0.18	0.18	..	-1.7
Heat	..	..	1.02	0.04	0.04	0.04	0.04	..	-14.6
Transport	**..**	**..**	**0.81**	**0.56**	**0.71**	**0.75**	**0.75**	**..**	**-0.4**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.01	-	-	-	-	..	-
Oil	..	..	0.79	0.55	0.71	0.74	0.74	..	-0.3
Natural gas	..	..	-	-	-	-	-	..	-
Biofuels & waste	..	..	-	-	-	-	-	..	-
Electricity	..	..	0.01	0.01	0.01	0.00	0.00	..	-5.7
Heat	..	..	-	-	-	-	-	..	-
Comm. & public serv.	**..**	**..**	**0.34**	**0.29**	**0.42**	**0.43**	**0.41**	**..**	**0.9**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.05	0.01	0.00	0.00	0.00	..	-15.1
Oil	..	..	0.04	0.05	0.03	0.03	0.04	..	-0.1
Natural gas	..	..	0.01	0.01	0.03	0.03	0.03	..	6.7
Biofuels & waste	..	..	0.05	0.01	0.02	0.02	0.02	..	-4.6
Electricity	..	..	0.02	0.12	0.22	0.22	0.21	..	12.3
Heat	..	..	0.16	0.09	0.12	0.13	0.10	..	-2.2

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**..**	**..**	**1.00**	**0.93**	**0.97**	**1.03**	**0.94**	**..**	**-0.3**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.17	0.03	0.01	0.01	0.01	..	-12.4
Oil	..	..	0.06	0.02	0.01	0.01	0.01	..	-8.3
Natural gas	..	..	0.06	0.04	0.05	0.05	0.05	..	-0.5
Biofuels & waste	..	..	0.12	0.33	0.41	0.42	0.36	..	5.4
Electricity	..	..	0.08	0.13	0.16	0.17	0.17	..	3.6
Heat	..	..	0.51	0.38	0.33	0.36	0.33	..	-2.0
Agriculture & fishing	**..**	**..**	**0.54**	**0.06**	**0.09**	**0.10**	**0.11**	**..**	**-7.3**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.04	0.00	-	-	-	..	-
Oil	..	..	0.19	0.03	0.06	0.07	0.08	..	-3.9
Natural gas	..	..	0.00	0.00	0.01	0.01	0.01	..	7.3
Biofuels & waste	..	..	0.01	0.01	0.00	0.00	0.00	..	-2.9
Electricity	..	..	-	0.02	0.02	0.02	0.02	..	-
Heat	..	..	0.31	0.00	0.00	0.00	0.00	..	-21.0
Other	**..**	**..**	**0.52**	**-**	**-**	**-**	**-**	**..**	**-**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.07	-	-	-	-	..	-
Oil	..	..	0.13	-	-	-	-	..	-
Natural gas	..	..	-	-	-	-	-	..	-
Biofuels & waste	..	..	-	-	-	-	-	..	-
Electricity	..	..	0.24	-	-	-	-	..	-
Heat	..	..	0.08	-	-	-	-	..	-
Non-energy use(1)	**..**	**..**	**0.26**	**0.18**	**0.05**	**0.04**	**0.04**	**..**	**-8.18**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**..**	**..**	**6.00**	**2.58**	**3.18**	**2.78**	**2.91**	**2.85**
Total industry (Mtoe)	**..**	**..**	**2.54**	**0.57**	**0.76**	**0.54**	**0.58**	**0.61**
Iron and steel	..	..	-	0.00	0.00	0.00	0.00	0.00
Chem. and petrochemical	..	..	0.22	0.09	0.11	0.05	0.05	0.04
Non-ferrous metals	..	..	-	0.00	0.00	0.00	0.00	0.00
Non-metallic minerals	..	..	0.14	0.11	0.20	0.13	0.11	0.15
Transport equipment	..	..	-	0.01	0.01	0.01	0.01	0.01
Machinery	..	..	0.04	0.02	0.04	0.04	0.04	0.04
Mining and quarrying	..	..	-	0.00	0.01	0.01	0.01	0.01
Food and tobacco	..	..	0.25	0.09	0.07	0.06	0.07	0.06
Paper, pulp and printing	..	..	0.06	0.04	0.05	0.05	0.07	0.06
Wood and wood products	..	..	0.09	0.08	0.13	0.09	0.11	0.12
Construction	..	..	0.09	0.03	0.04	0.04	0.04	0.05
Textile and leather	..	..	0.07	0.05	0.03	0.02	0.02	0.02
Non specified/other	..	..	1.59	0.05	0.06	0.04	0.05	0.04
Electricity consumption (Mtoe)	**..**	**..**	**0.60**	**0.43**	**0.60**	**0.57**	**0.59**	**0.57**
Total industry (Mtoe)	**..**	**..**	**0.25**	**0.16**	**0.20**	**0.17**	**0.18**	**0.18**
Iron and steel	..	..	-	0.00	0.00	0.00	0.00	0.00
Chem. and petrochemical	..	..	0.08	0.03	0.03	0.03	0.02	0.02
Non-ferrous metals	..	..	-	0.00	0.00	0.00	0.00	0.00
Non-metallic minerals	..	..	-	0.01	0.02	0.02	0.02	0.02
Transport equipment	..	..	-	0.00	0.00	0.00	0.00	0.00
Machinery	..	..	0.03	0.01	0.02	0.02	0.03	0.03
Mining and quarrying	..	..	-	0.00	0.00	0.00	0.00	0.00
Food and tobacco	..	..	0.02	0.02	0.03	0.02	0.02	0.02
Paper, pulp and printing	..	..	0.01	0.01	0.03	0.02	0.03	0.03
Wood and wood products	..	..	0.01	0.02	0.02	0.02	0.02	0.02
Construction	..	..	0.03	0.01	0.01	0.01	0.01	0.01
Textile and leather	..	..	0.03	0.03	0.01	0.01	0.01	0.01
Non specified/other	..	..	0.05	0.02	0.02	0.01	0.02	0.02
Total industry (TWh)	**..**	**..**	**2.96**	**1.83**	**2.34**	**1.94**	**2.10**	**2.05**
Iron and steel	..	..	-	0.00	0.00	0.00	0.00	0.00
Chem. and petrochemical	..	..	0.94	0.31	0.35	0.32	0.25	0.20
Non-ferrous metals	..	..	-	0.00	0.01	0.01	0.01	0.01
Non-metallic minerals	..	..	-	0.15	0.25	0.21	0.21	0.20
Transport equipment	..	..	-	0.05	0.04	0.04	0.04	0.04
Machinery	..	..	0.30	0.13	0.25	0.23	0.29	0.29
Mining and quarrying	..	..	-	0.01	0.02	0.02	0.02	0.02
Food and tobacco	..	..	0.27	0.27	0.31	0.25	0.28	0.27
Paper, pulp and printing	..	..	0.14	0.10	0.34	0.28	0.35	0.34
Wood and wood products	..	..	0.09	0.22	0.29	0.23	0.28	0.29
Construction	..	..	0.31	0.10	0.10	0.08	0.06	0.07
Textile and leather	..	..	0.34	0.30	0.13	0.12	0.12	0.12
Non specified/other	..	..	0.58	0.18	0.25	0.17	0.18	0.20

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports (1)	..	..	**1475**	**245**	**258**	**1369**	**3025**	**1100**	**1690**
Imports from:									
Total from OECD	..	..	**-**	**-**	**-**	**79**	**135**	**264**	**501**
Austria	..	..	-	-	-	-	-	-	-
Belgium	..	..	-	-	-	-	-	-	-
Canada	..	..	-	-	-	-	-	-	-
Czech Republic	..	..	-	-	-	-	-	-	-
Denmark	..	..	-	-	-	-	-	-	-
Estonia	..	..	-	-	-	-	-	-	-
Finland	..	..	-	-	-	79	135	264	501
France	..	..	-	-	-	-	-	-	-
Germany	..	..	-	-	-	-	-	-	-
Greece	..	..	-	-	-	-	-	-	-
Hungary	..	..	-	-	-	-	-	-	-
Ireland	..	..	-	-	-	-	-	-	-
Italy	..	..	-	-	-	-	-	-	-
Luxembourg	..	..	-	-	-	-	-	-	-
Mexico	..	..	-	-	-	-	-	-	-
Netherlands	..	..	-	-	-	-	-	-	-
Norway	..	..	-	-	-	-	-	-	-
Poland	..	..	-	-	-	-	-	-	-
Portugal	..	..	-	-	-	-	-	-	-
Slovak Republic	..	..	-	-	-	-	-	-	-
Slovenia	..	..	-	-	-	-	-	-	-
Spain	..	..	-	-	-	-	-	-	-
Sweden	..	..	-	-	-	-	-	-	-
Switzerland	..	..	-	-	-	-	-	-	-
Turkey	..	..	-	-	-	-	-	-	-
United Kingdom	..	..	-	-	-	-	-	-	-
United States	..	..	-	-	-	-	-	-	-
Total from non-OECD	..	..	**-**	**245**	**258**	**1290**	**2890**	**836**	**1189**
Albania	..	..	-	-	-	-	-	-	-
Azerbaijan	..	..	-	-	-	-	-	-	-
Belarus	..	..	-	-	-	-	-	-	-
Bulgaria	..	..	-	-	-	-	-	-	-
Croatia	..	..	-	-	-	-	-	-	-
F.Y.R. of Macedonia	..	..	-	-	-	-	-	-	-
Georgia	..	..	-	-	-	-	-	-	-
Lativia	..	..	-	-	-	83	562	664	815
Lithuania	..	..	-	-	120	1207	2328	172	374
Romania	..	..	-	-	-	-	-	-	-
Russian Federation	..	..	-	245	138	-	-	-	-
Serbia	..	..	-	-	-	-	-	-	-
Turkmenistan	..	..	-	-	-	-	-	-	-
Ukraine	..	..	-	-	-	-	-	-	-
Non-specified/others	..	..	**1475**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports (1)	**..**	**..**	**8477**	**1005**	**1187**	**2310**	**2943**	**4354**	**5252**
Exports to:									
Total to OECD	**..**	**..**	**-**	**-**	**-**	**1738**	**1219**	**1659**	**1686**
Austria	..	..	-	-	-	-	-	-	-
Belgium	..	..	-	-	-	-	-	-	-
Canada	..	..	-	-	-	-	-	-	-
Czech Republic	..	..	-	-	-	-	-	-	-
Denmark	..	..	-	-	-	-	-	-	-
Estonia	..	..	-	-	-	-	-	-	-
Finland	..	..	-	-	-	1738	1219	1659	1686
France	..	..	-	-	-	-	-	-	-
Germany	..	..	-	-	-	-	-	-	-
Greece	..	..	-	-	-	-	-	-	-
Hungary	..	..	-	-	-	-	-	-	-
Ireland	..	..	-	-	-	-	-	-	-
Italy	..	..	-	-	-	-	-	-	-
Luxembourg	..	..	-	-	-	-	-	-	-
Mexico	..	..	-	-	-	-	-	-	-
Netherlands	..	..	-	-	-	-	-	-	-
Norway	..	..	-	-	-	-	-	-	-
Poland	..	..	-	-	-	-	-	-	-
Portugal	..	..	-	-	-	-	-	-	-
Slovak Republic	..	..	-	-	-	-	-	-	-
Slovenia	..	..	-	-	-	-	-	-	-
Spain	..	..	-	-	-	-	-	-	-
Sweden	..	..	-	-	-	-	-	-	-
Switzerland	..	..	-	-	-	-	-	-	-
Turkey	..	..	-	-	-	-	-	-	-
United Kingdom	..	..	-	-	-	-	-	-	-
United States	..	..	-	-	-	-	-	-	-
Total to non-OECD	**..**	**..**	**-**	**1005**	**1187**	**572**	**1724**	**2695**	**3566**
Albania	..	..	-	-	-	-	-	-	-
Azerbaijan	..	..	-	-	-	-	-	-	-
Belarus	..	..	-	-	-	-	-	-	-
Bulgaria	..	..	-	-	-	-	-	-	-
Croatia	..	..	-	-	-	-	-	-	-
F.Y.R. of Macedonia	..	..	-	-	-	-	-	-	-
Georgia	..	..	-	-	-	-	-	-	-
Lativia	..	..	-	529	813	572	1724	2695	2084
Lithuania	..	..	-	-	-	-	-	-	1482
Romania	..	..	-	-	-	-	-	-	-
Russian Federation	..	..	-	476	374	-	-	-	-
Serbia	..	..	-	-	-	-	-	-	-
Turkmenistan	..	..	-	-	-	-	-	-	-
Ukraine	..	..	-	-	-	-	-	-	-
Non-specified/others	**..**	**..**	**8477**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**-**	**2.77**	**2.67**	**2.65**	**2.73**	**2.81**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	0.01	0.01	0.01	0.01
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.08	0.10	0.11	0.18
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	..	..	2.77	2.58	2.54	2.62	2.62
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	0.24
Biofuels & waste	-	-	-	-	-	-	-	-	0.03
Multi-fired:									
Solid / liquid	-	-	-	-	-	0.01	-	-	0.03
Solid / natural gas	-	-	-	-	0.17	0.27	0.27	0.32	0.05
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	2.60	2.31	2.27	2.30	2.27
Type of generation									
Steam	-	-	-	-	2.77	2.57	2.53	2.61	2.58
Internal combustion	-	-	-	-	-	0.01	0.01	0.01	0.04
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	1.66	1.60	1.79	1.79
Available capacity	..	..	..	..	..	2.00	2.00	2.04	2.04

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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ESTONIA

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**-**	**0.03**	**0.03**	**0.02**	**0.02**	**0.02**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	..	..	0.03	0.03	0.02	0.02	0.02
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	0.01	-	-	-
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	0.01	0.01	-	-	0.01
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	0.01	0.01	-
Solid / natural gas	-	-	-	-	0.01	-	0.01	0.01	0.01
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	0.01	0.01	0.01	0.01	0.01
Type of generation									
Steam	-	-	-	-	0.02	0.02	0.01	0.02	0.01
Internal combustion	-	-	-	-	0.01	0.01	-	0.01	0.01
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	0.01	0.01	0.01	0.01
Available capacity	..	..	..	..	..	0.01	0.01	0.01	0.01

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	..	..	..	..	..	..	..	..	..
Heavy fuel oil (t)	..	..	..	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				Euro/ toe					
Steam coal	..	..	..	..	..	..	..	..	..
Heavy fuel oil	..	..	..	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	..	..	..	..	54.47	60.74	70.30	72.60	78.55
of which: tax	..	..	..	..	4.95	6.17	11.80	9.60	12.55
Household									
Price	..	..	..	..	80.06	89.05	95.90	98.20	108.10
of which: tax	..	..	..	..	17.35	21.26	28.10	27.00	32.15

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	21.03	24.60	28.38	32.23	36.43	34.75	33.48	1.8	0.8
GDP (billion 2005 USD)	84.45	103.73	140.23	171.94	204.08	209.75	209.31	3.0	1.8
TPES/GDP(1)	0.25	0.24	0.20	0.19	0.18	0.17	0.16	-1.2	-1.1
Population (millions)	4.67	4.78	4.99	5.18	5.36	5.39	5.41	0.4	0.4
TPES/population(2)	4.51	5.15	5.69	6.23	6.79	6.45	6.19	1.4	0.4
TPES/GDP (2005 = 100)	142	136	116	107	102	95	91	-1.2	-1.1
Ele.TFC/GDP(2005=100)(3)	77	87	102	107	99	93	..	1.6	..
Ele.TFC/population(4)	5777	7782	11826	14625	15571	14901	..	4.3	..
Elec. generated (TWh)(5)	26.10	40.75	54.38	69.97	80.67	73.48	70.37	4.4	1.2

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**21.03**	**24.60**	**28.38**	**32.23**	**36.43**	**34.75**	**33.48**	**1.8**	**0.8**
Coal	2.55	4.95	5.32	5.14	6.89	5.70	4.66	4.4	-0.6
Oil	13.26	12.60	9.46	8.91	9.37	9.17	8.34	-2.0	-0.6
Natural gas	-	0.77	2.18	3.42	3.84	3.36	2.99	-	1.4
Biofuels & waste	3.94	3.47	4.56	6.55	8.26	8.09	8.42	0.9	2.8
Nuclear	-	1.83	5.01	5.86	5.94	6.04	5.99	-	0.8
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	0.00	0.01	0.03	0.04	0.04	-	24.1
Hydro	0.90	0.88	0.93	1.26	1.11	1.07	1.45	0.2	2.0
Net electricity imports(2)	0.37	0.10	0.92	1.02	0.90	1.19	1.50	5.4	2.3
Heat	-	-	-	0.07	0.10	0.09	0.09	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**26.1**	**40.7**	**54.4**	**70.0**	**70.6**	**80.7**	**73.5**	**70.4**
Nuclear	-	7.0	19.2	22.5	23.3	22.8	23.2	23.0
Hydro	10.5	10.2	10.9	14.7	13.8	12.9	12.4	16.8
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.0	0.0	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.1	0.2	0.3	0.5	0.5
Combustible fuels	15.6	23.5	24.3	32.6	33.1	44.3	37.1	29.8
Coal	*7.3*	*17.4*	*12.8*	*13.1*	*11.7*	*21.4*	*15.7*	*11.8*
Oil	*8.3*	*4.4*	*1.7*	*0.6*	*0.5*	*0.5*	*0.4*	*0.4*
Natural gas	-	*1.7*	*4.7*	*10.1*	*11.2*	*11.3*	*9.4*	*6.6*
Biofuels & waste	-	-	*5.2 e*	*8.7*	*9.7*	*11.2*	*11.4*	*11.0*
Other (e.g. fuel cells)	-	-	-	0.2	0.2	0.3	0.3	0.3
- Own use by power plant	1.0	2.0	2.8	2.7	2.7	3.5	3.1	..
Net production	**25.1**	**38.7**	**51.6**	**67.3**	**67.8**	**77.2**	**70.4**	**..**
Nuclear	..	6.6	18.1	21.6	22.4	21.9	22.3	..
Hydro	..	10.1	10.8	14.5	13.6	12.7	12.3	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.0	0.0	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.1	0.2	0.3	0.5	..
Combustible fuels	..	22.0	22.7	31.0	31.5	42.0	35.1	..
Other (e.g. fuel cells)	..	-	-	0.2	0.2	0.3	0.3	..
- Used for heat pumps	-	-	-	0.0	0.0	0.1	0.1	0.1
- Used for electric boilers	-	-	-	0.1	0.0	0.0	0.0	0.0
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	4.6	2.4	11.0	12.2	17.9	15.7	17.7	19.1
- Exports	0.2	1.2	0.4	0.3	0.9	5.2	3.8	1.6
Electrical energy supplied	**29.4**	**39.9**	**62.2**	**79.1**	**84.8**	**87.5**	**84.1**	**..**
- Transmission & distr. losses	2.2	2.3	2.8	2.6	3.0	2.8	2.5	..
- Statistical difference	-	-	-	-	0.2	0.0	-	..
Total consumption	**27.2**	**37.6**	**59.5**	**76.5**	**81.6**	**84.8**	**81.5**	**..**
- Energy industry consumption[2]	0.3	0.4	0.5	0.8	0.9	1.3	1.3	..
Final consumption	**26.9**	**37.2**	**58.9**	**75.7**	**80.7**	**83.5**	**80.2**	**..**
Industry	18.1	22.8	32.5	42.9	43.1	40.4	39.5	..
Transport	0.1	0.2	0.4	0.5	0.6	0.7	0.7	..
Commercial & publ. serv.	3.5	5.5	10.4	13.3	15.5	17.8	17.2	..
Residential	5.0	8.1	14.6	18.1	20.6	23.6	21.8	..
Agriculture & fishing	0.3	0.6	1.0	0.8	0.9	1.0	1.0	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**27.63**	**40.75**	**54.38**	**69.97**	**72.06**	**80.67**	**73.48**	**4.3**	**1.4**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**27.63**	**40.75**	**54.38**	**69.97**	**72.06**	**80.67**	**73.48**	**4.3**	**1.4**
Main activity producers									
Gross production	21.02	33.45	45.69	58.06	62.09	69.63	62.88	5.0	1.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	21.02	33.45	45.69	58.06	62.09	69.63	62.88	5.0	1.5
Nuclear	-	7.02	19.22	22.48	23.53	22.80	23.19	-	0.9
Hydro	12.63	10.22	10.86	13.60	11.79	12.06	11.50	-0.9	0.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.11	0.39	0.41	0.60	-	-
Coal	5.43	12.81	11.55 e	11.56	15.08	20.30	14.77	4.8	1.2
Oil	2.96	2.27	0.56	0.26	0.29	0.21	0.16	-9.9	-5.8
Natural gas	-	1.14	3.36	8.06	7.57	8.87	7.27	-	3.7
Biofuels & waste	-	-	0.15 e	1.98	3.45	4.97	5.40	-	18.7
Autoproducers									
Gross production	6.61	7.30	8.69	11.91	9.97	11.04	10.60	1.7	1.0
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	6.61	7.30	8.69	11.91	9.97	11.04	10.60	1.7	1.0
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	1.06	0.90	0.86	0.95	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.16	0.20	0.21	0.20	-	-
Coal	3.13	4.57	1.26 e	1.57	0.92	1.12	0.98	-5.5	-1.2
Oil	3.16	2.15	1.12	0.33	0.25	0.27	0.26	-6.3	-6.8
Natural gas	0.33	0.58	1.30	2.07	2.22	2.39	2.17	9.0	2.5
Biofuels & waste	-	-	5.01 e	6.72	5.49	6.20	6.05	-	0.9

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**6178**	**6890**	**8118**	**11355**	**9508**	**10532**	**10096**	**1.0**
Total energy	**-**	**-**	**-**	**815**	**892**	**914**	**869**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	815	892	914	869	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**-**	**-**	**-**	**10540**	**8616**	**9618**	**9227**	**-**
Iron and steel	-	-	-	688	479	583	500	-
Chemical and petrochemical	-	-	-	327	174	184	187	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	1	1	1	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	5	12	17	16	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	7	25	22	27	-
Pulp and printing	-	-	-	9470	7878	8721	8352	-
Wood and wood products	-	-	-	30	26	25	21	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	13	21	65	123	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**6178**	**6890**	**8118**	**-**	**-**	**-**	**-**	**-**
Commerce and pub. services	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	6178	6890	8118	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**52704**	**86832 e**	**149902**	**178890**	**210830**	**185502**	**194485**	**3.7**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	24451	52254 e	53225	59696	71002	63646	65597	0.9
Oil	7226	12388	12475	12679	14157	9468	9783	-1.3
Natural gas	2303	17165	45099	51216	51041	40469	42500	4.2
Biofuels & waste	-	5025 e	35728	51352	69185	66390	71095	13.1
Non-spec. comb. fuels	18724	-	-	-	-	-	-	-
Chemical processes	-	-	2989	3681	3324	2925	2900	-
Heat pumps	-	-	38	10	1246	1257	1267	-
Electric boilers	-	-	213	64	163	143	143	-
Other sources(1)	-	-	135	192	712	1204	1200	-
of which:								
Main activity producers								
Total	52704	86832 e	131746	161200	191838	172718	..	3.3
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	24451	52254 e	51473	58090	68091	61478	..	0.8
Oil	7226	12388	10590	11485	13118	9110	..	-1.5
Natural gas	2303	17165	42230	48052	48295	39606	..	4.1
Biofuels & waste	-	5025 e	27202	43499	60356	60068	..	12.5
Non-spec. comb. fuels	18724	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	38	10	1246	1257	..	-
Electric boilers	-	-	213	64	163	143	..	-
Other sources(1)	-	-	-	-	569	1056	..	-
Autoproducers								
Total	-	-	18156	17690	18992	12784	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	1752	1606	2911	2168	..	-
Oil	-	-	1885	1194	1039	358	..	-
Natural gas	-	-	2869	3164	2746	863	..	-
Biofuels & waste	-	-	8526	7853	8829	6322	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	2989	3681	3324	2925	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	135	192	143	148	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**2.54**	**5.09**	**5.86**	**8.23**	**9.66**	**11.83**	**10.08**	**5.0**	**2.6**
Coal	1.21	3.44	3.30	3.52	4.33	5.54	4.30	6.1	1.3
Oil	1.33	1.33	0.55	0.43	0.46	0.44	0.33	-5.1	-2.3
Natural gas	-	0.30	0.97	2.24	2.20	2.49	2.04	-	3.6
Biofuels & waste	-	0.02	1.04	2.05	2.68	3.36	3.41	-	5.8
of which: ***main activity prod.***									
Total	**..**	**4.42**	**4.52**	**6.53**	**8.18**	**10.18**	**8.64**	**..**	**3.1**
Coal	..	3.12	3.10	3.22	4.08	5.24	4.04	..	1.3
Oil	..	1.04	0.40	0.33	0.39	0.37	0.29	..	-1.5
Natural gas	..	0.24	0.83	1.95	1.89	2.16	1.78	..	3.7
Biofuels & waste	..	0.02	0.20	1.03	1.83	2.41	2.54	..	12.9

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**1.83**	**5.01**	**5.86**	**6.13**	**5.94**	**6.04**	**-**	**0.9**
Nuclear	-	1.83	5.01	5.86	6.13	5.94	6.04	-	0.9
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00	0.00	0.00	0.00	-	-
Non-Thermal									
Total	**0.90**	**0.88**	**0.93**	**1.27**	**1.11**	**1.14**	**1.11**	**0.2**	**0.8**
Hydro	0.90	0.88	0.93	1.26	1.09	1.11	1.07	0.2	0.7
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.02	0.03	0.04	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	3556	1540	1540	2230	3403	1926	1.1
Fuel input (TJ)	90820	39332	39282	56181	85403	47992	1.0
Electricity production (GWh)	8946	4419	4528	6590	10075	5618	1.1
Brown coal							
Fuel input (1000 t)	-	-	1	5	4	1	-
Fuel input (TJ)	-	-	43	192	152	46	-
Electricity production (GWh)	-	-	5	17	14	4	-
Peat							
Fuel input (1000 t)	921	700	961	1150	2300	2041	5.2
Fuel input (TJ)	7716	7526	9797	11724	23458	20807	5.0
Electricity production (GWh)	611	840 e	1087	1295	2632	2228	4.8
Coal manufactured gases[2]							
Fuel input (TJ)	4928	4392	6615	5035	6104	6021	1.5
Electricity production (GWh)	322	376	654	421	522	482	1.2
Petroleum products							
Fuel input (1000 t)	290	106	25	48	32	33	-5.4
Fuel input (TJ)	11776	4305	1049	1998	1331	1361	-5.3
Electricity production (GWh)	1103	331	98	219	131	128	-4.4
Natural gas[2]							
Fuel input (TJ)	6092	9461	4065	1691	2226	2007	-7.1
Electricity production (GWh)	600	963	400	170	205	197	-7.3
Wood and other solid waste							
Fuel input (TJ)	-	7007	6204	8252	15284	18750	4.8
Electricity production (GWh)	-	489 e	642	870	1551	1800	6.4
Industrial waste							
Fuel input (TJ)	-	-	11	53	97	85	-
Electricity production (GWh)	-	-	2	3	5	6	-
Municipal waste							
Fuel input (TJ)	-	-	137	1194	1499	1680	-
Electricity production (GWh)	-	-	13	119	158	163	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	3	460	754	-
Electricity production (GWh)	-	-	-	-	51	84	-
Total combustible fuels[3]							
Electricity production (GWh)	11582	7418	7429	9704	15344	10710	1.8

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	1089	2192	1906	2144	2085	1954	-0.5
Fuel input (TJ)	28010	55984	48589	54028	52355	48707	-0.7
Electricity production (GWh)	3334	5243	3954	4522	4453	4158	-1.1
CHP Heat production (TJ)	17585	32493	27340	30663	29465	27451	-0.8
Brown coal							
Fuel input (1000 t)	-	-	-	1	-	-	-
Fuel input (TJ)	-	-	3	19	11	2	-
Electricity production (GWh)	-	-	-	1	1	-	-
CHP Heat production (TJ)	-	-	1	10	3	1	-
Peat							
Fuel input (1000 t)	3138	2128	3464	4332	5126	4414	3.5
Fuel input (TJ)	26276	22880	35329	44184	52286	44974	3.3
Electricity production (GWh)	4159	1934 e	2878	3108	3652	3216	2.5
CHP Heat production (TJ)	6866	12492 e	19484	26383	31167	26251	3.6
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	379	610	617	469	-
Electricity production (GWh)	-	-	31	44	66	43	-
CHP Heat production (TJ)	-	-	189	333	268	234	-
Petroleum products							
Fuel input (1000 t)	595	197	150	102	97	65	-5.1
Fuel input (TJ)	24184	8000	6157	4208	4063	2674	-5.1
Electricity production (GWh)	3315	1348	489	316	353	288	-7.1
CHP Heat production (TJ)	7226	1896	2921	2418	2216	1125	-2.5
Natural gas[2]							
Fuel input (TJ)	8880	32948	85665	84196	95744	78175	4.2
Electricity production (GWh)	1119	3692	9731	9623	11054	9247	4.5
CHP Heat production (TJ)	2303	13404	33189	32326	36536	28547	3.7
Wood and other solid waste							
Fuel input (TJ)	-	31344	63977	72013	91671	91200	5.2
Electricity production (GWh)	-	4667 e	7859	7526	9018	9018	3.2
CHP Heat production (TJ)	-	1275 e	23972	32994	43564	42557	18.2
Industrial waste							
Fuel input (TJ)	-	-	1137	753	600	744	-
Electricity production (GWh)	-	-	29	30	24	18	-
CHP Heat production (TJ)	-	-	408	485	384	524	-
Municipal waste							
Fuel input (TJ)	-	-	1431	5394	5181	5291	-
Electricity production (GWh)	-	-	136	361	326	311	-
CHP Heat production (TJ)	-	-	705	2966	2881	3007	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	139	222	223	293	-
Electricity production (GWh)	-	-	22	31	38	49	-
CHP Heat production (TJ)	-	-	20	52	39	54	-
Total combustible fuels[3]							
Electricity production (GWh)	11927	16884	25129	25562	28985	26348	2.1
CHP Heat production (TJ)	33980	61560	108229	128630	146523	129751	3.6

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	152	102	83	113	106	-1.7
Fuel input (TJ)	-	3882	2621	2094	2847	2630	-1.8
Heat production (TJ)	-	3610	2215	1896	2598	2369	-2.0
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	5	8	5	4	-
Heat production (TJ)	-	-	4	7	4	3	-
Peat							
Fuel input (1000 t)	-	400	399	623	819	696	2.7
Fuel input (TJ)	-	4301	3933	6293	7585	7097	2.4
Heat production (TJ)	-	3659 e	3329	5338	6515	6221	2.6
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	732	1016	1223	1413	-
Heat production (TJ)	-	-	663	812	982	1116	-
Petroleum products							
Fuel input (1000 t)	-	266	271	325	327	248	-0.3
Fuel input (TJ)	-	10802	11003	13409	13454	9553	-0.6
Heat production (TJ)	-	10492	9554	11785	11941	8343	-1.1
Natural gas[2]							
Fuel input (TJ)	-	4500	14535	16433	17717	14583	5.8
Heat production (TJ)	-	3761	11910	13288	14505	11922	5.6
Wood and other solid waste							
Fuel input (TJ)	-	4492	11912	21331	23527	22362	7.9
Heat production (TJ)	-	3045 e	9980	18467	20595	19038	9.1
Industrial waste							
Fuel input (TJ)	-	-	32	734	671	275	-
Heat production (TJ)	-	-	17	523	500	232	-
Municipal waste							
Fuel input (TJ)	-	784	578	1295	1223	908	0.7
Heat production (TJ)	-	705 e	481	929	911	698	-0.0
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	157	858	345	322	-
Heat production (TJ)	-	-	145	781	311	280	-
Total combustible fuels[3]							
Heat production (TJ)	18724	25272	38298	53826	58862	50222	3.3

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.
(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**19.19**	**19.34**	**22.24**	**24.65**	**24.44**	**26.81**	**25.19**	**0.9**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	4.8
Coal	1.07	1.11	1.56	0.97	0.58	0.78	0.73	2.3	-3.6
Oil	11.26	10.01	9.19	8.39	7.85	8.29	7.76	-1.2	-0.8
Natural gas	-	0.43	0.98	0.94	0.98	1.06	1.00	-	0.1
Biofuels & waste	3.94	3.45	3.52	4.50	4.28	4.84	4.72	-0.7	1.4
Electricity	2.32	3.20	5.07	6.51	6.63	7.18	6.90	4.7	1.5
Heat	0.60	1.14	1.91	3.33	4.13	4.66	4.08	7.0	3.7
of which:									
Total industry	**6.52**	**5.99**	**9.02**	**11.60**	**9.47**	**10.87**	**10.60**	**1.9**	**0.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.94	1.01	1.54	0.93	0.52	0.72	0.67	2.9	-3.9
Oil	3.94	2.50	1.14	1.45	1.10	1.25	1.17	-7.0	0.1
Natural gas	-	0.40	0.92	0.83	0.62	0.67	0.67	-	-1.5
Biofuels & waste	-	-	2.45	3.40	2.63	3.01	3.08	-	1.1
Electricity	1.55	1.96	2.80	3.69	3.11	3.47	3.40	3.5	0.9
Heat	0.08	0.12	0.17	1.30	1.49	1.76	1.61	4.8	11.2
Transport	**2.41**	**2.80**	**3.95**	**3.99**	**4.20**	**4.37**	**4.34**	**2.9**	**0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.01	-	-	-	-	-	-	-	-
Oil	2.39	2.78	3.91	3.93	4.00	4.17	4.08	2.9	0.2
Natural gas	-	-	-	0.02	0.01	0.01	0.01	-	-
Biofuels & waste	-	-	-	-	0.12	0.12	0.18	-	-
Electricity	0.01	0.02	0.04	0.05	0.06	0.06	0.06	12.3	2.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.30**	**0.47**	**0.89**	**1.55**	**1.86**	**1.96**	**1.85**	**6.6**	**3.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	0.00	0.00	0.00	0.00	-	-
Oil	-	-	-	0.33	0.27	0.30	0.26	-	-
Natural gas	-	-	-	0.03	0.03	0.03	0.04	-	-
Biofuels & waste	-	-	-	0.05	0.08	0.09	0.08	-	-
Electricity	0.30	0.47	0.89	1.14	1.48	1.53	1.48	6.6	2.4
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**4.29**	**4.47**	**5.33**	**4.54**	**5.39**	**5.87**	**5.04**	**1.3**	**-0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	4.8
Coal	0.11	0.11	0.02	0.01	0.01	0.01	0.01	-8.6	-4.6
Oil	3.36	2.96	2.04	0.73	0.51	0.55	0.42	-2.9	-7.3
Natural gas	-	0.03	0.03	0.02	0.04	0.05	0.03	-	0.7
Biofuels & waste	-	-	0.91	0.94	1.29	1.43	1.22	-	1.4
Electricity	0.43	0.69	1.26	1.56	1.90	2.03	1.87	6.5	1.9
Heat	0.38	0.67	1.08	1.28	1.64	1.80	1.49	6.3	1.6
Agriculture & fishing	**0.52**	**0.58**	**0.92**	**0.69**	**0.70**	**0.74**	**0.69**	**3.4**	**-1.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	0.02	0.05	0.06	0.05	-	-
Oil	0.50	0.53	0.67	0.49	0.42	0.42	0.41	1.8	-2.3
Natural gas	-	0.00	0.01	0.02	0.01	0.01	0.00	-	-5.7
Biofuels & waste	-	-	0.16	0.10	0.15	0.17	0.14	-	-0.5
Electricity	0.02	0.05	0.09	0.07	0.08	0.08	0.08	7.8	-0.2
Heat	-	-	-	-	-	-	-	-	-
Other	**4.09**	**3.80**	**0.66**	**1.20**	**1.41**	**1.54**	**1.31**	**-10.1**	**3.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.00	-	-	0.43	0.40	0.41	0.31	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	3.94	3.45	-	0.01	0.02	0.02	0.02	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	0.14	0.35	0.66	0.76	0.99	1.11	0.98	9.4	1.9
Non-energy use(1)	**1.06**	**1.23**	**1.46**	**1.07**	**1.41**	**1.47**	**1.36**	**1.90**	**-0.32**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**19.19**	**19.34**	**22.24**	**24.65**	**26.06**	**24.44**	**26.81**	**25.19**
Total industry (Mtoe)	**6.52**	**5.99**	**9.02**	**11.60**	**11.43**	**9.47**	**10.87**	**10.60**
Iron and steel	0.59	0.91	0.92	0.83	0.78	0.64	0.97	0.90
Chem. and petrochemical	0.56	0.62	0.99	0.69	0.99	0.87	0.94	0.91
Non-ferrous metals	0.08	0.13	0.16	0.18	0.29	0.27	0.29	0.30
Non-metallic minerals	0.26	0.61	0.78	0.37	0.40	0.27	0.28	0.32
Transport equipment	0.06	0.06	0.04	0.07	0.07	0.06	0.09	0.09
Machinery	0.21	0.25	0.26	0.26	0.38	0.35	0.39	0.39
Mining and quarrying	0.13	0.13	0.11	0.11	0.11	0.10	0.11	0.13
Food and tobacco	0.47	0.49	0.45	0.28	0.35	0.42	0.40	0.40
Paper, pulp and printing	2.23	2.01	3.91	6.57	6.84	5.54	6.26	6.14
Wood and wood products	0.43	0.26	0.48	0.34	0.53	0.49	0.53	0.51
Construction	0.19	0.14	0.11	0.32	0.37	0.31	0.35	0.38
Textile and leather	0.11	0.09	0.06	0.05	0.04	0.03	0.03	0.03
Non specified/other	1.21	0.27	0.77	1.54	0.27	0.13	0.24	0.12
Electricity consumption (Mtoe)	**2.32**	**3.20**	**5.07**	**6.51**	**7.10**	**6.63**	**7.18**	**6.90**
Total industry (Mtoe)	**1.55**	**1.96**	**2.80**	**3.69**	**3.72**	**3.11**	**3.47**	**3.40**
Iron and steel	0.10	0.12	0.16	0.24	0.28	0.21	0.28	0.28
Chem. and petrochemical	0.17	0.24	0.31	0.37	0.41	0.37	0.40	0.41
Non-ferrous metals	0.04	0.08	0.13	0.15	0.17	0.16	0.16	0.17
Non-metallic minerals	0.04	0.05	0.07	0.08	0.08	0.08	0.07	0.07
Transport equipment	-	-	-	0.03	0.03	0.03	0.04	0.03
Machinery	0.08	0.12	0.15	0.17	0.23	0.22	0.22	0.24
Mining and quarrying	0.04	0.06	0.05	0.05	0.07	0.08	0.08	0.09
Food and tobacco	0.05	0.08	0.11	0.13	0.11	0.17	0.14	0.14
Paper, pulp and printing	0.90	1.04	1.58	2.17	2.03	1.62	1.79	1.72
Wood and wood products	0.06	0.10	0.10	0.13	0.14	0.13	0.14	0.13
Construction	0.02	0.03	0.04	0.02	0.03	0.03	0.03	0.03
Textile and leather	0.03	0.03	0.02	0.02	0.01	0.02	0.01	0.01
Non specified/other	0.02	0.02	0.06	0.14	0.14	-	0.11	0.08
Total industry (TWh)	**18.06**	**22.82**	**32.52**	**42.90**	**43.20**	**36.18**	**40.36**	**39.54**
Iron and steel	1.14	1.40	1.86	2.83	3.21	2.40	3.28	3.27
Chem. and petrochemical	2.01	2.79	3.66	4.33	4.77	4.32	4.63	4.71
Non-ferrous metals	0.45	0.90	1.47	1.76	1.98	1.91	1.91	1.94
Non-metallic minerals	0.50	0.59	0.86	0.87	0.98	0.88	0.80	0.85
Transport equipment	-	-	-	0.33	0.37	0.31	0.42	0.38
Machinery	0.90	1.41	1.79	1.95	2.66	2.57	2.61	2.74
Mining and quarrying	0.51	0.66	0.59	0.56	0.81	0.92	0.95	1.05
Food and tobacco	0.63	0.92	1.30	1.53	1.23	1.95	1.67	1.67
Paper, pulp and printing	10.44	12.15	18.43	25.18	23.55	18.88	20.80	20.00
Wood and wood products	0.74	1.11	1.13	1.51	1.58	1.56	1.57	1.54
Construction	0.19	0.30	0.49	0.21	0.32	0.31	0.35	0.35
Textile and leather	0.37	0.39	0.29	0.25	0.16	0.18	0.14	0.14
Non specified/other	0.19	0.22	0.67	1.58	1.58	-	1.24	0.90

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**4556**	**2374**	**11007**	**8501**	**12206**	**16107**	**15460**	**15719**	**17656**
Imports from:									
Total from OECD	**-**	**-**	**6476**	**3742**	**7687**	**5224**	**3752**	**4081**	**6887**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	2250	1785	1967	1650
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	125	37	132	159	112	114	131
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	6351	3705	7555	2815	1855	2000	5106
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**4531**	**4759 e**	**4519**	**10883**	**11708**	**11638**	**10769**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	4531	4759 e	4519	10883	11708	11638	10769
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**4556**	**2374**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**237**	**1163**	**364**	**96**	**326**	**3335**	**3375**	**5218**	**3804**
Exports to:									
Total to OECD	**-**	**-**	**364**	**95 e**	**326**	**3335**	**3375**	**5218**	**3804**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	10	87	246	484
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	2 e	173	58	126	156	127
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	364	93 e	153	3267	3162	4816	3193
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**1**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	1	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**237**	**1163**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**5.21**	**9.54**	**11.44**	**12.47**	**13.80**	**14.29**	**13.93**	**14.28**	**14.29**
Nuclear	-	2.20	2.36	2.31	2.64	2.67	2.67	2.70	2.70
Hydro	2.27	2.42	2.62	2.78	2.69	2.93	2.95	2.96	2.96
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.01	0.01	0.01	0.01
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.04	0.14	0.15	0.20	0.20
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	2.94	4.92	6.46	7.38	8.43	8.54	8.16	8.42	8.42
of which:									
Single-fired:									
Coal and coal products	0.05	0.06	0.04	0.05	0.06	0.06	0.06	0.06	0.06
Liquid fuels	1.02	1.04	0.90	0.88	0.92	0.91	0.71	0.71	0.71
Natural gas	-	0.24	0.44	0.32	0.41	0.37	0.37	0.37	0.37
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	1.75	3.43	3.54	3.91	4.26	4.40	4.10	4.16	4.16
Solid / natural gas	-	-	0.08	0.10	0.14	0.18	0.18	0.18	0.18
Liquid / natural gas	0.03	0.05	0.74	0.97	1.22	1.22	1.34	1.34	1.34
Solid / liquid / gas	0.09	0.09	0.73	1.14	1.42	1.42	1.42	1.62	1.62
Type of generation									
Steam	2.16	3.94	5.10	5.92	5.22	5.26	4.88	5.14	5.14
Internal combustion	-	-	-	-	0.05	0.05	0.05	0.05	0.05
Gas turbine	0.78	0.98	1.36	1.45	1.73	1.79	1.79	1.79	1.79
Combined cycle	-	-	-	-	1.44	1.44	1.44	1.44	1.44
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	10.24	11.20	12.40	13.82	13.34	14.62	14.97
Available capacity	..	..	13.97	13.11	12.82	12.48	12.28	12.60	12.64

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**1.29**	**1.42**	**1.78**	**1.97**	**2.47**	**2.38**	**2.41**	**2.41**	**2.41**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	0.20	0.20	0.20	0.20	0.20
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	1.29	1.42	1.78	1.97	2.27	2.19	2.22	2.22	2.21
of which:									
Single-fired:									
Coal and coal products	0.02	0.02	-	-	-	-	-	-	-
Liquid fuels	0.14	0.16	0.07	0.06	0.07	0.06	0.06	0.06	0.06
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	0.80	0.88	0.83	0.87	0.97	0.92	0.94	0.94	0.94
Solid / natural gas	-	-	0.05	0.09	0.11	0.05	0.05	0.05	0.05
Liquid / natural gas	0.19	0.19	0.30	0.31	0.37	0.38	0.38	0.38	0.38
Solid / liquid / gas	0.15	0.17	0.51	0.62	0.75	0.78	0.78	0.78	0.78
Type of generation									
Steam	1.29	1.42	1.78	1.97	2.00	1.93	1.96	1.96	1.95
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	-	-	0.12	0.11	0.11	0.11	0.11
Combined cycle	-	-	-	-	0.15	0.15	0.15	0.15	0.15
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	2.06	2.24	2.09	2.00	2.00	2.00	2.00

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	31.11	42.38	40.48	41.92	97.76	69.88	76.80	98.53	90.34
Heavy fuel oil (t)	67.61	127.32	115.38	198.90	394.68	303.70	404.13	..	..
Natural gas (MWh)(1)	5.99	10.94	6.83	10.56	20.00	18.70	20.85	24.35	27.46
				Euro/ toe					
Steam coal	51.1	69.6	66.5	68.8	160.5	114.7	126.1	161.8	148.3
Heavy fuel oil	70.4	132.6	120.2	207.2	411.1	316.4	421.0	..	..
Natural gas(2)	77.4	141.3	88.3	136.5	258.5	241.7	269.5	314.6	354.9
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	32.30	34.10	40.60	41.90	66.27	70.13	71.61	81.67	80.83
of which: tax	1.70	1.70	-	4.30	2.63	2.63	2.63	7.03	7.03
Household									
Price	39.90	43.40	66.10	84.40	117.93	125.05	132.42	153.53	151.61
of which: tax	2.00	2.20	11.20	22.20	30.10	31.38	33.15	45.74	45.38

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	180.14	191.77	224.00	251.98	261.16	252.83	251.71	1.3	0.5
GDP (billion 2005 USD)	1049.95	1283.62	1623.84	1973.04	2204.45	2249.13	2249.44	2.6	1.5
TPES/GDP(1)	0.17	0.15	0.14	0.13	0.12	0.11	0.11	-1.3	-0.9
Population (millions)	53.29	55.10	58.14	60.73	64.78	65.12	65.26	0.5	0.5
TPES/population(2)	3.38	3.48	3.85	4.15	4.03	3.88	3.86	0.8	0.0
TPES/GDP (2005 = 100)	135	118	109	101	94	89	88	-1.3	-0.9
Ele.TFC/GDP(2005=100)(3)	72	82	94	99	102	94	..	1.6	..
Ele.TFC/population(4)	2790	3797	5200	6341	6858	6448	..	3.7	..
Elec. generated (TWh)(5)	182.51	257.31	417.21	536.05	564.34	556.89	555.13	5.0	1.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**180.14**	**191.77**	**224.00**	**251.98**	**261.16**	**252.83**	**251.71**	**1.3**	**0.5**
Coal	29.30	32.89	20.21	15.04	12.07	10.28	11.47	-2.2	-2.5
Oil	119.81	106.32	84.03	82.22	75.59	75.56	73.91	-2.1	-0.6
Natural gas	13.50	21.64	26.02	35.76	42.53	37.03	38.23	3.9	1.8
Biofuels & waste	9.79	8.64	10.99	10.77	15.48	14.25	14.39	0.7	1.2
Nuclear	3.84	15.96	81.85	108.19	111.68	115.29	110.85	19.7	1.4
Geothermal	0.00	0.01	0.11	0.13	0.09	0.08	0.08	28.9	-1.3
Solar, wind, tide(1)	0.05	0.05	0.07	0.07	1.01	1.34	1.74	2.1	15.8
Hydro	4.10	5.98	4.63	5.77	5.36	3.85	4.85	0.7	0.2
Net electricity imports(2)	-0.25	0.28	-3.91	-5.98	-2.64	-4.85	-3.83	17.6	-0.1
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**182.5**	**258.0**	**420.7**	**540.7**	**576.2**	**569.2**	**562.0**	**561.2**
Nuclear	14.7	61.3	314.1	415.2	451.5	428.5	442.4	425.4
Hydro	47.7	70.2	57.3	71.8	56.5	67.1	49.9	62.5
of which:								
pumped storage production	*0.0*	*0.7*	*3.5*	*4.7*	*4.7*	*4.8*	*5.1*	*6.1*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.6	2.1	4.1
Tide, wave, ocean	0.6	0.5	0.6	0.6	0.5	0.5	0.5	0.5
Wind	-	-	-	0.1	1.0	9.9	12.2	14.9
Combustible fuels	119.5	126.0	48.8	53.1	66.7	62.4	54.9	53.8
Coal	*35.9*	*70.4*	*35.4*	*30.9 e*	*30.7*	*26.3 e*	*17.3*	*22.7*
Oil	*73.3*	*48.4*	*8.7*	*7.2 e*	*7.9*	*5.6*	*3.4*	*3.2*
Natural gas	*10.1*	*7.0*	*3.0*	*11.5 e*	*23.1*	*23.8*	*26.8*	*20.5*
Biofuels & waste	*0.2 e*	*0.2 e*	*1.6 e*	*3.6*	*5.0*	*6.8*	*7.4*	*7.5*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	8.0	11.3	19.4	23.8	25.9	24.2	24.6	..
Net production	**174.5**	**246.7**	**401.3**	**516.9**	**550.3**	**545.0**	**537.3**	**..**
Nuclear	..	57.9	297.9	395.2	430.0	407.9	421.1	..
Hydro	..	69.3	56.6	70.9	55.9	66.8	49.7	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.6	2.1	..
Tide, wave, ocean	..	0.5	0.6	0.6	0.5	0.5	0.5	..
Wind	..	-	-	0.1	1.0	9.9	12.2	..
Combustible fuels	..	118.9	46.2 e	50.1	62.9	59.2 e	51.8	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.2	1.0	4.9	6.6	6.6	6.6	6.9	6.7
+ Imports	4.7	15.6	6.7	3.7	8.1	19.5	9.5	12.2
- Exports	7.5	12.4	52.1	73.2	68.4	50.2	65.9	56.7
Electrical energy supplied	**171.4**	**249.0**	**351.0**	**440.8**	**483.3**	**507.6**	**474.0**	**..**
- Transmission & distr. losses	11.4	17.3	27.7	30.4	32.2	35.4	29.1	..
- Statistical difference	-	-	-	-	0.0	0.5	-0.2	..
Total consumption	**160.0**	**231.7**	**323.3**	**410.4**	**451.1**	**471.8**	**445.1**	**..**
- Energy industry consumption[2]	11.4	22.5	21.0	25.5	28.3	27.7	25.4	..
Final consumption	**148.6**	**209.1**	**302.2**	**384.9**	**422.8**	**444.1**	**419.7**	**..**
Industry	84.0	95.4	114.7	134.7	139.5	117.4	117.9	..
Transport	6.4	6.9	8.9	11.7	12.2	12.5	12.4	..
Commercial & publ. serv.	26.9	43.6	79.4	104.0	120.8	145.4	132.8	..
Residential	30.2	61.5	96.9	128.7	144.5	162.5	148.6	..
Agriculture & fishing	1.1	1.5	2.1	2.7	3.4	3.5	3.3	..
Sector non specified	0.1	0.2	0.3	3.1	2.3 e	2.7	4.6	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**186.86**	**257.98**	**420.73**	**540.73**	**535.73**	**569.16**	**561.96**	**5.2**	**1.4**
- Hydro pumped storage	*0.01*	*0.67*	*3.53*	*4.68*	*4.97*	*4.81*	*5.07*	*43.4*	*1.7*
Total generation(1)	**186.85**	**257.31**	**417.21**	**536.05**	**530.76**	**564.34**	**556.89**	**5.1**	**1.4**
Main activity producers									
Gross production	153.59	224.41	394.49	524.91	522.22	555.83	546.50	6.1	1.6
- Hydro pumped storage	*0.01*	*0.67*	*3.53*	*4.68*	*4.97*	*4.81*	*5.07*	*43.4*	*1.7*
Total generation(1)	153.58	223.74	390.97	520.23	517.25	551.02	541.43	6.0	1.6
Nuclear	14.70	61.25	314.08	415.16	409.74	428.52	442.38	21.1	1.6
Hydro	52.39	65.18	48.81	66.19	56.40	61.51	44.10	-0.4	-0.5
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	0.60	0.50	0.57	0.64	8.20	10.51	13.78	-0.3	16.4
Coal	16.46	50.28	22.28	28.35	22.99	25.17	16.33	1.9	-1.5
Oil	59.78	42.21	5.02	4.74	3.06	3.93	1.94	-14.3	-4.4
Natural gas	9.48	4.10	0.22	4.96	16.54	21.18	22.40	-21.0	24.7
Biofuels & waste	0.18	0.22	-	0.20	0.33	0.21	0.50	-	-
Autoproducers									
Gross production	33.27	33.57	26.24	15.82	13.50	13.33	15.46	-1.5	-2.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	33.27	33.57	26.24	15.82	13.50	13.33	15.46	-1.5	-2.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3.84	4.33	5.00	0.94	0.81	0.81	0.72	1.7	-8.8
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.02	0.39	0.58	1.04	-	-
Coal	19.04	20.10	13.15	2.51	1.03	1.15	0.98	-2.3	-11.6
Oil	9.23	6.23	3.65	2.43	1.76	1.64	1.50	-5.6	-4.2
Natural gas	1.16	2.91	2.81	6.56	3.96	2.58	4.36	5.7	2.1
Biofuels & waste	-	-	1.63	3.37	5.56	6.56	6.86	-	7.1

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**27928 e**	**27380 e**	**25171**	**14970**	**12768**	**12513**	**14697**	**-2.5**
Total energy	**-**	**-**	**12831**	**1487**	**1786**	**1599**	**1967**	**-8.5**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	1487	1786	1599	1967	-
Energy non specified/other	-	-	12831	-	-	-	-	-
Total industry	**27928 e**	**27380 e**	**9766**	**9272**	**6230**	**5953**	**7023**	**-1.6**
Iron and steel	4347 e	3064 e	2381	1354	947	1049	1216	-3.1
Chemical and petrochemical	5029 e	5121 e	4218	3253	1974	1851	2189	-3.1
Non-ferrous metals	182 e	161 e	280	18	11	9	11	-14.3
Non-metallic minerals	1 e	-	-	8	13	11	13	-
Transport equipment	262 e	173 e	220	331	240	209	250	0.6
Machinery	-	-	-	62	27	25	29	-
Mining and quarrying	14813 e	15645 e	254	27	25	24	29	-9.8
Food and tobacco	659 e	719 e	667	1208	917	824	981	1.9
Pulp and printing	-	-	1667	2354	1598	1535	1808	0.4
Wood and wood products	1940 e	1837 e	-	28	37	31	37	-
Construction	-	-	-	275	272	244	291	-
Textile and leather	541 e	276 e	79	19	2	2	2	-16.1
Non specified/other industries	154 e	384 e	-	335	167	139	167	-
Total transport	**-**	**-**	**1007**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	1007	-	-	-	-	-
Other	**-**	**-**	**1567**	**4211**	**4752**	**4961**	**5707**	**6.3**
Commerce and pub. services	-	-	-	4197	3553	4948	5691	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	14	16	13	16	-
Sector non specified	-	-	1567	-	1183	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**9968 e**	**19997**	**135470**	**174304**	**147570 e**	**152984**	**152984**	**10.2**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	18101	16596	11929 e	13375	13375	-
Oil	-	-	33897	28537	26637 e	23469	23469	-
Natural gas	-	-	59480	107537	84262	92702	92702	-
Biofuels & waste	9968 e	19997	23992	21634	24742	23438	23438	0.8
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	-	38603	60739	84623	84605	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	2487	788	284	731	..	-
Oil	-	-	15337	13886	8861	7190	..	-
Natural gas	-	-	17377	41751	73204	74574	..	-
Biofuels & waste	-	-	3402	4314	2274	2110	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	9968 e	19997	96867	113565	62947 e	68379	..	6.0
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	15614	15808	11645 e	12644	..	-
Oil	-	-	18560	14651	17776 e	16279	..	-
Natural gas	-	-	42103	65786	11058	18128	..	-
Biofuels & waste	9968 e	19997	20590	17320	22468	21328	..	0.3
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**28.71**	**29.39**	**11.81**	**13.61**	**16.09**	**18.21**	**15.83**	**-5.1**	**1.4**
Coal	10.37	17.09	8.43	7.59	5.79	5.84	3.85	-1.2	-3.7
Oil	15.54	10.16	1.62	1.23	2.17	2.23	1.52	-12.4	-0.3
Natural gas	1.92	1.32	0.44	3.00	5.70	7.52	7.87	-8.4	14.8
Biofuels & waste	0.87	0.83	1.32	1.79	2.44	2.63	2.59	2.5	3.3
of which: ***main activity prod.***									
Total	**..**	**22.07**	**6.03**	**8.43**	**11.22**	**13.38**	**10.66**	**..**	**2.8**
Coal	..	11.86	4.85	6.58	5.19	5.21	3.25	..	-1.9
Oil	..	9.19	1.14	0.65	1.15	1.27	0.65	..	-2.6
Natural gas	..	0.95	0.04	1.01	4.69	6.70	6.58	..	26.8
Biofuels & waste	..	0.06	-	0.19	0.19	0.20	0.17	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**3.84**	**15.96**	**81.85**	**108.19**	**106.79**	**111.73**	**115.46**	**19.7**	**1.7**
Nuclear	3.84	15.96	81.85	108.19	106.78	111.68	115.29	19.7	1.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00	0.01	0.05	0.18	-	-
Non-Thermal									
Total	**4.15**	**6.02**	**4.68**	**5.83**	**5.64**	**6.26**	**4.95**	**0.7**	**0.3**
Hydro	4.10	5.98	4.63	5.77	4.92	5.36	3.85	0.7	-0.9
Tide, wave, ocean	0.05	0.04	0.05	0.05	0.04	0.05	0.05	0.1	-0.3
Wind	-	-	-	0.01	0.68	0.85	1.05	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	25527	11028	9591	7468	7038	4717	-4.0
Fuel input (TJ)	571414	281299 e	249381 e	201833	201066	122290	-3.9
Electricity production (GWh)	60951	29053	25525	21075	22867	14613	-3.2
Brown coal							
Fuel input (1000 t)	2385	1843	267	-	-	-	-
Fuel input (TJ)	32044	32174 e	4905	-	-	-	-
Electricity production (GWh)	2765	2420	409	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	76502	39312	39697 e	21359	26123	21979	-2.7
Electricity production (GWh)	6662	3950	3738	2288	2913 e	2150	-2.9
Petroleum products							
Fuel input (1000 t)	10628	1704	1460 e	1323	1348	703	-4.1
Fuel input (TJ)	417311	69853	56284 e	49635	55733	28377	-4.2
Electricity production (GWh)	48439	8668	5441	3824	4717	2613 e	-5.6
Natural gas[2]							
Fuel input (TJ)	66516	20319	10868 e	119117	150426	179440	10.9
Electricity production (GWh)	7006	3027	797	10574	10213	13115	7.2
Wood and other solid waste							
Fuel input (TJ)	-	-	1789	14330	12570	3017	-
Electricity production (GWh)	-	-	278	374	314	163	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	2676 e	5316 e	13992 e	27864	30150	36230	9.6
Electricity production (GWh)	223 e	443	974	2288	2418	2800	9.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	421	2547	7446	7989	8705	15.5
Electricity production (GWh)	-	32	255	708	757	800	16.6
Total combustible fuels[3]							
Electricity production (GWh)	126046	47593	37417	41131	44199	36254	-1.3

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	..	-	833	638	558	549	-
Fuel input (TJ)	..	-	21669	17224	15932	14217	-
Electricity production (GWh)	..	-	1070	592	492	488	-
CHP Heat production (TJ)	..	-	15533	11552	10864	10899	-
Brown coal							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	..	-	3380	2546	1958	3428	-
Electricity production (GWh)	..	-	118	64	43	59	-
CHP Heat production (TJ)	..	-	2568	1382	1065 e	2476	-
Petroleum products							
Fuel input (1000 t)	..	-	1204	887	882	809	-
Fuel input (TJ)	..	-	61492	40091	43274	34897	-
Electricity production (GWh)	..	-	1724	998	848	826	-
CHP Heat production (TJ)	..	-	33897	27228 e	26637 e	23469	-
Natural gas[2]							
Fuel input (TJ)	..	-	128689	146124	199509	186622	-
Electricity production (GWh)	..	-	10717	9929 e	13545	13640	-
CHP Heat production (TJ)	..	-	59480	61679 e	84262	92702	-
Wood and other solid waste							
Fuel input (TJ)	..	6780 e	5230 e	5151	7405	14611	3.7
Electricity production (GWh)	..	1116 e	812	860	1216	1582	1.7
CHP Heat production (TJ)	..	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	37964 e	27906	30488	31426	-
Electricity production (GWh)	..	-	1188	1494	1768	1620	-
CHP Heat production (TJ)	..	-	17814	17298	18372	16814	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	291	287	1156	2150	2559	10.9
Electricity production (GWh)	..	41	54	167	296	396	11.4
CHP Heat production (TJ)	..	-	-	-	-	-	-
Total combustible fuels[3]							
Electricity production (GWh)	..	1157	15683	14104	18208	18611	14.1
CHP Heat production (TJ)	..	-	129292	119139	141200	146360	-

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Natural gas[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	21261 e	42666 e	13082 e	18364	19218	12058	-5.8
Heat production (TJ)	9968 e	19997	6178	5540	6370	6624	-5.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Heat production (TJ)	9968 e	19997 e	6178	5540	6370	6624	-5.1

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.
(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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FRANCE
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**142.22**	**141.29**	**143.08**	**163.21**	**157.87**	**162.70**	**152.20**	**0.0**	**0.3**
Geothermal	0.00	0.01	0.11	0.13	0.08	0.09	0.08	28.9	-1.3
Solar thermal	-	0.01	0.02	0.02	0.05	0.06	0.06	-	5.8
Coal	13.96	8.61	7.78	4.43	3.05	3.46	3.19	-3.4	-4.2
Oil	96.03	87.36	75.12	81.19	72.77	71.54	69.85	-1.4	-0.3
Natural gas	10.27	19.27	23.92	32.14	31.07	32.99	27.61	5.1	0.7
Biofuels & waste	8.91	7.81	9.66	8.98	11.92	12.85	11.66	0.5	0.9
Electricity	12.78	17.98	25.99	33.10	35.94	38.19	36.10	4.3	1.6
Heat	0.26	0.24	0.48	3.24	2.98	3.52	3.65	3.7	10.2
of which:									
Total industry	**41.69**	**41.21**	**32.96**	**34.74**	**27.40**	**29.05**	**28.52**	**-1.4**	**-0.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	7.28	5.40	5.86	3.64	2.64	3.01	2.84	-1.3	-3.4
Oil	21.86	19.27	6.56	5.61	5.17	5.01	5.00	-6.8	-1.3
Natural gas	4.15	7.21	9.19	12.34	8.14	9.09	8.58	4.8	-0.3
Biofuels & waste	1.17	1.13	1.50	1.56	1.85	1.85	1.96	1.4	1.3
Electricity	7.22	8.20	9.86	11.58	9.61	10.10	10.14	1.8	0.1
Heat	-	-	-	-	-	-	-	-	-
Transport	**24.71**	**30.31**	**38.53**	**45.04**	**43.81**	**43.82**	**43.68**	**2.6**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.07	0.02	-	-	-	-	-	-	-
Oil	24.08	29.69	37.77	43.70	40.21	40.27	40.13	2.7	0.3
Natural gas	0.01	0.01	0.00	0.00	0.06	0.05	0.05	-23.4	31.8
Biofuels & waste	-	-	-	0.33	2.47	2.42	2.44	-	-
Electricity	0.55	0.59	0.76	1.00	1.08	1.08	1.07	1.9	1.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**36.63**	**30.21**	**18.07**	**18.14**	**22.30**	**23.57**	**20.95**	**-4.1**	**0.7**
Geothermal	-	-	-	-	0.03	0.03	0.03	-	-
Solar thermal	-	-	-	-	0.01	0.01	0.01	-	-
Coal	0.20	0.00	-	-	0.11	0.13	0.10	-	-
Oil	32.43	22.17	5.10	4.31	3.86	3.52	2.97	-10.3	-2.5
Natural gas	1.69	4.29	6.10	4.52 e	5.93	6.69	5.61	7.8	-0.4
Biofuels & waste	-	-	0.05	0.37	0.69	0.69	0.80	-	14.4
Electricity	2.31	3.75	6.82	8.95	11.68	12.51	11.42	6.6	2.5
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**21.40**	**22.60**	**35.74**	**40.74**	**42.66**	**43.45**	**36.95**	**3.1**	**0.2**
Geothermal	0.00	0.01	0.11	0.12	0.05	0.05	0.05	28.8	-3.6
Solar thermal	-	0.01	0.02	0.02	0.04	0.05	0.05	-	5.0
Coal	6.42	3.19	1.66 e	0.63	0.20	0.23	0.17	-7.6	-10.2
Oil	1.83	2.09	10.96	9.56	8.24	7.43	6.20	11.1	-2.7
Natural gas	2.92	5.42	6.59	12.66 e	14.19	13.87	11.28	4.9	2.6
Biofuels & waste	7.64	6.59	8.08	6.68	6.88	7.85	6.41	0.3	-1.1
Electricity	2.59	5.29	8.33	11.07	13.05	13.97	12.78	7.1	2.1
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**2.88**	**3.24**	**3.90**	**4.26**	**4.14**	**4.39**	**4.32**	**1.8**	**0.5**
Geothermal	0.00	0.00	0.00	0.01	0.01	0.01	0.01	30.5	1.3
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	2.74	2.94	3.54	3.68	3.61	3.84	3.80	1.5	0.3
Natural gas	-	0.13	0.14	0.30	0.20	0.21	0.18	-	1.5
Biofuels & waste	0.04	0.04	0.04	0.04	0.04	0.04	0.04	-0.0	0.5
Electricity	0.10	0.13	0.18	0.23	0.28	0.30	0.29	3.7	2.2
Heat	-	-	-	-	-	-	-	-	-
Other	**0.32**	**0.31**	**0.50**	**4.13**	**5.38**	**6.28**	**5.46**	**2.7**	**12.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	0.04	0.04	0.03	-	-
Oil	-	-	-	0.63	0.73	0.73	0.86	-	-
Natural gas	-	-	-	-	1.38	1.76	0.53	-	-
Biofuels & waste	0.06	0.06	-	-	-	-	-	-	-
Electricity	0.01	0.01	0.03	0.27	0.25	0.23	0.40	8.6	13.6
Heat	0.26 e	0.24 e	0.48	3.24	2.98	3.52	3.65	3.7	10.2
Non-energy use(1)	**14.60**	**13.41**	**13.36**	**16.17**	**12.18**	**12.14**	**12.32**	**-0.52**	**-0.39**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**142.22**	**141.29**	**143.08**	**163.21**	**165.46**	**157.87**	**162.70**	**152.20**
Total industry (Mtoe)	**41.69**	**41.21**	**32.96**	**34.74**	**31.73**	**27.40**	**29.05**	**28.52**
Iron and steel	8.99	6.79	5.43	4.13	3.88	2.99	3.54	3.37
Chem. and petrochemical	5.44	6.33	6.21	6.12	7.75	6.20	5.94	6.10
Non-ferrous metals	2.15	2.23	1.68	1.47	0.99	0.97	0.88	0.98
Non-metallic minerals	3.34	3.24	4.04	3.70	4.40	3.91	4.00	4.12
Transport equipment	0.86	0.75	0.87	1.55	1.17	1.10	1.13	1.05
Machinery	1.71	2.45	3.01	2.47	2.24	2.01	2.24	2.13
Mining and quarrying	0.85	0.68	0.61	0.24	0.20	0.23	0.23	0.24
Food and tobacco	3.11	3.67	3.74	5.02	4.59	4.54	4.85	4.38
Paper, pulp and printing	2.75	2.66	2.95	3.57	2.47	2.18	2.36	1.99
Wood and wood products	0.87	0.73	1.17	1.05	1.06	0.76	0.76	1.03
Construction	3.23	2.04	1.08	1.13	1.34	1.00	1.11	0.99
Textile and leather	2.13	1.30	1.01	1.66	0.45	0.36	0.33	0.31
Non specified/other	6.25	8.35	1.18	2.63	1.19	1.14	1.68	1.84
Electricity consumption (Mtoe)	**12.78**	**17.98**	**25.99**	**33.10**	**37.22**	**35.94**	**38.19**	**36.10**
Total industry (Mtoe)	**7.22**	**8.20**	**9.86**	**11.58**	**11.06**	**9.61**	**10.10**	**10.14**
Iron and steel	1.22	1.31	1.00	1.48	1.02	0.76	0.88	0.95
Chem. and petrochemical	1.74	1.84	2.30	2.21	2.64	2.28	2.38	2.37
Non-ferrous metals	0.89	1.06	0.91	0.83	0.68	0.62	0.64	0.62
Non-metallic minerals	0.51	0.53	0.55	0.70	0.86	0.75	0.79	0.82
Transport equipment	0.40	0.47	0.69	0.74	0.75	0.63	0.65	0.69
Machinery	0.66	0.79	1.17	1.28	1.49	1.26	1.37	1.35
Mining and quarrying	0.14	0.18	0.32	0.16	0.06	0.05	0.05	0.05
Food and tobacco	0.42	0.61	1.19	1.52	1.75	1.73	1.73	1.76
Paper, pulp and printing	0.46	0.51	0.81	1.18	0.91	0.78	0.79	0.76
Wood and wood products	0.11	0.14	0.34	0.19	0.21	-	-	-
Construction	0.07	0.07	0.18	0.13	0.22	0.16	0.19	0.17
Textile and leather	0.58	0.60	0.36	0.31	0.18	0.15	0.15	0.14
Non specified/other	0.03	0.10	0.05	0.85	0.30	0.45	0.49	0.47
Total industry (TWh)	**83.99**	**95.36**	**114.67**	**134.66**	**128.64**	**111.72**	**117.44**	**117.89**
Iron and steel	14.23	15.23	11.64	17.15	11.90	8.82	10.22	11.02
Chem. and petrochemical	20.27	21.41	26.79	25.74	30.70	26.56	27.64	27.51
Non-ferrous metals	10.30	12.32	10.54	9.70	7.90	7.15	7.47	7.16
Non-metallic minerals	5.92	6.15	6.36	8.12	10.01	8.66	9.17	9.49
Transport equipment	4.62	5.46	8.02	8.66	8.67	7.31	7.56	8.01
Machinery	7.70	9.20	13.63	14.83	17.30	14.66	15.94	15.68
Mining and quarrying	1.66	2.06	3.66	1.89	0.68	0.55	0.58	0.62
Food and tobacco	4.85	7.05	13.80	17.70	20.38	20.09	20.10	20.42
Paper, pulp and printing	5.39	5.93	9.39	13.69	10.58	9.05	9.20	8.87
Wood and wood products	1.24	1.63	3.94	2.16	2.44	-	-	-
Construction	0.79	0.84	2.10	1.50	2.54	1.90	2.17	2.03
Textile and leather	6.73	6.97	4.24	3.63	2.07	1.71	1.76	1.66
Non specified/other	0.31	1.14	0.56	9.90	3.47	5.25	5.64	5.41

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**4654**	**15639**	**6674**	**2860**	**3695**	**10748**	**18517**	**19475**	**9501**
Imports from:									
Total from OECD	**4636**	**15628**	**6674**	**2860**	**3695**	**10748**	**18517**	**19475**	**9501**
Austria	-	-	-	-	-	-	-	-	-
Belgium	89	7810	3544	1244	202	2036	6611	5389	2324
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	1125	3741	534	390	618	1188	1432	791	412
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	318	736	183	267	392	1140	589	437	998
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	2171	1285	1873	376	595	1661	2343	3501	2458
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	911	2037	495	557	1888	3800	4182	5247	1929
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	22	19	45	26	-	923	3360	4110	1380
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**18**	**11**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**7543**	**12394**	**52112**	**72701**	**73174**	**58736**	**44451**	**50188**	**65914**
Exports to:									
Total to OECD	**7543**	**12394**	**51935**	**72554**	**73093**	**58488**	**44248**	**49968**	**65719**
Austria	-	-	-	-	-	-	-	-	-
Belgium	1320	1086	2312	5707	8512	7286	1839	3182	7248
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	3096	3659	8666	17357	15653	10889	10609	15132	20601
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	761	1425	15441	17637	16126	12841	11817	11656	14299
Luxembourg	-	2	-	47	42	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	244	1819	1513	5891	8504	4571	3960	2000	3998
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	1990	4381	12078	9620	9559	9482	8310	9705	12324
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	132	22	11925	16295	14697	13419	7713	8293	7249
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**177**	**147**	**81**	**248**	**203**	**220**	**195**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**36.48**	**54.58**	**95.18**	**99.42**	**109.27**	**110.84**	**112.94**	**117.47**	**125.80**
Nuclear	2.89	14.39	55.75	58.52	63.18	63.26	63.13	63.13 e	63.13
Hydro	14.87	17.97	23.03	23.11	24.88	24.81	24.93	25.08	25.16
of which: pumped storage	*0.08*	*1.61*	*7.03*	*7.09*	*7.17*	*6.99*	*6.99*	*6.99 e*	*6.99*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.07	0.23	0.90	2.23
Tide, wave, ocean	0.24	0.24	0.24	0.24	0.24	0.24	0.24	0.24 e	0.24
Wind	-	-	-	- e	0.05	3.21	3.81	4.94 e	5.97
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	1.27
Combustible fuels	18.48	21.97	16.16	17.55	20.92	19.26	20.61	23.18 e	27.79
of which:									
Single-fired:									
Coal and coal products	2.85	4.60	2.36	1.67	..	..	..	..	7.94
Liquid fuels	9.05	11.14	7.21	8.51	..	..	..	..	10.36
Natural gas	0.57	0.45	0.08	0.08	..	..	..	..	9.49
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	4.23	3.90	5.68	6.26	..	..	..	..	-
Solid / natural gas	0.48	0.72	0.25	0.25	..	..	..	..	-
Liquid / natural gas	1.29	0.76	0.08	0.29	..	..	..	..	-
Solid / liquid / gas	-	0.40	0.50	0.50	..	..	..	..	-
Type of generation									
Steam	-	-	15.29	16.48	..	..	..	..	-
Internal combustion	-	-	0.24	0.23	..	..	..	..	-
Gas turbine	-	-	0.64	0.84	..	..	..	..	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	63.40	66.80	72.39	89.00	92.40	96.71	91.72
Available capacity	..	..	69.00	76.30	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**8.90**	**9.09**	**8.23**	**8.20**	**5.41**	**6.91**	**6.09**	**7.09**	**5.56**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.22	1.08	1.72	1.88	0.25	0.29	0.26	0.26 e	0.17
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	0.01	0.04	0.13 e	0.53
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.01	0.22	0.78	1.06	0.72
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	7.68	8.01	6.51	6.32	5.15	6.39	5.02	5.65 e	4.14
of which:									
Single-fired:									
Coal and coal products	4.35	4.34	2.88	2.53	..	..	..	..	-
Liquid fuels	0.66	0.66	0.65	1.00	..	..	-	-	-
Natural gas	0.13	0.16	0.18	0.19	..	..	..	..	-
Biofuels & waste	-	-	-	-	..	..	..	..	-
Multi-fired:									
Solid / liquid	2.32	2.51	2.52	2.39	..	..	..	..	-
Solid / natural gas	0.05	0.06	0.04	0.04	..	..	..	..	-
Liquid / natural gas	0.17	0.29	0.24	0.17	..	..	..	..	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	5.82	5.30	..	..	..	..	-
Internal combustion	-	-	0.13	0.24	..	..	..	..	-
Gas turbine	-	-	0.57	0.77	..	..	..	..	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	..	32.17	42.23	40.41	93.11	82.02	81.75	92.26	..
Heavy fuel oil (t)	..	..	..	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				Euro/ toe					
Steam coal	..	51.8	68.0	65.1	149.9	132.1	131.6	148.6	..
Heavy fuel oil	..	..	..	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	22.30	30.90	46.80	38.80	71.70	76.80	80.74	87.35	90.50
of which: tax	-	-	-	-	7.40	7.90	8.64	12.13	13.79
Household									
Price	55.40	73.50	124.60	110.30	112.40	114.60	124.79	134.46	135.97
of which: tax	10.80	14.50	23.10	23.30	28.00	28.70	33.78	39.47	41.09

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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GERMANY

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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GERMANY

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	334.70	357.18	351.15	336.58	329.77	311.77	307.38	0.3	-0.6
GDP (billion 2005 USD)	1491.79	1760.61	2216.25	2685.20	2959.06	3048.69	3068.88	2.4	1.5
TPES/GDP(1)	0.22	0.20	0.16	0.13	0.11	0.10	0.10	-2.0	-2.1
Population (millions)	78.96	78.30	79.36	82.19	81.76	81.78	81.64	0.0	0.1
TPES/population(2)	4.24	4.56	4.42	4.10	4.03	3.81	3.77	0.3	-0.7
TPES/GDP (2005 = 100)	185	167	131	103	92	84	83	-2.0	-2.1
Ele.TFC/GDP(2005=100)(3)	111	118	109	96	95	91	..	-0.1	..
Ele.TFC/population(4)	3964	5006	5736	5884	6472	6379	..	2.2	..
Elec. generated (TWh)(5)	374.35	466.34	547.65	572.31	621.97	602.42	610.95	2.3	0.5

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**334.70**	**357.18**	**351.15**	**336.58**	**329.77**	**311.77**	**307.38**	**0.3**	**-0.6**
Coal	139.40	141.02	128.56	84.83	77.12	77.35	77.69	-0.5	-2.3
Oil	158.70	143.86	121.39	124.69	105.16	101.92	101.01	-1.6	-0.8
Natural gas	28.64	51.19	54.96	71.83	75.76	69.58	67.78	3.9	1.0
Biofuels & waste	2.50	4.35	4.80	7.86	29.41	26.60	27.31	3.9	8.2
Nuclear	3.15	14.50	39.84	44.20	36.63	28.16	25.92	16.1	-1.9
Geothermal	-	-	0.01	0.12	0.53	0.58	0.66	-	23.0
Solar, wind, tide(1)	-	-	0.02	0.92	4.70	6.42	6.94	-	31.3
Hydro	1.31	1.64	1.50	1.87	1.76	1.49	1.84	0.8	0.9
Net electricity imports(2)	0.99	0.61	0.08	0.26	-1.29	-0.32	-1.77	-13.8	-
Heat	-	-	-0.00	-0.00	-0.01	-0.01	-0.01	-	3.3

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**375.9**	**467.6**	**550.0**	**576.5**	**620.6**	**628.9**	**608.7**	**617.6**
Nuclear	12.1	55.6	152.5	169.6	163.1	140.6	108.0	99.5
Hydro	16.8	20.3	19.8	26.0	26.7	27.4	23.5	28.1
of which:								
pumped storage production	*1.6*	*1.2*	*2.4*	*4.2*	*7.1*	*6.9*	*6.2*	*6.7*
Geothermal	-	-	-	-	-	0.0	0.0	0.0
Solar	-	-	0.0	0.1	1.3	11.7	19.3	28.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.1	9.4	27.2	37.8	48.9	46.0
Combustible fuels	347.0	391.7	377.7	371.6 e	402.3 e	408.5 e	406.1	413.7
Coal	*258.3*	*293.5*	*321.6*	*304.2 e*	*305.7 e*	*273.6 e*	*271.9*	*286.4*
Oil	*44.8*	*26.7*	*10.4*	*4.8*	*10.6*	*8.3*	*6.6*	*9.5*
Natural gas	*41.0*	*66.0*	*40.5*	*52.5*	*69.4*	*86.8*	*83.6*	*70.0*
Biofuels & waste	*2.9*	*5.4*	*5.2*	*10.1 e*	*16.6 e*	*39.9*	*44.0*	*47.8*
Other (e.g. fuel cells)	-	-	-	-	-	3.0	2.8	2.3
- Own use by power plant	26.1	31.0	41.4	38.1	39.0	33.4	35.8	..
Net production	**349.8**	**436.6**	**508.6**	**538.5**	**581.6**	**595.5**	**572.9**	**..**
Nuclear	..	52.5	144.4	160.7	154.6	132.9	102.2	..
Hydro	..	20.0	19.4	25.6	26.3	26.8	23.0	..
Geothermal	..	-	-	-	-	0.0	0.0	..
Solar	..	-	0.0	0.1	1.3	11.7	19.3	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.1	9.4	27.2	37.8	48.9	..
Combustible fuels	..	364.1	344.7	342.8 e	372.1 e	383.6 e	376.8	..
Other (e.g. fuel cells)	..	-	-	-	-	2.7	2.6	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	3.8	3.7	5.0	6.0	9.5	8.6	7.8	8.1
+ Imports	19.7	23.4	31.7	45.1	56.9	43.0	51.0	46.3
- Exports	8.1	16.2	30.7	42.1	61.4	57.9	54.8	66.8
Electrical energy supplied	**357.6**	**440.0**	**504.5**	**535.5**	**567.5**	**572.0**	**561.3**	**..**
- Transmission & distr. losses	20.0	20.8	23.5	34.1	29.4	28.2	25.7	..
- Statistical difference	-	-	-	-	-	-0.1	-0.9	..
Total consumption	**337.6**	**419.2**	**481.0**	**501.4**	**538.1**	**543.8**	**536.5**	**..**
- Energy industry consumption[2]	24.7	27.3	25.9	18.0	17.2	14.9	15.0	..
Final consumption	**312.9**	**391.9**	**455.1**	**483.5**	**521.0**	**529.0**	**521.5**	**..**
Industry	178.3	199.5	216.5	211.6	231.3	225.4	230.7	..
Transport	9.9	12.0	13.7	15.9	16.2	16.7	16.6	..
Commercial & publ. serv.	40.1	58.2	80.7	117.9	123.9	136.2	128.7	..
Residential	78.6	115.0	137.1	130.5	141.3	141.7	136.6	..
Agriculture & fishing	6.1	7.1	7.2	7.5	8.3	9.0	9.0	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**392.14**	**467.58**	**550.02**	**576.54**	**590.37**	**628.90**	**608.67**	**2.1**	**0.5**
- Hydro pumped storage	*1.57*	*1.24*	*2.37*	*4.23*	*6.05*	*6.93*	*6.25*	*2.6*	*4.7*
Total generation[1]	**390.56**	**466.34**	**547.65**	**572.31**	**584.32**	**621.97**	**602.42**	**2.1**	**0.5**
Main activity producers									
Gross production	287.48	372.48	466.09	527.63	546.53	576.01	558.25	3.1	0.9
- Hydro pumped storage	*1.57*	*1.24*	*2.37*	*4.23*	*6.05*	*6.93*	*6.25*	*2.6*	*4.7*
Total generation[1]	285.90	371.24	463.72	523.40	540.48	569.08	552.01	3.1	0.8
Nuclear	14.46	54.50	151.37	169.61	134.93	140.56	107.97	15.8	-1.6
Hydro	15.24	16.78	15.39	21.73	18.30	20.05	16.94	0.1	0.5
Geothermal	-	-	-	-	0.02	0.03	0.02	-	-
Solar, wind, tide[2]	-	-	0.05	9.41	45.86	50.10	68.93	-	41.2
Coal	187.58	228.71	262.70	279.61	245.98	254.30	254.07	2.1	-0.2
Oil	18.77	15.16	6.46	1.62	3.50	2.89	1.83	-6.4	-5.8
Natural gas	48.81	53.23	25.20	36.06	59.86	65.35	62.55	-4.0	4.4
Biofuels & waste	1.05	2.85	2.56	5.37	32.04	35.81	39.71	5.7	14.0
Autoproducers									
Gross production	104.66	95.10	83.93	48.91	43.84	52.89	50.41	-1.4	-2.4
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation[1]	104.66	95.10	83.93	48.91	43.84	52.89	50.41	-1.4	-2.4
Nuclear	-	1.09	1.10	-	-	-	-	-	-
Hydro	2.40	2.29	2.04	-	0.37	0.38	0.33	-1.0	-8.4
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide[2]	-	-	0.02	..	2.12	2.34	2.13	-	24.1
Coal	74.91	64.80	58.94	24.56	12.67	19.25	17.80	-1.5	-5.5
Oil	13.54	11.58	3.94	3.17	6.14	5.38	4.78	-7.4	0.9
Natural gas	11.88	12.76	15.26	16.44	19.03	21.48	21.08	1.6	1.6
Biofuels & waste	1.93	2.59	2.63	4.75	3.52	4.06	4.30	2.0	2.4

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**97419**	**88625**	**77616**	**45324 e**	**42506**	**48937**	**46709**	**-2.4**
Total energy	**-**	**-**	**-**	**-**	**13399**	**14633**	**13055**	**-**
Coal mines	-	-	-	-	6431	6871	5884	-
Oil and gas extraction	-	-	-	-	137	146	185	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	1135	1112	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	6831	6481	5874	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**70638**	**62280**	**56042**	**45324 e**	**29107**	**34304**	**33654**	**-2.4**
Iron and steel	10300	7909	6010	5136	4486	6696	6401	0.3
Chemical and petrochemical	24010	18387	15688	17332 e	13898	16221	15924	0.1
Non-ferrous metals	2520	1961	2099	108	58	62	64	-15.3
Non-metallic minerals	202	182	125	251	136	153	178	1.7
Transport equipment	-	-	440	263	363	392	429	-0.1
Machinery	-	-	119	81	118	196	162	1.5
Mining and quarrying	21711	21519	21405	14020	323	309	69	-23.9
Food and tobacco	1090	1142	1214	1792	2181	2204	2408	3.3
Pulp and printing	4930	4743	4714	5486	5867	6414	6251	1.4
Wood and wood products	-	-	182	696	1373	1425	1463	10.4
Construction	-	-	-	8	..	5	-	-
Textile and leather	943	611	467	151	49	34	34	-11.7
Non specified/other industries	4932 e	5826 e	3579 e	-	255	193	271	-11.6
Total transport	**-**	**-**	**-**	**c**	**c**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	c	c	-	-	-
Other	**26781**	**26345**	**21574**	**-**	**-**	**-**	**-**	**-**
Commerce and pub. services	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	26781	26345	21574	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**360840**	**448383**	**315920 e**	**814755 e**	**516108 e**	**468127 e**	**490359**	**0.2**
Nuclear	352	4279	-	-	-	888	-	-7.2
Geothermal	-	-	-	450	1026	51	65	-
Coal	223593	288500	165906 e	163332 e	169353	153215	162729	-3.0
Oil	75067	38299	20146 e	26519	8059	5102	7444	-9.2
Natural gas	59048	97534	110500 e	326867 e	256768	221817	220753	4.0
Biofuels & waste	2780	19771	19368 e	42863 e	73973	80099	92368	6.9
Non-spec. comb. fuels	-	-	-	254724 e	6929 e	6955 e	7000	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	360840	448383	315920 e	496201 e	509179	461172	..	0.1
Nuclear	352	4279	-	-	-	888	..	-7.2
Geothermal	-	-	-	450	1026	51	..	-
Coal	223593	288500	165906 e	158682 e	169353	153215	..	-3.0
Oil	75067	38299	20146 e	3593	8059	5102	..	-9.2
Natural gas	59048	97534	110500 e	290613 e	256768	221817	..	4.0
Biofuels & waste	2780	19771	19368 e	42863 e	73973	80099	..	6.9
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	318554 e	6929 e	6955 e	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	4650 e	-	-	..	-
Oil	-	-	-	22926	-	-	..	-
Natural gas	-	-	-	36254 e	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	254724 e	6929 e	6955 e	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**94.06**	**106.63**	**96.66**	**86.00**	**95.55**	**100.27**	**95.98**	**0.2**	**-0.0**
Coal	72.91	81.12	80.91 e	69.17 e	61.11	62.72	63.24	0.6	-1.2
Oil	11.11	8.22	3.31	1.41	2.21	1.82	1.46	-6.9	-3.8
Natural gas	9.29	14.85	10.61	12.27	18.50	19.89	18.37	0.8	2.6
Biofuels & waste	0.75	2.44 e	1.82 e	3.16 e	13.74	15.84	12.91	5.3	9.8
of which: ***main activity prod.***									
Total	**..**	**85.99**	**80.74**	**76.67**	**87.68**	**90.95**	**86.62**	**..**	**0.3**
Coal	..	65.97	69.11 e	64.04 e	58.52	58.66	59.04	..	-0.7
Oil	..	6.06	2.58	0.98	1.01	0.88	0.57	..	-7.0
Natural gas	..	12.72	7.90	9.85	15.25	16.46	14.99	..	3.1
Biofuels & waste	..	1.24	1.15 e	1.80 e	12.89	14.96	12.02	..	11.8

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**3.15**	**14.50**	**39.84**	**44.21**	**35.75**	**37.66**	**29.82**	**16.1**	**-1.4**
Nuclear	3.15	14.50	39.84	44.20	35.16	36.63	28.14	16.1	-1.6
Geothermal	-	-	-	-	0.02	0.02	0.02	-	-
Solar	-	-	0.00	0.01	0.57	1.00	1.66	-	60.0
Non-Thermal									
Total	**1.31**	**1.64**	**1.50**	**2.67**	**4.93**	**5.01**	**5.69**	**0.8**	**6.5**
Hydro	1.31	1.64	1.50	1.87	1.60	1.76	1.49	0.8	-0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.01	0.80	3.32	3.25	4.20	-	36.5
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	39255	49133	48789	31386	34168	33524	-1.8
Fuel input (TJ)	1141883	1256004	1269836	837824	892735	886778	-1.6
Electricity production (GWh)	115135	141837	143164	93771 e	102429 e	97234	-1.8
Brown coal							
Fuel input (1000 t)	220851	209597	154304	149593	147524	153129	-1.5
Fuel input (TJ)	1818740	1750685	1428335	1366672	1321313	1369105	-1.2
Electricity production (GWh)	167916	169040	153523 e	140638	140428	143986	-0.8
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	121434	106516	73622	51745	86294	80562	-1.3
Electricity production (GWh)	10463	10764	7475	5606	9323	9005	-0.8
Petroleum products							
Fuel input (1000 t)	6971	2770	891	1583	1176	915	-5.1
Fuel input (TJ)	243595	97100	44684	61546	46717	35924	-4.6
Electricity production (GWh)	26741	10397	4785	7215	6019	4405	-4.0
Natural gas (1)							
Fuel input (TJ)	669784	373757	386911	256872	273981	242862	-2.0
Electricity production (GWh)	65990	40460	52495	31283	35472	32277	-1.1
Wood and other solid waste							
Fuel input (TJ)	-	4644	13805 e	141107	111756	81872	14.6
Electricity production (GWh)	-	129	804	7882	7521	6814	20.8
Industrial waste							
Fuel input (TJ)	24560	20526	43047 e	10416	9760	8531	-4.1
Electricity production (GWh)	2585	2373	3946	858	934	766	-5.2
Municipal waste							
Fuel input (TJ)	32444	22942	33723	69578	73854	75414	5.8
Electricity production (GWh)	2852	2437	3688	6166	6746	6430	4.7
Biogases and liquid biofuels							
Fuel input (TJ)	-	6360	18360 e	169530	263193	114836	14.8
Electricity production (GWh)	-	247	1683 e	13414	16604	11164	19.9
Total combustible fuels(2)							
Electricity production (GWh)	391682	377684	371563 e	306833 e	325476	312081	-0.9

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	3079	3193	3021 e	7470	8211	7546	4.2
Fuel input (TJ)	89243	92936	80661 e	200753	215810	199557	3.7
Electricity production (GWh)	-	-	-	13299 e	15338	15163	-
CHP Heat production (TJ)	77668	83930	76711 e	103243	111999	99446	0.8
Brown coal							
Fuel input (1000 t)	18699	25962	9990 e	7717	8013	7862	-5.5
Fuel input (TJ)	158468	230295	97708 e	73480	77312	77195	-5.1
Electricity production (GWh)	-	-	-	4950	5444	6087	-
CHP Heat production (TJ)	137916	197450	85943 e	36242	36983	36238	-7.8
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	9203	7884	2877 e	3226	4557	2926	-4.6
Electricity production (GWh)	-	-	-	384	592	390	-
CHP Heat production (TJ)	8009	7120	2650 e	48	102	146	-16.9
Petroleum products							
Fuel input (1000 t)	2374	1165	461	543	498	442	-4.5
Fuel input (TJ)	86253	42409	21206 e	22212	20585	18100	-4.0
Electricity production (GWh)	-	-	-	2424	2254	2203	-
CHP Heat production (TJ)	75067	38299	20146 e	1831	1869	1152	-15.4
Natural gas(1)							
Fuel input (TJ)	75387	119996	129240	506458	528670	505240	7.1
Electricity production (GWh)	-	-	-	47601	51357	51353	-
CHP Heat production (TJ)	59048	97534	66500 e	157198	161379	145447	1.9
Wood and other solid waste							
Fuel input (TJ)	-	-	-	37336	41481	50811	-
Electricity production (GWh)	-	-	-	2999	3209	4725	-
CHP Heat production (TJ)	-	-	-	8182	9692	12375	-
Industrial waste							
Fuel input (TJ)	-	-	-	10325	16071	16662	-
Electricity production (GWh)	-	-	-	444	672	880	-
CHP Heat production (TJ)	-	-	-	4039	5999	6916	-
Municipal waste							
Fuel input (TJ)	3195	21893	23295 e	68676	75104	72740	5.9
Electricity production (GWh)	-	-	-	2166	2428	3080	-
CHP Heat production (TJ)	2780	19771	19368 e	29796	30828	28406	1.7
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	19519	21106	64511	-
Electricity production (GWh)	-	-	-	1633	1751	10146	-
CHP Heat production (TJ)	-	-	-	864	1142	1315	-
Total combustible fuels(2)							
Electricity production (GWh)	-	-	-	75900 e	83045 e	94027	-
CHP Heat production (TJ)	360488	444104	271318	355285	366922	338396	-1.3

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	800	1018	1113	-
Fuel input (TJ)	-	-	-	21981	26840	30279	-
Heat production (TJ)	-	-	-	8367	18164	15151	-
Brown coal							
Fuel input (1000 t)	-	-	32 e	353	220	173	-
Fuel input (TJ)	-	-	669 e	3823	2796	2652	-
Heat production (TJ)	-	-	602 e	1783	2040	2221	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	95	101	76	-
Heat production (TJ)	-	-	-	63	65	13	-
Petroleum products							
Fuel input (1000 t)	-	-	-	173	183	127	-
Fuel input (TJ)	-	-	-	7253	7662	5289	-
Heat production (TJ)	-	-	-	5292	6190	3950	-
Natural gas(1)							
Fuel input (TJ)	-	-	55000	97738	122713	106616	-
Heat production (TJ)	-	-	44000 e	75620	95389	76370	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	11222	11003	9236	-
Heat production (TJ)	-	-	-	5881	6179	6224	-
Industrial waste							
Fuel input (TJ)	-	-	-	3868	4715	5892	-
Heat production (TJ)	-	-	-	2194	3010	3571	-
Municipal waste							
Fuel input (TJ)	-	-	-	27788	33992	38166	-
Heat production (TJ)	-	-	-	14162	16424	20036	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	1234	1166	2110	-
Heat production (TJ)	-	-	-	852	699	1256	-
Total combustible fuels(2)							
Heat production (TJ)	-	-	44602	114214	148160	128792	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**241.71**	**248.66**	**240.73**	**231.36**	**216.46**	**229.91**	**221.02**	**-0.0**	**-0.4**
Geothermal	-	-	0.01	0.12	0.40	0.46	0.57	-	23.3
Solar thermal	-	-	0.01	0.11	0.41	0.45	0.56	-	20.5
Coal	55.69	49.20	39.25	8.96	6.83	7.36	8.23	-2.0	-7.2
Oil	133.30	122.68	111.16	113.96	94.00	94.73	91.97	-1.1	-0.9
Natural gas	18.58	33.48	39.05	55.10	50.96	56.60	51.17	4.5	1.3
Biofuels & waste	1.75	1.91	2.97	4.70	11.01	13.54	13.65	3.2	7.5
Electricity	26.91	33.70	39.14	41.58	42.62	45.49	44.85	2.2	0.7
Heat	5.49	7.69	9.15	6.83	10.24	11.29	10.03	3.1	0.4
of which:									
Total industry	**88.24**	**78.83**	**66.16**	**51.33**	**49.57**	**54.70**	**54.95**	**-1.7**	**-0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	27.26	24.92	20.23	7.39	5.37	5.76	6.26	-1.7	-5.4
Oil	32.31	17.91	7.07	5.14	2.96	2.63	2.09	-8.6	-5.6
Natural gas	11.72	16.84	17.04	19.25	16.93	19.13	18.98	2.2	0.5
Biofuels & waste	0.03	0.03	0.79	0.45	3.31	4.32	3.74	21.7	7.7
Electricity	15.34	17.16	18.62	18.20	17.38	19.38	19.84	1.1	0.3
Heat	1.59	1.97	2.41	0.90	3.63	3.48	4.05	2.5	2.5
Transport	**36.13**	**44.20**	**54.40**	**59.36**	**53.44**	**53.67**	**54.16**	**2.4**	**-0.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	1.72	0.25	0.02	0.01	-	-	-	-24.2	-
Oil	33.56	42.86	53.21	57.76	48.68	48.48	49.14	2.7	-0.4
Natural gas	-	0.06	-	-	0.70	0.80	0.65	-	-
Biofuels & waste	-	-	-	0.22	2.70	2.96	2.94	-	-
Electricity	0.85	1.03	1.18	1.37	1.37	1.44	1.43	1.9	0.9
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**27.42**	**28.49**	**28.36**	**25.07**	**31.07**	**33.43**	**30.04**	**0.2**	**0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.01	0.01	0.02	-	-
Coal	7.15	7.53	6.21	0.31 e	0.24	0.18	0.37	-0.8	-12.6
Oil	16.09	14.97	10.53	8.82	7.95	8.16	7.44	-2.5	-1.6
Natural gas	-	-	4.68	5.80	9.28	10.06	9.09	-	3.2
Biofuels & waste	0.73	0.98	-	-	0.01	0.01	-	-	-
Electricity	3.45	5.01	6.94	10.14	11.17	11.71	11.06	4.2	2.2
Heat	-	-	-	-	2.40	3.30	2.06	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**60.80**	**54.87**	**62.97**	**65.20**	**59.06**	**63.28**	**56.06**	**0.2**	**-0.6**
Geothermal	-	-	0.01	0.12	0.40	0.46	0.51	-	22.7
Solar thermal	-	-	0.01 e	0.06 e	0.39	0.43	0.54	-	22.8
Coal	15.42	13.30	10.76	0.93 e	0.96	1.10	1.26	-2.1	-9.7
Oil	33.73	25.03	18.09	19.48	14.02	14.12	12.14	-3.6	-1.9
Natural gas	0.00	0.03	13.41	23.42	22.12	24.22	20.13	69.2	2.0
Biofuels & waste	0.99	0.89	2.18	4.03 e	4.99	6.25	5.81	4.8	4.8
Electricity	6.76	9.89	11.79	11.22	11.97	12.19	11.75	3.3	-0.0
Heat	3.90	5.72	6.74	5.93	4.21	4.51	3.92	3.3	-2.5
Agriculture & fishing	**2.09**	**3.01**	**3.04**	**0.94**	**0.74**	**0.77**	**0.77**	**2.2**	**-6.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.24	0.17	0.07	0.03 e	-	-	-	-7.3	-
Oil	1.32	2.23	2.20	-	-	-	-	3.0	-
Natural gas	-	-	0.16	0.26	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.52	0.61	0.62	0.65	0.74	0.77	0.77	1.0	1.1
Heat	-	-	-	-	-	-	-	-	-
Other	**9.81**	**16.29**	**2.85**	**4.40**	**-**	**-**	**1.21**	**-7.0**	**-4.0**
Geothermal	-	-	-	-	-	-	0.05	-	-
Solar thermal	-	-	0.00 e	0.05 e	-	-	-	-	-
Coal	1.64	1.47	1.12	0.02 e	-	-	-	-2.2	-
Oil	2.11	0.95	0.21	0.11	-	-	-	-12.6	-
Natural gas	6.06	13.87	1.51	4.21	-	-	-	-7.8	-
Biofuels & waste	-	-	-	-	-	-	1.16	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**17.23**	**22.96**	**22.95**	**25.07**	**22.58**	**24.06**	**23.82**	**1.70**	**0.18**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**241.71**	**248.66**	**240.73**	**231.36**	**229.95**	**216.46**	**229.91**	**221.02**
Total industry (Mtoe)	**88.24**	**78.83**	**66.16**	**51.33**	**57.37**	**49.57**	**54.70**	**54.95**
Iron and steel	20.40	15.20	11.06	8.51	9.89	7.22	8.15	8.74
Chem. and petrochemical	18.99	18.13	15.71	10.25	11.94	11.14	12.69	12.47
Non-ferrous metals	2.89	3.44	3.08	2.63	2.38	1.77	2.15	2.02
Non-metallic minerals	9.48	8.53	7.14	7.13	6.88	6.21	6.37	6.59
Transport equipment	2.68	3.00	3.12	2.91	2.98	2.56	2.95	2.75
Machinery	4.55	4.71	5.20	3.13	3.72	3.07	5.57	5.69
Mining and quarrying	3.14	2.87	2.36	0.46	0.54	0.48	0.44	0.38
Food and tobacco	6.08	6.54	5.65	4.51	4.65	4.77	4.93	4.92
Paper, pulp and printing	3.49	3.72	3.91	4.58	6.26	5.82	6.24	6.01
Wood and wood products	0.81	0.84	0.51	0.63	1.41	1.49	1.85	2.01
Construction	0.05	0.46	0.06	0.75	0.07	0.07	0.07	0.07
Textile and leather	2.84	2.68	2.36	0.93	0.63	0.50	0.59	0.57
Non specified/other	12.85	8.72	6.00	4.91	6.02	4.48	2.70	2.74
Electricity consumption (Mtoe)	**26.91**	**33.70**	**39.14**	**41.58**	**45.20**	**42.62**	**45.49**	**44.85**
Total industry (Mtoe)	**15.34**	**17.16**	**18.62**	**18.20**	**20.82**	**17.38**	**19.38**	**19.84**
Iron and steel	2.44	2.57	2.35	2.03	2.44	1.93	2.33	2.43
Chem. and petrochemical	5.41	5.67	5.37	4.16	4.45	3.86	4.50	4.52
Non-ferrous metals	1.25	1.69	1.71	1.59	1.49	0.95	1.22	1.14
Non-metallic minerals	0.88	0.92	1.00	1.28	1.10	1.00	1.05	1.11
Transport equipment	0.70	0.83	1.18	1.63	1.59	1.36	1.53	1.44
Machinery	0.75	0.92	1.07	0.88	1.02	0.86	2.83	3.13
Mining and quarrying	0.50	0.51	0.55	0.18	0.21	0.18	0.19	0.16
Food and tobacco	0.62	0.84	1.04	1.26	1.31	1.53	1.51	1.53
Paper, pulp and printing	0.90	1.10	1.46	1.87	2.08	2.06	2.09	2.05
Wood and wood products	0.21	0.24	0.30	0.34	0.40	0.38	0.39	0.39
Construction	0.05	0.06	0.06	0.07	0.07	0.07	0.07	0.07
Textile and leather	0.60	0.57	0.61	0.37	0.23	0.20	0.21	0.22
Non specified/other	1.04	1.24	1.92	2.53	4.43	2.99	1.46	1.65
Total industry (TWh)	**178.33**	**199.55**	**216.48**	**211.59**	**242.12**	**202.05**	**225.39**	**230.66**
Iron and steel	28.33	29.92	27.37	23.65	28.36	22.39	27.09	28.22
Chem. and petrochemical	62.94	65.92	62.50	48.34	51.73	44.86	52.34	52.52
Non-ferrous metals	14.51	19.66	19.86	18.50	17.30	11.08	14.19	13.26
Non-metallic minerals	10.18	10.72	11.59	14.83	12.80	11.63	12.23	12.92
Transport equipment	8.11	9.64	13.69	18.99	18.53	15.84	17.84	16.75
Machinery	8.74	10.74	12.49	10.24	11.87	9.97	32.91	36.36
Mining and quarrying	5.81	5.95	6.45	2.06	2.40	2.10	2.18	1.90
Food and tobacco	7.16	9.76	12.05	14.70	15.20	17.83	17.53	17.77
Paper, pulp and printing	10.52	12.74	16.95	21.77	24.22	23.96	24.31	23.87
Wood and wood products	2.49	2.76	3.46	4.01	4.68	4.47	4.51	4.55
Construction	0.54	0.71	0.70	0.81	0.85	0.85	0.85	0.85
Textile and leather	6.94	6.66	7.11	4.30	2.67	2.31	2.48	2.52
Non specified/other	12.06	14.39	22.27	29.41	51.53	34.74	16.94	19.17

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**19685**	**23371**	**31669**	**39735**	**45134**	**41670**	**41859**	**42962**	**51003**
Imports from:									
Total from OECD	**-**	**-**	**25127**	**39735**	**45134**	**41670**	**41859**	**42962**	**51003**
Austria	-	-	4092	4818	5942	7012	8356	7986	6886
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	2350	8931	7938	8685	9293	9407
Denmark	-	-	4721	4522	6412	9211	6411	2982	5279
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	8626	17338	15352	10572	10612	15132	20317
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	965	778	738	-	1	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	1025	211	898	828	3509	3130	3217
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	2350	688	95	134	167	432
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	1124	654	2539	967	1081	2046
Switzerland	-	-	5698	6244	5519	3475	3184	3191	3419
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**19685**	**23371**	**6542**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**8123**	**16224**	**30739**	**34911**	**42077**	**61770**	**54132**	**57917**	**54768**
Exports to:									
Total to OECD	**-**	**-**	**26011**	**34911**	**42077**	**61770**	**54132**	**57917**	**54768**
Austria	-	-	4453	5543	7386	15055	15009	14816	16020
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	274	231	1323	964	565	1883
Denmark	-	-	235	209	545	1413	3667	6336	2965
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	472	503	407	867	1436	793	138
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	3532	4233	4400	4148	4090	4262	4244
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	8524	12786	16684	18858	8873	8796	9586
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	3885	2005	5576	5616	5331	5136
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	12	92	541	1191	2332	628
Switzerland	-	-	8795	7466	10327	13989	13286	14686	14168
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**8123**	**16224**	**4728**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**50.56**	**67.62**	**84.20**	**99.71**	**108.38**	**129.08**	**136.00**	**145.88**	**152.25**
Nuclear	3.29	8.46	22.26	22.68	22.40	20.49	20.48	20.47	12.05
Hydro	4.35	5.90	6.31	8.35	8.98	9.95	10.59	10.98	11.52
of which: pumped storage	*-*	*-*	*-*	*4.38*	*4.65*	*6.49*	*6.67*	*6.78*	*6.78*
Geothermal	-	-	-	-	-	0.01	0.01	0.01	0.01
Solar	-	-	-	0.02 e	0.11	5.33	9.80	17.32	25.04
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	6.10	23.86	25.75	27.16	29.07
Other (e.g. fuel cells)	-	-	-	-	-	-	-	1.17	1.14
Combustible fuels	42.92	53.26	55.63	68.66	70.79	69.44	69.38	68.79	73.44
of which:									
Single-fired:									
Coal and coal products	21.54	23.35	18.96	28.65	29.14	..	..	..	-
Liquid fuels	5.93	8.48	4.92	4.42	3.54	..	..	..	-
Natural gas	5.61	7.31	5.76	7.88	9.81	..	..	..	-
Biofuels & waste	-	-	0.36	0.65	1.03	..	..	..	-
Multi-fired:									
Solid / liquid	6.06	6.55	9.03	8.92	9.30	..	..	..	-
Solid / natural gas	0.66	1.08	1.98	1.87	2.39	..	..	..	-
Liquid / natural gas	2.37	5.90	9.22	9.24	8.67	..	..	..	-
Solid / liquid / gas	0.75	0.59	5.41	7.03	6.90	..	..	..	-
Type of generation									
Steam	-	49.88	50.96	62.49	62.36	..	..	..	-
Internal combustion	-	0.05	0.14	0.16	0.68	..	..	..	-
Gas turbine	-	3.33	4.53	6.01	5.02	..	..	..	-
Combined cycle	-	-	-	-	2.73	..	..	..	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	51.69	62.32	70.85	74.60	..	..	..	-
Available capacity	..	68.56	79.73	96.11	89.50	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**15.64**	**14.94**	**13.55**	**16.52**	**10.00**	**10.20**	**10.95**	**11.10**	**11.01**
Nuclear	-	0.14	0.15	0.15	c	c	-	-	-
Hydro	0.46	0.55	0.54	0.53	c	0.05	0.05	0.05	0.04
of which: pumped storage	*-*	*-*	*-*	*0.15*	*c*	*c*	*-*	*-*	*-*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.05	1.14	c	0.03	0.03	0.05	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	2.59	2.56
Combustible fuels	15.18	14.25	12.81	14.70	10.00	10.11	10.87	8.42	8.40
of which:									
Single-fired:									
Coal and coal products	9.30	8.61	7.36	7.95	3.52	..	..	..	-
Liquid fuels	3.13	3.34	1.13	1.21	0.60	..	..	..	-
Natural gas	1.02	1.06	3.77	4.88	4.63	..	..	..	-
Biofuels & waste	-	-	0.55	0.67	0.91	..	..	..	-
Multi-fired:									
Solid / liquid	0.80	0.59	-	-	0.16	..	..	..	-
Solid / natural gas	0.83	0.57	-	-	0.19	..	..	..	-
Liquid / natural gas	0.10	0.08	-	-	-	..	..	..	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	13.76	12.18	13.74	8.47	..	..	..	-
Internal combustion	-	0.06	0.09	0.11	0.28	..	..	..	-
Gas turbine	-	0.44	0.55	0.85	1.26	..	..	..	-
Combined cycle	-	-	-	-	-	..	..	..	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	12.61	10.69	12.46	6.25	..	..	..	-
Available capacity	..	..	12.11	13.41	9.99	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	85.18	91.83	115.81	46.02	104.36	79.25	88.94	110.14	98.38
Heavy fuel oil (t)	106.60	183.60	120.80	181.50	391.30	302.50	379.90	..	c
Natural gas (MWh)(1)	6.89	10.12	11.23	14.31	..	..	..	..	..
				Euro/ toe					
Steam coal	123.2	132.8	167.5	66.6	150.9	114.6	128.6	159.3	142.3
Heavy fuel oil	108.8	187.3	123.2	185.2	399.3	308.7	387.7	..	c
Natural gas(2)	89.1	130.8	145.1	185.0	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	48.70	53.50	75.40	44.00	88.20	100.45	102.55	113.00	115.70
of which: tax	2.10	2.30	5.70	..	..	16.65	23.05	33.25	37.90
Household									
Price	87.70	93.40	135.30	130.90	220.80	228.80	240.65	252.95	263.55
of which: tax	12.80	14.30	25.70	18.00	85.40	90.80	103.10	112.90	119.90

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	11.81	14.98	21.44	27.09	27.62	26.72	25.99	3.6	0.9
GDP (billion 2005 USD)	119.54	145.93	156.25	196.96	240.95	223.83	209.56	1.6	1.3
TPES/GDP(1)	0.10	0.10	0.14	0.14	0.11	0.12	0.12	2.0	-0.5
Population (millions)	9.08	9.81	10.34	10.92	11.31	11.31	11.33	0.8	0.4
TPES/population(2)	1.30	1.53	2.07	2.48	2.44	2.36	2.29	2.8	0.5
TPES/GDP (2005 = 100)	78	81	109	109	91	95	98	2.0	-0.5
Ele.TFC/GDP(2005=100)(3)	50	64	86	103	104	109	..	3.2	..
Ele.TFC/population(4)	1400	2030	2755	3954	4699	4581	..	4.1	..
Elec. generated (TWh)(5)	14.82	22.65	34.78	53.43	57.37	59.17	57.57	5.1	2.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**11.81**	**14.98**	**21.44**	**27.09**	**27.62**	**26.72**	**25.99**	**3.6**	**0.9**
Coal	2.10	3.26	8.07	9.04	7.86	7.89	8.20	8.2	0.1
Oil	9.06	10.92	12.07	14.88	13.85	12.43	11.57	1.7	-0.2
Natural gas	-	-	0.14	1.70	3.23	3.97	3.76	-	16.2
Biofuels & waste	0.45	0.45	0.89	1.01	1.08	1.26	1.34	4.1	1.9
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	0.00	0.00	0.03	0.03	0.02	-	10.8
Solar, wind, tide(1)	-	-	0.06	0.14	0.43	0.52	0.56	-	11.0
Hydro	0.19	0.29	0.15	0.32	0.64	0.34	0.37	-1.3	4.1
Net electricity imports(2)	0.00	0.05	0.06	-0.00	0.49	0.28	0.15	17.6	4.3
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**14.8**	**22.7**	**35.0**	**53.8**	**60.0**	**57.4**	**59.4**	**57.8**
Nuclear	-	-	-	-	-	-	-	-
Hydro	2.2	3.4	2.0	4.1	5.6	7.5	4.3	4.6
of which:								
pumped storage production	*-*	*-*	*0.2*	*0.4*	*0.6*	*0.0*	*0.3*	*0.3*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.0	0.2	0.6	1.2
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.5	1.3	2.7	3.3	3.3
Combustible fuels	12.6	19.2	33.0	49.3	53.1	47.0	51.2	48.8
Coal	*5.3*	*10.2*	*25.2*	*34.3*	*35.5*	*30.8*	*31.1*	*32.1*
Oil	*7.3*	*9.1*	*7.7*	*8.9*	*9.2*	*6.1*	*5.9*	*4.4*
Natural gas	*-*	*-*	*0.1*	*5.9*	*8.2*	*9.8*	*13.9*	*12.0*
Biofuels & waste	*-*	*-*	*-*	*0.2*	*0.2*	*0.3*	*0.3*	*0.3*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	0.8	1.4	2.9	4.0	4.3	4.0	5.5	..
Net production	**14.0**	**21.3**	**32.1**	**49.9**	**55.7**	**53.4**	**53.9**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	3.4	2.0	4.1	5.6	7.5	4.3	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	0.0	0.2	0.6	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.5	1.3	2.7	3.3	..
Combustible fuels	..	17.9	30.2	45.3	48.9	43.1	45.7	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	0.3	0.6	0.8	0.0	0.4	0.6
+ Imports	0.1	0.7	1.3	1.7	5.6	8.5	7.2	6.0
- Exports	0.0	0.0	0.6	1.7	1.8	2.8	3.9	4.2
Electrical energy supplied	**14.1**	**21.9**	**32.5**	**49.3**	**58.7**	**59.1**	**56.8**	**..**
- Transmission & distr. losses	1.0	1.6	2.9	4.3	5.6	3.8	2.8	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**13.0**	**20.3**	**29.7**	**45.0**	**53.1**	**55.3**	**53.9**	**..**
- Energy industry consumption[2]	0.3	0.4	1.2	1.8	2.2	2.2	2.2	..
Final consumption	**12.7**	**19.9**	**28.5**	**43.2**	**50.9**	**53.1**	**51.8**	**..**
Industry	7.4	10.5	12.1	13.5	14.4	14.1	14.6	..
Transport	0.0	0.1	0.1	0.2	0.2	0.2	0.2	..
Commercial & publ. serv.	2.0	3.3	5.6	12.3	16.5	18.0	16.8	..
Residential	3.1	5.7	9.1	14.2	16.9	18.1	17.6	..
Agriculture & fishing	0.2	0.4	1.6	2.9	2.9	2.7	2.5	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**15.02**	**22.65**	**35.00**	**53.84**	**61.37**	**57.39**	**59.44**	**5.4**	**2.6**
- Hydro pumped storage	-	-	*0.23*	*0.42*	*0.27*	*0.03*	*0.26*	-	*0.7*
Total generation(1)	**15.02**	**22.65**	**34.78**	**53.43**	**61.09**	**57.37**	**59.17**	**5.4**	**2.6**
Main activity producers									
Gross production	14.81	22.41	34.13	52.83	59.41	54.90	56.88	5.4	2.5
- Hydro pumped storage	-	-	*0.23*	*0.42*	*0.27*	*0.03*	*0.26*	-	*0.7*
Total generation(1)	14.81	22.41	33.90	52.41	59.14	54.88	56.62	5.3	2.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2.35	3.41	1.77	3.69	5.37	7.46	4.01	-1.8	4.0
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.00	0.45	2.59	2.87	3.93	-	43.5
Coal	5.72	10.16	25.17	34.31	34.19	30.80	31.06	9.7	1.0
Oil	6.74	8.85	6.96	8.17	6.93	5.29	5.04	0.2	-1.5
Natural gas	-	-	-	5.79	9.86	8.29	12.39	-	-
Biofuels & waste	-	-	-	-	0.18	0.16	0.20	-	-
Autoproducers									
Gross production	0.21	0.24	0.88	1.01	1.96	2.49	2.55	9.3	5.2
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.21	0.24	0.88	1.01	1.96	2.49	2.55	9.3	5.2
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.21	0.24	0.78	0.72	0.75	0.80	0.88	8.5	0.6
Natural gas	-	-	0.09	0.13	1.16	1.54	1.55	-	14.4
Biofuels & waste	-	-	-	0.16	0.05	0.16	0.12	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**212**	**243**	**859**	**990**	**1933**	**2442**	**2252**	**4.7**
Total energy	**30**	**27**	**584**	**634**	**784**	**791**	**672**	**0.7**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	51	5	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	30	27	584	634	733	786	672	0.7
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**182**	**216**	**275**	**356**	**1062**	**1447**	**1329**	**7.8**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	125	148	195	191	19	61	100	-3.1
Non-ferrous metals	-	-	-	54	1033	1373	1213	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	31	45	80	111	8	11	15	-7.7
Pulp and printing	26	23	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	2	2	1	-
Non specified/other industries	-	-	-	-	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**45**	**34**	**-**
Rail and pipeline	-	-	-	-	-	45	34	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**-**	**-**	**87**	**159**	**217**	**-**
Commerce and pub. services	-	-	-	-	28	74	106	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	59	85	111	-
Sector non specified	-	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**-**	**1174**	**2049**	**1941**	**2256**	**2050**	**-**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	1174	2034	1905	2213	1990	-
Oil	-	-	-	15	36	43	60	-
Natural gas	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	-	1174	2049	1941	2256	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	1174	2034	1905	2213	..	-
Oil	-	-	-	15	36	43	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	-	-	-	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**3.14**	**4.76**	**8.74**	**11.62**	**11.99**	**11.28**	**11.79**	**6.2**	**1.4**
Coal	1.40	2.63	6.89	8.23	8.26	7.66	7.87	9.8	0.6
Oil	1.74	2.14	1.83	2.05	1.85	1.48	1.45	0.3	-1.1
Natural gas	-	-	0.02	1.28	1.82	2.06	2.39	-	26.2
Biofuels & waste	-	-	-	0.06	0.06	0.08	0.08	-	-
of which: ***main activity prod.***									
Total	**..**	**4.74**	**8.57**	**11.43**	**11.57**	**10.84**	**11.33**	**..**	**1.3**
Coal	..	2.63	6.89	8.23	8.26	7.66	7.87	..	0.6
Oil	..	2.11	1.68	1.95	1.62	1.24	1.18	..	-1.7
Natural gas	..	-	-	1.25	1.65	1.90	2.22	..	-
Biofuels & waste	..	-	-	-	0.05	0.04	0.05	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**0.00**	**0.01**	**0.05**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.00	0.01	0.05	-	-
Non-Thermal									
Total	**0.19**	**0.29**	**0.15**	**0.36**	**0.68**	**0.87**	**0.63**	**-1.3**	**7.0**
Hydro	0.19	0.29	0.15	0.32	0.46	0.64	0.34	-1.3	4.0
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.04	0.22	0.23	0.29	-	42.3
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	6	-	154	34	-
Fuel input (TJ)	-	-	152	-	4227	780	-
Electricity production (GWh)	-	-	14	-	421	76	-
Brown coal							
Fuel input (1000 t)	20634	50531	59835	51439	41619	42770	-0.8
Fuel input (TJ)	139207	288477	322431	271239	225533	229076	-1.1
Electricity production (GWh)	10159	25166	31957	26834	22058	22269	-0.6
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	2192	1735	2016	1664	1266	1200	-1.7
Fuel input (TJ)	95237	70698	82232	66272	50219	47596	-1.9
Electricity production (GWh)	8845	6963	8166	6904	5234	4978	-1.6
Natural gas (1)							
Fuel input (TJ)	-	-	58138	76900	88265	103352	-
Electricity production (GWh)	-	-	5788	9864	8291	12387	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	1937	1695	578	-
Electricity production (GWh)	-	-	-	184	161	38	-
Total combustible fuels(2)							
Electricity production (GWh)	19004	32129	45925	43786	36165	39748	1.0

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	20	4	-	-
Fuel input (TJ)	-	-	-	459	110	-	-
Electricity production (GWh)	-	-	-	39	10	-	-
CHP Heat production (TJ)	-	-	-	11	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	4053	13726	16037	17098	-
Fuel input (TJ)	-	-	21849	74076	90802	91577	-
Electricity production (GWh)	-	-	2342	7315	8308	8718	-
CHP Heat production (TJ)	-	-	1174	2012	1905	2213	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	26	138	93	208	220	246	2.8
Fuel input (TJ)	1114	5546	4152	9938	10362	11694	3.6
Electricity production (GWh)	244	783	719	775	855	937	0.9
CHP Heat production (TJ)	-	-	-	27	36	43	-
Natural gas(1)							
Fuel input (TJ)	-	840	1415	7611	7592	7846	11.2
Electricity production (GWh)	-	92	132	1159	1539	1551	14.4
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	2662	169	1341	1175	-
Electricity production (GWh)	-	-	163	19	129	113	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	351	286	1788	-
Electricity production (GWh)	-	-	-	34	29	169	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	244	875	3356	9341	10870	11488	13.0
CHP Heat production (TJ)	-	-	1174	2050	1941	2256	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**8.53**	**10.70**	**14.49**	**18.45**	**20.59**	**19.44**	**19.00**	**3.2**	**1.3**
Geothermal	-	-	0.00	0.00	0.02	0.03	0.03	-	11.7
Solar thermal	-	-	0.06	0.10	0.18	0.18	0.18	-	5.8
Coal	0.52	0.47	1.22	0.88	0.17	0.30	0.22	5.1	-7.9
Oil	6.46	8.07	9.78	12.41	13.46	12.18	11.42	2.5	0.7
Natural gas	-	-	0.10	0.38	1.07	1.14	1.47	-	13.8
Biofuels & waste	0.45	0.45	0.89	0.95	0.93	0.99	1.17	4.1	1.3
Electricity	1.09	1.71	2.45	3.71	4.71	4.57	4.45	4.9	2.9
Heat	-	-	-	0.03	0.05	0.05	0.05	-	-
of which:									
Total industry	**2.93**	**3.87**	**3.98**	**4.44**	**3.46**	**3.47**	**3.32**	**1.8**	**-0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	0.00	-	-
Coal	0.37	0.32	1.07	0.85	0.17	0.30	0.21	6.4	-7.4
Oil	1.93	2.65	1.68	1.94	1.43	1.34	1.04	-0.8	-2.3
Natural gas	-	-	-	0.24	0.41	0.37	0.55	-	-
Biofuels & waste	-	-	0.19	0.23	0.24	0.25	0.26	-	1.5
Electricity	0.63	0.90	1.04	1.17	1.21	1.22	1.26	3.0	0.9
Heat	-	-	-	-	-	-	-	-	-
Transport	**2.07**	**3.19**	**5.04**	**6.40**	**8.36**	**7.48**	**6.71**	**5.4**	**1.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.02	0.00	0.00	-	-	-	-	-17.4	-
Oil	2.05	3.18	5.03	6.38	8.24	7.32	6.57	5.4	1.3
Natural gas	-	-	-	-	0.02	0.01	0.01	-	-
Biofuels & waste	-	-	-	-	0.08	0.13	0.11	-	-
Electricity	0.00	0.01	0.01	0.02	0.02	0.02	0.02	5.9	2.4
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.18**	**0.28**	**0.65**	**1.31**	**2.14**	**1.95**	**1.87**	**8.0**	**5.2**
Geothermal	-	-	-	-	..	..	0.01	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.01	-	14.9
Coal	0.00	0.00	0.01	-	-	-	-	11.8	-
Oil	-	-	0.16	0.25	0.29	0.25	0.23	-	1.7
Natural gas	-	-	-	0.01	0.14	0.14	0.16	-	-
Biofuels & waste	-	-	-	0.00	0.00	0.00	0.01	-	-
Electricity	0.18	0.28	0.48	1.05	1.70	1.55	1.45	6.1	5.4
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**1.96**	**1.99**	**3.05**	**4.48**	**4.85**	**4.63**	**5.45**	**2.6**	**2.8**
Geothermal	-	-	..	..	0.01	0.02	0.00	..	..
Solar thermal	-	-	0.06	0.10	0.18	0.18	0.18	-	5.6
Coal	0.04	0.04	0.02	0.02	0.00	0.00	0.00	-3.8	-7.4
Oil	1.20	1.01	1.48	2.41	2.20	1.97	2.58	1.2	2.7
Natural gas	-	-	-	0.00	0.26	0.25	0.35	-	-
Biofuels & waste	0.45	0.45	0.70	0.70	0.59	0.61	0.76	2.7	0.4
Electricity	0.26	0.49	0.78	1.22	1.56	1.56	1.52	6.6	3.2
Heat	-	-	-	0.03	0.05	0.05	0.05	-	-
Agriculture & fishing	**0.65**	**0.75**	**1.03**	**1.11**	**0.87**	**0.80**	**0.67**	**2.7**	**-2.0**
Geothermal	-	-	0.00	0.00	0.01	0.01	0.01	-	6.6
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.00	0.01	-	-	-	-	-
Oil	0.64	0.71	0.89	0.84	0.63	0.55	0.42	2.0	-3.5
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	0.01	0.01	0.01	0.03	-	-
Electricity	0.02	0.03	0.13	0.25	0.22	0.23	0.22	13.4	2.3
Heat	-	-	-	-	-	-	-	-	-
Other	**0.20**	**0.13**	**0.05**	**0.00**	**-**	**-**	**0.09**	**-7.9**	**2.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	0.00	-	-
Oil	0.20	0.13	0.05	-	-	-	0.09	-7.9	2.9
Natural gas	-	-	-	-	-	-	0.00	-	-
Biofuels & waste	-	-	-	0.00	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.53**	**0.50**	**0.70**	**0.72**	**0.91**	**1.11**	**0.88**	**1.63**	**1.11**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**8.53**	**10.70**	**14.49**	**18.45**	**21.19**	**20.59**	**19.44**	**19.00**
Total industry (Mtoe)	**2.93**	**3.87**	**3.98**	**4.44**	**4.21**	**3.46**	**3.47**	**3.32**
Iron and steel	0.46	0.35	0.22	0.19	0.23	0.19	0.18	0.18
Chem. and petrochemical	0.28	0.21	0.31	0.27	0.26	0.22	0.19	0.17
Non-ferrous metals	0.55	0.69	0.62	0.81	0.74	0.61	0.76	0.67
Non-metallic minerals	0.52	1.16	1.28	1.29	1.12	0.86	0.97	0.73
Transport equipment	0.01	0.01	0.01	0.04	0.03	0.03	0.03	0.04
Machinery	0.03	0.03	0.04	0.07	0.07	0.01	0.02	0.05
Mining and quarrying	0.09	0.11	0.09	0.13	0.09	0.08	0.06	0.03
Food and tobacco	0.28	0.22	0.34	0.65	0.66	0.62	0.58	0.60
Paper, pulp and printing	0.14	0.15	0.14	0.17	0.14	0.12	0.12	0.09
Wood and wood products	0.01	0.01	0.01	0.05	0.05	0.04	0.05	0.05
Construction	-	-	0.00	0.17	0.15	0.15	0.13	0.09
Textile and leather	0.05	0.09	0.22	0.21	0.17	0.09	0.09	0.08
Non specified/other	0.54	0.84	0.71	0.40	0.50	0.43	0.30	0.54
Electricity consumption (Mtoe)	**1.09**	**1.71**	**2.45**	**3.71**	**4.87**	**4.71**	**4.57**	**4.45**
Total industry (Mtoe)	**0.63**	**0.90**	**1.04**	**1.17**	**1.33**	**1.21**	**1.22**	**1.26**
Iron and steel	0.04	0.08	0.09	0.08	0.15	0.12	0.11	0.12
Chem. and petrochemical	0.08	0.10	0.12	0.10	0.07	0.06	0.05	0.04
Non-ferrous metals	0.25	0.27	0.29	0.33	0.34	0.35	0.46	0.37
Non-metallic minerals	0.07	0.13	0.15	0.18	0.19	0.15	0.15	0.09
Transport equipment	0.01	0.01	0.01	0.02	0.01	0.01	0.01	0.03
Machinery	0.02	0.03	0.04	0.05	0.06	0.00	0.01	0.04
Mining and quarrying	0.01	0.02	0.02	0.02	0.03	0.02	0.01	0.00
Food and tobacco	0.02	0.04	0.06	0.10	0.19	0.19	0.19	0.23
Paper, pulp and printing	0.03	0.04	0.04	0.04	0.05	0.05	0.06	0.03
Wood and wood products	0.01	0.01	0.01	0.01	0.02	0.02	0.02	0.03
Construction	-	-	0.00	0.01	0.00	0.00	0.00	0.00
Textile and leather	0.05	0.09	0.09	0.09	0.07	0.05	0.05	0.05
Non specified/other	0.05	0.08	0.12	0.12	0.14	0.17	0.10	0.23
Total industry (TWh)	**7.37**	**10.50**	**12.11**	**13.55**	**15.49**	**14.07**	**14.14**	**14.64**
Iron and steel	0.50	0.95	1.00	0.98	1.69	1.41	1.30	1.40
Chem. and petrochemical	0.97	1.20	1.38	1.21	0.76	0.73	0.53	0.47
Non-ferrous metals	2.90	3.18	3.32	3.86	3.96	4.05	5.40	4.26
Non-metallic minerals	0.78	1.55	1.78	2.07	2.25	1.78	1.71	1.07
Transport equipment	0.06	0.12	0.16	0.18	0.16	0.16	0.09	0.33
Machinery	0.22	0.33	0.41	0.61	0.68	0.05	0.14	0.48
Mining and quarrying	0.14	0.21	0.28	0.28	0.36	0.27	0.16	0.04
Food and tobacco	0.24	0.46	0.71	1.21	2.23	2.18	2.16	2.68
Paper, pulp and printing	0.32	0.49	0.51	0.51	0.61	0.58	0.64	0.40
Wood and wood products	0.06	0.11	0.10	0.14	0.27	0.23	0.22	0.31
Construction	-	-	0.01	0.08	0.01	0.00	0.00	0.00
Textile and leather	0.60	1.03	1.07	1.00	0.84	0.61	0.61	0.55
Non specified/other	0.59	0.88	1.38	1.43	1.67	2.00	1.19	2.67

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**79**	**654**	**1330**	**1390**	**1729**	**7575**	**7600**	**8517**	**7180**
Imports from:									
Total from OECD	**-**	**-**	**16**	**44**	**-**	**1759**	**311**	**803**	**2864**
Austria	-	-	16	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	44	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	1759	311	67	274
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	736	2590
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**79**	**654**	**1314**	**1346**	**1729**	**5816**	**7289**	**7714**	**4316**
Albania	-	151	165	198	50	-	61	404	4
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	320	652	1067	4628	3418	3454	2824
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	1188	3810	3856	1488
Georgia	-	58	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	79	445	829	496	612	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports (1)	**34**	**38**	**619**	**593**	**1740**	**1962**	**3233**	**2811**	**3948**
Exports to:									
Total to OECD	**-**	**-**	**-**	**-**	**-**	**210**	**2192**	**2312**	**1714**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	180	2192	2312	1714
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	30	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**34**	**38**	**619**	**593**	**1740**	**1752**	**1041**	**499**	**2234**
Albania	-	-	457	391	1111	1657	1035	491	2125
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	67	9	205	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	95	6	8	109
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	34	38	95	193	424	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**3.81**	**5.16**	**8.31**	**8.72**	**10.69**	**13.73**	**13.68**	**14.59**	**15.98**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.29	1.42	2.41	2.52	3.07	3.18	3.02	3.02	3.22
of which: pumped storage	*-*	*-*	*0.32*	*0.32*	*0.70*	*0.70*	*0.57*	*0.57*	*0.70*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.01	0.05	0.20	0.61
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.03	0.23	1.02	0.95	1.30	1.64
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	2.53	3.74	5.90	6.17	7.39	9.52	9.67	10.08	10.51
of which:									
Single-fired:									
Coal and coal products	1.08	1.86	3.89	4.22	4.49	4.81	4.81	4.79	4.79
Liquid fuels	1.13	1.66	2.01	1.96	1.84	2.24	2.37	2.37	2.37
Natural gas	0.10	-	-	-	1.06	2.45	2.45	2.89	3.31
Biofuels & waste	-	-	-	-	-	0.02	0.04	0.03	0.04
Multi-fired:									
Solid / liquid	0.22	0.22	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	5.31	5.48	5.68	6.00	6.06	6.05	6.05
Internal combustion	-	-	0.29	0.40	0.56	0.82	0.89	0.88	0.89
Gas turbine	-	-	0.29	0.16	0.30	0.46	0.47	0.49	0.49
Combined cycle	-	-	-	0.13	0.85	2.24	2.24	2.65	3.07
Other	-	-	-	-	-	-	-	-	-
Peak load	..	3.55	4.92	6.06	8.53	10.39	9.83	9.88	10.06
Available capacity	..	..	6.04	6.31	10.32	11.09	12.65	11.03	11.31

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.13**	**0.17**	**0.20**	**0.22**	**0.21**	**0.53**	**0.54**	**0.52**	**0.54**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.13	0.17	0.20	0.22	0.21	0.53	0.54	0.52	0.54
of which:									
Single-fired:									
Coal and coal products	0.04	-	-	-	-	-	-	-	-
Liquid fuels	0.09	0.17	0.13	0.15	0.13	0.15	0.15	0.14	0.14
Natural gas	-	-	0.02	0.02	0.05	0.37	0.37	0.36	0.37
Biofuels & waste	-	-	0.05	0.05	0.04	0.01	0.03	0.02	0.04
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	0.11	0.13	0.13	0.05	0.04	0.03	0.05
Internal combustion	-	-	-	-	-	0.03	0.05	0.05	0.06
Gas turbine	-	-	0.02	0.02	0.02	0.39	0.39	0.39	0.40
Combined cycle	-	-	0.07	0.07	0.07	0.05	0.07	0.06	0.04
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	..	..	..	..	..	..	..	..	..
Heavy fuel oil (t)	7.35	17.04	74.15	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	c	c	c	c	c	c
				Euro/ toe					
Steam coal	..	..	..	..	..	..	..	..	..
Heavy fuel oil	8	18	77	..	..	..	..	..	..
Natural gas(2)	..	..	..	c	c	c	c	c	c
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	2.90	5.30	30.20	45.20	76.80	82.00	86.00	90.25	104.05
of which: tax	-	-	-	-	-	4.00	11.70	12.35	17.60
Household									
Price	6.80	9.30	55.00	75.70	107.30	109.30	119.60	124.40	140.45
of which: tax	0.60	0.80	8.20	5.60	9.10	9.30	22.90	23.00	33.60

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	21.28	28.35	28.76	25.00	25.67	24.96	23.50	1.8	-0.9
GDP (billion 2005 USD)	61.13	78.31	87.69	89.96	109.36	111.16	109.23	2.1	1.0
TPES/GDP(1)	0.35	0.36	0.33	0.28	0.23	0.22	0.22	-0.3	-1.9
Population (millions)	10.43	10.71	10.37	10.21	10.00	9.97	9.94	-0.0	-0.2
TPES/population(2)	2.04	2.65	2.77	2.45	2.57	2.50	2.36	1.8	-0.7
TPES/GDP (2005 = 100)	139	145	131	111	94	90	86	-0.3	-1.9
Ele.TFC/GDP(2005=100)(3)	98	111	123	112	107	106	..	1.3	..
Ele.TFC/population(4)	1684	2390	3049	2884	3422	3465	..	3.6	..
Elec. generated (TWh)(5)	17.64	23.88	28.44	35.19	37.37	35.98	34.41	2.8	0.9

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**21.28**	**28.35**	**28.76**	**25.00**	**25.67**	**24.96**	**23.50**	**1.8**	**-0.9**
Coal	7.91	8.43	6.20	3.85	2.70	2.76	2.67	-1.4	-3.8
Oil	8.15	10.79	8.35	6.63	6.54	6.20	5.67	0.1	-1.7
Natural gas	4.17	7.97	8.91	9.65	9.81	9.35	8.38	4.6	-0.3
Biofuels & waste	0.64	0.52	0.66	0.76	1.88	1.80	1.78	0.2	4.6
Nuclear	-	-	3.58	3.71	4.12	4.10	4.13	-	0.7
Geothermal	-	-	0.09	0.09	0.10	0.10	0.10	-	0.8
Solar, wind, tide(1)	-	-	-	-	0.05	0.06	0.07	-	-
Hydro	0.01	0.01	0.02	0.02	0.02	0.02	0.02	3.4	0.8
Net electricity imports(2)	0.40	0.64	0.96	0.30	0.45	0.57	0.68	5.3	-1.5
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**17.6**	**23.9**	**28.4**	**35.2**	**35.8**	**37.4**	**36.0**	**34.4**
Nuclear	-	-	13.7	14.2	13.8	15.8	15.7	15.8
Hydro	0.1	0.1	0.2	0.2	0.2	0.2	0.2	0.2
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.0	0.0	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.0	0.5	0.6	0.8
Combustible fuels	17.5	23.8	14.5	20.8 e	21.7	20.9	19.4	17.6
Coal	*11.6*	*12.0*	*8.7*	*9.7*	*7.1*	*6.4*	*6.6*	*6.5*
Oil	*3.0*	*3.3*	*1.4*	*4.4*	*0.5 e*	*0.5*	*0.1*	*0.2*
Natural gas	*2.9*	*8.4*	*4.5*	*6.6*	*12.4*	*11.6*	*10.7*	*9.2*
Biofuels & waste	-	-	*0.0*	*0.1*	*1.7*	*2.4*	*2.0*	*1.8*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	1.8	2.0	2.5	2.9	2.5	2.8	2.5	..
Net production	**15.9**	**21.9**	**25.9**	**32.3**	**33.2**	**34.6**	**33.5**	**..**
Nuclear	..	-	12.9	13.0	12.8	14.8	14.7	..
Hydro	..	0.1	0.2	0.2	0.2	0.2	0.2	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	0.0	0.0	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	-	0.0	0.5	0.6	..
Combustible fuels	..	21.8	12.8	19.1 e	20.2	19.1	18.0	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	5.7	10.2	13.3	9.5	15.6	9.9	14.7	17.0
- Exports	1.1	2.8	2.2	6.1	9.4	4.7	8.0	9.0
Electrical energy supplied	**20.5**	**29.3**	**37.0**	**35.7**	**39.4**	**39.8**	**40.1**	**..**
- Transmission & distr. losses	1.9	2.4	4.0	4.8	3.9	3.8	3.8	..
- Statistical difference	-	-	-	-	-	-	0.0	..
Total consumption	**18.6**	**26.9**	**33.0**	**30.9**	**35.5**	**36.0**	**36.4**	**..**
- Energy industry consumption[2]	1.1	1.4	1.4	1.4	3.2	1.8	1.8	..
Final consumption	**17.6**	**25.6**	**31.6**	**29.4**	**32.3**	**34.2**	**34.5**	**..**
Industry	10.7	13.8	13.8	8.8	9.3	9.8	9.9	..
Transport	0.8	1.1	1.2	1.0	1.1	1.1	1.1	..
Commercial & publ. serv.	2.3	2.6	5.5	8.9	9.9	11.4	11.5	..
Residential	2.6	5.0	9.2	9.8	11.1	11.2	11.3	..
Agriculture & fishing	1.0	1.6	1.9	1.0	0.9	0.8	0.8	..
Sector non specified	0.2	1.5	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**18.99**	**23.88**	**28.44**	**35.19**	**35.91**	**37.37**	**35.98**	**2.6**	**1.1**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**18.99**	**23.88**	**28.44**	**35.19**	**35.91**	**37.37**	**35.98**	**2.6**	**1.1**
Main activity producers									
Gross production	17.92	22.66	27.46	34.69	35.56	36.95	35.32	2.7	1.2
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	17.92	22.66	27.46	34.69	35.56	36.95	35.32	2.7	1.2
Nuclear	-	-	13.73	14.18	15.43	15.76	15.69	-	0.6
Hydro	0.08	0.11	0.18	0.18	0.23	0.19	0.22	5.0	1.1
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.33	0.53	0.63	-	-
Coal	11.15	11.60	8.54	9.71	6.42	6.35	6.57	-1.7	-1.2
Oil	3.82	2.97	1.03	4.34	0.62	0.48	0.14	-7.9	-8.9
Natural gas	2.86	7.98	3.96	6.18	10.18	11.29	10.24	2.0	4.6
Biofuels & waste	-	-	0.03	0.11	2.35	2.35	1.83	-	20.9
Autoproducers									
Gross production	1.07	1.21	0.97	0.50	0.35	0.43	0.66	-0.6	-1.8
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	1.07	1.21	0.97	0.50	0.35	0.43	0.66	-0.6	-1.8
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.67	0.44	0.13	-	-	-	-	-9.6	-
Oil	0.25	0.35	0.33	0.07	0.01	0.01	-	1.7	-
Natural gas	0.15	0.43	0.51	0.42	0.24	0.31	0.50	7.9	-0.2
Biofuels & waste	-	-	-	0.01	0.10	0.10	0.16	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**963**	**1091**	**876**	**492**	**325**	**392**	**609**	**-1.7**
Total energy	**-**	**-**	**-**	**123**	**18**	**32**	**29**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	5	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	80	18	27	29	-
Energy non specified/other	-	-	-	43	-	-	-	-
Total industry	**-**	**-**	**-**	**369**	**282**	**277**	**395**	**-**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	81	47	37	16	-
Non-ferrous metals	-	-	-	29	-	-	-	-
Non-metallic minerals	-	-	-	-	10	9	4	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	1	21	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	186	196	206	210	-
Pulp and printing	-	-	-	64	8	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	7	124	-
Textile and leather	-	-	-	1	-	-	-	-
Non specified/other industries	-	-	-	7	-	18	41	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**963**	**1091**	**876**	**-**	**25**	**83**	**185**	**-7.1**
Commerce and pub. services	-	-	-	-	24	47	109	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	28	75	-
Sector non specified	963	1091	876	-	1	8	1	-27.6

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**79310**	**73854**	**69157**	**63597 e**	**53026**	**49255**	**46118**	**-1.9**
Nuclear	-	-	606	669	502	508	528	-
Geothermal	-	-	218	234	233	271	210	-
Coal	27748	23580	18749	9387	7046	7081	6632	-5.6
Oil	19857	12886	4831	1040	211	233	205	-17.4
Natural gas	31619	36830	43791	51035	41469	37443	34978	0.1
Biofuels & waste	86	558	962	1231 e	3560	3714	3560	9.4
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	1	5	5	5	-
of which:								
Main activity producers								
Total	50287	53676	64007	61508 e	51362	46306	..	-0.7
Nuclear	-	-	606	669	502	508	..	-
Geothermal	-	-	218	234	233	271	..	-
Coal	20559	19620	18749	9387	7004	7042	..	-4.8
Oil	9599	6260	4420	995	208	233	..	-14.5
Natural gas	20129	27238	39127	49014	39966	34911	..	1.2
Biofuels & waste	-	558	887	1208 e	3444	3336	..	8.9
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	1	5	5	..	-
Autoproducers								
Total	29023	20178	5150	2089	1664	2949	..	-8.8
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	7189	3960	-	-	42	39	..	-19.7
Oil	10258	6626	411	45	3	-	..	-
Natural gas	11490	9592	4664	2021	1503	2532	..	-6.1
Biofuels & waste	86	-	75	23	116	378	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**6.35**	**9.35**	**6.03**	**6.46**	**5.48**	**5.71**	**5.27**	**-0.3**	**-0.6**
Coal	4.05	4.83	3.13	2.87	1.82	1.86	1.86	-1.5	-2.4
Oil	1.17	1.45	0.71	1.07	0.20	0.12	0.04	-2.9	-12.8
Natural gas	1.13	3.06	2.16	2.45	2.71	2.95	2.72	3.9	1.1
Biofuels & waste	0.00	0.00	0.03	0.06	0.75	0.78	0.65	16.8	15.6
of which: ***main activity prod.***									
Total	**..**	**8.13**	**5.22**	**6.27**	**5.40**	**5.61**	**5.10**	**..**	**-0.1**
Coal	..	4.52	2.97	2.87	1.82	1.85	1.86	..	-2.2
Oil	..	1.03	0.45	1.06	0.19	0.11	0.04	..	-10.9
Natural gas	..	2.59	1.77	2.28	2.65	2.88	2.60	..	1.9
Biofuels & waste	..	-	0.03	0.06	0.74	0.76	0.60	..	15.2

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**3.58**	**3.71**	**4.03**	**4.12**	**4.10**	**-**	**0.6**
Nuclear	-	-	3.58	3.71	4.03	4.12	4.10	-	0.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.00	0.00	0.00	-	-
Non-Thermal									
Total	**0.01**	**0.01**	**0.02**	**0.02**	**0.05**	**0.06**	**0.07**	**3.4**	**7.7**
Hydro	0.01	0.01	0.02	0.02	0.02	0.02	0.02	3.4	1.1
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.03	0.05	0.05	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	141	148	-	-
Fuel input (TJ)	-	-	-	3589	3631	-	-
Electricity production (GWh)	-	-	-	242	257	-	-
Brown coal							
Fuel input (1000 t)	14379	10826	10429	8624	8690	9320	-0.7
Fuel input (TJ)	129149	93889	87353	61536	62058	66692	-1.6
Electricity production (GWh)	11148	7861	8290	5789	5859	6408	-1.0
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	1395	293	-	339	610	-	-
Electricity production (GWh)	109	22	-	20	38	-	-
Petroleum products							
Fuel input (1000 t)	719	241	962	117	113	33	-9.0
Fuel input (TJ)	29039	9590	38687	4790	4590	1381	-8.8
Electricity production (GWh)	2658	850	4149	499	484	137	-8.3
Natural gas (1)							
Fuel input (TJ)	89261	38859	37602	39666	46598	35302	-0.5
Electricity production (GWh)	7490	3152	3620	3943	4745	3887	1.0
Wood and other solid waste							
Fuel input (TJ)	-	-	-	23921	23671	16667	-
Electricity production (GWh)	-	-	-	2009	1900	1396	-
Industrial waste							
Fuel input (TJ)	-	-	-	46	28	158	-
Electricity production (GWh)	-	-	-	4	3	14	-
Municipal waste							
Fuel input (TJ)	-	-	-	556	1314	770	-
Electricity production (GWh)	-	-	-	58	132	80	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	9	96	926	-
Electricity production (GWh)	-	-	-	2	10	91	-
Total combustible fuels(2)							
Electricity production (GWh)	21405	11885	16059 e	12566	13428	12013	0.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	60	66	23	-
Fuel input (TJ)	-	-	-	1452	1619	558	-
Electricity production (GWh)	-	-	-	31	31	12	-
CHP Heat production (TJ)	-	-	-	899	1026	393	-
Brown coal							
Fuel input (1000 t)	2430	2551	2586	279	141	174	-12.0
Fuel input (TJ)	22077	22237	27324	3344	1627	2375	-10.1
Electricity production (GWh)	713	688	1300	278	87	63	-10.8
CHP Heat production (TJ)	13014	13888	15193	1641	1083	1614	-9.7
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	842	1013	5541	2790	4029	4400	7.2
Electricity production (GWh)	72	98	117	55	78	90	-0.4
CHP Heat production (TJ)	329	395	3545	1662	2127	2247	8.6
Petroleum products							
Fuel input (1000 t)	361	219	145	68	3	4	-17.4
Fuel input (TJ)	14533	8793	5604	2781	78	130	-18.2
Electricity production (GWh)	658	501	255	134	6	7	-18.4
CHP Heat production (TJ)	8301	4910	4014	1731	38	81	-17.8
Natural gas(1)							
Fuel input (TJ)	25948	35818	55915	72297	74161	71199	3.3
Electricity production (GWh)	916	1321	2982	6479	6853	6851	8.2
CHP Heat production (TJ)	14221	20002	27052	30097	29590	22786	0.6
Wood and other solid waste							
Fuel input (TJ)	-	-	133	2982	3423	3315	-
Electricity production (GWh)	-	-	10	117	134	131	-
CHP Heat production (TJ)	-	-	75	1019	2201	2173	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	87	420	-
Electricity production (GWh)	-	-	-	-	4	2	-
CHP Heat production (TJ)	-	-	-	-	-	102	-
Municipal waste							
Fuel input (TJ)	-	988	2436	3304	3144	3260	5.8
Electricity production (GWh)	-	34	110	168	158	158	7.6
CHP Heat production (TJ)	-	318	815	1056	1076	742	4.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	528	749	1005	-
Electricity production (GWh)	-	-	-	94	108	122	-
CHP Heat production (TJ)	-	-	-	11	110	253	-
Total combustible fuels(2)							
Electricity production (GWh)	2359	2642	4774	7356	7459	7436	5.1
CHP Heat production (TJ)	35865	39513	50694	38116	37251	30391	-1.2

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	72	9	-	6	65	62	9.6
Fuel input (TJ)	1622	246	-	135	1586	1509	9.0
Heat production (TJ)	1033	170	-	107	1232	1170	9.6
Brown coal							
Fuel input (1000 t)	1810	1214	1	73	3	11	-20.1
Fuel input (TJ)	19968	12675	12	1123	52	197	-18.0
Heat production (TJ)	12844	8586	11	896	42	149	-17.6
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	812	784	-	2108	2635	2396	5.5
Heat production (TJ)	528	541	-	1503	1536	1508	5.0
Petroleum products							
Fuel input (1000 t)	413	272	22	19	6	4	-18.2
Fuel input (TJ)	17254	11229	907	790	196	170	-18.1
Heat production (TJ)	11556	7976	817	697	173	152	-17.2
Natural gas(1)							
Fuel input (TJ)	28128	25668	20510	14185	16546	20119	-1.2
Heat production (TJ)	17398	16828	16739	10976	11879	14657	-0.7
Wood and other solid waste							
Fuel input (TJ)	133	291	107	163	195	509	2.7
Heat production (TJ)	86	240	72	126	162	432	2.8
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	17	13	14	-
Heat production (TJ)	-	-	-	12	11	12	-
Total combustible fuels(2)							
Heat production (TJ)	43445	34341	17639	14317	15035	18080	-3.0

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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HUNGARY
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**16.53**	**21.57**	**20.64**	**17.19**	**17.84**	**18.12**	**17.70**	**1.3**	**-0.7**
Geothermal	-	-	0.09	0.08	0.09	0.09	0.10	-	0.6
Solar thermal	-	-	-	-	0.00	0.01	0.01	-	-
Coal	4.08	3.54	2.31	0.54	0.35	0.39	0.42	-3.3	-7.8
Oil	6.46	9.00	7.12	5.20	6.36	6.08	5.85	0.6	-0.9
Natural gas	2.80	4.61	6.20	6.69	6.09	6.43	6.20	4.8	0.0
Biofuels & waste	0.62	0.49	0.62	0.69	1.00	1.09	1.15	0.0	3.0
Electricity	1.51	2.20	2.72	2.53	2.85	2.94	2.97	3.5	0.4
Heat	1.06	1.72	1.59	1.45	1.09	1.09	1.01	2.4	-2.1
of which:									
Total industry	**6.13**	**7.41**	**6.04**	**3.26**	**2.43**	**2.61**	**2.55**	**-0.1**	**-4.0**
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	1.57	1.29	0.52	0.29	0.21	0.24	0.24	-6.3	-3.5
Oil	1.53	1.70	0.90	0.27	0.15	0.14	0.08	-3.1	-10.8
Natural gas	1.62	2.59	3.20	1.37	0.89	0.97	0.98	4.1	-5.5
Biofuels & waste	0.02	0.01	0.00	0.06	0.12	0.12	0.12	-10.5	19.5
Electricity	0.92	1.19	1.18	0.76	0.74	0.84	0.85	1.5	-1.6
Heat	0.46	0.63	0.23	0.52	0.33	0.30	0.28	-4.0	0.9
Transport	**2.28**	**2.88**	**2.93**	**3.04**	**4.51**	**4.12**	**3.99**	**1.5**	**1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.38	0.13	0.00	0.00	-	-	-	-30.3	-
Oil	1.84	2.66	2.83	2.95	4.23	3.85	3.73	2.6	1.3
Natural gas	-	-	0.00	0.00	0.00	0.00	0.00	-	9.5
Biofuels & waste	-	-	-	-	0.17	0.17	0.17	-	-
Electricity	0.07	0.09	0.10	0.09	0.10	0.10	0.10	2.4	-0.3
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**1.12**	**1.40**	**2.02**	**3.02**	**2.99**	**3.13**	**3.14**	**3.5**	**2.1**
Geothermal	-	-	0.08	0.08	0.08	0.08	0.08	-	-0.2
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.47	0.22	0.09	0.02	0.00	0.00	0.00	-9.2	-14.9
Oil	0.17	0.45	0.29	0.07	0.02	0.02	0.02	3.2	-12.4
Natural gas	0.09	0.20	0.61	1.77	1.57	1.71	1.73	12.0	5.0
Biofuels & waste	-	0.00	0.01	0.05	0.12	0.12	0.13	-	12.6
Electricity	0.20	0.23	0.48	0.76	0.98	0.98	0.99	5.3	3.5
Heat	0.20	0.30	0.46	0.26	0.22	0.22	0.20	5.1	-3.8

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**3.79**	**5.15**	**6.70**	**5.59**	**5.52**	**5.74**	**5.48**	**3.4**	**-1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	0.01	0.01	-	-
Coal	1.55	1.86	1.68	0.20	0.14	0.15	0.17	0.5	-10.3
Oil	0.99	1.23	1.17	0.31	0.10	0.13	0.12	1.0	-10.4
Natural gas	0.18	0.49	1.64	3.02	3.18	3.26	2.97	13.9	2.9
Biofuels & waste	0.56	0.46	0.59	0.55	0.58	0.66	0.72	0.3	1.0
Electricity	0.22	0.43	0.79	0.84	0.97	0.96	0.97	7.8	1.0
Heat	0.29	0.68	0.83	0.67	0.54	0.57	0.53	6.4	-2.1
Agriculture & fishing	**1.05**	**1.42**	**1.13**	**0.67**	**0.45**	**0.49**	**0.49**	**0.5**	**-3.9**
Geothermal	-	-	0.00	0.00	0.01	0.01	0.01	-	12.4
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.05	0.01	0.02	0.03	0.00	0.00	0.00	-4.3	-16.2
Oil	0.79	1.12	0.67	0.34	0.23	0.28	0.27	-0.9	-4.3
Natural gas	0.02	0.07	0.19	0.20	0.12	0.12	0.12	13.8	-1.9
Biofuels & waste	0.02	0.02	0.01	0.03	0.01	0.01	0.01	-4.0	1.4
Electricity	0.08	0.13	0.17	0.08	0.07	0.07	0.07	4.1	-4.3
Heat	0.09	0.07	0.07	0.00	0.00	0.00	0.00	-0.9	-24.7
Other	**0.87**	**0.85**	**0.08**	**0.02**	**-**	**-**	**-**	**-12.9**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.06	0.03	-	-	-	-	-	-	-
Oil	0.47	0.31	0.08	0.02	-	-	-	-9.7	-
Natural gas	0.29	0.36	-	-	-	-	-	-	-
Biofuels & waste	0.01	0.00	0.00	-	-	-	-	-15.5	-
Electricity	0.02	0.13	-	-	-	-	-	-	-
Heat	0.02	0.03	-	-	-	-	-	-	-
Non-energy use(1)	**1.28**	**2.45**	**1.74**	**1.59**	**1.95**	**2.03**	**2.04**	**1.79**	**0.77**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**16.53**	**21.57**	**20.64**	**17.19**	**18.58**	**17.84**	**18.12**	**17.70**
Total industry (Mtoe)	**6.13**	**7.41**	**6.04**	**3.26**	**3.10**	**2.43**	**2.61**	**2.55**
Iron and steel	1.72	1.90	1.28	0.45	0.37	0.24	0.29	0.29
Chem. and petrochemical	0.75	1.12	1.04	0.83	0.63	0.49	0.51	0.50
Non-ferrous metals	0.34	0.38	0.26	0.25	0.19	0.14	0.17	0.16
Non-metallic minerals	1.01	1.22	1.02	0.58	0.66	0.45	0.44	0.42
Transport equipment	0.21	0.24	0.17	0.09	0.15	0.12	0.14	0.14
Machinery	0.51	0.58	0.48	0.17	0.25	0.23	0.26	0.26
Mining and quarrying	0.17	0.17	0.17	0.02	0.01	0.02	0.02	0.01
Food and tobacco	0.65	0.88	0.95	0.47	0.45	0.40	0.41	0.41
Paper, pulp and printing	0.10	0.11	0.09	0.16	0.17	0.14	0.16	0.16
Wood and wood products	0.06	0.08	0.07	0.06	0.05	0.03	0.03	0.03
Construction	0.23	0.25	0.15	0.02	0.06	0.04	0.05	0.03
Textile and leather	0.34	0.41	0.30	0.07	0.02	0.02	0.02	0.02
Non specified/other	0.05	0.07	0.05	0.09	0.09	0.10	0.11	0.11
Electricity consumption (Mtoe)	**1.51**	**2.20**	**2.72**	**2.53**	**2.95**	**2.85**	**2.94**	**2.97**
Total industry (Mtoe)	**0.92**	**1.19**	**1.18**	**0.76**	**0.85**	**0.74**	**0.84**	**0.85**
Iron and steel	0.13	0.16	0.15	0.05	0.06	0.04	0.04	0.04
Chem. and petrochemical	0.21	0.30	0.30	0.24	0.23	0.19	0.20	0.20
Non-ferrous metals	0.14	0.16	0.15	0.09	0.04	0.03	0.04	0.04
Non-metallic minerals	0.07	0.10	0.10	0.07	0.10	0.08	0.08	0.08
Transport equipment	0.03	0.04	0.03	0.03	0.08	0.07	0.08	0.08
Machinery	0.09	0.11	0.13	0.05	0.11	0.11	0.13	0.13
Mining and quarrying	0.03	0.03	0.03	0.01	0.00	0.01	0.00	0.00
Food and tobacco	0.06	0.10	0.14	0.09	0.11	0.11	0.12	0.12
Paper, pulp and printing	0.03	0.04	0.05	0.04	0.04	0.03	0.05	0.05
Wood and wood products	0.01	0.01	0.02	0.01	0.01	0.01	0.01	0.01
Construction	0.02	0.03	0.02	0.00	0.01	0.01	0.01	0.01
Textile and leather	0.07	0.08	0.07	0.02	0.01	0.01	0.01	0.01
Non specified/other	0.02	0.03	0.00	0.05	0.04	0.05	0.06	0.06
Total industry (TWh)	**10.74**	**13.80**	**13.75**	**8.80**	**9.91**	**8.56**	**9.78**	**9.88**
Iron and steel	1.52	1.89	1.75	0.58	0.75	0.43	0.52	0.52
Chem. and petrochemical	2.49	3.43	3.45	2.80	2.72	2.16	2.32	2.34
Non-ferrous metals	1.68	1.86	1.77	0.99	0.47	0.36	0.43	0.44
Non-metallic minerals	0.77	1.12	1.15	0.87	1.12	0.92	0.93	0.94
Transport equipment	0.40	0.51	0.37	0.29	0.96	0.78	0.93	0.94
Machinery	0.99	1.24	1.47	0.58	1.31	1.29	1.54	1.56
Mining and quarrying	0.34	0.38	0.31	0.10	0.06	0.06	0.06	0.06
Food and tobacco	0.75	1.12	1.64	1.09	1.25	1.22	1.36	1.37
Paper, pulp and printing	0.40	0.51	0.56	0.51	0.45	0.40	0.56	0.57
Wood and wood products	0.12	0.17	0.21	0.14	0.17	0.12	0.15	0.15
Construction	0.25	0.36	0.20	0.03	0.08	0.08	0.12	0.12
Textile and leather	0.79	0.90	0.83	0.23	0.12	0.10	0.13	0.13
Non specified/other	0.26	0.32	0.05	0.59	0.45	0.64	0.74	0.75

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**5732**	**10182**	**13299**	**3210**	**9523**	**12774**	**10972**	**9897**	**14664**
Imports from:									
Total from OECD	**473**	**801**	**1076**	**1334**	**7976**	**8296**	**7393**	**5948**	**9749**
Austria	170	252	298	482	426	840	1392	1013	1631
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	303	549	778	852	7550	7456	6001	4935	8118
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**5259**	**9381**	**12223**	**1876**	**1547**	**4478**	**3579**	**3949**	**4915**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	1	1	-	5	12	93	11
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	1428	955	-	283	-	720	586	1252	866
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	36	100	62	-	-	-	75	544	267
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	3795	8326	12160	1592	1547	3753	2906	2060	3771
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**1070**	**2796**	**2152**	**805**	**6083**	**8871**	**5459**	**4702**	**8021**
Exports to:									
Total to OECD	**1044**	**2641**	**1787**	**518**	**842**	**722**	**238**	**697**	**703**
Austria	492	364	281	173	842	722	238	641	698
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	552	2277	1506	345	-	-	-	56	5
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**26**	**155**	**365**	**287**	**5241**	**8149**	**5221**	**4005**	**7318**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	117	4472	5300	3309	3044	6171
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	2	15	61	88	-	105	308	146	340
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	24	116	294	65	765	2653	1364	392	697
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	24	10	17	4	91	240	423	110
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**3.70**	**5.22**	**6.97**	**7.22**	**8.08**	**8.58**	**8.74**	**8.84**	**9.48**
Nuclear	-	-	1.76	1.84	1.85	1.94	1.94	2.00	2.00
Hydro	0.02	0.05	0.05	0.05	0.05	0.05	0.05	0.05	0.06
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.13	0.20	0.29	0.33
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	3.68	5.17	5.17	5.33	6.19	6.45	6.55	6.50	7.10
of which:									
Single-fired:									
Coal and coal products	2.12	2.06	2.03	1.99	1.83	-	-	0.04	0.02
Liquid fuels	0.12	0.20	0.20	0.35	0.58	0.41	0.41	0.41	0.41
Natural gas	-	-	-	-	-	2.37	0.82	1.18	1.89
Biofuels & waste	-	-	-	-	-	0.08	0.10	0.19	0.20
Multi-fired:									
Solid / liquid	-	-	-	-	-	1.12	1.13	1.13	1.12
Solid / natural gas	-	-	-	-	-	0.26	0.26	0.28	0.18
Liquid / natural gas	1.44	2.91	2.93	2.99	3.78	2.01	3.63	3.22	3.24
Solid / liquid / gas	-	-	-	-	-	0.19	0.19	0.05	0.03
Type of generation									
Steam	3.48	4.80	4.77	4.83	4.97	4.15	4.20	4.02	3.66
Internal combustion	-	-	-	-	-	0.44	0.43	0.43	0.43
Gas turbine	0.12	0.20	0.20	0.35	0.58	1.04	1.04	1.18	1.71
Combined cycle	0.08	0.17	0.20	0.15	0.64	0.84	0.88	0.87	1.30
Other	-	-	-	-	-	-	-	-	-
Peak load	4.02	5.11	6.53	5.73	5.74	6.39	6.38	6.56	6.49
Available capacity	4.34	6.25	8.94	7.82	8.75	7.40	7.41	7.23	8.09

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.21**	**0.17**	**0.21**	**0.19**	**0.20**	**0.12**	**0.12**	**0.15**	**0.17**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.21	0.17	0.21	0.19	0.20	0.12	0.12	0.15	0.17
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	0.11	0.11	0.12	0.11
Biofuels & waste	-	-	-	-	-	-	-	-	0.04
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	0.01	0.01	0.01	0.01
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	0.21	0.17	0.21	0.19	0.20	-	-	0.01	0.01
Type of generation									
Steam	0.18	0.14	0.04	0.05	0.05	0.01	0.01	0.03	0.03
Internal combustion	-	-	-	-	-	0.08	0.09	0.09	0.11
Gas turbine	-	-	-	-	-	0.03	0.03	0.03	0.03
Combined cycle	0.03	0.03	0.17	0.14	0.15	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Hungarian Forints/ unit					
Steam coal (t)	..	372	1700	c	c	c	c	c	c
Heavy fuel oil (t)	..	2740	5635	41246	..	..	..	..	..
Natural gas (MWh)(1)	..	185	535	2424	9248	8927	6777	8417	9883
				Hungarian Forints/ toe					
Steam coal	..	1564	8181	c	c	c	c	c	c
Heavy fuel oil	..	2825	5809	42522	..	..	..	..	..
Natural gas(2)	..	2386	6908	31323	119510	115361	87576	108760	127708
End-user prices of electricity									
				Hungarian Forints/ MWh					
Industry									
Price	..	..	4700.00	13752.50	29257.20	32276.92	27563.38	27551.77	29578.48
of which: tax	..	..	-	-	252.00	252.00	615.00	1155.00	1755.00
Household									
Price	..	1033.00	2450.00	18435.20	38661.55	41670.35	45421.63	43904.83	45898.32
of which: tax	..	-	-	1975.20	6443.59	7653.74	9340.33	9468.97	10907.52

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	1.12	1.50	2.09	3.10	5.37	5.73	6.02	3.7	4.9
GDP (billion 2005 USD)	5.44	7.84	10.27	13.21	16.39	16.86	17.14	3.8	2.4
TPES/GDP(1)	0.21	0.19	0.20	0.23	0.33	0.34	0.35	-0.1	2.5
Population (millions)	0.21	0.23	0.26	0.28	0.32	0.32	0.32	1.1	1.0
TPES/population(2)	5.28	6.56	8.19	11.03	16.88	17.97	18.88	2.6	3.9
TPES/GDP (2005 = 100)	96	89	95	110	153	159	164	-0.1	2.5
Ele.TFC/GDP(2005=100)(3)	80	76	79	109	200	198	..	-0.0	..
Ele.TFC/population(4)	9772	12557	15339	24603	49410	50206	..	2.7	..
Elec. generated (TWh)(5)	2.32	3.18	4.51	7.68	17.06	17.21	17.55	4.0	6.4

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**1.12**	**1.50**	**2.09**	**3.10**	**5.37**	**5.73**	**6.02**	**3.7**	**4.9**
Coal	0.00	0.02	0.06	0.10	0.09	0.09	0.10	31.3	1.9
Oil	0.58	0.58	0.62	0.70	0.85	0.84	0.82	0.5	1.3
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	0.00	0.00	0.00	0.00	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	0.35	0.64	1.04	1.76	3.34	3.73	4.04	6.6	6.4
Solar, wind, tide(1)	-	-	-	-	-	-	-	-	-
Hydro	0.19	0.27	0.36	0.55	1.08	1.08	1.06	3.9	5.0
Net electricity imports(2)	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**2.3**	**3.2**	**4.5**	**7.7**	**8.7**	**17.1**	**17.2**	**17.5**
Nuclear	-	-	-	-	-	-	-	-
Hydro	2.2	3.1	4.2	6.4	7.0	12.6	12.5	12.3
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	0.0	0.1	0.3	1.3	1.7	4.5	4.7	5.2
Solar	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-
Combustible fuels	0.1	0.0	0.0	0.0	0.0	0.0	0.0	0.0
Coal	-	-	-	-	-	-	-	-
Oil	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Natural gas	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	*0.0*	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	0.0	0.0	0.1	0.1	0.2	0.3	0.4	..
Net production	**2.3**	**3.2**	**4.5**	**7.6**	**8.5**	**16.7**	**16.9**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	3.1	4.2	6.3	6.9	12.5	12.4	..
Geothermal	..	0.1	0.3	1.3	1.6	4.2	4.5	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	-	-	-	-	..
Combustible fuels	..	0.0	0.0	0.0	0.0	0.0	0.0	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	0.1	0.2	0.2	0.2	0.2	0.2
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**2.3**	**3.2**	**4.3**	**7.4**	**8.3**	**16.6**	**16.7**	**..**
- Transmission & distr. losses	0.2	0.3	0.4	0.3	0.4	0.7	0.5	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**2.1**	**2.9**	**3.9**	**7.1**	**8.0**	**15.9**	**16.2**	**..**
- Energy industry consumption[2]	-	-	0.0	0.2	0.2	0.2	0.1	..
Final consumption	**2.1**	**2.9**	**3.9**	**6.9**	**7.8**	**15.7**	**16.0**	**..**
Industry	1.5	2.0	2.6	5.2	5.9	13.5	13.9	..
Transport	-	-	-	-	-	-	-	..
Commercial & publ. serv.	0.1	0.2	0.5	0.8	0.9	1.0	1.0	..
Residential	0.4	0.6	0.6	0.6	0.7	0.9	0.9	..
Agriculture & fishing	-	-	0.2	0.2	0.2	0.3	0.3	..
Sector non specified	0.1	0.1	0.1	0.1	0.1	-	0.0	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**2.37**	**3.18**	**4.51**	**7.68**	**16.83**	**17.06**	**17.21**	**4.1**	**6.6**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**2.37**	**3.18**	**4.51**	**7.68**	**16.83**	**17.06**	**17.21**	**4.1**	**6.6**
Main activity producers									
Gross production	2.36	3.17	4.51	7.68	16.83	17.06	17.21	4.1	6.6
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	2.36	3.17	4.51	7.68	16.83	17.06	17.21	4.1	6.6
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2.28	3.08	4.20	6.35	12.28	12.59	12.51	3.9	5.3
Geothermal	0.01	0.05	0.30	1.32	4.55	4.47	4.70	25.4	14.0
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.07	0.05	0.01	0.00	0.00	0.00	0.00	-15.4	-4.3
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Autoproducers									
Gross production	0.01	0.01	0.01	0.01	-	-	-	-	-
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.01	0.01	0.01	0.01	-	-	-	-	-
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.00	0.00	0.00	0.00	-	-	-	-	-
Geothermal	-	0.01	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.00	0.00	0.00	0.00	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**5**	**10**	**5**	**5**	**-**	**-**	**-**	**-**
Total energy	**-**	**5**	**-**	**-**	**-**	**-**	**-**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-
Energy non specified/other	-	5	-	-	-	-	-	-
Total industry	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	-	-	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-
Pulp and printing	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**5**	**5**	**5**	**5**	**-**	**-**	**-**	**-**
Commerce and pub. services	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	5	5	5	5	-	-	-	-
Sector non specified	-	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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ICELAND
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**1576**	**5282**	**8007**	**9293**	**10885**	**10974**	**10975**	**3.5**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	1576	4819	7369	8670	10200	10300	10300	3.7
Coal	-	-	-	-	-	-	-	-
Oil	-	-	20	-	11	-	-	-
Natural gas	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	45	56	28	-	-	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	463	573	567	646	674	675	1.8
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	1576	5282	8007	9293	10847	10970	..	3.5
Nuclear	-	-	-	-	-	-	..	-
Geothermal	1576	4819	7369	8670	10200	10300	..	3.7
Coal	-	-	-	-	-	-	..	-
Oil	-	-	20	-	11	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	45	56	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	463	573	567	636	670	..	1.8
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	-	38	4	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	28	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	10	4	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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ICELAND
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.02**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-15.9**	**-**
Coal	-	-	-	-	-	-	-	-	-
Oil	0.02	0.01	0.00	0.00	0.00	0.00	0.00	-15.9	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	0.00	0.00	0.00	-	-	-
of which: ***main activity prod.***									
Total	**..**	**0.01**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**..**	**-**
Coal	..	-	-	-	-	-	-	..	-
Oil	..	0.01	0.00	0.00	0.00	0.00	0.00	..	-
Natural gas	..	-	-	-	-	-	-	..	-
Biofuels & waste	..	-	-	0.00	0.00	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**0.04**	**0.14**	**0.42**	**1.11**	**2.76**	**2.76**	**3.13**	**14.7**	**10.0**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	0.04	0.14	0.42	1.11	2.76	2.76	3.13	14.7	10.0
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**0.19**	**0.27**	**0.36**	**0.55**	**1.06**	**1.08**	**1.08**	**3.9**	**5.3**
Hydro	0.19	0.27	0.36	0.55	1.06	1.08	1.08	3.9	5.3
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	10	1	1	1	1	1	-
Fuel input (TJ)	399	66	46	21	17	17	-6.3
Electricity production (GWh)	47	6	5	2	2	2	-5.1
Natural gas[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	8	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	2	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Electricity production (GWh)	47	6	5	2	2	2	-5.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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ICELAND
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	22	24	11	-	-
Heat production (TJ)	-	-	20	23	11	-	-
Natural gas[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	56	33	36	-	-
Heat production (TJ)	-	-	45	25	28	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Heat production (TJ)	-	-	65	48	39	-	-

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.
(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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ICELAND
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**1.02**	**1.28**	**1.64**	**2.11**	**2.99**	**2.94**	**2.96**	**2.8**	**2.9**
Geothermal	0.30	0.44	0.55	0.55	0.41	0.41	0.42	3.5	-1.3
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	0.02	0.06	0.10	0.09	0.09	0.09	31.3	1.7
Oil	0.54	0.55	0.59	0.70	0.91	0.85	0.83	0.6	1.6
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.00	0.00	0.00	-	-
Electricity	0.18	0.25	0.34	0.59	1.35	1.35	1.38	3.8	6.9
Heat	-	0.03	0.10	0.17	0.24	0.24	0.24	-	4.4
of which:									
Total industry	**0.27**	**0.35**	**0.42**	**0.72**	**1.31**	**1.30**	**1.33**	**2.6**	**5.7**
Geothermal	0.03	0.02	0.05	0.06	0.01	0.01	0.01	2.5	-5.7
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.02	0.06	0.10	0.09	0.09	0.09	-	1.7
Oil	0.11	0.14	0.09	0.11	0.05	0.04	0.03	-1.3	-5.1
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.13	0.17	0.22	0.45	1.16	1.16	1.19	3.2	8.4
Heat	-	-	-	-	-	-	-	-	-
Transport	**0.13**	**0.16**	**0.21**	**0.21**	**0.30**	**0.28**	**0.27**	**3.0**	**1.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.13	0.16	0.21	0.21	0.30	0.28	0.27	3.0	1.2
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.00	0.00	0.00	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.02**	**0.03**	**0.07**	**0.12**	**0.21**	**0.21**	**0.21**	**7.2**	**5.4**
Geothermal	0.01	0.02	0.02	0.04	0.08	0.08	0.08	3.1	6.2
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	0.00	0.00	0.00	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.01	0.02	0.04	0.07	0.09	0.09	0.09	9.6	3.6
Heat	-	0.00	0.01	0.01	0.04	0.04	0.04	-	9.4

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**0.45**	**0.53**	**0.58**	**0.60**	**0.53**	**0.53**	**0.53**	**1.5**	**-0.4**
Geothermal	0.24	0.38	0.44	0.39	0.29	0.29	0.29	3.6	-2.0
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	-	-	-	-	-	-	-	-
Oil	0.17	0.07	0.02	0.01	0.00	0.00	0.00	-13.3	-7.2
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.03	0.06	0.05	0.05	0.08	0.08	0.07	2.9	1.9
Heat	-	0.03	0.07	0.15	0.16	0.16	0.16	-	3.9
Agriculture & fishing	**0.13**	**0.18**	**0.28**	**0.31**	**0.30**	**0.27**	**0.27**	**4.7**	**-0.2**
Geothermal	0.02	0.02	0.04	0.05	0.04	0.04	0.04	4.4	-0.3
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.10	0.16	0.21	0.24	0.21	0.19	0.18	4.3	-0.8
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	0.02	0.02	0.02	0.02	0.02	-	1.0
Heat	-	-	-	-	0.02	0.02	0.02	-	-
Other	**0.01**	**0.01**	**0.02**	**0.02**	**0.01**	**0.01**	**0.01**	**3.7**	**-5.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.00	0.00	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.01	0.00	0.01	0.01	-	-	0.00	-2.2	-16.0
Heat	-	-	0.02	0.02	0.01	0.01	0.01	-	-3.6
Non-energy use(1)	**0.02**	**0.02**	**0.07**	**0.13**	**0.34**	**0.33**	**0.35**	**6.57**	**8.31**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**1.02**	**1.28**	**1.64**	**2.11**	**2.92**	**2.99**	**2.94**	**2.96**
Total industry (Mtoe)	**0.27**	**0.35**	**0.42**	**0.72**	**1.30**	**1.31**	**1.30**	**1.33**
Iron and steel	-	0.04	0.10	0.17	0.16	0.16	0.16	0.17
Chem. and petrochemical	-	0.01	0.02	0.01	0.00	0.01	0.00	0.00
Non-ferrous metals	0.09	0.11	0.13	0.32	0.99	1.04	1.03	1.06
Non-metallic minerals	-	-	0.01	0.01	0.02	0.01	0.01	0.01
Transport equipment	-	-	-	0.00	0.00	0.00	0.00	0.00
Machinery	-	-	-	0.00	0.00	0.00	0.00	0.00
Mining and quarrying	-	-	0.00	0.05	0.00	0.00	0.00	0.00
Food and tobacco	-	-	0.06	0.09	0.05	0.04	0.04	0.04
Paper, pulp and printing	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Wood and wood products	-	-	-	0.00	0.00	0.00	0.00	0.00
Construction	-	-	0.03	0.06	0.06	0.04	0.03	0.03
Textile and leather	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Non specified/other	0.17	0.20	0.06	0.00	0.02	0.02	0.02	0.02
Electricity consumption (Mtoe)	**0.18**	**0.25**	**0.34**	**0.59**	**1.31**	**1.35**	**1.35**	**1.38**
Total industry (Mtoe)	**0.13**	**0.17**	**0.22**	**0.45**	**1.12**	**1.16**	**1.16**	**1.19**
Iron and steel	-	0.02	0.05	0.08	0.08	0.08	0.08	0.08
Chem. and petrochemical	-	0.01	0.02	0.01	0.00	0.00	0.00	0.00
Non-ferrous metals	0.09	0.11	0.12	0.31	0.99	1.03	1.03	1.06
Non-metallic minerals	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Transport equipment	-	-	-	0.00	0.00	0.00	0.00	0.00
Machinery	-	-	-	0.00	0.00	0.00	0.00	0.00
Mining and quarrying	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Food and tobacco	-	-	0.02	0.03	0.03	0.04	0.04	0.04
Paper, pulp and printing	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Wood and wood products	-	-	-	0.00	0.00	0.00	0.00	0.00
Construction	-	-	0.00	0.00	0.01	0.00	0.00	0.00
Textile and leather	-	-	0.00	0.00	0.00	0.00	0.00	0.00
Non specified/other	0.03	0.03	0.00	0.00	0.00	0.00	0.00	0.00
Total industry (TWh)	**1.50**	**1.98**	**2.56**	**5.24**	**13.06**	**13.50**	**13.50**	**13.87**
Iron and steel	-	0.27	0.57	0.98	0.89	0.90	0.93	0.95
Chem. and petrochemical	-	0.13	0.22	0.11	0.04	0.04	0.04	0.05
Non-ferrous metals	1.10	1.23	1.45	3.61	11.55	12.03	12.02	12.34
Non-metallic minerals	-	-	0.03	0.05	0.05	0.03	0.02	0.03
Transport equipment	-	-	-	0.01	0.01	0.01	0.00	0.00
Machinery	-	-	-	0.01	0.01	0.01	0.01	0.01
Mining and quarrying	-	-	0.00	0.01	0.00	0.00	0.00	0.00
Food and tobacco	-	-	0.18	0.39	0.41	0.41	0.41	0.43
Paper, pulp and printing	-	-	0.02	0.02	0.02	0.02	0.02	0.02
Wood and wood products	-	-	-	0.01	0.01	0.00	0.00	0.00
Construction	-	-	0.02	0.01	0.07	0.04	0.02	0.02
Textile and leather	-	-	0.03	0.02	0.00	0.00	0.00	0.00
Non specified/other	0.41	0.35	0.05	0.02	0.01	0.01	0.01	0.01

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**0.48**	**0.67**	**0.91**	**1.05**	**1.35**	**2.57**	**2.57**	**2.58**	**2.67**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.38	0.54	0.75	0.88	1.06	1.88	1.88	1.88	1.88
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	0.01	0.05	0.05	0.17	0.58	0.58	0.58	0.67
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.10	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	0.10	0.12	0.12	0.12	0.12	0.12	0.12	0.12	0.12
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	0.02	0.02	-	-	-	-	-	-	-
Internal combustion	0.04	0.06	0.08	0.08	0.09	0.08	0.09	0.09	0.08
Gas turbine	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	0.40	0.52	0.67	0.73	1.07	2.13	2.15	2.18	2.09
Available capacity	0.48	0.67	0.91	0.97	1.27	2.57	2.58	2.58	2.67

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.02**	**0.03**	**0.03**	**0.03**	**0.03**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	0.01	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.02	0.02	0.03	0.03	0.03	-	-	-	-
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	0.02	0.02	0.03	0.03	0.03	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	-	-	-	-	-	-	-
Internal combustion	0.01	0.02	0.03	0.03	0.03	-	-	-	-
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	-	-	..	..	..	..	..	..	-
Available capacity	0.02	0.02	0.03	0.03	0.03	-	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	6.91	8.24	9.87	13.57	14.22	13.22	13.35	2.1	1.4
GDP (billion 2005 USD)	39.52	54.40	77.64	158.80	206.96	209.92	211.89	4.1	4.7
TPES/GDP(1)	0.17	0.15	0.13	0.09	0.07	0.06	0.06	-1.9	-3.1
Population (millions)	3.07	3.40	3.51	3.80	4.56	4.58	4.59	0.8	1.2
TPES/population(2)	2.25	2.42	2.82	3.57	3.12	2.89	2.91	1.3	0.2
TPES/GDP (2005 = 100)	247	214	180	121	97	89	89	-1.9	-3.1
Ele.TFC/GDP(2005=100)(3)	130	132	127	106	102	99	..	-0.1	..
Ele.TFC/population(4)	2002	2529	3386	5335	5579	5437	..	3.1	..
Elec. generated (TWh)(5)	7.35	10.57	14.23	23.67	28.44	27.66	27.50	4.0	3.0

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**6.91**	**8.24**	**9.87**	**13.57**	**14.22**	**13.22**	**13.35**	**2.1**	**1.4**
Coal	1.59	1.91	3.36	2.50	1.90	2.03	2.66	4.5	-1.1
Oil	5.26	5.52	4.47	7.39	6.91	6.20	5.79	-1.0	1.2
Natural gas	-	0.74	1.87	3.43	4.69	4.12	4.01	-	3.5
Biofuels & waste	-	-	0.11	0.14	0.37	0.39	0.43	-	6.5
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	0.00	0.02	0.25	0.38	0.36	-	49.9
Hydro	0.06	0.07	0.06	0.07	0.05	0.06	0.07	0.5	0.6
Net electricity imports(2)	0.00	-	-	0.01	0.04	0.04	0.04	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**7.3**	**10.9**	**14.5**	**24.0**	**26.0**	**28.6**	**27.7**	**27.7**
Nuclear	-	-	-	-	-	-	-	-
Hydro	0.6	1.2	1.0	1.2	1.0	0.8	0.7	1.0
of which:								
pumped storage production	*-*	*0.3*	*0.3*	*0.3*	*0.3*	*0.2*	*-*	*0.2*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.2	1.1	2.8	4.4	4.0
Combustible fuels	6.7	9.7	13.5	22.6	23.9	25.0	22.6	22.7
Coal	*1.8*	*1.7*	*8.2*	*8.6*	*8.8*	*6.4*	*6.9*	*8.1*
Oil	*4.9*	*6.4*	*1.4 e*	*4.6 e*	*3.3*	*0.6*	*0.4*	*0.4*
Natural gas	*-*	*1.6*	*3.9*	*9.3*	*11.6*	*17.7*	*14.9*	*13.7*
Biofuels & waste	*-*	*-*	*-*	*0.1*	*0.1*	*0.3*	*0.3*	*0.5*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	0.4	0.6	0.9	1.3	1.2	1.2	1.3	..
Net production	**7.0**	**10.3**	**13.7**	**22.7**	**24.8**	**27.5**	**26.4**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	1.1	1.0	1.1	1.0	0.8	0.7	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.2	1.1	2.8	4.4	..
Combustible fuels	..	9.2	12.7	21.3	22.7	23.9	21.3	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	0.5	0.4	0.4	0.5	0.3	0.0	0.3
+ Imports	0.1	-	-	0.2	2.0	0.8	0.7	0.8
- Exports	0.0	-	-	0.1	0.0	0.3	0.2	0.4
Electrical energy supplied	**7.0**	**9.8**	**13.2**	**22.3**	**26.3**	**27.6**	**26.9**	**..**
- Transmission & distr. losses	0.8	1.1	1.3	2.0	2.0	2.1	2.1	..
- Statistical difference	-	-	-	-0.1	-0.3	-0.1	-0.3	..
Total consumption	**6.2**	**8.7**	**12.0**	**20.4**	**24.5**	**25.6**	**25.1**	**..**
- Energy industry consumption[2]	0.1	0.1	0.1	0.1	0.2	0.2	0.2	..
Final consumption	**6.2**	**8.6**	**11.9**	**20.3**	**24.4**	**25.4**	**24.9**	**..**
Industry	2.2	3.2	4.5	7.7	7.7	9.1	9.5	..
Transport	-	-	0.0	0.0	0.1	0.0	0.0	..
Commercial & publ. serv.	1.4	1.8	2.8	5.6	8.5	7.2	6.5	..
Residential	2.6	3.6	4.1	6.4	7.5	8.5	8.3	..
Agriculture & fishing	-	-	0.4	0.6	0.6	0.6	0.6	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**7.86**	**10.88**	**14.52**	**23.98**	**28.31**	**28.61**	**27.66**	**3.9**	**3.1**
- Hydro pumped storage	*0.22*	*0.32*	*0.29*	*0.30*	*0.36*	*0.18*	-	*1.5*	-
Total generation(1)	**7.63**	**10.57**	**14.23**	**23.67**	**27.96**	**28.44**	**27.66**	**4.0**	**3.2**
Main activity producers									
Gross production	7.68	10.74	14.30	23.40	26.48	26.66	25.51	4.0	2.8
- Hydro pumped storage	*0.22*	*0.32*	*0.29*	*0.30*	*0.36*	*0.18*	-	*1.5*	-
Total generation(1)	7.45	10.42	14.02	23.09	26.13	26.48	25.51	4.0	2.9
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.79	0.84	0.70	0.85	0.90	0.60	0.71	-0.7	0.1
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.24	2.96	2.82	4.38	-	-
Coal	1.80	1.70	8.08	8.54	6.60	6.35	6.90	9.8	-0.8
Oil	4.87	6.27	1.41	4.59	0.89	0.56	0.20	-7.5	-8.8
Natural gas	-	1.61	3.83	8.79	14.56	15.88	13.02	-	6.0
Biofuels & waste	-	-	-	0.10	0.22	0.28	0.30	-	-
Autoproducers									
Gross production	0.18	0.15	0.21	0.58	1.83	1.96	2.15	1.0	11.7
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.18	0.15	0.21	0.58	1.83	1.96	2.15	1.0	11.7
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	0.04	0.04	0.08	0.05	0.04	0.04	0.03	4.9	-5.5
Oil	0.14	0.11	0.02	0.05	0.03	0.05	0.22	-10.8	11.2
Natural gas	-	-	0.11	0.48	1.74	1.83	1.87	-	14.6
Biofuels & waste	-	-	-	-	0.03	0.04	0.04	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**165**	**139**	**202**	**547**	**1788**	**1904**	**1914**	**11.3**
Total energy	**10**	**5**	**14**	**44**	**62**	**78**	**58**	**7.0**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	34	34	24	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	44	28	44	34	-
Energy non specified/other	10	5	14	-	-	-	-	-
Total industry	**153**	**132**	**185**	**399**	**1603**	**1692**	**1727**	**11.2**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	20	-	23	67	42	82	101	7.3
Non-ferrous metals	-	-	-	-	1203	1237	1217	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	34	33	56	-	-	-	-	-
Food and tobacco	62	79	106	332	311	343	365	6.1
Pulp and printing	30	13	-	-	-	-	-	-
Wood and wood products	-	-	-	-	16	18	13	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	7	7	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	31	12	31	-
Total transport	**-**	**-**	**-**	**8**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	8	-	-	-	-
Other	**2**	**2**	**3**	**96**	**123**	**134**	**129**	**19.6**
Commerce and pub. services	-	-	-	87	123	134	129	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	2	2	3	9	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**1.71**	**2.40**	**3.03**	**4.78**	**4.37**	**4.59**	**4.07**	**3.4**	**1.4**
Coal	0.65	0.59	1.85	1.92	1.35	1.36	1.40	6.4	-1.3
Oil	1.06	1.42	0.34	1.01	0.21	0.13	0.10	-6.5	-5.7
Natural gas	-	0.39	0.84	1.82	2.75	3.02	2.49	-	5.3
Biofuels & waste	-	-	-	0.02	0.06	0.08	0.08	-	-
of which: ***main activity prod.***									
Total	**..**	**2.36**	**2.98**	**4.66**	**4.10**	**4.30**	**3.75**	**..**	**1.1**
Coal	..	0.58	1.83	1.90	1.33	1.35	1.39	..	-1.3
Oil	..	1.40	0.33	1.00	0.20	0.13	0.05	..	-8.9
Natural gas	..	0.39	0.82	1.74	2.51	2.76	2.25	..	4.9
Biofuels & waste	..	-	-	0.02	0.05	0.06	0.07	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**0.06**	**0.07**	**0.06**	**0.09**	**0.33**	**0.29**	**0.44**	**0.5**	**9.9**
Hydro	0.06	0.07	0.06	0.07	0.08	0.05	0.06	0.5	0.1
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.02	0.25	0.24	0.38	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	47	1959	2341	1307	1469	1549	-1.1
Fuel input (TJ)	1047	51982	59740	32444	36321	38228	-1.5
Electricity production (GWh)	73	5896	6793	4003	4135	4700	-1.1
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	2613	3114	2571	3176	2632	2519	-1.0
Fuel input (TJ)	21884	24782	20018	23314	20144	19800	-1.1
Electricity production (GWh)	1625	2185	1742	2593	2214	2198	0.0
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	1465	350	1041	213	132	49	-8.9
Fuel input (TJ)	58737	14469	42976	8738	5431	2015	-9.0
Electricity production (GWh)	6286	1422 e	4587 e	892	557	202	-8.9
Natural gas (1)							
Fuel input (TJ)	18079	38000	80911	116742	128515	104631	4.9
Electricity production (GWh)	1610	3834	8787	14563	15882	13022	6.0
Wood and other solid waste							
Fuel input (TJ)	-	-	-	423	853	1130	-
Electricity production (GWh)	-	-	-	48	92	120	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	988	1765	1849	1832	-
Electricity production (GWh)	-	-	95	169	184	181	-
Total combustible fuels(2)							
Electricity production (GWh)	9594	13337	22004	22268	23064	20423	2.0

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	6	6	-	-	-	-
Fuel input (TJ)	-	161	173	-	-	-	-
Electricity production (GWh)	-	22	24	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	54	62	69	50	49	36	-2.6
Fuel input (TJ)	450	483	535	656	650	474	-0.1
Electricity production (GWh)	35	60	28	35	35	25	-4.1
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	24	2	11	5	6	51	16.7
Fuel input (TJ)	794	60	496	241	325	2089	18.4
Electricity production (GWh)	99	6	51	29	48	215	18.6
CHP Heat production (TJ)	-	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	1130	3969	11337	11915	11434	11.7
Electricity production (GWh)	-	107	476	1735	1833	1868	14.6
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	220	308	262	-
Electricity production (GWh)	-	-	-	17	19	16	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	229	246	181	-
Electricity production (GWh)	-	-	-	17	22	21	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	134	195	579	1833	1957	2145	12.1
CHP Heat production (TJ)	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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IRELAND
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**5.11**	**6.34**	**7.54**	**10.63**	**11.35**	**11.34**	**10.44**	**2.3**	**1.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.01	0.01	-	27.6
Coal	1.03	1.36	1.68	0.66	0.63	0.60	0.55	2.9	-5.2
Oil	3.55	3.90	3.73	6.52	6.79	6.64	5.88	0.3	2.2
Natural gas	-	0.35	1.00	1.58	1.48	1.61	1.55	-	2.1
Biofuels & waste	-	-	0.11	0.12	0.27	0.30	0.31	-	5.1
Electricity	0.53	0.74	1.02	1.74	2.17	2.19	2.14	3.9	3.6
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**1.70**	**2.17**	**1.73**	**2.49**	**2.08**	**2.13**	**2.26**	**0.1**	**1.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.07	0.12	0.24	0.10	0.11	0.11	0.10	7.7	-4.3
Oil	1.44	1.43	0.68	1.15	0.65	0.61	0.56	-4.3	-0.9
Natural gas	-	0.35	0.36	0.47	0.43	0.47	0.62	-	2.7
Biofuels & waste	-	-	0.06	0.10	0.15	0.16	0.16	-	4.7
Electricity	0.19	0.28	0.39	0.66	0.74	0.78	0.82	4.3	3.6
Heat	-	-	-	-	-	-	-	-	-
Transport	**1.13**	**1.54**	**1.64**	**3.44**	**4.12**	**3.92**	**3.61**	**2.2**	**3.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.13	1.54	1.64	3.43	4.03	3.82	3.50	2.2	3.7
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.08	0.09	0.10	-	-
Electricity	-	-	0.00	0.00	0.00	0.00	0.00	-	5.0
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.25**	**0.58**	**0.98**	**1.36**	**1.61**	**1.52**	**1.32**	**8.4**	**1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	-	0.07	0.02	0.00	-	-	-	-	-
Oil	0.13	0.35	0.63	0.58	0.48	0.44	0.38	9.6	-2.4
Natural gas	-	-	0.09	0.29	0.43	0.44	0.36	-	6.7
Biofuels & waste	-	-	-	-	0.02	0.02	0.02	-	-
Electricity	0.12	0.15	0.24	0.48	0.68	0.62	0.56	4.3	4.1
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**1.81**	**1.82**	**2.33**	**2.48**	**3.11**	**3.24**	**2.73**	**1.5**	**0.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.01	0.01	-	27.5
Coal	0.96	1.16	1.43	0.55	0.52	0.49	0.45	2.3	-5.3
Oil	0.62	0.35	0.38	0.92	1.24	1.27	0.96	-2.8	4.5
Natural gas	-	-	0.12	0.44	0.62	0.71	0.57	-	7.8
Biofuels & waste	-	-	0.04	0.02	0.03	0.03	0.02	-	-3.2
Electricity	0.22	0.31	0.36	0.55	0.70	0.73	0.71	2.8	3.4
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**0.02**	**0.03**	**0.25**	**0.31**	**0.27**	**0.27**	**0.25**	**15.0**	**0.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.02	0.03	0.21	0.26	0.22	0.22	0.20	13.9	-0.2
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	0.04	0.05	0.05	0.05	0.05	-	1.2
Heat	-	-	-	-	-	-	-	-	-
Other	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use[1]	**0.21**	**0.20**	**0.62**	**0.55**	**0.16**	**0.27**	**0.28**	**6.71**	**-3.82**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**5.11**	**6.34**	**7.54**	**10.63**	**12.54**	**11.35**	**11.34**	**10.44**
Total industry (Mtoe)	**1.70**	**2.17**	**1.73**	**2.49**	**2.44**	**2.08**	**2.13**	**2.26**
Iron and steel	0.02	0.02	0.07	0.05	0.00	0.00	0.00	0.00
Chem. and petrochemical	0.03	0.15	0.19	0.35	0.29	0.28	0.29	0.25
Non-ferrous metals	-	-	0.28	0.41	0.42	0.32	0.42	0.46
Non-metallic minerals	0.03	0.11	0.30	0.38	0.52	0.36	0.26	0.28
Transport equipment	0.00	0.01	0.02	0.03	0.02	0.01	0.02	0.02
Machinery	0.01	0.05	0.07	0.19	0.26	0.27	0.24	0.27
Mining and quarrying	0.01	0.03	0.04	0.13	0.16	0.11	0.11	0.12
Food and tobacco	0.04	0.40	0.42	0.58	0.45	0.42	0.42	0.47
Paper, pulp and printing	0.01	0.03	0.02	0.06	0.03	0.03	0.03	0.03
Wood and wood products	0.01	0.00	0.07	0.13	0.13	0.12	0.14	0.13
Construction	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
Textile and leather	0.02	0.03	0.05	0.06	0.01	0.02	0.02	0.02
Non specified/other	1.52	1.33	0.20	0.12	0.16	0.13	0.16	0.20
Electricity consumption (Mtoe)	**0.53**	**0.74**	**1.02**	**1.74**	**2.29**	**2.17**	**2.19**	**2.14**
Total industry (Mtoe)	**0.19**	**0.28**	**0.39**	**0.66**	**0.69**	**0.74**	**0.78**	**0.82**
Iron and steel	0.01	0.00	0.02	0.03	-	-	-	-
Chem. and petrochemical	0.03	0.05	0.04	0.11	0.12	0.13	0.14	0.15
Non-ferrous metals	-	-	0.06	0.05	0.05	0.04	0.06	0.06
Non-metallic minerals	0.03	0.04	0.03	0.05	0.07	0.08	0.05	0.05
Transport equipment	0.00	0.00	0.00	0.01	0.01	0.01	0.02	0.02
Machinery	0.01	0.02	0.02	0.09	0.12	0.13	0.12	0.12
Mining and quarrying	0.01	0.02	0.01	0.04	0.05	0.06	0.06	0.06
Food and tobacco	0.04	0.07	0.11	0.16	0.13	0.15	0.17	0.17
Paper, pulp and printing	0.01	0.01	0.01	0.03	0.02	0.02	0.02	0.02
Wood and wood products	0.01	0.00	0.01	0.03	0.03	0.03	0.03	0.04
Construction	0.00	0.00	0.00	0.01	0.01	0.01	0.01	0.01
Textile and leather	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Non specified/other	0.02	0.02	0.06	0.05	0.09	0.09	0.10	0.11
Total industry (TWh)	**2.20**	**3.21**	**4.49**	**7.73**	**7.98**	**8.60**	**9.10**	**9.48**
Iron and steel	0.09	0.02	0.24	0.33	-	-	-	-
Chem. and petrochemical	0.36	0.55	0.41	1.34	1.38	1.51	1.65	1.73
Non-ferrous metals	-	-	0.65	0.53	0.58	0.51	0.73	0.74
Non-metallic minerals	0.31	0.41	0.36	0.59	0.82	0.90	0.58	0.60
Transport equipment	0.03	0.05	0.05	0.12	0.09	0.10	0.19	0.20
Machinery	0.15	0.27	0.24	1.05	1.35	1.47	1.36	1.42
Mining and quarrying	0.13	0.27	0.10	0.46	0.59	0.64	0.65	0.68
Food and tobacco	0.50	0.86	1.23	1.82	1.55	1.69	1.94	2.03
Paper, pulp and printing	0.17	0.16	0.11	0.32	0.18	0.19	0.21	0.22
Wood and wood products	0.06	0.05	0.11	0.34	0.30	0.33	0.39	0.41
Construction	0.03	0.04	0.02	0.06	0.07	0.07	0.07	0.07
Textile and leather	0.18	0.28	0.22	0.20	0.07	0.08	0.12	0.12
Non specified/other	0.18	0.26	0.75	0.58	1.00	1.10	1.21	1.27

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**74**	**-**	**-**	**20**	**169**	**753**	**939**	**760**	**732**
Imports from:									
Total from OECD	**74 e**	**-**	**-**	**20**	**169**	**753**	**939**	**760**	**732**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	74 e	-	-	20	169	753	939	760	732
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [1]	**29**	**-**	**-**	**35**	**71**	**303**	**175**	**290**	**242**
Exports to:									
Total to OECD	**29 e**	**-**	**-**	**35**	**71**	**303**	**175**	**290**	**242**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	29 e	-	-	35	71	303	175	290	242
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**2.03**	**3.02**	**3.74**	**3.97**	**4.58**	**7.14**	**7.33**	**8.22**	**8.46**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.51	0.51	0.51	0.52	0.53	0.53	0.53	0.53	0.53
of which: pumped storage	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*	*0.29*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.12	1.03	1.26	1.39	1.63
Other (e.g. fuel cells)	-	-	-	-	-	0.20	0.20	0.20	0.20
Combustible fuels	1.52	2.51	3.23	3.44	3.94	5.38	5.34	6.10	6.10
of which:									
Single-fired:									
Coal and coal products	0.41	0.45	1.29	1.23	1.24	0.35	0.35	0.35	0.35
Liquid fuels	1.03	1.65	0.58	0.69	0.82	1.02	1.02	1.13	1.13
Natural gas	-	0.41	0.26	0.26	0.26	1.41	1.41	1.40	1.40
Biofuels & waste	-	-	-	-	0.02	0.03	0.03	0.03	0.04
Multi-fired:									
Solid / liquid	0.09	-	-	-	-	0.86	0.85	0.85	0.85
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	1.10	1.26	1.60	1.72	1.69	2.34	2.34
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	2.61	2.70	2.81	2.49	2.48	2.26	2.27
Internal combustion	-	-	-	-	0.02	0.04	0.04	0.04	0.03
Gas turbine	-	-	0.36	0.49	0.38	0.59	0.58	1.56	1.56
Combined cycle	-	-	0.26	0.26	0.74	2.27	2.24	2.24	2.24
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	2.60	3.08	3.84	4.88	4.89	5.09	4.64
Available capacity	..	..	3.40	3.77	4.29	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.06**	**0.06**	**0.07**	**0.09**	**0.13**	**0.29**	**0.30**	**0.31**	**0.33**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.06	0.06	0.07	0.09	0.13	0.29	0.30	0.31	0.33
of which:									
Single-fired:									
Coal and coal products	-	-	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Liquid fuels	0.06	0.06	0.01	0.03	0.02	0.01	0.01	0.01	0.01
Natural gas	-	-	0.03	0.04	0.09	0.11	0.12	0.13	0.14
Biofuels & waste	-	-	-	-	-	0.01	0.01	0.01	0.01
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	0.16	0.16	0.16	0.16
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	-	-	0.05	0.01	0.01	0.01	0.01
Internal combustion	0.06	0.06	0.07	0.09	0.03	0.05	0.05	0.06	0.07
Gas turbine	-	-	-	-	0.04	0.23	0.23	0.23	0.23
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	0.01	0.01	0.01	0.02
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	..	..	42.89	32.89	68.03	81.87	62.94	90.15	68.57
Heavy fuel oil (t)	..	..	85.67	152.42	387.23	..	..	..	..
Natural gas (MWh)(1)	..	..	7.72	9.24	c	c	c	c	c
				Euro/ toe					
Steam coal	..	..	69.24	53.10	109.83	132.17	101.61	145.54	110.70
Heavy fuel oil	..	..	90.37	160.78	408.47	..	..	..	..
Natural gas(2)	..	..	99.81	119.41	c	c	c	c	c
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	24.90	31.50	51.90	53.10	127.15	121.63	103.60	109.53	120.74
of which: tax	-	-	-	-	-	-	-	-	-
Household									
Price	37.30	47.40	100.80	110.00	182.73	183.56	175.60	186.48	210.31
of which: tax	-	-	8.50	12.20	21.73	21.83	20.90	22.18	25.01

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	7.76	7.82	11.47	18.23	23.19	23.25	24.08	2.3	3.4
GDP (billion 2005 USD)	37.07	47.07	68.12	120.02	165.54	173.16	178.53	3.6	4.5
TPES/GDP(1)	0.21	0.17	0.17	0.15	0.14	0.13	0.13	-1.3	-1.0
Population (millions)	3.30	3.90	4.68	6.30	7.62	7.76	7.91	2.1	2.4
TPES/population(2)	2.35	2.01	2.45	2.89	3.04	3.00	3.04	0.2	1.0
TPES/GDP (2005 = 100)	152	120	122	110	101	97	98	-1.3	-1.0
Ele.TFC/GDP(2005=100)(3)	65	73	84	101	93	89	..	1.6	..
Ele.TFC/population(4)	2304	2812	3888	6124	6394	6308	..	3.1	..
Elec. generated (TWh)(5)	8.72	12.40	20.90	42.66	58.57	59.65	60.71	5.3	5.0

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**7.76**	**7.82**	**11.47**	**18.23**	**23.19**	**23.25**	**24.08**	**2.3**	**3.4**
Coal	0.00	0.00	2.29	6.47	7.41	7.75	9.22	54.9	6.5
Oil	7.72	7.70	8.83	11.27	10.57	10.63	11.96	0.8	1.4
Natural gas	0.05	0.13	0.03	0.01	4.41	4.10	2.10	-2.7	21.6
Biofuels & waste	0.00	0.00	0.00	0.01	0.02	0.02	0.02	-	8.3
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	0.36	0.60	1.13	1.12	1.14	-	5.4
Hydro	-	-	0.00	0.00	0.00	0.00	0.00	-	10.7
Net electricity imports(2)	-0.00	-0.01	-0.04	-0.13	-0.34	-0.36	-0.36	13.0	10.6
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**8.7**	**12.4**	**20.9**	**42.7**	**48.6**	**58.6**	**59.6**	**60.7**
Nuclear	-	-	-	-	-	-	-	-
Hydro	-	-	0.0	0.0	0.0	0.0	0.0	0.0
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.1	0.2	0.2
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.0	0.0	0.0	0.0
Combustible fuels	8.7	12.4	20.9	42.6	48.6	58.4	59.3	60.4
Coal	-	-	*10.5*	*29.4*	*36.3*	*34.3*	*35.2*	*42.5*
Oil	*8.7*	*12.4*	*10.4 e*	*13.3 e*	*6.7*	*2.1*	*4.4*	*5.2*
Natural gas	-	-	-	*0.0*	*5.6*	*22.0*	*19.7*	*12.7*
Biofuels & waste	-	-	-	-	-	*0.0*	*0.0*	*0.0*
Other (e.g. fuel cells)	-	-	-	-	-	0.0	0.1	0.1
- Own use by power plant	0.6	0.8	1.3	2.1	4.1	4.9 e	5.0 e	..
Net production	**8.1**	**11.6**	**19.6**	**40.6**	**44.5**	**53.7 e**	**54.7 e**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	-	0.0	0.0	0.0	0.0	0.0	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	0.1	0.2	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	-	0.0	0.0	0.0	..
Combustible fuels	..	11.6	19.6	40.5	44.5	53.6 e	54.4 e	..
Other (e.g. fuel cells)	..	-	-	-	-	0.0	0.1	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	-	-	-	-	-	-	-	-
- Exports	0.1	0.2	0.5	1.5	1.7	4.0	4.2	4.2
Electrical energy supplied	**8.1**	**11.5**	**19.2**	**39.1**	**42.8**	**49.7 e**	**50.5 e**	**..**
- Transmission & distr. losses	0.5	0.5	1.0	1.4	1.4	1.6 e	1.6 e	..
- Statistical difference	-0.0	-	-	-0.9	-1.0	-1.0	-0.7	..
Total consumption	**7.6**	**11.0**	**18.2**	**38.6**	**42.5**	**49.1**	**49.5**	**..**
- Energy industry consumption[2]	-	-	-	-	-	0.4	0.6	..
Final consumption	**7.6**	**11.0**	**18.2**	**38.6**	**42.5**	**48.7**	**49.0**	**..**
Industry	2.3	3.5	5.3	10.4	11.8	12.5	12.0	..
Transport	-	-	-	-	-	-	-	..
Commercial & publ. serv.	-	3.1	5.1	11.8	13.1	17.0	17.1	..
Residential	2.2	3.0	5.3	11.6	13.7	15.3	15.9	..
Agriculture & fishing	0.3	0.5	0.9	1.6	1.7	1.7	1.8	..
Sector non specified	2.8	0.9	1.5	3.2	2.2	2.3	2.2	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**9.16**	**12.40**	**20.90**	**42.66**	**55.01**	**58.57**	**59.65**	**5.3**	**5.1**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation[1]	**9.16**	**12.40**	**20.90**	**42.66**	**55.01**	**58.57**	**59.65**	**5.3**	**5.1**
Main activity producers									
Gross production	8.94	12.18	20.27	42.15	53.19	56.87	57.85	5.2	5.1
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation[1]	8.94	12.18	20.27	42.15	53.19	56.87	57.85	5.2	5.1
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.00	0.03	0.02	0.03	0.02	-	10.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide[2]	-	-	-	-	0.02	0.03	0.01	-	-
Coal	-	-	10.47	29.30	34.35	34.24	35.15	-	5.9
Oil	8.94	12.18	9.80	12.81	1.62	1.44	3.89	0.6	-4.3
Natural gas	-	-	-	0.01	17.19	21.13	18.78	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Autoproducers									
Gross production	0.22	0.22	0.63	0.51	1.82	1.70	1.79	6.9	5.1
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation[1]	0.22	0.22	0.63	0.51	1.82	1.70	1.79	6.9	5.1
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	0.00	0.00	0.01	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide[2]	-	-	-	-	0.28 e	0.08	0.27	-	-
Coal	-	-	-	0.06	0.05	0.05	0.05	-	-
Oil	0.22	0.22	0.63	0.46	0.61	0.71	0.47	6.9	-1.4
Natural gas	-	-	-	-	0.83	0.83	0.97	-	-
Biofuels & waste	-	-	-	-	0.04	0.04	0.04	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**202**	**206**	**588**	**487**	**1749**	**1542**	**1666**	**5.1**
Total energy	**-**	**-**	**-**	**-**	**409**	**566**	**614**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	409	566	614	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**-**	**-**	**-**	**-**	**1301**	**963**	**817**	**-**
Iron and steel	-	-	-	-	-	-	-	-
Chemical and petrochemical	-	-	-	-	-	281	45	-
Non-ferrous metals	-	-	-	-	32	-	-	-
Non-metallic minerals	-	-	-	-	-	-	242	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	606	435	366	-
Food and tobacco	-	-	-	-	11	10	17	-
Pulp and printing	-	-	-	-	98	102	107	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	554	135	40	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**202**	**206**	**588**	**487**	**39**	**13**	**235**	**-4.3**
Commerce and pub. services	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	202	206	588	487	39	13	235	-4.3

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**2.13**	**2.86**	**4.89**	**8.85**	**11.29**	**12.14**	**12.96**	**5.0**	**4.7**
Coal	-	-	2.38	6.43	7.37	7.40	7.67	-	5.7
Oil	2.13	2.86	2.52	2.42	0.56	0.57	1.59	1.0	-2.2
Natural gas	-	-	-	0.00	3.34	4.16	3.69	-	-
Biofuels & waste	-	-	-	-	0.02 e	0.01 e	0.01	-	-
of which: ***main activity prod.***									
Total	**..**	**2.81**	**4.75**	**8.74**	**10.91**	**11.70**	**11.99**	**..**	**4.5**
Coal	..	-	2.38	6.42	7.34	7.37	7.64	..	5.7
Oil	..	2.81	2.38	2.31	0.39	0.32	0.89	..	-4.6
Natural gas	..	-	-	0.00	3.19	4.01	3.45	..	-
Biofuels & waste	..	-	-	-	-	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**0.00**	**0.01**	**0.02**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.00 e	0.01	0.02	-	-
Non-Thermal									
Total	**-**	**-**	**0.00**	**0.00**	**0.00**	**0.00**	**0.00**	**-**	**12.4**
Hydro	-	-	0.00	0.00	0.00	0.00	0.00	-	11.2
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.00	0.00	0.00	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	3702	10218	12311	12298	12451	5.9
Fuel input (TJ)	-	98577	267896	307283	308520	316548	5.7
Electricity production (GWh)	-	10382	29219	34353	34243	34822	5.9
Brown coal							
Fuel input (1000 t)	-	303	456	444	432	581	3.1
Fuel input (TJ)	-	887	1336	1301	1272	4610	8.2
Electricity production (GWh)	-	86	133	45	46	369	7.2
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	2973	2609	2470	570	579	1615	-2.3
Fuel input (TJ)	119738	105421	101123	21315	23361	46601	-3.8
Electricity production (GWh)	12404	10427 e	13265 e	2227	2145	4359	-4.1
Natural gas (1)							
Fuel input (TJ)	-	-	140	155310	193347	171628	-
Electricity production (GWh)	-	-	13	18016	21955	19748	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	128	131	81	-
Electricity production (GWh)	-	-	-	6	6	8	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	549	368	298	-
Electricity production (GWh)	-	-	-	36	32	32	-
Total combustible fuels(2)							
Electricity production (GWh)	12404	20895	42630	54683	58427	59338	5.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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ISRAEL
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**3.61**	**4.51**	**6.97**	**11.98**	**13.92**	**14.84**	**14.08**	**3.9**	**3.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.36	0.60	1.04	1.12	1.10	-	5.5
Coal	0.00	0.00	0.01	0.02	-	-	-	11.0	-
Oil	2.91	3.44	5.00	8.03	8.79	9.45	8.64	3.2	2.6
Natural gas	0.05	0.13	0.03	0.00	0.17	0.06	0.12	-2.7	7.0
Biofuels & waste	0.00	0.00	0.00	0.01	0.01	0.01	0.01	-	5.2
Electricity	0.65	0.94	1.56	3.32	3.91	4.19	4.21	5.3	4.8
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**1.09**	**1.21**	**1.44**	**1.36**	**1.59**	**2.06**	**1.33**	**1.6**	**-0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	0.00	0.01	0.02	-	-	-	11.0	-
Oil	0.89	0.91	0.97	0.44	0.52	0.93	0.18	0.5	-7.7
Natural gas	-	-	0.00	-	0.17	0.06	0.12	-	21.4
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.20	0.30	0.45	0.90	0.91	1.07	1.03	5.0	4.0
Heat	-	-	-	-	-	-	-	-	-
Transport	**1.15**	**1.39**	**2.21**	**3.37**	**3.80**	**4.05**	**3.79**	**3.9**	**2.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.15	1.39	2.21	3.37	3.80	4.05	3.79	3.9	2.6
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**-**	**0.27**	**0.44**	**1.01**	**1.34**	**1.46**	**1.47**	**-**	**5.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	0.27	0.44	1.01	1.34	1.46	1.47	-	5.9
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**0.29**	**0.39**	**1.32**	**2.43**	**3.33**	**3.39**	**3.47**	**9.3**	**4.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.36	0.60	1.04	1.12	1.10	-	5.5
Coal	-	-	-	-	-	-	-	-	-
Oil	0.10	0.13	0.50	0.83	0.98	0.95	1.00	10.0	3.3
Natural gas	-	0.00	0.00	-	-	-	-	-	-
Biofuels & waste	0.00	0.00	0.00	0.00	0.00	0.00	0.00	-	1.8
Electricity	0.19	0.26	0.46	0.99	1.30	1.32	1.37	5.4	5.4
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**0.02**	**0.04**	**0.08**	**0.14**	**0.15**	**0.14**	**0.15**	**7.4**	**3.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.02	0.04	0.08	0.14	0.15	0.14	0.15	7.4	3.0
Heat	-	-	-	-	-	-	-	-	-
Other	**0.78**	**0.56**	**0.74**	**1.86**	**2.37**	**2.33**	**2.32**	**-0.3**	**5.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.53	0.48	0.61	1.58	2.15	2.13	2.13	0.8	6.1
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	0.00	0.01	0.01	0.00	-	-
Electricity	0.24	0.08	0.13	0.27	0.21	0.20	0.19	-3.7	1.8
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.28**	**0.65**	**0.74**	**1.81**	**1.34**	**1.39**	**1.55**	**5.92**	**3.61**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**3.61**	**4.51**	**6.97**	**11.98**	**13.86**	**13.92**	**14.84**	**14.08**
Total industry (Mtoe)	**1.09**	**1.21**	**1.44**	**1.36**	**1.62**	**1.59**	**2.06**	**1.33**
Iron and steel	0.00	0.00	0.06	0.09	0.11	0.08	0.09	0.08
Chem. and petrochemical	-	-	0.12	0.18	0.19	0.18	0.74	0.19
Non-ferrous metals	-	-	0.00	-	-	-	-	-
Non-metallic minerals	-	-	0.03	0.06	0.06	0.06	0.07	0.07
Transport equipment	-	-	0.02	0.03	0.03	0.03	0.03	0.03
Machinery	-	-	0.01	0.09	0.09	0.07	0.06	0.04
Mining and quarrying	-	-	0.03	0.13	0.11	0.09	0.12	0.10
Food and tobacco	-	-	0.06	0.10	0.11	0.11	0.11	0.11
Paper, pulp and printing	-	-	0.02	0.04	0.04	0.05	0.06	0.05
Wood and wood products	-	-	0.01	0.01	0.01	0.01	0.01	0.01
Construction	-	-	0.00	0.01	0.08	0.08	0.07	0.07
Textile and leather	-	-	0.04	0.05	0.04	0.03	0.03	0.03
Non specified/other	1.09	1.21	1.02	0.56	0.74	0.81	0.67	0.55
Electricity consumption (Mtoe)	**0.65**	**0.94**	**1.56**	**3.32**	**4.11**	**3.91**	**4.19**	**4.21**
Total industry (Mtoe)	**0.20**	**0.30**	**0.45**	**0.90**	**1.08**	**0.91**	**1.07**	**1.03**
Iron and steel	-	-	0.06	0.09	0.11	0.08	0.09	0.08
Chem. and petrochemical	-	-	0.12	0.18	0.19	0.18	0.21	0.19
Non-ferrous metals	-	-	0.00	-	-	-	-	-
Non-metallic minerals	-	-	0.03	0.06	0.06	0.06	0.07	0.07
Transport equipment	-	-	0.02	0.03	0.03	0.03	0.03	0.03
Machinery	-	-	0.01	0.09	0.09	0.07	0.06	0.04
Mining and quarrying	-	-	0.03	0.13	0.11	0.09	0.12	0.10
Food and tobacco	-	-	0.06	0.10	0.11	0.11	0.11	0.11
Paper, pulp and printing	-	-	0.02	0.04	0.04	0.05	0.06	0.05
Wood and wood products	-	-	0.01	0.01	0.01	0.01	0.01	0.01
Construction	-	-	0.00	0.01	0.08	0.08	0.07	0.07
Textile and leather	-	-	0.04	0.05	0.04	0.03	0.03	0.03
Non specified/other	0.20	0.30	0.04	0.11	0.20	0.12	0.22	0.25
Total industry (TWh)	**2.31**	**3.50**	**5.29**	**10.45**	**12.51**	**10.53**	**12.49**	**12.02**
Iron and steel	-	-	0.73	1.06	1.26	0.92	1.09	0.92
Chem. and petrochemical	-	-	1.42	2.10	2.27	2.09	2.40	2.17
Non-ferrous metals	-	-	0.04	-	-	-	-	-
Non-metallic minerals	-	-	0.39	0.74	0.73	0.64	0.76	0.79
Transport equipment	-	-	0.21	0.30	0.36	0.36	0.38	0.35
Machinery	-	-	0.09	1.04	1.02	0.80	0.75	0.46
Mining and quarrying	-	-	0.39	1.57	1.23	1.09	1.42	1.22
Food and tobacco	-	-	0.73	1.11	1.34	1.31	1.23	1.22
Paper, pulp and printing	-	-	0.20	0.46	0.52	0.54	0.67	0.60
Wood and wood products	-	-	0.11	0.12	0.13	0.12	0.11	0.11
Construction	-	-	0.05	0.17	0.90	0.90	0.82	0.86
Textile and leather	-	-	0.42	0.54	0.41	0.32	0.32	0.39
Non specified/other	2.31	3.50	0.51	1.23	2.36	1.44	2.54	2.92

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**-**	**-**	**456**	**914**	**1457**	**3666**	**3783**	**3966**	**4222**
Exports to:									
Total to OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**456**	**914**	**1457**	**3666**	**3783**	**3966**	**4222**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**..**	**..**	**5.07**	**6.92**	**9.13**	**11.65**	**11.72**	**13.87**	**13.35**
Nuclear	..	..	-	-	-	-	-	-	-
Hydro	..	..	-	-	-	-	0.01	0.01	0.01
of which: pumped storage	..	..	-	-	-	-	-	-	-
Geothermal	..	..	-	-	-	-	-	-	-
Solar	..	..	-	-	-	-	-	-	-
Tide, wave, ocean	..	..	-	-	-	-	-	-	-
Wind	..	..	-	-	-	-	0.01	0.01	0.01
Other (e.g. fuel cells)	..	..	-	-	-	-	-	-	-
Combustible fuels	..	..	5.07	6.92	9.13	11.65	11.71	13.86	13.34
of which:									
Single-fired:									
Coal and coal products	..	..	-	3.13	-	-	-	-	-
Liquid fuels	..	..	-	3.79	4.84 e	3.76 e	2.80 e	3.37 e	-
Natural gas	..	..	-	-	-	-	-	-	0.09
Biofuels & waste	..	..	-	-	-	-	-	-	2.09
Multi-fired:									
Solid / liquid	..	..	-	-	4.29 e	4.84 e	4.84 e	4.84 e	4.84
Solid / natural gas	..	..	-	-	-	-	-	-	-
Liquid / natural gas	..	..	-	-	- e	3.05 e	4.07 e	5.65 e	6.32
Solid / liquid / gas	..	..	-	-	-	-	-	-	-
Type of generation									
Steam	..	..	4.11	5.29	6.48 e	6.76 e	6.61 e	6.61	6.46
Internal combustion	..	..	-	-	- e	- e	0.03	0.29	0.29
Gas turbine	..	..	0.96	1.64	2.32 e	2.09 e	2.20 e	3.42	3.19
Combined cycle	..	..	-	-	0.34 e	2.80 e	2.85 e	2.94	3.31
Other	..	..	-	-	- e	- e	0.02	0.60	0.09
Peak load	..	..	3.80	5.60	7.90 e	10.20 e	9.81 e	10.47	11.13
Available capacity	..	..	..	6.92	9.13 e	11.68 e	11.69 e	11.11	11.69

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**..**	**..**	**-**	**-**	**-**	**0.01**	**0.41**	**0.48**	**0.69**
Nuclear	..	..	-	-	-	-	-	-	-
Hydro	..	..	-	-	-	-	-	-	-
of which: pumped storage	..	..	-	-	-	-	-	-	-
Geothermal	..	..	-	-	-	-	-	-	-
Solar	..	..	-	-	-	-	0.03	0.07	0.19
Tide, wave, ocean	..	..	-	-	-	-	-	-	-
Wind	..	..	-	-	-	0.01	-	-	0.01
Other (e.g. fuel cells)	..	..	-	-	-	-	0.06	0.01	0.10
Combustible fuels	..	..	-	-	-	-	0.32	0.39	0.39
of which:									
Single-fired:									
Coal and coal products	..	..	-	-	-	-	-	-	-
Liquid fuels	..	..	-	-	-	-	0.11	0.06	0.06
Natural gas	..	..	-	-	-	-	0.21	0.10	0.10
Biofuels & waste	..	..	-	-	-	-	-	0.05	0.05
Multi-fired:									
Solid / liquid	..	..	-	-	-	-	-	-	-
Solid / natural gas	..	..	-	-	-	-	-	-	-
Liquid / natural gas	..	..	-	-	-	-	-	0.19	0.19
Solid / liquid / gas	..	..	-	-	-	-	-	-	-
Type of generation									
Steam	..	..	-	-	-	-	-	-	-
Internal combustion	..	..	-	-	-	-	-	-	-
Gas turbine	..	..	-	-	-	-	-	0.31	0.31
Combined cycle	..	..	-	-	-	-	-	-	-
Other	..	..	-	-	-	-	0.32	0.09	0.09
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				New Israeli Sheqel/ unit					
Steam coal (t)	..	..	..	..	452	482	362	504	513
Heavy fuel oil (t)	..	..	..	..	2147	1603	1852	2749	3103
Natural gas (MWh)(1)	x	x	x	x	108	111	140	150	163
				New Israeli Sheqel/ toe					
Steam coal	..	..	..	..	869	927	695	969	987
Heavy fuel oil	..	..	..	..	2236	1669	1929	2864	3232
Natural gas(2)	x	x	x	x	1401	1432	1809	1934	2112
End-user prices of electricity									
				New Israeli Sheqel/ MWh					
Industry									
Price	..	..	..	261.25	403.00	379.00	324.00	346.84	415.25
of which: tax	..	..	..	-	-	-	-	-	-
Household									
Price	..	..	..	379.28	557.87	537.07	521.66	531.67	583.74
of which: tax	..	..	..	55.11	74.87	76.07	71.95	73.33	81.98

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	119.12	130.84	146.56	171.52	170.24	167.42	158.62	1.2	0.4
GDP (billion 2005 USD)	891.18	1144.33	1450.66	1700.99	1763.89	1770.47	1728.53	2.9	0.8
TPES/GDP(1)	0.13	0.11	0.10	0.10	0.10	0.09	0.09	-1.6	-0.4
Population (millions)	54.75	56.43	56.72	56.94	60.48	60.72	60.43	0.2	0.3
TPES/population(2)	2.18	2.32	2.58	3.01	2.81	2.76	2.62	1.0	0.1
TPES/GDP (2005 = 100)	130	111	98	98	94	92	89	-1.6	-0.4
Ele.TFC/GDP(2005=100)(3)	82	83	88	95	101	101	..	0.4	..
Ele.TFC/population(4)	2248	2832	3785	4796	4950	4972	..	3.1	..
Elec. generated (TWh)(5)	143.92	183.47	213.15	269.95	298.77	300.65	294.37	2.3	1.5

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**119.12**	**130.84**	**146.56**	**171.52**	**170.24**	**167.42**	**158.62**	**1.2**	**0.4**
Coal	8.10	11.68	14.63	12.56	14.17	15.91	15.53	3.5	0.3
Oil	90.30	88.23	83.32	86.85	65.24	62.70	55.93	-0.5	-1.8
Natural gas	14.22	22.72	38.99	57.92	68.04	63.80	61.34	6.1	2.1
Biofuels & waste	0.24	0.92	0.94	2.25	8.74	10.20	10.65	8.3	11.7
Nuclear	0.82	0.58	-	-	-	-	-	-	-
Geothermal	2.13	2.30	2.97	4.26	4.77	5.01	4.95	2.0	2.3
Solar, wind, tide(1)	-	-	0.01	0.06 e	1.08	1.92	2.91	-	33.2
Hydro	3.23	3.89	2.72	3.80	4.40	3.94	3.60	-1.0	1.3
Net electricity imports(2)	0.08	0.52	2.98	3.81	3.80	3.93	3.71	24.1	1.0
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**145.5**	**185.7**	**216.6**	**276.6**	**303.7**	**302.1**	**302.6**	**296.3**
Nuclear	3.1	2.2	-	-	-	-	-	-
Hydro	39.1	47.5	35.1	50.9	42.9	54.4	47.8	43.8
of which:								
pumped storage production	*1.6*	*2.3*	*3.5*	*6.7*	*6.9*	*3.3*	*1.9*	*1.9*
Geothermal	2.5	2.7	3.2	4.7	5.3	5.4	5.7	5.6
Solar	-	-	0.0 e	0.0 e	0.0	1.9	10.8	18.9
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.6	2.3	9.1	9.9	13.2
Combustible fuels	100.8	133.4	178.3	219.7	252.0	230.5	227.7	214.0
Coal	*5.2*	*18.3*	*35.8*	*30.5*	*49.4*	*44.4*	*50.1*	*47.1*
Oil	*89.7*	*104.6*	*102.7*	*85.9*	*47.1*	*21.7*	*19.9*	*18.7*
Natural gas	*4.5*	*9.2*	*39.7*	*101.4*	*149.3*	*152.7*	*144.5*	*135.8*
Biofuels & waste	*1.4*	*1.3*	*0.1*	*1.9 e*	*6.2*	*11.6*	*13.1*	*12.3*
Other (e.g. fuel cells)	-	-	-	0.8	1.1	0.8	0.8	0.8
- Own use by power plant	6.4	8.3	11.5	13.3	13.1	11.3	11.1	..
Net production	**139.1**	**177.4**	**205.1**	**263.3**	**290.6**	**290.7**	**291.4**	**..**
Nuclear	..	2.1	-	-	-	-	-	..
Hydro	..	47.2	34.6	50.2	42.4	53.8	47.2	..
Geothermal	..	2.6	3.1	4.4	5.0	5.0	5.3	..
Solar	..	-	0.0 e	0.0 e	0.0	1.9	10.7	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.6	2.3	9.0	9.8	..
Combustible fuels	..	125.5	167.4	207.3	239.8	220.2	217.7	..
Other (e.g. fuel cells)	..	-	-	0.7	1.1	0.7	0.8	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	2.3	3.2	4.8	9.1	9.3	4.5	2.5	2.6
+ Imports	3.2	8.1	35.6	44.8	50.3	46.0	47.5	45.4
- Exports	2.4	2.0	0.9	0.5	1.1	1.8	1.8	2.3
Electrical energy supplied	**137.7**	**180.3**	**234.9**	**298.5**	**330.5**	**330.5**	**334.6**	**..**
- Transmission & distr. losses	11.8	16.6	16.2	19.2	20.6	20.6	20.8	..
- Statistical difference	-	-	-	-	-	0.0	-0.0	..
Total consumption	**125.8**	**163.6**	**218.8**	**279.3**	**309.8**	**309.9**	**313.8**	**..**
- Energy industry consumption[2]	2.8	3.9	4.2	6.3	9.0	10.6	12.0	..
Final consumption	**123.1**	**159.8**	**214.6**	**273.0**	**300.9**	**299.3**	**301.8**	**..**
Industry	77.1	94.0	110.9	141.8	144.8	127.9	128.1	..
Transport	3.8	4.8	6.7	8.5	9.9	10.7	10.8	..
Commercial & publ. serv.	14.5	20.5	40.0	56.6	73.9	85.6	86.9	..
Residential	26.3	37.8	52.7	61.1	67.0	69.6	70.1	..
Agriculture & fishing	1.3	2.6	4.2	4.9	5.4	5.6	5.9	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**148.91**	**185.74**	**216.60**	**276.64**	**292.64**	**302.06**	**302.58**	**2.4**	**1.6**
- Hydro pumped storage	*1.55*	*2.27*	*3.45*	*6.70*	*4.31*	*3.29*	*1.93*	*5.1*	*-2.7*
Total generation(1)	**147.35**	**183.47**	**213.15**	**269.95**	**288.34**	**298.77**	**300.65**	**2.3**	**1.7**
Main activity producers									
Gross production	117.77	153.67	190.33	276.64	272.37	278.20	279.02	3.0	1.8
- Hydro pumped storage	*1.55*	*2.27*	*3.43*	*6.70*	*4.31*	*3.29*	*1.93*	*5.1*	*-2.7*
Total generation(1)	116.22	151.40	186.90	269.95	268.06	274.91	277.09	3.0	1.9
Nuclear	3.41	2.21	-	-	-	-	-	-	-
Hydro	30.35	37.27	25.90	44.21	48.25	50.19	44.96	-1.0	2.7
Geothermal	2.50	2.67	3.22	4.71	5.34	5.38	5.65	1.6	2.7
Solar, wind, tide(2)	-	-	0.01	1.37 e	7.44	11.29	20.95	-	47.5
Coal	3.85	14.49	32.02	30.52	43.41	44.42	50.13	14.2	2.2
Oil	74.56	87.93	93.54	85.88	21.17	17.11	15.61	1.4	-8.2
Natural gas	1.49	6.74	32.14	101.36	134.05	135.86	127.33	21.2	6.8
Biofuels & waste	0.06	0.09	0.08	1.91	8.41	10.66	12.46	1.4	27.6
Autoproducers									
Gross production	31.13	32.07	26.27	..	20.28	23.87	23.56	-1.1	-0.5
- Hydro pumped storage	-	-	*0.03*	..	..	..	..	-	..
Total generation(1)	31.13	32.07	26.25	..	20.28	23.87	23.56	-1.1	-0.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	7.44	7.97	5.72	..	0.89	0.93	0.87	-1.6	-8.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	..	0.39	0.52	0.51	-	-
Coal	2.77	3.76	3.74	..	0.01	0.02	0.01	1.9	-23.6
Oil	16.70	16.66	9.18	-	4.85	4.60	4.27	-3.7	-3.6
Natural gas	2.53	2.48	7.57	..	13.22	16.88	17.22	7.1	4.0
Biofuels & waste	1.69	1.20	0.03	..	0.92	0.92	0.68	-22.6	16.4

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**22160**	**22673**	**25105**	**..**	**19399**	**22857**	**22564**	**-0.5**
Total energy	**-**	**-**	**1629**	**..**	**4105**	**4041**	**3785**	**4.1**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	147	176	144	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	3938	3856	3441	-
Energy non specified/other	-	-	1629	..	20	9	200	-9.5
Total industry	**22160**	**22673**	**23476**	**..**	**14421**	**17784**	**17724**	**-1.3**
Iron and steel	2992	3744	5658	..	770	916	884	-8.5
Chemical and petrochemical	12165	11068	12072	..	4751	7351	7577	-2.2
Non-ferrous metals	2569	3508	75	..	32	40	35	-3.6
Non-metallic minerals	408	504	591	..	1005	1116	1137	3.2
Transport equipment	-	-	-	..	873	1213	1157	-
Machinery	312	357	1241	..	219	271	273	-7.0
Mining and quarrying	34	30	47	-	3	3	2	-14.0
Food and tobacco	598	665	490	..	1424	1374	1214	4.4
Pulp and printing	1881	1985	1897	..	4004	4415	4441	4.1
Wood and wood products	-	-	-	..	224	310	325	-
Construction	-	-	-	-	1	1	1	-
Textile and leather	1098	681	1171	..	396	400	325	-5.9
Non specified/other industries	103	131	234	..	719	374	353	2.0
Total transport	**-**	**-**	**-**	**-**	**515**	**578**	**637**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	515	578	637	-
Other	**-**	**-**	**-**	**..**	**358**	**454**	**418**	**-**
Commerce and pub. services	-	-	-	-	298	352	371	-
Residential	-	-	-	-	4	5	-	-
Agriculture and fishing	-	-	-	-	56	97	47	-
Sector non specified	-	-	-	..	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**-**	**..**	**193064**	**205341**	**218919**	**207716**	**-**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	589	589	595	-
Coal	-	-	-	5372	2261	2927	2777	-
Oil	-	-	..	55792	60272	57909	54936	-
Natural gas	-	-	-	120822	128832	125619	119169	-
Biofuels & waste	-	-	-	11078	13387	31874	30238	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	1	1	-
of which:								
Main activity producers								
Total	-	-	-	72641	95443	112101	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	589	589	..	-
Coal	-	-	-	3826	1745	2546	..	-
Oil	-	-	-	6475	11878	10106	..	-
Natural gas	-	-	-	52596	69326	68637	..	-
Biofuels & waste	-	-	-	9744	11905	30222	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	1	..	-
Autoproducers								
Total	-	-	..	120423	109898	106818	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	1546	516	381	..	-
Oil	-	-	..	49317	48394	47803	..	-
Natural gas	-	-	-	68226	59506	56982	..	-
Biofuels & waste	-	-	-	1334	1482	1652	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**21.72**	**28.91**	**37.65**	**44.79**	**47.17**	**48.97**	**48.95**	**3.3**	**1.3**
Coal	1.33	4.19	8.01	6.71	10.06	10.15	11.31	11.1	1.7
Oil	19.12	22.59	21.53	18.95	7.61	7.37	6.55	0.7	-5.5
Natural gas	1.02	1.98	8.07	18.68	26.43	27.85	26.33	12.9	5.8
Biofuels & waste	0.24 e	0.15 e	0.04	0.44 e	3.09	3.61	4.76	-10.2	25.6
of which: ***main activity prod.***									
Total	**..**	**23.38**	**33.73**	**44.79**	**40.70**	**41.77**	**41.77**	**..**	**1.0**
Coal	..	3.41	7.12	6.71	10.05	10.13	11.29	..	2.2
Oil	..	18.44	19.72	18.95	4.76	4.55	3.79	..	-7.5
Natural gas	..	1.50	6.88	18.68	23.07	23.74	22.16	..	5.7
Biofuels & waste	..	0.03 e	0.02	0.44 e	2.82	3.35	4.52	..	28.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**2.95**	**2.87**	**2.77**	**4.05**	**4.65**	**4.79**	**5.79**	**-0.4**	**3.6**
Nuclear	0.82	0.58	-	-	-	-	-	-	-
Geothermal	2.13	2.30	2.77	4.04 e	4.59	4.62	4.86	1.6	2.7
Solar	-	-	0.00	0.00 e	0.06	0.16	0.93	-	45.7
Non-Thermal									
Total	**3.23**	**3.89**	**2.72**	**3.85**	**4.79**	**5.18**	**4.79**	**-1.0**	**2.7**
Hydro	3.23	3.89	2.72	3.80	4.23	4.40	3.94	-1.0	1.8
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.05	0.56	0.78	0.85	-	49.9
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	4959	10693	9530 e	14630	14575	16384	2.1
Fuel input (TJ)	123758	283096	239946 e	374123	368785	413868	1.8
Electricity production (GWh)	13254	30697	25736	38547	38835	44209	1.8
Brown coal							
Fuel input (1000 t)	1993	1058	4 e	578	394	205	-7.5
Fuel input (TJ)	13461	12345	52 e	10885	7419	3868	-5.4
Electricity production (GWh)	1267	1171	6	1152	769	369	-5.4
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	40512	32700	14371 e	4051	10017	16553	-3.2
Electricity production (GWh)	3729	2936	1535	368	923	1608	-2.8
Petroleum products							
Fuel input (1000 t)	23288	20924	17478 e	3022	1583	1291	-12.4
Fuel input (TJ)	945769	853169	691096 e	110196	54104	41951	-13.4
Electricity production (GWh)	104586	94455	73074	10912	5096	3884	-14.1
Natural gas (1)							
Fuel input (TJ)	92227	323771	543995	528111	514033	520763	2.3
Electricity production (GWh)	9226	32386	58284	68540	66031	68235	3.6
Wood and other solid waste							
Fuel input (TJ)	-	-	1046 e	28163	21557	32606	-
Electricity production (GWh)	-	-	87	2104	1544	1678	-
Industrial waste							
Fuel input (TJ)	-	-	670	1581	1673	1566	-
Electricity production (GWh)	-	-	56	99	98	87	-
Municipal waste							
Fuel input (TJ)	-	921	3204 e	30078	35024	38534	19.5
Electricity production (GWh)	-	71	267	1600	2122	2382	18.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	5093 e	21230	31243	33633	-
Electricity production (GWh)	-	-	524	2274	3584	3739	-
Total combustible fuels(2)							
Electricity production (GWh)	133350	161716	159569	125596	119002	126191	-1.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	31	99 e	19	81	91	5.3
Fuel input (TJ)	..	840	2575 e	534	2266	2543	5.4
Electricity production (GWh)	..	178	530	46	130	148	-0.9
CHP Heat production (TJ)	..	-	-	213	1288	1646	-
Brown coal							
Fuel input (1000 t)	..	-	..	-	-	-	-
Fuel input (TJ)	..	3	..	-	-	-	-
Electricity production (GWh)	..	1	..	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	5040	20647 e	32716	38118	38419	10.2
Electricity production (GWh)	..	779	2717	3303	3777	3805	7.8
CHP Heat production (TJ)	..	-	-	790	973	1281	-
Petroleum products							
Fuel input (1000 t)	..	1579	3449 e	4831	6009	5445	6.1
Fuel input (TJ)	..	63763	102336 e	184539	201025	177349	5.0
Electricity production (GWh)	..	8264	12804	15108	16618	16001	3.2
CHP Heat production (TJ)	..	-	..	62531	60272	57909	-
Natural gas(1)							
Fuel input (TJ)	..	56767	331791	701561	781761	704657	12.7
Electricity production (GWh)	..	7323	43076	78729	86707	76313	11.8
CHP Heat production (TJ)	..	-	-	107959	128832	125619	-
Wood and other solid waste							
Fuel input (TJ)	..	84	3379 e	11410	14113	22833	30.6
Electricity production (GWh)	..	12	338	723	717	845	22.5
CHP Heat production (TJ)	..	-	-	2535	3919	7630	-
Industrial waste							
Fuel input (TJ)	..	586	562	692	-	249	-4.0
Electricity production (GWh)	..	16	56	57	-	10	-2.2
CHP Heat production (TJ)	..	-	-	126	-	-	-
Municipal waste							
Fuel input (TJ)	..	18	3980 e	27364	30154	32054	42.8
Electricity production (GWh)	..	2	537	1632	1972	2034	39.1
CHP Heat production (TJ)	..	-	-	4680	5166	7162	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	42	387 e	8794	13924	34200	37.6
Electricity production (GWh)	..	2	43	840	1550	2363	40.1
CHP Heat production (TJ)	..	-	-	1986	2055	14594	-
Total combustible fuels(2)							
Electricity production (GWh)	..	16577	60101	100438	111471	101519	9.0
CHP Heat production (TJ)	..	-	-	180820	202505	215841	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**96.56**	**102.23**	**114.94**	**128.83**	**125.58**	**129.77**	**126.75**	**1.0**	**0.5**
Geothermal	-	-	0.20	0.21	0.21	0.13	0.13	-	-2.2
Solar thermal	-	-	0.00	0.01	0.08	0.13	0.14	-	17.4
Coal	3.68	3.82	3.57	2.68	1.10	1.93	2.34	-0.2	-2.0
Oil	69.94	64.20	61.45	62.30	55.68	54.32	53.61	-0.8	-0.6
Natural gas	12.35	19.73	30.39	38.58	36.63	39.05	35.95	5.4	0.8
Biofuels & waste	-	0.74	0.86	1.58	3.83	5.12	5.44	-	9.2
Electricity	10.58	13.74	18.46	23.48	24.94	25.74	25.96	3.3	1.6
Heat	-	-	-	-	3.09	3.33	3.19	-	-
of which:									
Total industry	**39.06**	**35.84**	**34.09**	**38.25**	**28.92**	**29.96**	**28.89**	**-0.8**	**-0.8**
Geothermal	-	-	-	-	-	0.00	0.00	-	-
Solar thermal	-	-	-	-	-	0.01	0.01	-	-
Coal	2.66	2.98	3.29	2.45	1.00	1.80	2.17	1.3	-2.0
Oil	21.12	15.61	8.08	6.70	4.33	3.48	3.49	-5.5	-3.9
Natural gas	8.64	9.04	12.97	16.62	9.89	10.35	9.31	2.4	-1.6
Biofuels & waste	-	0.12	0.22	0.29	0.39	0.19	0.45	-	3.5
Electricity	6.63	8.09	9.54	12.20	10.37	11.00	11.01	2.2	0.7
Heat	-	-	-	-	2.94	3.13	2.44	-	-
Transport	**18.96**	**24.35**	**32.71**	**39.69**	**39.09**	**38.51**	**38.54**	**3.3**	**0.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.14	0.00	-	-	-	-	-	-	-
Oil	18.37	23.68	31.92	38.63	36.40	35.43	35.34	3.3	0.5
Natural gas	0.12	0.26	0.21	0.33	0.60	0.70	0.85	3.1	6.9
Biofuels & waste	-	-	-	-	1.18	1.47	1.41	-	-
Electricity	0.33	0.41	0.58	0.73	0.91	0.92	0.93	3.4	2.3
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**1.55**	**2.17**	**8.17**	**11.54**	**16.92**	**16.98**	**15.75**	**10.3**	**3.2**
Geothermal	-	-	-	0.13	0.13	0.08	0.08	-	-
Solar thermal	-	-	-	0.00	0.02	0.03	0.03	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.31	0.41	0.52	0.96	0.84	0.83	0.76	3.2	1.8
Natural gas	-	-	4.21	5.57	8.61	8.61	7.25	-	2.6
Biofuels & waste	-	-	-	0.01	0.01	0.02	0.02	-	-
Electricity	1.25	1.77	3.44	4.87	7.25	7.36	7.47	6.1	3.8
Heat	-	-	-	-	0.06	0.05	0.14	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**26.78**	**28.96**	**26.06**	**27.59**	**28.90**	**31.66**	**31.32**	**-0.2**	**0.9**
Geothermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Solar thermal	-	-	0.00	0.01	0.07	0.10	0.10	-	15.7
Coal	0.87	0.83	0.28	0.07	0.00	0.00	0.00	-6.4	-18.5
Oil	20.05	15.90	9.31	6.01	3.79	3.33	3.08	-4.4	-5.1
Natural gas	3.59	8.36	11.31	14.97	16.82	18.69	17.98	7.0	2.2
Biofuels & waste	-	0.63 e	0.61	1.28	2.24	3.44	3.54	-	8.7
Electricity	2.26	3.25	4.53	5.26	5.93	5.98	6.03	4.2	1.4
Heat	-	-	-	-	0.05	0.12	0.57	-	-
Agriculture & fishing	**1.93**	**2.20**	**3.11**	**3.16**	**3.12**	**2.94**	**2.92**	**2.9**	**-0.3**
Geothermal	-	-	-	0.08	0.08	0.05	0.05	-	-
Solar thermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.81	1.97	2.72	2.55	2.40	2.27	2.23	2.4	-0.9
Natural gas	0.00	0.01	0.02	0.12	0.14	0.14	0.13	16.7	8.8
Biofuels & waste	-	-	-	0.00	0.00	0.00	0.00	-	-
Electricity	0.11	0.22	0.36	0.42	0.49	0.48	0.51	7.1	1.6
Heat	-	-	-	-	0.01	0.00	0.01	-	-
Other	**-**	**-**	**0.38**	**0.17**	**0.14**	**0.16**	**0.15**	**-**	**-4.4**
Geothermal	-	-	0.20	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	0.15	0.17	0.11	0.13	0.11	-	-1.3
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	0.03 e	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	0.03	0.03	0.03	-	-
Non-energy use(1)	**8.28**	**8.70**	**10.42**	**8.43**	**8.49**	**9.56**	**9.19**	**1.37**	**-0.60**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**96.56**	**102.23**	**114.94**	**128.83**	**132.33**	**125.58**	**129.77**	**126.75**
Total industry (Mtoe)	**39.06**	**35.84**	**34.09**	**38.25**	**35.11**	**28.92**	**29.96**	**28.89**
Iron and steel	5.67	6.82	5.66	5.60	5.13	3.70	4.83	5.01
Chem. and petrochemical	11.93	7.48	6.84	6.16	4.72	4.36	4.16	4.02
Non-ferrous metals	0.86	0.85	0.83	0.97	0.93	0.86	0.84	0.94
Non-metallic minerals	8.29	8.69	7.45	8.09	8.24	5.95	5.89	5.80
Transport equipment	0.22	0.27	0.33	0.41	0.46	0.41	0.50	0.42
Machinery	4.07	3.56	2.94	4.72	4.65	3.73	3.90	3.68
Mining and quarrying	0.26	0.15	0.14	0.17	0.18	0.15	0.15	0.17
Food and tobacco	2.20	2.43	2.10	3.50	3.29	2.99	2.78	2.73
Paper, pulp and printing	1.84	1.60	1.83	2.64	2.57	2.43	2.41	2.25
Wood and wood products	0.12	0.18	0.15	0.47	0.54	0.57	0.39	0.49
Construction	0.05	0.11	0.12	0.20	0.20	0.19	0.20	0.43
Textile and leather	2.12	2.13	1.98	2.71	1.65	1.38	1.34	1.19
Non specified/other	1.42	1.57	3.73	2.63	2.54	2.18	2.56	1.77
Electricity consumption (Mtoe)	**10.58**	**13.74**	**18.46**	**23.48**	**26.60**	**24.94**	**25.74**	**25.96**
Total industry (Mtoe)	**6.63**	**8.09**	**9.54**	**12.20**	**12.18**	**10.37**	**11.00**	**11.01**
Iron and steel	1.19	1.71	1.67	1.75	1.86	1.35	1.61	1.78
Chem. and petrochemical	1.67	1.89	1.70	1.89	1.51	1.25	1.34	1.30
Non-ferrous metals	0.46	0.59	0.53	0.48	0.48	0.44	0.39	0.40
Non-metallic minerals	0.64	0.84	0.97	1.18	1.20	1.01	1.02	0.99
Transport equipment	0.22	0.27	0.33	0.41	0.37	0.31	0.33	0.31
Machinery	0.63	0.87	1.21	1.76	1.99	1.64	1.83	1.86
Mining and quarrying	0.11	0.11	0.11	0.09	0.09	0.08	0.08	0.07
Food and tobacco	0.34	0.43	0.64	1.00	1.10	1.08	1.10	1.09
Paper, pulp and printing	0.41	0.49	0.61	0.87	0.88	0.81	0.84	0.83
Wood and wood products	0.12	0.18	0.15	0.35	0.37	0.33	0.34	0.31
Construction	0.05	0.08	0.08	0.11	0.16	0.16	0.15	0.14
Textile and leather	0.59	0.59	0.84	0.99	0.65	0.53	0.54	0.52
Non specified/other	0.19	0.04	0.68	1.35	1.52	1.38	1.43	1.43
Total industry (TWh)	**77.15**	**94.02**	**110.92**	**141.85**	**141.65**	**120.61**	**127.87**	**128.08**
Iron and steel	13.88	19.84	19.41	20.35	21.63	15.73	18.68	20.64
Chem. and petrochemical	19.38	22.00	19.82	21.95	17.53	14.59	15.54	15.09
Non-ferrous metals	5.38	6.87	6.16	5.53	5.60	5.09	4.57	4.63
Non-metallic minerals	7.47	9.73	11.31	13.70	13.97	11.71	11.87	11.47
Transport equipment	2.56	3.14	3.79	4.71	4.26	3.63	3.79	3.65
Machinery	7.28	10.14	14.12	20.45	23.13	19.11	21.34	21.59
Mining and quarrying	1.26	1.27	1.27	1.05	1.03	0.92	0.88	0.86
Food and tobacco	3.92	4.99	7.50	11.64	12.83	12.56	12.79	12.62
Paper, pulp and printing	4.82	5.66	7.12	10.10	10.28	9.38	9.76	9.60
Wood and wood products	1.43	2.11	1.76	4.04	4.32	3.80	3.91	3.61
Construction	0.62	0.89	0.96	1.23	1.89	1.81	1.75	1.64
Textile and leather	6.90	6.91	9.77	11.46	7.57	6.20	6.33	6.06
Non specified/other	2.27	0.47	7.93	15.65	17.63	16.08	16.66	16.63

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**3248**	**8072**	**35577**	**38662**	**44831**	**43433**	**47070**	**45987**	**47519**
Imports from:									
Total from OECD	**3248**	**7347**	**35577**	**38662**	**44831**	**43433**	**47070**	**45987**	**47519**
Austria	328	711	1703	1323	1958	1360	1192	1328	1074
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	760	1426	15443	17648	16175	12990	11939	11678	14334
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	179	2192	2312	1714
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	1346	751	4533	4726	6772	7484	4778
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	2160	5210	17085	18940	22165	24178	24975	23185	25619
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**725**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports (1)	**2369**	**1989**	**922**	**1235**	**484**	**3398**	**2111**	**1827**	**1787**
Exports to:									
Total to OECD	**2342**	**1917**	**922**	**1235**	**484**	**3398**	**2111**	**1827**	**1787**
Austria	122	22	-	1	-	2	-	3	11
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	317	736	181	267	404	1151	1238	1140	1004
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	1751	311	67	274
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	719	944	72	95	60	124	66
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	1903	1159	22	23	8	399	502	493	432
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**27**	**72**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**30.65**	**38.45**	**49.14**	**57.11**	**75.51**	**93.06**	**95.33**	**100.33**	**112.67**
Nuclear	0.55	1.42	-	-	-	-	-	-	-
Hydro	12.90	13.85	17.04	18.02	20.35	21.09	21.20	21.35	21.57
of which: pumped storage	*-*	*-*	*6.19*	*6.88*	*6.96*	*7.54*	*7.54*	*7.54*	*7.54*
Geothermal	0.38	0.43	0.50	0.47	0.59	0.67	0.70	0.73	0.73
Solar	-	-	-	0.02	0.02	0.43	1.14	3.47	12.77
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.02	0.36	3.52	4.88	5.79	6.91
Other (e.g. fuel cells)	-	-	-	0.01	0.16	0.19	0.19	0.19	0.18
Combustible fuels	16.82	22.75	31.60	38.57	54.03	67.15	67.23	68.80	70.50
of which:									
Single-fired:									
Coal and coal products	0.07	0.06	0.02	0.02	0.02	0.03	0.03	0.03	0.03
Liquid fuels	7.05	13.71	15.26	17.72	14.56	11.16	9.18	9.18	9.19
Natural gas	-	-	0.04	0.23	5.87	25.19	27.08	29.63	31.10
Biofuels & waste	-	-	0.04	0.09	0.69	1.15	1.52	1.63	2.05
Multi-fired:									
Solid / liquid	7.35	4.23	6.02	6.02	7.69	6.22	5.66	5.69	5.70
Solid / natural gas	-	-	-	-	-	1.21	1.22	1.34	1.34
Liquid / natural gas	1.74	3.82	9.24	13.45	20.36	19.51	19.24	17.36	17.17
Solid / liquid / gas	0.60	0.92	0.98	1.05	4.85	2.68	3.31	3.94	3.94
Type of generation									
Steam	-	-	29.55	34.03	40.05	27.37	25.97	25.77	25.61
Internal combustion	-	-	0.19	0.24	0.83	0.95	1.23	1.57	2.10
Gas turbine	-	-	1.86	4.29	5.31	3.34	2.70	2.69	2.72
Combined cycle	-	-	-	0.01	7.84	35.49	37.33	38.76	40.07
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	36.26	39.65	..	55.29	51.87	56.43	56.47
Available capacity	..	..	36.46	45.67	..	63.50	67.00	69.30	69.30

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**7.70**	**8.37**	**7.42**	**8.81**	**..**	**5.57**	**6.11**	**6.16**	**5.78**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.97	1.97	1.73	1.82	..	0.19	0.18	0.17	0.17
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	0.01
Other (e.g. fuel cells)	-	-	-	0.08	..	0.13	0.13	0.13	0.13
Combustible fuels	5.73	6.40	5.69	6.91	..	5.25	5.81	5.86	5.48
of which:									
Single-fired:									
Coal and coal products	0.87	0.12	0.01	-	-	-	-	-	-
Liquid fuels	2.47	2.25	1.18	0.92	..	0.72	0.72	0.71	0.71
Natural gas	0.26	0.40	0.45	1.68	..	2.66	3.24	3.30	3.44
Biofuels & waste	-	-	0.09	0.06	..	0.05	0.08	0.09	0.09
Multi-fired:									
Solid / liquid	0.67	1.82	0.36	0.45	..	0.01	0.01	0.01	0.01
Solid / natural gas	-	-	-	-	-	0.02	0.02	0.04	0.04
Liquid / natural gas	1.46	1.82	1.96	2.21	..	1.66	1.59	1.56	1.03
Solid / liquid / gas	-	-	1.64	1.59	..	0.14	0.15	0.15	0.15
Type of generation									
Steam	-	-	5.22	4.86	..	2.24	2.16	2.14	1.70
Internal combustion	-	-	0.05	0.13	..	0.46	0.55	0.65	0.66
Gas turbine	-	-	0.26	0.43	..	0.71	0.65	0.68	0.73
Combined cycle	-	-	0.12	1.50	..	1.85	2.44	2.39	2.39
Other	-	-	0.05	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	16.03	22.46	37.13	c	95.80	74.07	81.33	..	..
Heavy fuel oil (t)	37.56	80.11	83.32	c	c	c	c	c	c
Natural gas (MWh)(1)	3.08	6.58	6.22	c	c	c	c	c	c
				Euro/ toe					
Steam coal	25.85	36.23	59.89	c	165.17	125.54	137.85	..	..
Heavy fuel oil	39.13	83.45	86.79	c	c	c	c	c	c
Natural gas(2)	39.77	85.01	80.38	c	c	c	c	c	c
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	18.90	28.80	60.40	96.50	198.23	198.77	194.86	200.74	227.01
of which: tax	0.30	0.30	14.70	14.70	41.28	42.49	44.51	53.55	71.82
Household									
Price	21.90	34.00	97.00	147.00	208.80	204.58	198.69	200.43	224.38
of which: tax	1.80	2.40	26.50	33.60	53.62	50.54	51.74	56.68	68.46

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	320.37	344.52	439.33	518.96	499.09	461.47	451.50	1.9	0.1
GDP (billion 2005 USD)	1940.01	2448.10	3851.27	4308.10	4648.48	4621.97	4714.24	4.1	0.9
TPES/GDP(1)	0.17	0.14	0.11	0.12	0.11	0.10	0.10	-2.2	-0.8
Population (millions)	108.90	117.06	123.61	126.93	128.04	127.83	127.26	0.7	0.1
TPES/population(2)	2.94	2.94	3.55	4.09	3.90	3.61	3.55	1.1	-0.0
TPES/GDP (2005 = 100)	145	124	100	106	94	88	84	-2.2	-0.8
Ele.TFC/GDP(2005=100)(3)	100	98	91	102	101	95	..	-0.6	..
Ele.TFC/population(4)	3813	4386	6066	7438	7811	7351	..	2.8	..
Elec. generated (TWh)(5)	465.39	572.53	835.51	1048.98	1108.65	1042.74	1025.80	3.5	0.9

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**320.37**	**344.52**	**439.33**	**518.96**	**499.09**	**461.47**	**451.50**	**1.9**	**0.1**
Coal	57.86	59.56	76.62	96.86	114.97	107.42	112.90	1.7	1.8
Oil	248.93	233.68	250.42	255.21	202.50	206.30	209.90	0.0	-0.8
Natural gas	5.07	21.40	44.16	65.65	86.01	99.95	105.17	13.6	4.0
Biofuels & waste	-	-	5.00	5.86	9.91	10.40	10.40	-	3.4
Nuclear	2.53	21.52	52.71	83.93	75.11	26.52	2.93	19.6	-12.3
Geothermal	0.23	0.77	1.58	3.10	2.44	2.48	2.35	11.9	1.8
Solar, wind, tide(1)	-	-	1.17	0.85 e	1.08 e	1.25 e	1.17	-	0.0
Hydro	5.74	7.59	7.68	7.50	7.07	7.15	6.68	1.7	-0.6
Net electricity imports(2)	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**470.3**	**576.3**	**842.0**	**1058.5 e**	**1099.8 e**	**1117.1 e**	**1051.3 e**	**1033.7**
Nuclear	9.7	82.6	202.3	322.0	304.8	288.2	101.8	11.2
Hydro	71.7	92.1	95.8	96.8	86.4	90.7	91.7	85.7
of which:								
pumped storage production	*4.9*	*3.8*	*6.5*	*9.6*	*9.9*	*8.5*	*8.5*	*8.0*
Geothermal	0.3	0.9	1.7	3.3	3.2	2.6	2.7	2.5
Solar	-	-	0.0	0.3 e	1.5 e	3.8	5.2	4.5
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.1	1.8	4.0	4.6	4.3
Combustible fuels	388.6	400.7	542.2	635.9	702.2	727.8	845.4	925.5
Coal	*37.3*	*54.9*	*116.7*	*232.3*	*303.5*	*297.9*	*281.1*	*291.5*
Oil	*340.8*	*264.7*	*247.9*	*137.1*	*137.7*	*93.7*	*153.3*	*171.1*
Natural gas	*10.5*	*81.1*	*167.1*	*251.3*	*239.0*	*300.4*	*374.0*	*425.9*
Biofuels & waste	-	-	*10.5*	*15.2*	*22.1*	*35.8*	*37.0*	*37.0*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	15.7	24.6	32.1	39.3	42.9	42.4	38.7	..
Net production	**454.6**	**551.8**	**809.9**	**1019.3**	**1056.9**	**1074.8**	**1012.6**	**..**
Nuclear	..	78.6	193.9	308.7	290.5	274.5	95.0	..
Hydro	..	91.5	95.1	96.1	85.8	90.2	91.3	..
Geothermal	..	-	1.6	3.1	3.0	2.4	2.4	..
Solar	..	-	0.0	0.3 e	1.5 e	3.8 e	5.2 e	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.1	1.8	4.0	4.6	..
Combustible fuels	..	381.6	519.3	611.0	674.4	699.9	814.2	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	- e	0.3	1.1	1.1	1.1	1.0	1.0
- Used for pumped storage	4.7	6.1	10.0	14.8	13.5	9.8	9.7	9.1
+ Imports	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**449.8**	**545.6**	**799.6**	**1003.4**	**1042.3**	**1063.8**	**1001.8**	**..**
- Transmission & distr. losses	28.1	25.4	40.8	46.9	50.4	49.4	48.2	..
- Statistical difference	-	-	0.0	-0.0	0.0	-	-	..
Total consumption	**421.7**	**520.2**	**758.8**	**956.5**	**991.8**	**1014.4**	**953.7**	**..**
- Energy industry consumption[2]	6.5	7.0	9.2	12.7	13.8	14.7	14.3	..
Final consumption	**415.1**	**513.3**	**749.6**	**943.7**	**978.1**	**999.7**	**939.4**	**..**
Industry	291.4	327.8	337.3	361.6	341.1	327.8	279.4	..
Transport	13.2	15.2	16.8	18.6	19.1	18.8	18.6	..
Commercial & publ. serv.	30.1	53.0	209.7	303.7	332.3	343.2	345.3	..
Residential	79.2	116.1	184.1	257.9	283.1	305.3	290.2	..
Agriculture & fishing	1.2	1.2	1.6	1.6	1.0	0.9	0.9	..
Sector non specified	-	-	-	0.3	1.5	3.8	5.1	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source
(TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**459.08**	**576.33**	**842.04**	**1058.55**	**1050.33**	**1117.12**	**1051.25**	**3.9**	**1.1**
- Hydro pumped storage	*2.10*	*3.80*	*6.53*	*9.56*	*6.94*	*8.47*	*8.51*	*7.3*	*1.3*
Total generation(1)	**456.98**	**572.53**	**835.51**	**1048.98**	**1043.39**	**1108.65**	**1042.74**	**3.8**	**1.1**
Main activity producers									
Gross production	397.75	511.86	757.59	940.68	925.39	974.55	907.89	4.1	0.9
- Hydro pumped storage	*2.10*	*3.80*	*6.53*	*9.56*	*6.94*	*8.47*	*8.51*	*7.3*	*1.3*
Total generation(1)	395.65	508.06	751.06	931.11	918.46	966.08	899.38	4.1	0.9
Nuclear	19.70	82.01	201.40	321.34	279.75	288.23	101.76	15.6	-3.2
Hydro	76.55	81.35	82.22	79.76	67.60	65.71	65.87	0.4	-1.1
Geothermal	0.10	0.90	1.49	3.12	2.70	2.47	2.52	18.4	2.5
Solar, wind, tide(2)	-	-	-	0.00	0.01	0.04	0.10	-	-
Coal	30.35	37.95	94.30	191.66	236.65	252.48	237.41	7.3	4.5
Oil	253.60	224.75	205.83	87.50	51.76	59.34	119.03	-1.3	-2.6
Natural gas	15.35	81.11	165.26	245.67	274.90	287.37	360.40	16.0	3.8
Biofuels & waste	-	-	0.58	2.06	5.09	10.45	12.30	-	15.7
Autoproducers									
Gross production	61.32	64.47	84.45	117.87	124.94	142.57	143.36	2.0	2.6
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	61.32	64.47	84.45	117.87	124.94	142.57	143.36	2.0	2.6
Nuclear	-	0.58	0.87	0.71	-	-	-	-	-
Hydro	6.13	6.95	7.09	7.49	9.29	16.51	17.33	0.9	4.4
Geothermal	-	-	0.26	0.23	0.19	0.16	0.16	-	-2.3
Solar, wind, tide(2)	-	-	0.00	0.46 e	6.37 e	7.72 e	9.62 e	-	54.8
Coal	9.41	16.98	22.41	40.59	43.80	45.37	43.74	5.6	3.2
Oil	45.79	39.96	42.06	49.58	36.34	34.40	34.31	-0.5	-1.0
Natural gas	-	-	1.83	5.66	12.59	13.03	13.56	-	10.0
Biofuels & waste	-	-	9.94	13.15	16.36	25.38	24.65	-	4.4

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers
(GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**51586**	**53218**	**84450**	**117870**	**124935**	**142310**	**142508**	**2.5**
Total energy	**-**	**-**	**3979**	**9987**	**18037**	**17937**	**17503**	**7.3**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	3979	9987	18037	17937	17503	7.3
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**51586**	**50521**	**80471**	**107538**	**104155**	**120595**	**119906**	**1.9**
Iron and steel	-	11195	15845	25279	25321	26451	26113	2.4
Chemical and petrochemical	-	17152	28110	31664	24303	24931	24532	-0.6
Non-ferrous metals	-	5569	2344	1539	1360	1402	1384	-2.5
Non-metallic minerals	-	2007	8889	12487	12998	13042	12702	1.7
Transport equipment	-	2	-	-	-	-	-	-
Machinery	-	4	2006	2957	3578	3582	3584	2.8
Mining and quarrying	-	981	-	-	-	-	-	-
Food and tobacco	-	473	-	-	-	-	-	-
Pulp and printing	-	10435	17055	25414	21495	20948	21367	1.1
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	30	-	-	-	-	-	-
Non specified/other industries	51586	2673	6222	8198	15100	30239	30224	7.8
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**2697**	**-**	**345**	**2743**	**3778**	**5099**	**-**
Commerce and pub. services	-	-	-	-	-	-	-	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	-	2697	-	345	2743	3778	5099	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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JAPAN
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**4270**	**7797**	**22589**	**24975**	**24984**	**22716**	**22716**	**5.2**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	637	515	613	539	-	-	-	-
Oil	1201	1609	1469	897	798	747	747	-3.6
Natural gas	1949	3556	11597	14223	15046	14039	14039	6.8
Biofuels & waste	-	1330	5412	5711	5083	4322	4322	5.8
Non-spec. comb. fuels	483	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	787	3498	3605	4057	3608	3608	7.5
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	4270	7797	22589	24975	24984	22716	..	5.2
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	637	515	613	539	-	-	..	-
Oil	1201	1609	1469	897	798	747	..	-3.6
Natural gas	1949	3556	11597	14223	15046	14039	..	6.8
Biofuels & waste	-	1330	5412	5711	5083	4322	..	5.8
Non-spec. comb. fuels	483	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	787	3498	3605	4057	3608	..	7.5
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	-	-	-	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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JAPAN
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**84.59**	**88.97**	**111.78**	**126.23**	**131.31**	**141.10**	**164.15**	**1.7**	**1.8**
Coal	11.97	10.52	25.41	48.35	58.14	61.64	58.46	4.5	4.0
Oil	70.62	62.87	50.64	27.52	16.82	18.02	30.42	-1.9	-2.4
Natural gas	2.00	15.58	33.42	47.20	52.12	54.32	67.89	18.0	3.4
Biofuels & waste	-	-	2.32	3.17	4.23	7.12	7.39	-	5.7
of which: ***main activity prod.***									
Total	**..**	**75.18**	**95.91**	**105.54**	**111.95**	**119.90**	**143.33**	**..**	**1.9**
Coal	..	8.03	20.43	40.23	50.02	53.22	50.34	..	4.4
Oil	..	51.57	42.26	18.58	10.77	12.31	24.76	..	-2.5
Natural gas	..	15.58	33.05	46.15	49.97	52.10	65.58	..	3.3
Biofuels & waste	..	-	0.17	0.58	1.19	2.27	2.65	..	13.8

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**2.76**	**22.30**	**54.21**	**86.84**	**75.62**	**77.70**	**29.26**	**19.1**	**-2.9**
Nuclear	2.53	21.52	52.71	83.93	72.90	75.11	26.52	19.6	-3.2
Geothermal	0.23	0.77	1.50	2.88	2.48	2.26	2.30	11.6	2.1
Solar	-	-	0.00	0.03 e	0.24 e	0.33 e	0.44 e	-	50.2
Non-Thermal									
Total	**5.74**	**7.59**	**7.68**	**7.51**	**6.92**	**7.41**	**7.55**	**1.7**	**-0.1**
Hydro	5.74	7.59	7.68	7.50	6.61	7.07	7.15	1.7	-0.3
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.31	0.34	0.39	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	11998	31019	64856	86357	90049	86209	5.0
Fuel input (TJ)	264554	770119	1672079	2163888	2256397	2160184	5.0
Electricity production (GWh)	27851	84640	191412	248037	259152	246984	5.2
Brown coal							
Fuel input (1000 t)	-	6	30	-	-	-	-
Fuel input (TJ)	-	227	1113	-	-	-	-
Electricity production (GWh)	-	24	130	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	278254	300051	359336	277266	332122	294112	-0.1
Electricity production (GWh)	27084	32042	40708	32409	38698	34159	0.3
Petroleum products							
Fuel input (1000 t)	63133	49703	27012	16630	17800	29930	-2.4
Fuel input (TJ)	2508740	2241726	1224831	750115	802970	1353464	-2.4
Electricity production (GWh)	264706	247885	137080	88094	93738	153336	-2.3
Natural gas[2]							
Fuel input (TJ)	833295	1548964	2181663	2409107	2510830	3143338	3.4
Electricity production (GWh)	81107	167084	251335	287498	300401	373957	3.9
Wood and other solid waste							
Fuel input (TJ)	-	78705	84836	109209	233016	235045	5.3
Electricity production (GWh)	-	8713	10410	14007	28739	28827	5.9
Industrial waste							
Fuel input (TJ)	-	-	814	4662	12120	17475	-
Electricity production (GWh)	-	-	97	602	1464	2131	-
Municipal waste							
Fuel input (TJ)	-	16439 e	40934 e	57455	47370	52162	5.7
Electricity production (GWh)	-	1807	4706	6837	5624	5992	5.9
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Electricity production (GWh)	400748	542195	635878	677484	727816	845386	2.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	38	32	27	-	-	-	-
Fuel input (TJ)	960	804	690	-	-	-	-
Heat production (TJ)	637	515	613	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	40	57	36	7	18	17	-5.6
Fuel input (TJ)	1816	2534	1680	311	812	759	-5.6
Heat production (TJ)	1201	1609	1469	299	798	747	-3.6
Natural gas[2]							
Fuel input (TJ)	2946	6169	14515	16280	17003	15833	4.6
Heat production (TJ)	1949	3556	11597	14072	15046	14039	6.8
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	80	172	77	25	125	2.1
Heat production (TJ)	-	51	153	74	24	122	4.2
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1946	6098	5825	5537	4608	4.2
Heat production (TJ)	-	1279	5259	5295	5059	4200	5.8
Total combustible fuels[3]							
Heat production (TJ)	4270	7010	19091	19740	20927	19108	4.9

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.
(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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JAPAN
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**233.98**	**231.89**	**299.44**	**343.27**	**312.95**	**323.15**	**314.47**	**1.5**	**0.2**
Geothermal	-	-	0.08	0.22	0.21	0.18	0.18	-	4.0
Solar thermal	-	-	1.17	0.81	0.44	0.41	0.41	-	-4.9
Coal	24.08	25.25	31.68	25.23	24.34	27.23	26.46	1.6	-0.9
Oil	171.06	156.56	183.99	209.55	172.34	171.50	167.73	0.4	-0.4
Natural gas	3.11	5.84	15.24	23.10	32.22	34.51	35.35	9.8	4.1
Biofuels & waste	-	-	2.63	2.66	2.34	2.75	3.00	-	0.6
Electricity	35.70	44.14	64.46	81.16	80.49	85.98	80.79	3.5	1.1
Heat	0.03	0.10	0.19	0.54	0.56	0.60	0.54	11.9	5.2
of which:									
Total industry	**104.89**	**91.23**	**102.21**	**97.91**	**82.17**	**88.57**	**84.73**	**-0.2**	**-0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	18.65	21.42	30.32	24.27	23.49	26.36	25.58	2.9	-0.8
Oil	59.54	39.49	36.67	34.81	24.13	23.48	23.73	-2.8	-2.1
Natural gas	1.64	2.14	3.69	5.11	7.35	7.82	8.41	4.9	4.0
Biofuels & waste	-	-	2.53	2.62	2.32	2.73	2.98	-	0.8
Electricity	25.06	28.19	29.01	31.10	24.89	28.19	24.03	0.9	-0.9
Heat	-	-	-	-	-	-	-	-	-
Transport	**40.75**	**53.98**	**71.75**	**87.94**	**76.25**	**76.87**	**75.82**	**3.4**	**0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.20	-	-	-	-	-	-	-	-
Oil	39.41	52.67	70.31	86.34	74.63	75.26	74.22	3.5	0.3
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	1.14	1.31	1.45	1.60	1.62	1.61	1.60	1.4	0.5
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**20.20**	**20.34**	**46.00**	**61.87**	**63.91**	**64.33**	**64.91**	**5.0**	**1.7**
Geothermal	-	-	0.04	0.13	0.12	0.10	0.10	-	4.0
Solar thermal	-	-	0.04	0.02	0.02	0.02	0.02	-	-4.8
Coal	0.90	0.68	0.90	0.61	0.53	0.53	0.51	-0.0	-2.6
Oil	16.30	14.25	22.94	25.67	18.10	16.45	16.66	2.0	-1.5
Natural gas	0.38	0.76	3.89	8.81	15.53	17.16	17.42	14.6	7.4
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	2.59	4.55	18.03	26.12	29.08	29.52	29.69	12.1	2.4
Heat	0.03	0.10	0.16	0.51	0.53	0.57	0.51	10.7	5.9

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**20.92**	**25.74**	**37.99**	**48.62**	**46.93**	**49.65**	**47.47**	**3.6**	**1.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	1.12	0.79	0.43	0.39	0.39	-	-4.9
Coal	4.29	3.16	0.07	-	-	-	-	-21.8	-
Oil	8.75	9.67	13.48	16.59	12.82	13.78	12.90	2.6	-0.2
Natural gas	1.08	2.92	7.35	8.99	9.04	9.17	9.16	12.0	1.1
Biofuels & waste	-	-	0.10	0.05	0.02	0.02	0.02	-	-6.8
Electricity	6.81	9.98	15.84	22.18	24.60	26.25	24.96	5.1	2.2
Heat	-	-	0.03	0.03	0.03	0.03	0.03	-	-0.2
Agriculture & fishing	**2.74**	**3.47**	**6.93**	**5.40**	**3.47**	**3.47**	**3.51**	**5.6**	**-3.2**
Geothermal	-	-	0.03	0.09	0.09	0.08	0.08	-	4.0
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.00	-	-	-	-	-	-
Oil	2.64	3.36	6.76	5.17	3.30	3.32	3.36	5.7	-3.3
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.10	0.10	0.14	0.14	0.08	0.08	0.07	1.9	-3.1
Heat	-	-	-	-	-	-	-	-	-
Other	**7.60**	**8.71**	**-**	**0.03**	**0.24**	**0.33**	**0.44**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.04	-	-	-	-	-	-	-	-
Oil	7.54	8.69	-	-	-	-	-	-	-
Natural gas	0.02	0.02	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	0.03	0.24	0.33	0.44	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**36.87**	**28.43**	**34.55**	**41.51**	**40.00**	**39.92**	**37.59**	**-0.38**	**0.40**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**233.98**	**231.89**	**299.44**	**343.27**	**318.02**	**312.95**	**323.15**	**314.47**
Total industry (Mtoe)	**104.89**	**91.23**	**102.21**	**97.91**	**85.70**	**82.17**	**88.57**	**84.73**
Iron and steel	34.47	28.28	21.20	18.42	19.52	17.94	20.54	20.76
Chem. and petrochemical	14.27	10.32	17.94	18.86	16.31	17.37	17.05	16.84
Non-ferrous metals	3.96	3.72	2.76	2.06	2.06	1.93	2.00	1.96
Non-metallic minerals	11.83	11.13	10.51	9.54	8.48	7.87	7.84	7.88
Transport equipment	0.87	1.19	-	-	-	-	-	-
Machinery	0.76	1.02	10.06	8.49	9.14	8.39	8.88	9.17
Mining and quarrying	0.50	0.44	0.50	0.39	0.26	0.27	0.30	0.31
Food and tobacco	3.72	3.54	5.01	5.55	4.57	4.61	4.54	4.50
Paper, pulp and printing	5.77	4.50	9.57	9.53	8.24	7.61	7.77	7.67
Wood and wood products	-	-	-	-	-	-	-	-
Construction	3.34	3.49	4.86	4.86	3.84	3.82	3.86	3.92
Textile and leather	5.72	4.00	-	-	-	-	-	-
Non specified/other	19.68	19.59	19.80	20.21	13.26	12.36	15.80	11.71
Electricity consumption (Mtoe)	**35.70**	**44.14**	**64.46**	**81.16**	**82.94**	**80.49**	**85.98**	**80.79**
Total industry (Mtoe)	**25.06**	**28.19**	**29.01**	**31.10**	**26.65**	**24.89**	**28.19**	**24.03**
Iron and steel	6.16	6.32	6.03	5.82	5.43	5.04	5.71	5.80
Chem. and petrochemical	4.39	3.85	5.20	4.95	4.40	4.20	4.40	4.23
Non-ferrous metals	2.48	2.28	1.23	1.32	1.43	1.34	1.46	1.43
Non-metallic minerals	1.19	1.48	2.03	2.02	1.95	1.86	1.97	1.92
Transport equipment	0.87	1.19	-	-	-	-	-	-
Machinery	0.76	1.02	4.84	6.03	6.69	6.10	6.52	6.26
Mining and quarrying	0.16	0.14	0.17	0.12	0.08	0.07	0.08	0.08
Food and tobacco	0.40	0.57	0.93	1.26	1.45	1.44	1.48	1.46
Paper, pulp and printing	1.78	1.99	2.76	3.05	2.79	2.60	2.62	2.52
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	0.20	0.16	0.08	0.07	0.07	0.06
Textile and leather	0.61	0.55	-	-	-	-	-	-
Non specified/other	6.27	8.79	5.63	6.37	2.37	2.15	3.89	0.28
Total industry (TWh)	**291.38**	**327.79**	**337.32**	**361.63**	**309.90**	**289.37**	**327.81**	**279.38**
Iron and steel	71.67	73.50	70.14	67.72	63.10	58.63	66.37	67.41
Chem. and petrochemical	51.06	44.71	60.46	57.54	51.16	48.88	51.11	49.22
Non-ferrous metals	28.78	26.51	14.32	15.33	16.61	15.61	16.93	16.58
Non-metallic minerals	13.85	17.22	23.64	23.45	22.68	21.68	22.92	22.32
Transport equipment	10.06	13.84	-	-	-	-	-	-
Machinery	8.83	11.92	56.25	70.16	77.73	70.92	75.85	72.78
Mining and quarrying	1.85	1.67	1.94	1.34	0.89	0.85	0.89	0.88
Food and tobacco	4.60	6.63	10.78	14.68	16.80	16.71	17.27	16.92
Paper, pulp and printing	20.68	23.13	32.06	35.49	32.44	30.28	30.45	29.29
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	2.32	1.84	0.88	0.77	0.79	0.75
Textile and leather	7.13	6.42	-	-	-	-	-	-
Non specified/other	72.87	102.24	65.42	74.08	27.59	25.04	45.23	3.21

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**92.47**	**129.36**	**175.07**	**202.95**	**228.60**	**234.33**	**237.77**	**228.00**	**229.91**
Nuclear	3.89	15.51	31.48	41.19	45.08	47.94	48.85	48.96	48.96
Hydro	22.48	28.67	36.45	42.08	44.85	45.87	45.84	43.37	44.17
of which: pumped storage	*-*	*11.50*	*17.01*	*22.29*	*24.31*	*25.49*	*25.46*	*25.37*	*26.27*
Geothermal	0.02	0.13	0.24	0.47	0.50	0.50	0.50	0.50	0.50
Solar	-	-	-	-	-	-	-	0.01	0.06
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	0.01	0.09	0.09
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	66.08	85.05	106.91	119.20	138.16	140.02	142.57	135.07	136.13
of which:									
Single-fired:									
Coal and coal products	5.64	5.26	7.66	14.87	25.42	35.34	35.94	35.94	35.94
Liquid fuels	57.34	59.48	50.83	49.20	51.12	41.55	41.16	41.16	41.16
Natural gas	3.10	20.31	15.62	20.82	35.27	44.75	46.68	46.68	46.68
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	32.81	34.31	26.36	18.39	18.80	11.30	12.36
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	105.60	117.20	136.93	138.53	141.09	133.59	133.09
Internal combustion	-	-	0.51	0.63	0.72	0.80	0.80	0.80	0.93
Gas turbine	-	-	0.80	1.37	0.51	0.69	0.69	0.69	2.11
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	143.72	171.13	173.07	179.00	159.13	177.75	156.60
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**11.74**	**14.34**	**19.66**	**24.57**	**31.89**	**46.20**	**46.71**	**59.03**	**62.15**
Nuclear	0.01	0.18	0.17	0.17	0.17	-	-	-	-
Hydro	1.07	1.11	1.38	1.37	1.47	1.47	1.40	4.37	4.25
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	0.03	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Solar	-	-	-	0.04 e	0.33 e	2.14 e	2.63 e	3.61 e	4.85 e
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.08	1.75	1.99	2.21	2.33
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	10.66	13.02	18.08	22.95	29.81	40.80	40.66	48.81	50.68
of which:									
Single-fired:									
Coal and coal products	3.20	3.92	..	..	..	..	..	..	..
Liquid fuels	7.46	9.11	..	..	..	..	..	..	..
Natural gas	-	-	..	..	..	..	..	..	..
Biofuels & waste	-	-	..	..	..	..	..	..	..
Multi-fired:									
Solid / liquid	-	-	..	..	..	..	..	..	..
Solid / natural gas	-	-	..	..	..	..	..	..	..
Liquid / natural gas	-	-	..	..	..	..	..	..	..
Solid / liquid / gas	-	-	..	..	..	..	..	..	..
Type of generation									
Steam	9.67	11.35	14.20	15.68	19.54	27.95	28.01	35.67	37.75
Internal combustion	0.77	1.02	1.57	3.40	4.10	5.11	4.87	4.76	4.63
Gas turbine	0.22	0.66	2.32	3.38	4.84	6.24	6.29	6.88	6.80
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	0.49	1.32	1.50	1.50	1.50	1.50
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				1000 Japanese Yen/ unit					
Steam coal (t)	15	16	12	4	..	..	..	..	..
Heavy fuel oil (t)	23	57	30	..	..	..	..	..	..
Natural gas (MWh)(1)	2	4	2	..	..	..	..	..	..
				1000 Japanese Yen/ toe					
Steam coal	27.23	29.22	21.07	7.92	..	..	..	..	..
Heavy fuel oil	24.00	59.10	31.24	..	..	..	..	..	..
Natural gas(2)	21.98	49.26	26.89	..	..	..	..	..	..
End-user prices of electricity									
				1000 Japanese Yen/ MWh					
Industry									
Price	13.10	19.60	17.70	15.44	14.40	14.76	13.55	14.29	15.50
of which: tax	0.40	0.70	0.95	1.16	1.06	1.08	1.02	1.06	1.11
Household									
Price	19.60	26.60	25.60	23.08	21.30	21.30	20.37	20.83	22.09
of which: tax	0.80	1.10	1.15	1.53	1.39	1.39	1.35	1.37	1.43

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	21.54	41.21	93.09	188.16	249.96	260.44	263.00	9.0	4.8
GDP (billion 2005 USD)	81.55	142.47	360.30	678.27	1019.09	1056.12	1077.71	9.1	5.1
TPES/GDP(1)	0.26	0.29	0.26	0.28	0.25	0.25	0.24	-0.1	-0.3
Population (millions)	34.10	38.12	42.87	47.01	49.41	49.78	49.96	1.4	0.7
TPES/population(2)	0.63	1.08	2.17	4.00	5.06	5.23	5.26	7.5	4.1
TPES/GDP (2005 = 100)	106	116	104	112	99	99	98	-0.1	-0.3
Ele.TFC/GDP(2005=100)(3)	37	54	62	92	104	105	..	3.0	..
Ele.TFC/population(4)	376	859	2202	5599	9097	9457	..	11.0	..
Elec. generated (TWh)(5)	14.83	37.24	105.37	288.53	496.72	520.05	528.41	12.2	7.6

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**21.54**	**41.21**	**93.09**	**188.16**	**249.96**	**260.44**	**263.00**	**9.0**	**4.8**
Coal	8.13	13.49	25.56	41.95	73.43	80.24	78.09	7.0	5.2
Oil	13.31	26.65	49.73	99.04	95.11	93.71	94.73	8.1	3.0
Natural gas	-	-	2.72	17.01	38.63	41.58	44.97	-	13.6
Biofuels & waste	-	-	0.73	1.38	3.45	3.86	4.17	-	8.2
Nuclear	-	0.91	13.78	28.40	38.73	40.32	40.37	-	5.0
Geothermal	-	-	-	-	0.03	0.05	0.07	-	-
Solar, wind, tide(1)	-	-	0.01	0.04 e	0.18	0.21	0.20	-	14.7
Hydro	0.11	0.17	0.55	0.34	0.32	0.40	0.32	9.9	-2.5
Net electricity imports(2)	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	0.09	0.09	0.09	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**14.8**	**37.2**	**105.4 e**	**290.1**	**389.4**	**499.5**	**523.3**	**531.0**
Nuclear	-	3.5	52.9	109.0	146.8	148.6	154.7	154.9
Hydro	1.3	2.0	6.4	5.6	5.2	6.5	7.8	6.3
of which:								
pumped storage production	-	-	-	*1.6*	*1.5*	*2.8*	*3.2*	*2.6*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	0.0 e	0.0 e	0.0	0.8	0.9	0.9
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.0 e	0.1	0.8	0.9	0.9
Combustible fuels	13.5 e	31.8 e	46.1	175.5 e	237.2	342.5	358.5	367.6
Coal	*1.3 e*	*2.5 e*	*17.7*	*111.4*	*148.8*	*219.3*	*224.5*	*222.8*
Oil	*12.2*	*29.3*	*18.9 e*	*34.6*	*26.0 e*	*18.9 e*	*16.6*	*21.8*
Natural gas	-	-	*9.6*	*29.5*	*62.2*	*103.2*	*115.7*	*121.2*
Biofuels & waste	-	-	-	*0.1 e*	*0.3 e*	*1.1*	*1.6*	*1.8*
Other (e.g. fuel cells)	-	-	-	-	0.0	0.3	0.4	0.4
- Own use by power plant	0.7 e	2.0 e	5.1	12.4	16.6	19.1	20.1	..
Net production	**14.1 e**	**35.2 e**	**100.3 e**	**277.7**	**372.8**	**480.4**	**503.2**	**..**
Nuclear	..	3.3 e	50.4	103.5	139.3	141.9	147.8	..
Hydro	..	2.0 e	6.3	5.6	5.1	6.4	7.8	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	0.0 e	0.0 e	0.0	0.8	0.9	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.0 e	0.1	0.8	0.9	..
Combustible fuels	..	30.0 e	43.6	168.6 e	228.2	330.2	345.4	..
Other (e.g. fuel cells)	..	-	-	-	0.0	0.3	0.4	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	0.1	2.3	2.1	2.0	3.7	4.3	3.4
+ Imports	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**14.1 e**	**35.1 e**	**98.0 e**	**275.6**	**370.8**	**476.7**	**498.9**	**..**
- Transmission & distr. losses	1.3 e	2.4 e	3.6	12.5	13.7	18.0	17.4	..
- Statistical difference	-	-	0.0 e	-	-0.5	0.2	0.5	..
Total consumption	**12.8**	**32.7**	**94.4**	**263.1**	**357.6**	**458.5**	**481.0**	**..**
- Energy industry consumption[2]	-	-	-	-	-	9.1	10.3	..
Final consumption	**12.8**	**32.7**	**94.4**	**263.1**	**357.6**	**449.3**	**470.6**	**..**
Industry	8.8	22.7	57.8	150.4	184.0	228.1	246.0	..
Transport	0.1	0.4	1.0	2.0	2.6	2.2	2.2	..
Commercial & publ. serv.	2.2	4.1	16.4	68.3	113.2	147.7	149.9	..
Residential	1.5	5.3	17.7	37.1	50.9	61.3	61.9	..
Agriculture & fishing	0.1	0.2	1.5	5.3	7.0	10.0	10.6	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source
(TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**16.84**	**37.24**	**105.37**	**290.13**	**454.50**	**499.51**	**523.29**	**12.1**	**7.9**
- Hydro pumped storage	-	-	-	*1.60*	*2.83*	*2.79*	*3.23*	-	-
Total generation(1)	**16.84**	**37.24**	**105.37**	**288.53**	**451.68**	**496.72**	**520.05**	**12.1**	**7.9**
Main activity producers									
Gross production	16.81	37.18	99.48	262.37	430.62	471.03	493.60	11.8	7.9
- Hydro pumped storage	-	-	-	*1.60*	*2.83*	*2.79*	*3.23*	-	-
Total generation(1)	16.81	37.18	99.48	260.77	427.79	468.24	490.36	11.8	7.9
Nuclear	-	3.48	52.89	108.96	147.77	148.60	154.72	-	5.2
Hydro	1.91	1.98	6.36	4.01	2.81	3.68	4.60	7.8	-1.5
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.01 e	1.27	1.67	1.84	-	-
Coal	0.72	2.42	11.77	97.55	193.20	199.70	203.97	19.1	14.5
Oil	14.19	29.30	18.86	21.75	14.21	13.17	11.47	1.8	-2.3
Natural gas	-	-	9.60	28.50	68.10	100.90	113.15	-	12.5
Biofuels & waste	-	-	-	-	0.43	0.51	0.62	-	-
Autoproducers									
Gross production	0.03	0.06	5.89	27.75	23.89	28.48	29.69	40.7	8.0
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.03	0.06	5.89	27.75	23.89	28.48	29.69	40.7	8.0
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.00	0.01 e	0.16	0.26	0.39	-	32.8
Coal	0.03 e	0.06 e	5.89	13.85	15.67	19.58	20.55	40.7	6.1
Oil	-	-	-	12.83	5.60	5.77	5.17	-	-
Natural gas	-	-	-	0.97	2.17	2.28	2.57	-	-
Biofuels & waste	-	-	-	0.09	0.29	0.60	1.02	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers
(GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**25**	**60**	**5729 e**	**27754 e**	**23886**	**28482**	**29350**	**8.1**
Total energy	**-**	**-**	**-**	**-**	**905**	**878**	**832**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	905	878	832	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**-**	**-**	**5728**	**27338 e**	**22590**	**27202**	**27847**	**7.8**
Iron and steel	-	-	5728	13156 e	13919	15996	15884	5.0
Chemical and petrochemical	-	-	-	8147 e	5067	7465	7311	-
Non-ferrous metals	-	-	-	376 e	259	333	561	-
Non-metallic minerals	-	-	-	70 e	163	134	121	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	1432 e	94	14	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	415 e	437	496	1339	-
Pulp and printing	-	-	-	1317 e	699	835	736	-
Wood and wood products	-	-	-	97 e	44	32	56	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	2328 e	1908	1897	1839	-
Non specified/other industries	-	-	-	-	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**25**	**60**	**1 e**	**416 e**	**391**	**402**	**671**	**36.3**
Commerce and pub. services	-	-	1 e	140 e	391	402	671	36.3
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	25	60	-	276 e	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**-**	**140095 e**	**192499 e**	**191755 e**	**203494 e**	**203494**	**-**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	33102	35225	53342	58543	58543	-
Oil	-	-	65755	100660 e	52716	49648	49648	-
Natural gas	-	-	37885	48116	61768	68453	68453	-
Biofuels & waste	-	-	3353 e	7996 e	20102	23083	23083	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	502 e	3827 e	3767 e	3767	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	-	47562	64280 e	69404	71471	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	9733	16101 e	7821	5399	..	-
Natural gas	-	-	37829	47887	61068	65435	..	-
Biofuels & waste	-	-	-	292	515	637	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	92533 e	128219 e	122351 e	132023 e	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	33102	35225	53342	58543	..	-
Oil	-	-	56022	84559 e	44895	44249	..	-
Natural gas	-	-	56	229	700	3018	..	-
Biofuels & waste	-	-	3353 e	7704 e	19587	22446	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	502 e	3827 e	3767 e	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**3.36**	**7.66**	**12.52**	**40.98**	**67.84**	**76.42**	**81.07**	**8.0**	**9.3**
Coal	0.34 e	0.84 e	5.98	27.06	49.75	52.43	55.57	18.5	11.2
Oil	3.02	6.82	4.51	8.04	5.03	5.08	4.34	2.4	-0.2
Natural gas	-	-	2.04	5.76	12.39	18.00	20.03	-	11.5
Biofuels & waste	-	-	-	0.12	0.67	0.91 e	1.12 e	-	-
of which: ***main activity prod.***									
Total	**..**	**7.64**	**10.47**	**36.48**	**61.13**	**68.15**	**71.43**	**..**	**9.6**
Coal	..	0.82	3.92	24.45	45.39	47.11	49.40	..	12.8
Oil	..	6.82	4.51	6.27	3.64	3.37	2.44	..	-2.9
Natural gas	..	-	2.04	5.76	11.98	17.57	19.45	..	11.3
Biofuels & waste	..	-	-	-	0.12	0.11	0.14	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**0.91**	**13.78**	**28.40**	**38.56**	**38.79**	**40.40**	**-**	**5.3**
Nuclear	-	0.91	13.78	28.40	38.51	38.73	40.32	-	5.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	0.00	0.00	0.05	0.07	0.08	-	38.4
Non-Thermal									
Total	**0.11**	**0.17**	**0.55**	**0.35**	**0.31**	**0.40**	**0.50**	**9.9**	**-0.5**
Hydro	0.11	0.17	0.55	0.34	0.24	0.32	0.40	9.9	-1.5
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00 e	0.06	0.07	0.07	-	-
Other (e.g. fuel cells)	-	-	-	-	0.01	0.02	0.03	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	1865	7706	36337	74259	79001	81637	11.9
Fuel input (TJ)	33967	164293	967487	1904165	1949686	2015957	12.7
Electricity production (GWh)	2421	11770	98078	193628	198240	199149	14.4
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	30759	60162	-
Electricity production (GWh)	-	-	-	-	2251	5381	-
Petroleum products							
Fuel input (1000 t)	6704	4434 e	5895 e	3339 e	3069 e	2569	-2.6
Fuel input (TJ)	291058	193646 e	258885	138843 e	128540 e	110117	-2.7
Electricity production (GWh)	29297	18857 e	26537	15066 e	14030 e	12798	-1.8
Natural gas[2]							
Fuel input (TJ)	-	102859	140950	418876	624831	692637	9.5
Electricity production (GWh)	-	9604	17617	55445	82679	92091	11.4
Wood and other solid waste							
Fuel input (TJ)	-	-	433 e	169	2781	3002	-
Electricity production (GWh)	-	-	46	18	241	294	-
Industrial waste							
Fuel input (TJ)	-	-	-	128	932	2688	-
Electricity production (GWh)	-	-	-	14	103	245	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	28	190	-
Electricity production (GWh)	-	-	-	-	2	20	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	112	4220	3889	4686	-
Electricity production (GWh)	-	-	11	469	430	504	-
Total combustible fuels[3]							
Electricity production (GWh)	31718	40231	142289 e	264640	297976	310482	10.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	1939	3421	4169	5137	-
Fuel input (TJ)	-	-	53580	82201	101176	128389	-
Electricity production (GWh)	-	-	2037	3304	5029	6255	-
CHP Heat production (TJ)	-	-	33102	50690	53342	57270	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	86	-
Fuel input (TJ)	-	-	-	-	-	2927	-
Electricity production (GWh)	-	-	-	-	-	87	-
CHP Heat production (TJ)	-	-	-	-	-	811	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	724 e	85897	94717	97663	116116	122612	1.7
Electricity production (GWh)	60 e	5891	11280	11932	13756	13646	4.1
CHP Heat production (TJ)	-	-	-	488	-	462	-
Petroleum products							
Fuel input (1000 t)	-	-	3396 e	2319	2324	2018	-
Fuel input (TJ)	-	-	154012	109274	100339	96201	-
Electricity production (GWh)	-	-	8044	4745	4905	3833	-
CHP Heat production (TJ)	-	-	59190	63464	49799	47739	-
Natural gas[2]							
Fuel input (TJ)	-	-	123037	153913	206618	235783	-
Electricity production (GWh)	-	-	11844	14833	20505	23626	-
CHP Heat production (TJ)	-	-	36767	51117	57308	65264	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	2124	1802	1964	-
Electricity production (GWh)	-	-	-	28	21	87	-
CHP Heat production (TJ)	-	-	-	1333	1077	988	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	25	1815	-
Electricity production (GWh)	-	-	-	-	1	129	-
CHP Heat production (TJ)	-	-	-	-	9	1081	-
Municipal waste							
Fuel input (TJ)	-	-	344 e	7391	7125	11497	-
Electricity production (GWh)	-	-	36 e	186	207	253	-
CHP Heat production (TJ)	-	-	-	2516	2295	4575	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	1131	1054	-
Electricity production (GWh)	-	-	-	-	102	107	-
CHP Heat production (TJ)	-	-	-	-	515	401	-
Total combustible fuels[3]							
Electricity production (GWh)	60 e	5891	33241 e	35028	44526	48023	10.5
CHP Heat production (TJ)	-	-	129059	169608	164345	178591	-

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	177	117	99	50	-
Fuel input (TJ)	-	-	7954	4853	4103	2079	-
Heat production (TJ)	-	-	6565	3829	2917	1909	-
Natural gas[2]							
Fuel input (TJ)	-	-	1235	3769	6183	3695	-
Heat production (TJ)	-	-	1118	3040	4460	3189	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	1206	-
Heat production (TJ)	-	-	-	-	-	564	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	2571	7531	-
Heat production (TJ)	-	-	-	-	2057	6025	-
Municipal waste							
Fuel input (TJ)	-	-	4191	12926	17686	11195	-
Heat production (TJ)	-	-	3353 e	10341	14149	9345	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	1060	-	130	-
Heat production (TJ)	-	-	-	788	-	104	-
Total combustible fuels[3]							
Heat production (TJ)	-	-	11036 e	17998	23583	21136	-

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.
(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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KOREA
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**17.49**	**31.29**	**64.91**	**127.11**	**147.82**	**157.66**	**161.04**	**8.0**	**4.4**
Geothermal	-	-	-	-	0.02	0.03	0.05	-	-
Solar thermal	-	-	0.01	0.04	0.03	0.03	0.03	-	4.9
Coal	6.49	9.74	11.72	9.07	8.18	9.54	9.61	3.5	-0.9
Oil	9.90	18.73	43.66	79.88	79.70	81.87	82.08	9.1	3.1
Natural gas	-	-	0.67	10.92	18.12	20.58	21.57	-	18.0
Biofuels & waste	-	-	0.73	1.27	2.44	2.63	2.74	-	6.5
Electricity	1.10	2.82	8.12	22.63	34.89	38.64	40.47	12.5	8.0
Heat	-	-	-	3.29	4.44	4.33	4.50	-	-
of which:									
Total industry	**6.42**	**10.31**	**19.26**	**38.47**	**39.96**	**44.98**	**47.20**	**6.7**	**4.4**
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.39	1.35	3.05	8.50	6.91	8.28	8.44	12.9	5.0
Oil	5.27	7.01	10.88	10.97	5.83	5.90	5.19	4.4	-3.5
Natural gas	-	-	0.07	2.88	5.63	7.09	8.27	-	25.3
Biofuels & waste	-	-	0.28	1.05	1.74	1.74	1.70	-	8.9
Electricity	0.76	1.95	4.97	12.93	17.14	19.62	21.16	11.7	7.1
Heat	-	-	-	2.12	2.70	2.34	2.43	-	-
Transport	**2.50**	**4.78**	**14.57**	**26.27**	**29.28**	**29.91**	**29.42**	**10.9**	**3.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.01	0.00	-	-	-	-	-	-	-
Oil	2.48	4.74	14.49	26.09	27.97	28.40	27.87	11.0	3.2
Natural gas	-	-	-	-	0.90	1.02	1.07	-	-
Biofuels & waste	-	-	-	-	0.22	0.30	0.28	-	-
Electricity	0.01	0.03	0.09	0.18	0.19	0.19	0.19	12.9	3.9
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.89**	**2.55**	**8.69**	**17.21**	**19.21**	**20.50**	**20.16**	**14.3**	**4.1**
Geothermal	-	-	-	-	0.02	0.03	0.04	-	-
Solar thermal	-	-	0.00	0.00	0.01	0.01	0.01	-	4.7
Coal	0.10	0.09 e	0.03 e	-	-	-	-	-7.3	-
Oil	0.60	2.10	7.06	9.28	3.40	3.45	2.96	15.6	-4.1
Natural gas	-	-	0.14 e	1.81	3.32	3.53	3.31	-	16.4
Biofuels & waste	-	-	0.05	0.16	0.46	0.55	0.68	-	13.1
Electricity	0.19	0.35	1.41	5.87	11.81	12.70	12.89	12.5	11.1
Heat	-	-	-	0.10	0.19	0.24	0.26	-	-

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**6.19**	**9.26**	**12.94**	**15.03**	**18.64**	**19.86**	**20.14**	**4.4**	**2.1**
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar thermal	-	-	0.01	0.04	0.02	0.02	0.02	-	4.9
Coal	5.99 e	8.30 e	8.64 e	0.57 e	0.89	0.86	0.84	2.2	-10.5
Oil	0.07	0.50	1.92	3.88	2.93	2.98	3.21	21.3	2.5
Natural gas	-	-	0.46 e	6.23	8.26	8.94	8.90	-	15.1
Biofuels & waste	-	-	0.39	0.06	0.02	0.03	0.05	-	-9.2
Electricity	0.13	0.46	1.53	3.19	4.96	5.27	5.32	15.4	6.1
Heat	-	-	-	1.07	1.54	1.76	1.80	-	-
Agriculture & fishing	**0.01**	**0.42**	**1.66**	**3.62**	**2.78**	**3.03**	**2.87**	**37.8**	**2.7**
Geothermal	-	-	-	-	-	-	0.01	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	0.41	1.53	3.16	1.99	2.16	1.93	-	1.1
Natural gas	-	-	-	0.01	0.00	0.00	0.00	-	-
Biofuels & waste	-	-	-	-	-	-	0.02	-	-
Electricity	0.01	0.02	0.13	0.46	0.79	0.86	0.91	18.4	9.9
Heat	-	-	-	-	-	-	-	-	-
Other	**0.35**	**0.90**	**1.06**	**1.47**	**0.94**	**1.01**	**1.15**	**6.8**	**0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.35	0.90	1.06	1.47	0.94	1.01	1.15	6.8	0.4
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**1.13**	**3.06**	**6.73**	**25.03**	**37.01**	**38.36**	**40.10**	**11.04**	**8.87**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**17.49**	**31.29**	**64.91**	**127.11**	**146.88**	**147.82**	**157.66**	**161.04**
Total industry (Mtoe)	**6.42**	**10.31**	**19.26**	**38.47**	**42.53**	**39.96**	**44.98**	**47.20**
Iron and steel	0.50	1.30	2.27	7.10	9.65	8.78	10.44	10.76
Chem. and petrochemical	0.22	0.41	3.68	6.34	7.28	6.87	8.01	9.11
Non-ferrous metals	-	-	0.16	0.26	0.87	1.04	1.02	1.11
Non-metallic minerals	0.10	0.68	3.72	5.53	6.03	5.46	5.66	6.08
Transport equipment	0.02	0.03	0.03	2.36	2.28	2.17	2.55	3.04
Machinery	0.03	0.20	1.87	2.81	5.37	5.24	6.08	6.50
Mining and quarrying	0.04	0.06	0.20	0.13	0.17	0.17	0.23	0.25
Food and tobacco	0.06	0.13	1.35	1.63	1.59	1.69	1.66	1.79
Paper, pulp and printing	0.05	0.13	1.23	2.40	2.21	2.06	2.21	2.15
Wood and wood products	-	0.03	0.12	0.21	0.27	0.28	0.28	0.24
Construction	-	-	0.51	0.45	0.75	0.76	0.82	0.82
Textile and leather	0.13	0.39	2.41	4.23	2.66	2.67	2.57	2.43
Non specified/other	5.26	6.95	1.69	5.00	3.40	2.78	3.44	2.91
Electricity consumption (Mtoe)	**1.10**	**2.82**	**8.12**	**22.63**	**34.37**	**34.89**	**38.64**	**40.47**
Total industry (Mtoe)	**0.76**	**1.95**	**4.97**	**12.93**	**17.23**	**17.14**	**19.62**	**21.16**
Iron and steel	0.11	0.40	0.87	3.09	3.81	3.55	4.24	4.59
Chem. and petrochemical	0.18	0.37	0.94	2.93	2.96	3.02	3.51	3.83
Non-ferrous metals	-	-	-	0.03	0.55	0.69	0.75	0.82
Non-metallic minerals	0.10	0.22	0.48	0.78	1.00	0.98	1.01	1.03
Transport equipment	-	-	-	0.81	1.53	1.47	1.74	1.91
Machinery	0.03	0.20	1.04	2.16	4.32	4.37	5.10	5.56
Mining and quarrying	0.04	0.06	0.09	0.09	0.12	0.12	0.14	0.17
Food and tobacco	0.06	0.13	0.30	0.55	0.67	0.70	0.76	0.81
Paper, pulp and printing	0.05	0.13	0.33	0.82	0.86	0.86	0.88	0.93
Wood and wood products	-	0.03	0.05	0.10	0.14	0.14	0.15	0.16
Construction	-	-	-	-	-	-	-	-
Textile and leather	0.13	0.39	0.82	1.44	1.07	1.05	1.12	1.14
Non specified/other	0.07	0.02	0.05	0.15	0.20	0.19	0.21	0.21
Total industry (TWh)	**8.85**	**22.72**	**57.79**	**150.39**	**200.29**	**199.33**	**228.12**	**246.05**
Iron and steel	1.31	4.68	10.06	35.89	44.30	41.32	49.27	53.36
Chem. and petrochemical	2.05	4.28	10.92	34.04	34.39	35.13	40.86	44.53
Non-ferrous metals	-	-	-	0.31	6.41	8.00	8.75	9.59
Non-metallic minerals	1.14	2.61	5.63	9.03	11.58	11.39	11.75	11.96
Transport equipment	-	-	-	9.37	17.80	17.14	20.21	22.26
Machinery	0.38	2.31	12.09	25.14	50.18	50.85	59.30	64.64
Mining and quarrying	0.44	0.67	1.01	1.00	1.41	1.35	1.68	1.93
Food and tobacco	0.71	1.52	3.54	6.42	7.84	8.18	8.87	9.42
Paper, pulp and printing	0.58	1.53	3.88	9.52	10.02	9.99	10.20	10.77
Wood and wood products	-	0.34	0.62	1.21	1.63	1.62	1.77	1.81
Construction	-	-	-	-	-	-	-	-
Textile and leather	1.47	4.55	9.51	16.75	12.48	12.17	13.05	13.30
Non specified/other	0.77	0.23	0.53	1.70	2.28	2.18	2.42	2.48

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**2.34**	**32.18**	**48.45**	**74.15**	**74.72**	**79.10**	**78.95**
Nuclear	-	-	-	8.62	13.72	17.72	17.72	17.72	18.72
Hydro	-	-	2.34	3.09	3.15	5.51	5.52	5.53	6.42
of which: pumped storage	*-*	*-*	*1.00*	*1.60*	*1.60*	*3.90*	*3.90*	*3.90*	*4.70*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.30	0.42	0.53	0.56
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.19	0.35	0.38	0.41
Other (e.g. fuel cells)	-	-	-	-	-	-	0.02	0.04	0.06
Combustible fuels	-	-	..	20.48	31.59	50.44	50.71	54.91 e	52.80
of which:									
Single-fired:									
Coal and coal products	-	-	..	6.80	12.74	22.58	23.08	24.44	24.87
Liquid fuels	-	-	..	6.12	4.87	5.47	5.50	5.46	5.50
Natural gas	-	-	..	4.49	6.30	21.18	19.55	23.81	22.35
Biofuels & waste	-	-	-	-	-	0.08	0.08	0.09	0.09
Multi-fired:									
Solid / liquid	-	-	..	1.02	1.29	1.13	1.13	1.13 e	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	..	2.05	6.39	-	1.37	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	..	14.03	20.06	33.09	32.78	33.40	32.38
Internal combustion	-	-	..	0.26	0.27	0.14	0.35	0.35	0.36
Gas turbine	-	-	-	-	-	0.17	-	-	-
Combined cycle	-	-	..	6.18	11.26	17.04	17.58	21.17 e	20.06
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	29.88	41.01	62.79	66.80	71.31	73.14
Available capacity	..	..	..	31.97	46.08	68.52	72.07	75.75	76.13

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**-**	**5.24**	**5.71**	**5.89**	**5.60**	**5.70**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.06	0.11	0.12	0.18
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.01	0.11	0.01	-	0.02
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	0.01
Combustible fuels	-	-	..	..	5.23	5.54	5.78	5.48	5.50
of which:									
Single-fired:									
Coal and coal products	-	-	..	..	0.09 e	3.70	3.64	3.85	3.93
Liquid fuels	-	-	..	..	3.66 e	1.66	2.02	1.39	1.27
Natural gas	-	-	..	..	0.10 e	0.09	0.05	0.09	0.09
Biofuels & waste	-	-	..	..	0.48 e	0.09	0.07	0.14	0.21
Multi-fired:									
Solid / liquid	-	-	..	..	0.32 e	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	..	..	0.58 e	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	..	..	4.87 e	5.04	5.35	5.10	5.13
Internal combustion	-	-	-	-	-	0.03	-	0.02	-
Gas turbine	-	-	-	-	-	0.38	0.33	0.26	0.28
Combined cycle	-	-	-	-	0.36 e	0.09	0.09	0.09	0.09
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
1000 South Korean Wons/ unit									
Steam coal (t)	..	..	..	..	100	105	..	..	..
Heavy fuel oil (t)	..	152	93	312	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	63.95	49.62	..	..	..
1000 South Korean Wons/ toe									
Steam coal	..	..	..	..	152	159	..	..	..
Heavy fuel oil	..	165	101	339	..	..	..	..	..
Natural gas(2)	..	..	..	..	826	641	..	..	..
End-user prices of electricity									
1000 South Korean Wons/ MWh									
Industry									
Price	20.72	49.30	49.50	58.30	66.24	73.69	..	..	..
of which: tax	..	..	..	..	..	..	..	..	..
Household									
Price	32.20	59.60	68.10	94.72	97.58	98.07	96.10	98.20	104.80
of which: tax	..	..	..	..	..	..	..	..	..

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	4.43	3.56	3.39	3.34	4.22	4.17	4.08	-1.6	0.8
GDP (billion 2005 USD)	10.94	11.92	19.33	31.59	41.26	41.94	42.07	3.4	3.6
TPES/GDP(1)	0.41	0.30	0.18	0.11	0.10	0.10	0.10	-4.8	-2.7
Population (millions)	0.35	0.36	0.38	0.44	0.51	0.52	0.53	0.5	1.5
TPES/population(2)	12.63	9.78	8.87	7.63	8.31	8.04	7.70	-2.1	-0.6
TPES/GDP (2005 = 100)	348	257	151	91	88	85	83	-4.8	-2.7
Ele.TFC/GDP(2005=100)(3)	166	184	131	112	98	95	..	-1.4	..
Ele.TFC/population(4)	8456	9830	10865	13220	12955	12511	..	1.5	..
Elec. generated (TWh)(5)	1.39	0.92	0.62	0.42	3.23	2.65	2.74	-4.6	7.0

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**4.43**	**3.56**	**3.39**	**3.34**	**4.22**	**4.17**	**4.08**	**-1.6**	**0.8**
Coal	2.44	1.82	1.11	0.11	0.07	0.06	0.05	-4.5	-12.8
Oil	1.60	1.04	1.48	2.00	2.45	2.54	2.46	-0.5	2.3
Natural gas	0.22	0.42	0.43	0.67	1.20	1.03	1.05	4.1	4.2
Biofuels & waste	-	0.02	0.02	0.05	0.14	0.14	0.14	-	8.7
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	-	0.00	0.01	0.01	0.01	-	-
Hydro	0.00	0.01	0.01	0.01	0.01	0.00	0.01	2.4	1.5
Net electricity imports(2)	0.18	0.24	0.34	0.49	0.35	0.39	0.35	3.9	0.2
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**2.2**	**1.1**	**1.4**	**1.2**	**4.1**	**4.6**	**3.7**	**3.8**
Nuclear	-	-	-	-	-	-	-	-
Hydro	0.8	0.3	0.8	0.9	0.9	1.5	1.1	1.2
of which:								
pumped storage production	*0.8*	*0.2*	*0.8*	*0.7*	*0.8*	*1.4*	*1.1*	*1.1*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.0	0.0	0.0	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.0	0.1	0.1	0.1	0.1
Combustible fuels	1.3	0.8	0.6	0.3	3.2	3.0	2.5	2.5
Coal	*0.8*	*0.5*	*0.5*	-	-	-	-	-
Oil	*0.4*	*0.1*	*0.0*	-	*0.0*	*0.0*	*0.0*	*0.0*
Natural gas	*0.1*	*0.2*	*0.0*	*0.2*	*3.1*	*2.9*	*2.3*	*2.4*
Biofuels & waste	-	*0.0*	*0.0*	*0.1*	*0.1*	*0.1*	*0.2*	*0.2*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	0.1	0.1	0.0	0.0	0.0	0.0	0.0	..
Net production	**2.1**	**1.1**	**1.3**	**1.1**	**4.1**	**4.6**	**3.7**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	0.3	0.8	0.9	0.9	1.5	1.1	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	0.0	0.0	0.0	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.0	0.1	0.1	0.1	..
Combustible fuels	..	0.8	0.5	0.3	3.2	3.0	2.5	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	1.1	0.3	1.0	1.0	1.1	1.9	1.5	1.5
+ Imports	2.8	3.0	4.7	6.4	6.4	7.3	7.1	6.7
- Exports	0.8	0.2	0.7	0.7	3.1	3.2	2.6	2.6
Electrical energy supplied	**3.1**	**3.6**	**4.2**	**5.8**	**6.3**	**6.7**	**6.6**	**..**
- Transmission & distr. losses	0.1	0.0	0.1	0.0	0.1	0.1	0.1	..
- Statistical difference	-	-	-0.0	0.0	-0.0	0.0	0.0	..
Total consumption	**3.0**	**3.6**	**4.1**	**5.8**	**6.2**	**6.6**	**6.5**	**..**
- Energy industry consumption[2]	-	-	-	-	-	-	-	..
Final consumption	**3.0**	**3.6**	**4.1**	**5.8**	**6.2**	**6.6**	**6.5**	**..**
Industry	2.4	2.5	2.8	3.2	3.2	3.6	3.3	..
Transport	0.0	0.0	0.1	0.1	0.1	0.1	0.1	..
Commercial & publ. serv.	-	0.5	0.6	1.6	2.0	2.0	2.2	..
Residential	0.2	0.5	0.6	0.8	0.8	0.9	0.8	..
Agriculture & fishing	-	0.1	0.1	0.0	0.0	0.0	0.0	..
Sector non specified	0.4	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**2.08**	**1.11**	**1.38**	**1.17**	**3.88**	**4.59**	**3.72**	**-2.5**	**4.8**
- Hydro pumped storage	*0.84*	*0.19*	*0.75*	*0.75*	*0.73*	*1.36*	*1.07*	*-0.7*	*1.7*
Total generation(1)	**1.24**	**0.92**	**0.62**	**0.42**	**3.15**	**3.23**	**2.65**	**-4.2**	**7.1**
Main activity producers									
Gross production	0.92	0.32	0.85	0.98	3.58	4.26	3.37	-0.5	6.8
- Hydro pumped storage	*0.84*	*0.19*	*0.75*	*0.75*	*0.73*	*1.36*	*1.07*	*-0.7*	*1.7*
Total generation(1)	0.08	0.13	0.10	0.23	2.86	2.90	2.30	1.2	16.0
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.08	0.10	0.07	0.12	0.10	0.10	0.05	-1.3	-1.0
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.03	0.06	0.06	0.06	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	0.00	0.00	-	-
Natural gas	-	-	-	0.03	2.63	2.67	2.08	-	-
Biofuels & waste	-	0.03	0.03	0.05	0.07	0.07	0.10	-	5.3
Autoproducers									
Gross production	1.16	0.79	0.52	0.19	0.30	0.34	0.35	-4.9	-1.9
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	1.16	0.79	0.52	0.19	0.30	0.34	0.35	-4.9	-1.9
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.00	0.01	0.01	0.01	0.00	-	1.4
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.02	0.02	0.03	-	-
Coal	0.71	0.47	0.48	-	-	-	-	-2.5	-
Oil	0.33	0.10	0.01	-	-	-	-	-20.1	-
Natural gas	0.12	0.22	0.03	0.18	0.22	0.25	0.26	-7.6	10.2
Biofuels & waste	-	-	-	0.00	0.05	0.06	0.06	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**1096**	**752**	**489**	**194**	**295**	**336**	**349**	**-1.6**
Total energy	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**1096**	**752**	**486**	**141**	**88**	**117**	**119**	**-6.5**
Iron and steel	1096	670	464	-	-	-	-	-
Chemical and petrochemical	-	55	22	141	88	117	119	8.4
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	27	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	-	-	-	-
Pulp and printing	-	-	-	-	-	-	-	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**3**	**53**	**207**	**219**	**230**	**23.0**
Commerce and pub. services	-	-	-	-	-	-	-	-
Residential	-	-	3	6	26	29	30	11.6
Agriculture and fishing	-	-	-	5	53	56	55	-
Sector non specified	-	-	-	42	128	134	145	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**-**	**320**	**926**	**1221**	**1090**	**1094**	**-**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-
Oil	-	-	32	17	11	11	8	-
Natural gas	-	-	284	869	1096	956	959	-
Biofuels & waste	-	-	4	40	114	123	127	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	-	320	926	1188	1053	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	32	17	11	11	..	-
Natural gas	-	-	284	869	1096	956	..	-
Biofuels & waste	-	-	4	40	81	86	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	-	33	37	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	33	37	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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LUXEMBOURG
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.44**	**0.27**	**0.19**	**0.10**	**0.53**	**0.56**	**0.47**	**-4.8**	**4.4**
Coal	0.29	0.16	0.15	-	-	-	-	-3.7	-
Oil	0.11	0.02	0.00	0.00	0.00	-	0.00	-19.2	-4.8
Natural gas	0.04	0.07	0.01	0.07	0.50	0.52	0.43	-8.2	19.8
Biofuels & waste	-	0.02	0.02	0.03	0.04	0.04	0.04	-	2.5
of which: ***main activity prod.***									
Total	**..**	**0.02**	**0.02**	**0.04**	**0.47**	**0.43**	**0.34**	**..**	**13.8**
Coal	..	-	-	-	-	-	-	..	-
Oil	..	-	-	0.00	0.00	-	0.00	..	-
Natural gas	..	-	-	0.01	0.44	0.40	0.31	..	-
Biofuels & waste	..	0.02	0.02	0.03	0.03	0.03	0.03	..	1.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**0.00**	**0.00**	**0.00**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.00	0.00	0.00	-	-
Non-Thermal									
Total	**0.00**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**0.01**	**2.4**	**2.7**
Hydro	0.00	0.01	0.01	0.01	0.01	0.01	0.00	2.4	-0.9
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00	0.01	0.00	0.01	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	15	-	-	-	-	-	-
Fuel input (TJ)	440	-	-	-	-	-	-
Electricity production (GWh)	27	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	6167	6378	-	-	-	-	-
Electricity production (GWh)	447	477	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	24	3	-	-	-	-	-
Fuel input (TJ)	1005	117	-	-	-	-	-
Electricity production (GWh)	100	9	-	-	-	-	-
Natural gas (1)							
Fuel input (TJ)	3107	448	-	18424	18676	14420	18.0
Electricity production (GWh)	216	34	-	2506	2533	1949	21.3
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	858	954	1176	1224	1113	1201	1.1
Electricity production (GWh)	30	34	52	66	74	100	5.3
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	820	554	52	2572	2607	2049	6.4

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	1	1	c	1	-
Fuel input (TJ)	-	-	47	62	7	7	-
Electricity production (GWh)	-	-	-	-	1	1	-
CHP Heat production (TJ)	-	-	22	29	3	3	-
Natural gas(1)							
Fuel input (TJ)	-	-	3086	4602	5554	5455	-
Electricity production (GWh)	-	-	215	337	385	391	-
CHP Heat production (TJ)	-	-	272	905	1061	930	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	19	220	306	313	-
Electricity production (GWh)	-	-	4	53	55	56	-
CHP Heat production (TJ)	-	-	-	-	33	37	-
Total combustible fuels(2)							
Electricity production (GWh)	-	-	219	390	441	448	-
CHP Heat production (TJ)	-	-	294	934	1097	970	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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LUXEMBOURG
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	c	-	-
Fuel input (TJ)	-	-	13	14	12	12	-
Heat production (TJ)	-	-	10	10	8	8	-
Natural gas(1)							
Fuel input (TJ)	-	-	20	46	c	-	-
Heat production (TJ)	-	-	12	28	35	26	-
Wood and other solid waste							
Fuel input (TJ)	-	-	5	96	95	101	-
Heat production (TJ)	-	-	4	81	81	86	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Heat production (TJ)	-	-	26	119	124	120	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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LUXEMBOURG
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**2.87**	**2.71**	**2.78**	**3.24**	**3.66**	**3.89**	**3.89**	**-0.2**	**1.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.98	1.04	0.52	0.11	0.07	0.07	0.06	-3.6	-9.9
Oil	1.46	1.01	1.48	2.00	2.32	2.45	2.54	0.1	2.6
Natural gas	0.18	0.36	0.42	0.60	0.62	0.68	0.61	5.2	1.8
Biofuels & waste	-	-	-	0.02	0.10	0.11	0.10	-	-
Electricity	0.26	0.31	0.36	0.50	0.53	0.57	0.56	2.0	2.2
Heat	-	-	-	0.01	0.03	0.03	0.03	-	-
of which:									
Total industry	**2.06**	**1.64**	**1.31**	**0.71**	**0.65**	**0.73**	**0.67**	**-2.6**	**-3.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.94	1.02	0.52	0.11	0.07	0.07	0.06	-3.5	-9.9
Oil	0.77	0.17	0.27	0.04	0.01	0.01	0.01	-5.9	-13.8
Natural gas	0.14	0.25	0.28	0.28	0.27	0.29	0.27	4.2	-0.1
Biofuels & waste	-	-	-	0.01	0.03	0.04	0.04	-	-
Electricity	0.20	0.21	0.24	0.28	0.27	0.31	0.28	1.0	0.7
Heat	-	-	-	-	0.00	0.01	0.00	-	-
Transport	**0.23**	**0.43**	**0.88**	**1.61**	**2.07**	**2.19**	**2.32**	**8.1**	**4.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.23	0.43	0.87	1.60	2.02	2.13	2.27	8.2	4.6
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.04	0.04	0.04	-	-
Electricity	0.00	0.00	0.00	0.01	0.01	0.01	0.01	3.1	3.8
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**-**	**0.04**	**0.05**	**0.38**	**0.37**	**0.41**	**0.42**	**-**	**10.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	0.06	0.03	0.06	0.06	-	-
Natural gas	-	-	-	0.17	0.15	0.15	0.14	-	-
Biofuels & waste	-	-	-	0.00	0.00	0.00	0.00	-	-
Electricity	-	0.04	0.05	0.14	0.17	0.17	0.19	-	6.2
Heat	-	-	-	0.01	0.02	0.02	0.02	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**0.51**	**0.53**	**0.50**	**0.47**	**0.52**	**0.51**	**0.43**	**-0.1**	**-0.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	0.03	0.02	0.01	0.00	0.00	0.00	0.00	-9.3	-11.2
Oil	0.42	0.36	0.30	0.23	0.23	0.19	0.15	-1.9	-3.3
Natural gas	0.04	0.11	0.14	0.16	0.20	0.23	0.19	8.0	1.4
Biofuels & waste	-	-	-	0.02	0.02	0.02	0.01	-	-
Electricity	0.02	0.04	0.05	0.07	0.08	0.07	0.07	5.9	1.8
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**0.01**	**0.02**	**0.01**	**0.02**	**0.03**	**0.03**	**0.02**	**-0.9**	**3.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.01	0.01	0.01	0.01	0.02	0.02	0.02	-5.5	5.7
Natural gas	-	-	-	0.00	0.00	0.00	0.00	-	-
Biofuels & waste	-	-	-	0.00	0.01	0.00	0.00	-	-
Electricity	-	0.01	0.01	0.00	0.00	0.00	0.00	-	-2.2
Heat	-	-	-	-	-	-	-	-	-
Other	**0.03**	**0.00**	**-**	**0.01**	**0.00**	**-**	**-**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.00	0.00	-	0.01	0.00	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.03	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.03**	**0.04**	**0.02**	**0.04**	**0.02**	**0.03**	**0.03**	**-1.93**	**1.19**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**2.87**	**2.71**	**2.78**	**3.24**	**3.93**	**3.66**	**3.89**	**3.89**
Total industry (Mtoe)	**2.06**	**1.64**	**1.31**	**0.71**	**0.75**	**0.65**	**0.73**	**0.67**
Iron and steel	1.84	1.37	0.89	0.34	0.42	0.35	0.42	0.35
Chem. and petrochemical	0.08	0.09	0.04	0.05	0.05	0.04	0.05	0.08
Non-ferrous metals	0.00	-	-	-	-	-	-	-
Non-metallic minerals	0.00	0.07	0.09	0.17	0.12	0.11	0.11	0.11
Transport equipment	-	-	-	0.00	0.00	0.00	0.00	0.00
Machinery	0.00	0.01	-	0.01	0.01	0.01	0.01	0.01
Mining and quarrying	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Food and tobacco	0.00	0.01	0.00	0.03	0.02	0.02	0.02	0.02
Paper, pulp and printing	-	-	-	0.02	0.02	0.02	0.01	0.01
Wood and wood products	-	-	-	0.00	0.03	0.02	0.02	0.02
Construction	0.04	0.04	0.02	0.02	0.03	0.02	0.03	0.03
Textile and leather	0.00	0.01	-	0.03	0.03	0.02	0.02	0.02
Non specified/other	0.08	0.04	0.27	0.03	0.02	0.02	0.03	0.02
Electricity consumption (Mtoe)	**0.26**	**0.31**	**0.36**	**0.50**	**0.57**	**0.53**	**0.57**	**0.56**
Total industry (Mtoe)	**0.20**	**0.21**	**0.24**	**0.28**	**0.31**	**0.27**	**0.31**	**0.28**
Iron and steel	0.16	0.14	0.10	0.16	0.18	0.16	0.20	0.16
Chem. and petrochemical	0.02	0.04	-	0.02	0.03	0.03	0.03	0.05
Non-ferrous metals	0.00	-	-	-	-	-	-	-
Non-metallic minerals	0.00	-	-	0.03	0.01	0.01	0.01	0.01
Transport equipment	-	-	-	0.00	0.00	0.00	0.00	0.00
Machinery	0.00	0.01	-	0.01	0.01	0.01	0.01	0.01
Mining and quarrying	0.00	0.00	-	0.00	0.00	0.00	0.00	0.00
Food and tobacco	0.00	0.00	-	0.01	0.01	0.01	0.01	0.01
Paper, pulp and printing	-	-	-	0.01	0.01	0.01	0.01	0.00
Wood and wood products	-	-	-	0.00	0.00	0.00	0.00	0.00
Construction	-	-	-	0.01	0.02	0.02	0.01	0.01
Textile and leather	0.00	0.01	-	0.01	0.01	0.01	0.01	0.01
Non specified/other	0.01	0.01	0.14	0.01	0.01	0.01	0.02	0.01
Total industry (TWh)	**2.37**	**2.47**	**2.81**	**3.24**	**3.60**	**3.10**	**3.61**	**3.25**
Iron and steel	1.89	1.57	1.19	1.84	2.15	1.84	2.30	1.83
Chem. and petrochemical	0.20	0.47	-	0.28	0.40	0.31	0.35	0.57
Non-ferrous metals	0.00	-	-	-	-	-	-	-
Non-metallic minerals	0.05	-	-	0.38	0.14	0.13	0.13	0.13
Transport equipment	-	-	-	0.01	0.04	0.03	0.03	0.03
Machinery	0.04	0.10	-	0.07	0.08	0.07	0.08	0.07
Mining and quarrying	0.04	0.03	-	0.01	0.01	0.01	0.01	0.01
Food and tobacco	0.03	0.05	-	0.15	0.13	0.15	0.15	0.13
Paper, pulp and printing	-	-	-	0.10	0.10	0.09	0.07	0.05
Wood and wood products	-	-	-	0.02	0.02	0.02	0.02	0.02
Construction	-	-	-	0.14	0.26	0.18	0.17	0.16
Textile and leather	0.02	0.16	-	0.17	0.13	0.12	0.14	0.11
Non specified/other	0.09	0.09	1.62	0.08	0.15	0.16	0.19	0.16

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports (1)	**2827**	**3034**	**4678**	**5746**	**6445**	**6830**	**6022**	**7280**	**7096**
Imports from:									
Total from OECD	**-**	**-**	**4678**	**5746**	**6445**	**6830**	**6022**	**7280**	**7096**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	821	1428	1967	1524	906	1118	1319
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	42	-	-	-	-
Germany	-	-	3857	4318	4436	5306	5116	6162	5777
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**2827**	**3034**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**791**	**192**	**746**	**743**	**737**	**2484**	**2604**	**3216**	**2614**
Exports to:									
Total to OECD	**-**	**-**	**746**	**743**	**737**	**2484**	**2604**	**3216**	**2614**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	1649	1877	1855	1546
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	746	743	737	835	727	1361	1068
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**791**	**192**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**0.91**	**1.14**	**1.14**	**1.14**	**1.15**	**1.56**	**1.56**	**1.57**	**1.57**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.91	1.13	1.13	1.13	1.13	1.13	1.13	1.13	1.13
of which: pumped storage	*-*	*1.10*	*1.10*	*1.10*	*1.10*	*1.10*	*1.10*	*1.10*	*1.10*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.01	0.04	0.04	0.04	0.05
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	0.01	0.01	0.01	0.01	0.38	0.38	0.40	0.40
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	0.38	0.38	0.38	0.38
Biofuels & waste	-	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	0.01	0.01	0.01	0.01	0.01	0.01	0.02	0.02
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	-	-	-	0.38	0.38	0.38	0.38
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	0.59	1.07	1.06	1.12	1.10
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.17**	**0.17**	**0.10**	**0.11**	**0.07**	**0.14**	**0.14**	**0.15**	**0.17**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.03	0.03	0.03	0.04
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.17	0.17	0.10	0.11	0.07	0.11	0.12	0.12	0.13
of which:									
Single-fired:									
Coal and coal products	0.05	0.05	0.03	-	-	-	-	-	-
Liquid fuels	0.02	0.02	0.01	-	-	-	-	-	-
Natural gas	-	-	-	0.02	0.07	0.11	0.11	0.11	0.12
Biofuels & waste	-	-	-	-	-	0.01	0.01	0.01	0.01
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	0.10	0.10	0.06	0.09	-	-	-	-	-
Type of generation									
Steam	-	-	0.09	0.09	-	-	-	-	-
Internal combustion	-	-	0.01	0.01	0.04	0.08	0.09	0.09	0.10
Gas turbine	-	-	-	0.01	0.03	0.03	0.03	0.03	0.03
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	..	..	..	..	..	..	..	..	..
Heavy fuel oil (t)	..	131.73	..	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				Euro/ toe					
Steam coal	..	..	..	..	..	..	..	..	..
Heavy fuel oil	..	136.51	..	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	27.30	34.10	..	..	79.10	98.20	86.80	84.70	86.90
of which: tax	-	-	..	..	3.50	4.10	6.70	4.30	4.30
Household									
Price	53.50	62.00	102.60	107.70	147.40	169.80	162.70	158.30	162.80
of which: tax	2.60	2.90	5.80	6.10	18.10	21.80	29.20	22.20	22.40

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

1973

2011

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	52.57	95.12	122.49	145.38	178.92	186.17	191.92	5.1	2.1
GDP (billion 2005 USD)	296.12	457.99	547.80	770.74	920.75	956.82	994.37	3.7	2.7
TPES/GDP(1)	0.18	0.21	0.22	0.19	0.19	0.19	0.19	1.4	-0.7
Population (millions)	53.27	65.70	81.25	98.30	108.29	109.22	110.16	2.5	1.4
TPES/population(2)	0.99	1.45	1.51	1.48	1.65	1.70	1.74	2.5	0.7
TPES/GDP (2005 = 100)	88	103	111	94	97	97	96	1.4	-0.7
Ele.TFC/GDP(2005=100)(3)	48	56	83	95	102	107	..	3.2	..
Ele.TFC/population(4)	593	870	1234	1651	1921	2069	..	4.4	..
Elec. generated (TWh)(5)	37.10	66.96	115.84	204.18	271.05	295.84	296.01	6.9	4.4

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**52.57**	**95.12**	**122.49**	**145.38**	**178.92**	**186.17**	**191.92**	**5.1**	**2.1**
Coal	1.84	2.37	3.47	7.11	9.50	10.01	9.90	3.8	4.9
Oil	32.47	64.45	80.26	90.23	97.24	100.09	104.93	5.5	1.2
Natural gas	10.49	19.13	23.12	28.92	53.26	56.22	58.10	4.8	4.3
Biofuels & waste	6.21	6.88	8.55	8.94	8.36	8.27	8.45	1.9	-0.1
Nuclear	-	-	0.77	2.14	1.53	2.63	2.29	-	5.1
Geothermal	0.14	0.79	4.41	5.07	5.69	5.59	5.00	22.6	0.6
Solar, wind, tide(1)	-	-	0.02	0.05	0.23	0.28	0.44	-	15.8
Hydro	1.39	1.45	2.02	2.85	3.19	3.12	2.74	2.2	1.4
Net electricity imports(2)	0.03	0.05	-0.12	0.08	-0.08	-0.05	0.08	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**37.1**	**67.0**	**115.8**	**204.2**	**243.8**	**271.1**	**295.8**	**296.0**
Nuclear	-	-	2.9	8.2	10.8	5.9	10.1	8.8
Hydro	16.2	16.9	23.5	33.1	27.7	37.1	36.3	31.9
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	0.2	0.9	5.1	5.9	7.3	6.6	6.5	5.8
Solar	-	-	0.0	0.0	0.0	0.0	0.0	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.0	0.0	1.2	1.6	3.3
Combustible fuels	20.8	49.2	84.3	156.9	198.0	220.2	241.3	246.2
Coal	*0.2*	*-*	*7.8*	*19.4*	*33.1*	*32.6*	*34.1*	*34.1*
Oil	*15.3*	*38.8*	*62.1*	*94.3*	*66.8*	*43.9*	*48.4*	*55.7*
Natural gas	*5.3*	*10.4*	*14.5*	*41.5*	*95.1*	*141.0*	*156.3*	*154.6*
Biofuels & waste	*-*	*-*	*-*	*1.7*	*3.1*	*2.7*	*2.5*	*1.9*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	1.2	3.0	5.8	10.0	12.2	11.0	16.8	..
Net production	**35.9**	**64.0**	**110.0**	**194.2**	**231.6**	**260.1**	**279.0**	**..**
Nuclear	..	-	2.8	7.9	10.3	5.7	9.7	..
Hydro	..	16.8	23.4	32.7	27.3	36.8	35.9	..
Geothermal	..	0.9	4.9	5.6	7.0	6.3	6.2	..
Solar	..	-	0.0	0.0	0.0	0.0	0.0	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.0	0.0	1.2	1.6	..
Combustible fuels	..	46.3	78.9	148.0	187.0	210.1	225.5	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	0.3	0.6	0.6	1.1	0.1	0.4	0.6	1.9
- Exports	-	-	1.9	0.2	1.3	1.3	1.2	1.0
Electrical energy supplied	**36.2**	**64.6**	**108.6**	**195.1**	**230.4**	**259.1**	**278.5**	**..**
- Transmission & distr. losses	4.6	7.5	15.0	28.5	37.4	44.3	45.6	..
- Statistical difference	-	-	-6.5	-0.1	-1.3	-0.5	-0.3	..
Total consumption	**31.6**	**57.2**	**100.2**	**166.7**	**194.3**	**215.3**	**233.1**	**..**
- Energy industry consumption[2]	-	-	-	4.5	7.1	7.4	7.2	..
Final consumption	**31.6**	**57.2**	**100.2**	**162.2**	**187.1**	**207.9**	**225.9**	**..**
Industry	18.1	30.2	53.4	99.5	104.5	115.1	124.1	..
Transport	0.4	0.4	0.8	1.1	1.1	1.2	1.1	..
Commercial & publ. serv.	-	7.9	10.9	17.6	19.6	20.9	22.8	..
Residential	8.7	10.0	20.4	36.1	42.5	49.4	52.5	..
Agriculture & fishing	1.7	3.7	6.7	7.9	8.1	8.6	11.2	..
Sector non specified	2.7	4.9	8.0	-	11.4	12.8	14.3	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**40.98**	**66.96**	**115.84**	**204.18**	**261.05**	**271.05**	**295.84**	**6.7**	**4.6**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**40.98**	**66.96**	**115.84**	**204.18**	**261.05**	**271.05**	**295.84**	**6.7**	**4.6**
Main activity producers									
Gross production	38.01	61.87	115.70	192.58	235.11	242.54	266.36	7.2	4.1
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	38.01	61.87	115.70	192.58	235.11	242.54	266.36	7.2	4.1
Nuclear	-	-	2.94	8.22	10.50	5.88	10.09	-	6.1
Hydro	16.60	16.74	23.34	33.08	26.45	36.74	35.80	2.2	2.1
Geothermal	0.46	0.92	5.12	5.90	6.74	6.62	6.51	16.2	1.1
Solar, wind, tide(2)	-	-	-	0.01	0.25	0.17	0.36	-	-
Coal	0.22	-	7.77	18.55	29.06	31.94	33.47	24.9	7.2
Oil	15.80	33.85	62.06	90.05	40.38	37.75	42.47	8.9	-1.8
Natural gas	4.92	10.37	14.46	36.78	121.73	123.45	137.67	7.0	11.3
Biofuels & waste	-	-	-	-	-	-	-	-	-
Autoproducers									
Gross production	2.98	5.09	0.14	11.60	25.94	28.51	29.48	-17.3	28.9
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	2.98	5.09	0.14	11.60	25.94	28.51	29.48	-17.3	28.9
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.11	0.15	0.14	0.06	0.27	0.38	0.47	1.7	5.9
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.00	0.02	0.36	1.10	1.32	-	36.2
Coal	-	-	-	0.89	0.49	0.68	0.66	-	-
Oil	2.87	4.95	-	4.28	5.36	6.13	5.90	-	-
Natural gas	-	-	-	4.69	16.74	17.53	18.61	-	-
Biofuels & waste	-	-	-	1.67	2.72	2.69	2.51	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**2834**	**4851**	**135**	**11133**	**24378**	**26728**	**27844**	**28.9**
Total energy	**-**	**-**	**-**	**4303**	**6894**	**6958**	**7200**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	2028	4299	4278	4356	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	2275	2595	2680	2844	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**-**	**-**	**-**	**6028**	**5979**	**7698**	**9229**	**-**
Iron and steel	-	-	-	953	577	647	605	-
Chemical and petrochemical	-	-	-	2866	2864	3652	4657	-
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	185	206	306	455	-
Food and tobacco	-	-	-	906	1386	1479	1580	-
Pulp and printing	-	-	-	851	649	1273	1530	-
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	75	68	63	62	-
Non specified/other industries	-	-	-	192	229	278	340	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**2834**	**4851**	**135**	**802**	**11505**	**12072**	**11415**	**23.5**
Commerce and pub. services	-	-	-	12	111	68	89	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	2834	4851	135	790	11394	12004	11326	23.5

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**5.60**	**12.60**	**20.37**	**37.15**	**42.62**	**44.39**	**47.59**	**7.9**	**4.1**
Coal	0.05	-	1.82	4.73	7.16	7.88	8.27	23.5	7.5
Oil	3.95	9.77	15.12	22.98	10.61	10.07	11.19	8.2	-1.4
Natural gas	1.61	2.84	3.43	8.68	23.73	25.30	27.06	4.6	10.3
Biofuels & waste	-	-	-	0.76	1.13	1.13	1.08	-	-
of which: ***main activity prod.***									
Total	**..**	**12.60**	**20.37**	**34.13**	**37.31**	**38.95**	**41.84**	**..**	**3.5**
Coal	..	-	1.82	4.37	7.04	7.71	8.11	..	7.4
Oil	..	9.77	15.12	21.94	9.38	8.75	9.93	..	-2.0
Natural gas	..	2.84	3.43	7.81	20.89	22.49	23.81	..	9.7
Biofuels & waste	..	-	-	-	-	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**0.14**	**0.79**	**5.17**	**7.22**	**8.53**	**7.22**	**8.23**	**23.7**	**2.2**
Nuclear	-	-	0.77	2.14	2.74	1.53	2.63	-	6.1
Geothermal	0.14	0.79	4.41	5.07	5.79	5.69	5.59	22.6	1.1
Solar	-	-	0.00	0.00	0.00	0.00	0.00	-	17.8
Non-Thermal									
Total	**1.39**	**1.45**	**2.02**	**2.85**	**2.35**	**3.30**	**3.26**	**2.2**	**2.3**
Hydro	1.39	1.45	2.02	2.85	2.30	3.19	3.12	2.2	2.1
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.00	0.05	0.11	0.14	-	42.3
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	3970	9566	13709	14773	15594	6.7
Fuel input (TJ)	-	76044	183055	295407	324484	340981	7.4
Electricity production (GWh)	-	7774	18547	29086	32020	33547	7.2
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	15461	4409	5610	5340	-
Electricity production (GWh)	-	-	885	463	598	585	-
Petroleum products							
Fuel input (1000 t)	10531	15732	23893	11214	10710	11861	-1.3
Fuel input (TJ)	426631	687823	1074374	469020	443945	492305	-1.6
Electricity production (GWh)	38795	62062	94328	45745	43879	48371	-1.2
Natural gas[2]							
Fuel input (TJ)	132000	159666	403919	1104105	1108506	1259001	10.3
Electricity production (GWh)	10366	14460	41464	138471	140976	156281	12.0
Wood and other solid waste							
Fuel input (TJ)	-	-	31321	45701	45554	43045	-
Electricity production (GWh)	-	-	1655	2627	2583	2404	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	357	1633	1900	2154	-
Electricity production (GWh)	-	-	17	91	106	108	-
Total combustible fuels[3]							
Electricity production (GWh)	49161	84296	156896	216483	220162	241296	5.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**39.74**	**65.92**	**84.32**	**98.28**	**110.22**	**113.61**	**116.07**	**4.5**	**1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.02	0.04	0.16	0.12	0.14	-	10.5
Coal	1.37	1.61	1.76	1.50	1.21	1.78	1.72	1.5	-0.1
Oil	22.18	39.69	51.21	61.66	72.50	73.86	73.94	5.0	1.8
Natural gas	7.26	12.84	14.16	12.95	11.80	12.74	13.65	4.0	-0.2
Biofuels & waste	6.21	6.88	8.55	8.18	7.25	7.23	7.19	1.9	-0.8
Electricity	2.71	4.92	8.62	13.95	17.30	17.88	19.43	7.0	3.9
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**14.12**	**22.23**	**26.55**	**27.92**	**25.96**	**27.57**	**29.19**	**3.8**	**0.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.01	0.01	0.01	-	10.3
Coal	1.37	1.61	1.74	1.50	1.21	1.78	1.72	1.4	-0.0
Oil	3.50	6.03	7.45	7.48	6.18	5.84	5.90	4.5	-1.1
Natural gas	6.37	10.45	10.82	9.00	8.24	9.01	9.89	3.2	-0.4
Biofuels & waste	1.32	1.54	1.95	1.38	1.03	1.02	1.00	2.3	-3.2
Electricity	1.56	2.60	4.59	8.56	9.29	9.90	10.67	6.6	4.1
Heat	-	-	-	-	-	-	-	-	-
Transport	**12.41**	**22.80**	**28.53**	**36.16**	**50.47**	**51.85**	**52.06**	**5.0**	**2.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	12.38	22.76	28.46	36.06	50.37	51.73	51.95	5.0	2.9
Natural gas	-	-	-	0.01	0.01	0.01	0.01	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.03	0.04	0.07	0.09	0.10	0.10	0.10	4.9	1.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.70**	**1.96**	**1.48**	**3.43**	**3.56**	**3.57**	**3.74**	**4.5**	**4.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.01	0.02	0.06	0.05	0.05	-	10.4
Coal	-	-	-	-	-	-	-	-	-
Oil	0.70	1.29	0.54	1.73	1.45	1.51	1.50	-1.5	5.0
Natural gas	-	-	-	0.17	0.21	0.23	0.22	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	0.68	0.93	1.51	1.84	1.79	1.96	-	3.6
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**8.59**	**11.16**	**15.75**	**18.09**	**17.69**	**17.84**	**18.02**	**3.6**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.01	0.02	0.09	0.07	0.08	-	10.5
Coal	-	-	-	-	-	-	-	-	-
Oil	2.58	4.49	6.57	7.64	6.45	6.59	6.52	5.7	-0.0
Natural gas	0.39	0.47	0.81	0.52	0.69	0.74	0.72	4.4	-0.6
Biofuels & waste	4.88	5.34	6.60	6.81	6.22	6.20	6.19	1.8	-0.3
Electricity	0.74	0.86	1.75	3.11	4.23	4.25	4.52	5.2	4.6
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**1.34**	**2.37**	**2.24**	**2.84**	**3.60**	**3.52**	**3.84**	**3.1**	**2.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.19	2.05	1.66	2.16	2.80	2.78	2.88	2.0	2.6
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.15	0.32	0.58	0.68	0.80	0.74	0.96	8.3	2.5
Heat	-	-	-	-	-	-	-	-	-
Other	**0.23**	**0.42**	**0.69**	**-**	**1.04**	**1.10**	**1.23**	**6.6**	**2.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.23	0.42	0.69	-	1.04	1.10	1.23	6.6	2.8
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**2.35**	**4.98**	**9.08**	**9.85**	**7.90**	**8.16**	**8.01**	**8.27**	**-0.59**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**39.74**	**65.92**	**84.32**	**98.28**	**115.07**	**110.22**	**113.61**	**116.07**
Total industry (Mtoe)	**14.12**	**22.23**	**26.55**	**27.92**	**28.00**	**25.96**	**27.57**	**29.19**
Iron and steel	2.43	3.20	4.82	5.18	5.13	4.22	4.42	4.15
Chem. and petrochemical	1.76	3.99	7.16	4.89	3.07	2.66	3.17	2.09
Non-ferrous metals	0.01	0.02	0.14	0.14	0.10	0.09	0.10	0.08
Non-metallic minerals	0.60	0.97	2.92	3.57	4.64	4.33	4.25	4.30
Transport equipment	0.07	0.11	0.11	0.17	0.23	0.22	0.22	0.28
Machinery	-	-	0.03	0.07	0.05	0.01	0.01	0.05
Mining and quarrying	0.29	0.32	1.28	1.65	1.57	1.49	1.54	1.58
Food and tobacco	1.35	1.59	3.40	2.60	2.25	1.85	1.86	1.84
Paper, pulp and printing	0.18	0.31	1.28	1.25	1.17	1.22	1.32	1.04
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	0.14	0.19	0.29	0.30	0.30	0.28
Textile and leather	-	-	-	0.01	0.00	0.01	0.01	0.01
Non specified/other	7.43	11.72	5.26	8.20	9.50	9.57	10.36	13.50
Electricity consumption (Mtoe)	**2.71**	**4.92**	**8.62**	**13.95**	**17.40**	**17.30**	**17.88**	**19.43**
Total industry (Mtoe)	**1.56**	**2.60**	**4.59**	**8.56**	**9.67**	**9.29**	**9.90**	**10.67**
Iron and steel	-	-	0.70	0.73	0.71	0.68	0.62	0.52
Chem. and petrochemical	-	-	0.76	0.83	0.73	0.73	0.79	0.80
Non-ferrous metals	-	-	0.10	0.10	0.07	0.07	0.06	0.08
Non-metallic minerals	-	-	0.29	0.44	0.45	0.36	0.57	0.66
Transport equipment	-	-	0.06	0.11	0.17	0.16	0.17	0.18
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	0.41	0.52	0.51	0.48	0.48	0.63
Food and tobacco	-	-	0.05	0.19	0.29	0.29	0.29	0.37
Paper, pulp and printing	-	-	0.22	0.29	0.30	0.30	0.41	0.43
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	0.03	0.03	0.04	0.04	0.05	0.04
Textile and leather	-	-	-	0.01	0.00	0.01	0.01	0.01
Non specified/other	1.56	2.60	1.96	5.31	6.39	6.17	6.45	6.97
Total industry (TWh)	**18.09**	**30.20**	**53.39**	**99.52**	**112.50**	**108.00**	**115.13**	**124.08**
Iron and steel	-	-	8.19	8.47	8.26	7.87	7.24	6.05
Chem. and petrochemical	-	-	8.89	9.63	8.45	8.54	9.16	9.30
Non-ferrous metals	-	-	1.20	1.16	0.87	0.82	0.71	0.89
Non-metallic minerals	-	-	3.41	5.15	5.29	4.19	6.66	7.67
Transport equipment	-	-	0.74	1.32	1.96	1.85	1.98	2.11
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	4.74	5.99	5.96	5.63	5.60	7.30
Food and tobacco	-	-	0.55	2.21	3.43	3.31	3.39	4.25
Paper, pulp and printing	-	-	2.57	3.33	3.50	3.53	4.76	4.96
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	0.30	0.40	0.47	0.46	0.55	0.48
Textile and leather	-	-	-	0.08	0.05	0.07	0.07	0.06
Non specified/other	18.09	30.20	22.82	61.79	74.27	71.73	75.01	81.01

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**317**	**618**	**576**	**1164**	**1069**	**351**	**346**	**397**	**596**
Imports from:									
Total from OECD	**317**	**618**	**576**	**1164**	**1069**	**351**	**346**	**397**	**596**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	317	618	576	1164	1069	351	346	397	596
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**-**	**-**	**1945**	**1944**	**195**	**1452**	**1249**	**1349**	**1164**
Exports to:									
Total to OECD	**-**	**-**	**1945**	**1920**	**70**	**1201**	**1011**	**999**	**879**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	1945	1920	70	1201	1011	999	879
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**24**	**125**	**251**	**238**	**350**	**285**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**8.37**	**14.63**	**25.30**	**33.04**	**36.70**	**51.11**	**51.69**	**52.95**	**52.51**
Nuclear	-	-	0.68	1.31	1.37	1.37	1.37	1.37	1.37
Hydro	3.52	5.99	7.81	9.33	9.62	11.34	11.38	11.50	11.50
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	0.08	0.15	0.70	0.75	0.86	0.97	0.97	0.97	0.89
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.09	0.09	0.09	0.09
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	4.78	8.48	16.12	21.64	24.86	37.35	37.89	39.03	38.67
of which:									
Single-fired:									
Coal and coal products	-	-	1.20	2.25	2.60	2.60	2.60	2.60	2.60
Liquid fuels	-	-	11.47	11.76	10.53	7.51	7.55	7.88	7.73
Natural gas	-	-	3.45	1.59	3.40	15.02	15.40	15.32	15.33
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	2.10	2.10	2.10	2.78	2.78
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	6.04	6.23	10.12	10.23	10.45	10.24
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	3.26	6.62	12.57	17.94	18.98	17.57	17.60	18.26	17.94
Internal combustion	0.39	0.14	0.09	0.13	0.12	0.22	0.22	0.21	0.21
Gas turbine	0.97	1.19	1.78	1.68	2.36	2.65	2.51	2.54	2.50
Combined cycle	0.13	0.54	1.69	1.89	3.40	16.91	17.57	18.02	18.03
Other	0.03	-	-	-	-	-	-	-	-
Peak load	..	..	..	24.48	27.38	35.99	33.57	37.94	39.85
Available capacity	..	..	..	33.04	36.70	51.11	51.32	51.61	51.19

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**1.55**	**2.24**	**2.07**	**2.83**	**3.65**	**7.20**	**8.01**	**9.34**	**9.09**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.03	0.07	0.03	0.03	0.03	0.13	0.16	0.12	0.15
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.01	0.01	0.02	0.03	0.03	0.03
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.02	0.02	0.39	0.48	0.51
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	1.52	2.17	2.04	2.78	3.59	7.04	7.43	8.71	8.40
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	0.07	0.07	0.07	0.07
Liquid fuels	1.52	2.17	0.31	0.48	0.89	1.69	1.71	1.72	1.66
Natural gas	-	-	1.11	1.30	1.49	3.55	3.81	4.79	4.75
Biofuels & waste	-	-	0.05	0.05	0.04	0.07	0.07	0.05	0.05
Multi-fired:									
Solid / liquid	-	-	0.41	0.41	0.41	0.43	0.43	0.45	0.44
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	0.15	0.54	0.75	1.23	1.35	1.63	1.44
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	1.09	1.41	0.85	0.84	0.85	1.76	1.76	1.78	1.83
Internal combustion	0.42	0.54	0.06	0.06	0.28	0.93	1.00	1.00	0.98
Gas turbine	-	0.22	1.01	1.04	1.61	2.66	3.11	2.88	2.48
Combined cycle	-	-	0.12	0.12	0.26	1.09	1.14	2.47	2.52
Other	-	-	-	0.72	0.58	0.60	0.42	0.58	0.59
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Mexican New Pesos/ unit					
Steam coal (t)	..	0.50	89.48	300.80	584.57	690.19	689.31	697.80	748.65
Heavy fuel oil (t)	0.26	0.35	156.54	1180.30	4951.42	4089.97	5208.58	6684.98	7926.50
Natural gas (MWh)(1)	0.03	0.04	21.48	121.95	405.55	230.01	253.10	234.01	184.82
				Mexican New Pesos/ toe					
Steam coal	..	1	196	657	1278	1509	1507	1525	1636
Heavy fuel oil	-	-	154	1164	4884	4034	5137	6593	7818
Natural gas(2)	-	-	278	1576	5241	2972	3271	3024	2388
End-user prices of electricity									
				Mexican New Pesos/ MWh					
Industry									
Price	0.50	0.70	113.60	480.77	1405.27	1164.26	1314.23	1433.95	1508.86
of which: tax	-	-	-	-	-	-	-	-	-
Household									
Price	0.80	1.20	130.20	645.50	1071.30	1078.64	1132.70	1183.24	1186.08
of which: tax	-	0.10	17.00	84.20	139.74	140.69	156.23	163.21	163.60

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	62.00	64.36	65.69	73.22	83.43	77.42	78.22	0.3	0.8
GDP (billion 2005 USD)	292.25	351.21	437.83	597.95	683.75	690.53	683.93	2.4	2.0
TPES/GDP(1)	0.21	0.18	0.15	0.12	0.12	0.11	0.11	-2.0	-1.2
Population (millions)	13.44	14.15	14.95	15.92	16.61	16.69	16.75	0.6	0.5
TPES/population(2)	4.61	4.55	4.39	4.60	5.02	4.64	4.67	-0.3	0.3
TPES/GDP (2005 = 100)	172	148	122	99	99	91	93	-2.0	-1.2
Ele.TFC/GDP(2005=100)(3)	93	100	103	100	95	95	..	0.6	..
Ele.TFC/population(4)	3301	4059	4920	6144	6435	6440	..	2.4	..
Elec. generated (TWh)(5)	52.63	64.81	71.94	89.63	118.14	112.97	102.15	1.9	1.6

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**62.00**	**64.36**	**65.69**	**73.22**	**83.43**	**77.42**	**78.22**	**0.3**	**0.8**
Coal	2.87	3.79	8.93	7.85	7.60	7.47	8.18	6.9	-0.4
Oil	30.46	28.86	23.28	25.89	31.49	29.81	30.61	-1.6	1.3
Natural gas	28.50	30.42	30.80	34.98	39.20	34.19	32.74	0.5	0.3
Biofuels & waste	-	0.23	0.95	1.73	3.47	3.59	3.68	-	6.3
Nuclear	0.29	1.09	0.91	1.02	1.03	1.08	1.03	7.0	0.6
Geothermal	-	-	-	-	0.01	0.01	0.01	-	-
Solar, wind, tide(1)	-	-	0.01	0.10	0.39	0.48	0.48	-	21.3
Hydro	-	-	0.01	0.01	0.01	0.00	0.01	-	1.0
Net electricity imports(2)	-0.12	-0.03	0.79	1.63	0.24	0.78	1.47	-	2.9
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**52.6**	**64.8**	**71.9**	**89.6**	**100.2**	**118.1**	**113.0**	**102.2**
Nuclear	1.1	4.2	3.5	3.9	4.0	4.0	4.1	4.0
Hydro	-	-	0.1	0.1	0.1	0.1	0.1	0.1
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.1	0.1	0.2
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.1	0.8	2.1	4.0	5.1	5.0
Combustible fuels	51.5	60.6	68.3	84.5	93.8	109.9	103.4	92.8
Coal	*3.2*	*8.9*	*27.5*	*27.1*	*26.9*	*25.8*	*24.7*	*27.3*
Oil	*6.5*	*24.9*	*3.1*	*2.6*	*2.3*	*1.3*	*1.5*	*1.1*
Natural gas	*41.9*	*25.8*	*36.6*	*51.5*	*57.9*	*74.2*	*68.4*	*55.5*
Biofuels & waste	-	*1.0*	*1.1*	*3.2*	*6.7*	*8.6*	*8.8*	*8.9*
Other (e.g. fuel cells)	-	-	-	0.2	0.3	0.2	0.1	0.2
- Own use by power plant	2.4	2.8	2.5	3.6	4.0	3.8	3.9	..
Net production	**50.2**	**62.0**	**69.4**	**86.0**	**96.2**	**114.3**	**109.0**	**..**
Nuclear	..	3.9	3.3	3.7	3.8	3.8	3.9	..
Hydro	..	-	0.1	0.1	0.1	0.1	0.1	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.1	0.1	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.1	0.8	2.1	4.0	5.1	..
Combustible fuels	..	58.0	66.0	81.1	90.0	106.3	99.7	..
Other (e.g. fuel cells)	..	-	-	0.2	0.3	0.2	0.1	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	0.0	0.5	9.7	22.9	23.7	15.6	20.6	32.2
- Exports	1.4	0.8	0.5	4.0	5.4	12.8	11.5	15.0
Electrical energy supplied	**48.9**	**61.7**	**78.6**	**104.9**	**114.5**	**117.1**	**118.1**	**..**
- Transmission & distr. losses	2.7	2.7	3.1	4.1	4.5	4.5	4.6	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**46.1**	**58.9**	**75.5**	**100.9**	**110.0**	**112.7**	**113.5**	**..**
- Energy industry consumption[2]	1.8	1.5	2.0	3.1	5.5	5.8	6.1	..
Final consumption	**44.3**	**57.4**	**73.5**	**97.8**	**104.5**	**106.9**	**107.5**	**..**
Industry	22.7	28.1	33.2	40.8	41.6	39.1	39.0	..
Transport	0.9	1.0	1.3	1.6	1.6	1.7	1.7	..
Commercial & publ. serv.	9.8	11.5	20.1	29.3	30.6	35.0	35.7	..
Residential	11.0	15.1	16.5	21.8	24.2	24.7	23.7	..
Agriculture & fishing	-	1.8	2.4	4.2	6.5	6.4	7.4	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**54.76**	**64.81**	**71.94**	**89.63**	**113.50**	**118.14**	**112.97**	**1.7**	**2.2**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**54.76**	**64.81**	**71.94**	**89.63**	**113.50**	**118.14**	**112.97**	**1.7**	**2.2**
Main activity producers									
Gross production	48.59	58.17	59.70	75.80	91.71	95.11	88.78	1.3	1.9
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	48.59	58.17	59.70	75.80	91.71	95.11	88.78	1.3	1.9
Nuclear	3.28	4.20	3.50	3.93	4.23	3.97	4.14	0.4	0.8
Hydro	-	-	0.09	0.14	0.10	0.11	0.06	-	-1.9
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.06	0.80	3.70	3.23	3.74	-	22.3
Coal	2.23	8.30	27.15	27.00	26.48	25.70	24.62	16.9	-0.5
Oil	2.97	23.68	0.22	0.25	0.37	0.40	0.65	-15.1	5.4
Natural gas	40.12	22.00	28.63	43.13	53.67	57.91	51.92	-2.1	2.9
Biofuels & waste	-	-	0.05	0.56	3.17	3.82	3.66	-	22.6
Autoproducers									
Gross production	6.18	6.63	12.24	13.83	21.79	23.03	24.19	4.4	3.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	6.18	6.63	12.24	13.83	21.79	23.03	24.19	4.4	3.3
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.00	0.29	1.06	0.98	1.61	-	42.1
Coal	0.74	0.58	0.37	0.11	0.12	0.10	0.12	-4.3	-5.3
Oil	0.96	1.22	2.90	2.39	1.12	0.86	0.81	7.2	-5.9
Natural gas	4.48	3.81	7.97	8.40	15.03	16.30	16.52	3.7	3.5
Biofuels & waste	-	1.02	1.01	2.64	4.45	4.79	5.14	-	8.1

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**6765**	**6234**	**11738**	**13135**	**20875**	**22156**	**23234**	**3.3**
Total energy	**-**	**-**	**-**	**2888**	**2106**	**1883**	**1827**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	85	32	32	32	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	2803	2074	1851	1795	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**6249**	**5721**	**10094**	**6082**	**4403**	**4555**	**4675**	**-3.6**
Iron and steel	175	129	206	272	270	255	279	1.5
Chemical and petrochemical	3000	4096	7213	3070	1738	1867	1995	-5.9
Non-ferrous metals	9	17	17	29	-	-	-	-
Non-metallic minerals	1	-	95	70	50	27	25	-6.2
Transport equipment	64	354	-	-	-	-	-	-
Machinery	-	-	20	1	-	-	-	-
Mining and quarrying	1689	-	62	-	-	-	90	1.8
Food and tobacco	321	295	1157	1494	1527	1490	1345	0.7
Pulp and printing	872	800	1281	1129	807	887	896	-1.7
Wood and wood products	1	-	10	8	5	9	20	3.4
Construction	-	-	-	-	-	-	2	-
Textile and leather	40	30	33	9	6	20	21	-2.1
Non specified/other industries	77	-	-	-	-	-	2	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**516**	**513**	**1644**	**4165**	**14366**	**15718**	**16732**	**11.7**
Commerce and pub. services	-	-	1	3177	3735	4346	4750	49.7
Residential	-	-	-	8	43	47	59	-
Agriculture and fishing	-	-	-	980	10588	11325	11923	-
Sector non specified	516	513	1643	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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NETHERLANDS
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**15058**	**155063**	**170863**	**146986**	**142233**	**137176**	**11.3**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	5606	13711	18399	20071	18441	22577	5.8
Oil	-	48	2854	7636	5340	6820	6059	26.6
Natural gas	-	6027	132154	136098	109823	102573	93087	14.5
Biofuels & waste	-	3377	6344	8730	11752	14399	15453	7.1
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	11934	129300	135507	117804	109125	..	11.1
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	5606	13711	18399	20071	18441	..	5.8
Oil	-	48	1655	1545	1316	2484	..	20.7
Natural gas	-	6027	113699	114329	94090	86059	..	13.5
Biofuels & waste	-	253	235	1234	2327	2141	..	10.7
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	3124	25763	35356	29182	33108	..	11.9
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	1199	6091	4024	4336	..	-
Natural gas	-	-	18455	21769	15733	16514	..	-
Biofuels & waste	-	3124	6109	7496	9425	12258	..	6.7
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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NETHERLANDS
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**11.71**	**12.90**	**14.21**	**17.91**	**20.94**	**21.73**	**20.12**	**1.1**	**1.7**
Coal	0.79	1.81	5.81	5.55	5.41	5.28	4.99	12.5	-0.7
Oil	1.55	5.14	0.73	0.67	0.41	0.37	0.47	-4.4	-2.1
Natural gas	9.37	5.72	7.11	10.32	12.58	13.37	11.93	-1.6	2.5
Biofuels & waste	-	0.23	0.57	1.37	2.54	2.71	2.74	-	7.8
of which: ***main activity prod.***									
Total	**..**	**11.38**	**11.34**	**14.71**	**16.98**	**17.66**	**15.91**	**..**	**1.6**
Coal	..	1.69	5.73	5.54	5.40	5.27	4.98	..	-0.7
Oil	..	4.96	0.05	0.09	0.09	0.10	0.17	..	6.4
Natural gas	..	4.73	5.54	8.93	10.77	11.43	9.95	..	2.8
Biofuels & waste	..	-	0.02	0.15	0.72	0.86	0.82	..	20.7

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**0.29**	**1.09**	**0.91**	**1.02**	**1.11**	**1.04**	**1.09**	**7.0**	**0.8**
Nuclear	0.29	1.09	0.91	1.02	1.10	1.03	1.08	7.0	0.8
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00	0.00	0.01	0.01	-	-
Non-Thermal									
Total	**-**	**-**	**0.01**	**0.10**	**0.41**	**0.37**	**0.46**	**-**	**18.9**
Hydro	-	-	0.01	0.01	0.01	0.01	0.00	-	-1.9
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.07	0.39	0.34	0.44	-	24.0
Other (e.g. fuel cells)	-	-	-	0.02	0.01	0.01	0.01	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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NETHERLANDS

8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	4928	5234	4625	5328	-
Fuel input (TJ)	-	-	120058	129741	114804	131103	-
Electricity production (GWh)	-	-	13927	15118	13266	15401	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	3417	16447	12168	16068	16773	7.9
Electricity production (GWh)	-	369	1928	1502	1975	2041	8.5
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Natural gas (1)							
Fuel input (TJ)	-	-	141784	180395	203879	193069	-
Electricity production (GWh)	-	-	19682	24179	26867	27614	-
Wood and other solid waste							
Fuel input (TJ)	-	-	3579	19067	24592	22781	-
Electricity production (GWh)	-	-	291	1764	2447	2328	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	27176	14423	11545	5630	-
Electricity production (GWh)	-	-	1627	792	725	383	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	1279	1758	1513	1021	-
Electricity production (GWh)	-	-	114	156	136	84	-
Total combustible fuels(2)							
Electricity production (GWh)	-	369	37569	43511	45416	47851	26.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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NETHERLANDS

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	2202	8721	3662	3171	3250	2072	-6.6
Fuel input (TJ)	64163	220393	89212	78606	80678	50984	-6.7
Electricity production (GWh)	7230	25014	10349	9160	9322	5989	-6.6
CHP Heat production (TJ)	-	5606	12973	14240	17168	15948	5.1
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	15843	19772	7155	6141	9555	10175	-3.1
Electricity production (GWh)	1644	2137	906	825	1235	1305	-2.3
CHP Heat production (TJ)	-	-	738	1179	2903	2493	-
Petroleum products							
Fuel input (1000 t)	5359	694	387	349	318	396	-2.6
Fuel input (TJ)	220862	30420	17157	15699	14353	17895	-2.5
Electricity production (GWh)	24899	3112	2641	1487	1253	1454	-3.6
CHP Heat production (TJ)	-	48	2854	6080	5340	6820	26.6
Natural gas(1)							
Fuel input (TJ)	249332	330704	327228	393361	406597	349360	0.3
Electricity production (GWh)	25809	36605	31843	44526	47335	40824	0.5
CHP Heat production (TJ)	-	6027	122420	98033	99883	91810	13.8
Wood and other solid waste							
Fuel input (TJ)	-	440	1509	16183	16196	15103	18.3
Electricity production (GWh)	-	34	144	1786	1750	1649	20.3
CHP Heat production (TJ)	-	233	203	1639	2051	1914	10.5
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	9504	22840	16172	39637	42576	53701	4.2
Electricity production (GWh)	1024	933	854	2292	2602	3385	6.3
CHP Heat production (TJ)	-	3124	1363	3127	2425	5195	2.5
Biogases and liquid biofuels							
Fuel input (TJ)	-	616	1058	5911	6567	6552	11.9
Electricity production (GWh)	-	91	173	832	946	964	11.9
CHP Heat production (TJ)	-	20	44	223	282	244	12.7
Total combustible fuels(2)							
Electricity production (GWh)	60606	67926	46910	60908	64443	55570	-1.0
CHP Heat production (TJ)	-	15058	140595	124521	130052	124424	10.6

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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NETHERLANDS
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	..	-	11386	11708	11626	12590	-
Heat production (TJ)	..	-	9734	10009	9940	10763	-
Wood and other solid waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	6419	9549	10422	9856	-
Heat production (TJ)	..	-	4734	6690	6994	7046	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Total combustible fuels(2)							
Heat production (TJ)	..	-	14468	16699	16934	17809	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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NETHERLANDS
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC(1)	**47.65**	**54.31**	**49.14**	**56.69**	**60.10**	**64.77**	**59.63**	**0.2**	**0.9**
Geothermal	-	-	-	-	0.00	0.01	0.01	-	-
Solar thermal	-	-	0.00	0.01	0.02	0.02	0.02	-	12.5
Coal	1.08	0.78	1.38	0.91	0.76	0.81	0.81	1.4	-2.5
Oil	23.47	24.35	18.07	20.79	26.38	27.69	26.15	-1.5	1.8
Natural gas	19.29	24.25	22.68	23.34	21.03	24.20	20.50	1.0	-0.5
Biofuels & waste	-	-	0.38	0.35	0.90	0.75	0.83	-	3.9
Electricity	3.81	4.94	6.32	8.41	8.94	9.19	9.24	3.0	1.8
Heat	-	-	0.31	2.89	2.06	2.11	2.07	-	9.5
of which:									
Total industry	**13.51**	**12.31**	**11.30**	**13.82**	**11.85**	**13.12**	**12.87**	**-1.0**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.76	0.69	1.11	0.61	0.55	0.53	0.55	2.2	-3.3
Oil	2.65	2.54	0.79	1.60	2.23	2.77	2.71	-6.9	6.1
Natural gas	8.14	6.66	6.51	6.26	4.78	5.26	5.01	-1.3	-1.2
Biofuels & waste	-	-	0.04	0.07	0.13	0.10	0.09	-	3.9
Electricity	1.95	2.41	2.86	3.51	3.12	3.36	3.35	2.3	0.8
Heat	-	-	-	1.77	1.04	1.11	1.17	-	-
Transport	**6.53**	**7.59**	**8.89**	**10.97**	**11.50**	**11.53**	**11.65**	**1.8**	**1.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	6.46	7.51	8.78	10.83	10.97	11.14	11.16	1.8	1.1
Natural gas	-	-	-	-	0.01	0.01	0.01	-	-
Biofuels & waste	-	-	-	-	0.37	0.23	0.32	-	-
Electricity	0.08	0.08	0.11	0.14	0.14	0.15	0.15	2.1	1.5
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**1.91**	**1.76**	**5.77**	**7.22**	**8.89**	**9.73**	**8.17**	**6.7**	**1.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	4.4
Coal	-	-	0.03	0.02	0.00	0.00	0.01	-	-6.6
Oil	1.07	0.75	0.63	0.29	0.42	0.39	0.29	-3.1	-3.7
Natural gas	-	0.03	3.26	3.72	4.85	5.74	4.25	-	1.3
Biofuels & waste	-	-	0.04	0.05	0.04	0.05	0.05	-	1.3
Electricity	0.84	0.99	1.73	2.52	2.95	3.01	3.07	4.3	2.8
Heat	-	-	0.09	0.62	0.62	0.55	0.51	-	8.5

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**13.06**	**14.17**	**9.95**	**10.30**	**10.19**	**11.52**	**9.75**	**-1.6**	**-0.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.01	0.02	0.02	0.02	-	17.6
Coal	0.24	0.05	0.02	0.00	0.00	0.01	0.00	-12.8	-7.8
Oil	4.74	1.41	0.24	0.06	0.06	0.11	0.07	-16.0	-5.5
Natural gas	7.14	11.41	7.86	7.97	7.46	8.64	7.03	0.6	-0.5
Biofuels & waste	-	-	0.30	0.23	0.30	0.30	0.31	-	0.1
Electricity	0.94	1.30	1.42	1.88	2.08	2.12	2.04	2.4	1.7
Heat	-	-	0.11	0.15	0.27	0.32	0.28	-	4.7
Agriculture & fishing	**0.32**	**0.56**	**3.33**	**3.88**	**3.35**	**3.39**	**3.25**	**14.7**	**-0.1**
Geothermal	-	-	-	-	0.00	0.01	0.01	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.32	0.40	0.31	0.50	0.55	0.37	0.40	-0.3	1.2
Natural gas	-	-	2.77	2.66	1.96	2.26	2.03	-	-1.5
Biofuels & waste	-	-	0.00	0.00	0.06	0.07	0.07	-	21.6
Electricity	-	0.15	0.20	0.36	0.65	0.55	0.64	-	5.5
Heat	-	-	0.05	0.35	0.13	0.13	0.11	-	4.5
Other	**4.75**	**4.75**	**0.07**	**-**	**0.01**	**-**	**-**	**-22.1**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.08	0.04	0.00	-	-	-	-	-18.0	-
Oil	0.66	0.31	-	-	0.01	-	-	-	-
Natural gas	4.00	4.40	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	0.06	-	-	-	-	-	-
Non-energy use(1)	**7.56**	**13.17**	**9.82**	**10.51**	**14.31**	**15.48**	**13.94**	**1.55**	**1.68**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**47.65**	**54.31**	**49.14**	**56.69**	**62.87**	**60.10**	**64.77**	**59.63**
Total industry (Mtoe)	**13.51**	**12.31**	**11.30**	**13.82**	**13.89**	**11.85**	**13.12**	**12.87**
Iron and steel	1.71	1.32	1.14	1.07	1.01	0.93	0.98	1.01
Chem. and petrochemical	5.77	5.27	4.94	5.72	6.54	5.55	6.16	6.05
Non-ferrous metals	0.40	0.52	0.54	0.64	0.68	0.44	0.53	0.63
Non-metallic minerals	1.11	1.06	0.91	0.86	0.76	0.67	0.72	0.63
Transport equipment	0.06	0.12	0.15	0.13	0.14	0.13	0.13	0.09
Machinery	0.23	0.37	0.73	0.70	0.59	0.65	0.66	0.56
Mining and quarrying	0.00	0.01	0.03	0.35	0.22	0.14	0.20	0.24
Food and tobacco	1.61	1.84	1.61	2.36	2.05	1.82	1.94	1.93
Paper, pulp and printing	0.84	0.71	0.67	1.00	0.91	0.72	0.75	0.70
Wood and wood products	0.04	0.07	0.07	0.09	0.06	0.07	0.07	0.07
Construction	0.02	0.04	0.30	0.25	0.26	0.25	0.51	0.48
Textile and leather	0.24	0.29	0.14	0.20	0.11	0.10	0.12	0.10
Non specified/other	1.48	0.70	0.07	0.44	0.55	0.37	0.35	0.37
Electricity consumption (Mtoe)	**3.81**	**4.94**	**6.32**	**8.41**	**9.39**	**8.94**	**9.19**	**9.24**
Total industry (Mtoe)	**1.95**	**2.41**	**2.86**	**3.51**	**3.62**	**3.12**	**3.36**	**3.35**
Iron and steel	0.19	0.16	0.20	0.23	0.23	0.21	0.23	0.23
Chem. and petrochemical	0.76	0.88	1.00	1.01	1.09	1.06	1.16	1.11
Non-ferrous metals	0.27	0.43	0.45	0.51	0.55	0.33	0.41	0.53
Non-metallic minerals	0.09	0.10	0.13	0.15	0.13	0.13	0.13	0.11
Transport equipment	-	-	0.04	0.06	0.06	0.06	0.06	0.05
Machinery	0.18	0.23	0.27	0.29	0.29	0.30	0.29	0.27
Mining and quarrying	0.00	0.01	0.01	0.05	0.03	0.02	0.04	0.03
Food and tobacco	0.19	0.28	0.40	0.55	0.59	0.53	0.56	0.55
Paper, pulp and printing	0.15	0.20	0.25	0.33	0.32	0.24	0.23	0.22
Wood and wood products	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Construction	0.02	0.04	0.04	0.04	0.04	0.04	0.04	0.04
Textile and leather	0.06	0.06	0.04	0.05	0.03	0.03	0.03	0.03
Non specified/other	0.03	0.01	0.01	0.22	0.24	0.16	0.17	0.17
Total industry (TWh)	**22.71**	**28.08**	**33.24**	**40.78**	**42.15**	**36.28**	**39.07**	**39.01**
Iron and steel	2.15	1.85	2.27	2.63	2.66	2.39	2.64	2.70
Chem. and petrochemical	8.80	10.26	11.63	11.79	12.63	12.32	13.45	12.88
Non-ferrous metals	3.15	5.02	5.29	5.95	6.39	3.84	4.78	6.11
Non-metallic minerals	1.02	1.11	1.50	1.69	1.56	1.46	1.46	1.28
Transport equipment	-	-	0.51	0.64	0.72	0.72	0.71	0.57
Machinery	2.15	2.66	3.08	3.39	3.34	3.46	3.42	3.11
Mining and quarrying	0.00	0.13	0.11	0.62	0.34	0.18	0.41	0.37
Food and tobacco	2.24	3.24	4.64	6.41	6.86	6.17	6.46	6.40
Paper, pulp and printing	1.77	2.35	2.90	3.83	3.71	2.76	2.70	2.52
Wood and wood products	0.20	0.28	0.25	0.29	0.29	0.28	0.24	0.23
Construction	0.23	0.44	0.43	0.48	0.49	0.48	0.49	0.47
Textile and leather	0.69	0.64	0.52	0.55	0.36	0.32	0.39	0.36
Non specified/other	0.32	0.09	0.11	2.52	2.82	1.90	1.93	2.00

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**7**	**511**	**9679**	**11979**	**22946**	**24967**	**15452**	**15583**	**20620**
Imports from:									
Total from OECD	**-**	**-**	**9679**	**11979**	**22946**	**24967**	**15452**	**15583**	**20620**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	123	878	2283	2984	3772	5319	7009
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	4516	5148	5258	-	-	-	-
Germany	-	-	5040	5816	14326	18896	8867	8937	9555
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	3087	2813	1327	3358
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	13	-	-	-	-
Switzerland	-	-	-	137	1	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	1065	-	-	-	698
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**7**	**511**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**1352**	**818**	**471**	**586**	**4031**	**9116**	**10561**	**12807**	**11531**
Exports to:									
Total to OECD	**-**	**-**	**471**	**586**	**4031**	**9116**	**10561**	**12807**	**11531**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	10	351	3045	8086	5791	7390	4520
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	157	27	-	-	-	-	-
Germany	-	-	271	208	975	809	3508	3070	2915
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	221	1262	2347	1550
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	9	-	-	-	-
Switzerland	-	-	33	-	2	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	2546
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**1352**	**818**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**12.00**	**15.71**	**15.31**	**16.47**	**18.22**	**19.77**	**20.69**	**21.36**	**21.79**
Nuclear	0.50	0.50	0.51	0.51	0.45	0.51	0.51	0.51	0.51
Hydro	-	-	0.04	0.04	0.04	0.04	0.04	0.04	0.04
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	-	-	0.01	0.01
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.05	0.22	0.39	1.72	1.78	1.79	1.60
Other (e.g. fuel cells)	-	-	-	0.02	0.02	0.02	0.02	0.02	0.02
Combustible fuels	11.50	15.21	14.72	15.70	17.32	17.48	18.34	18.99	19.61
of which:									
Single-fired:									
Coal and coal products	0.79	-	-	-	-	-	-	-	-
Liquid fuels	1.11	0.88	0.04	0.01	0.02 e	..	..	..	-
Natural gas	1.45	1.73	3.19	3.80	9.43 e	..	..	..	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	0.52	1.49	1.71	1.25	0.60 e	..	..	..	-
Solid / natural gas	0.56	0.67	2.06	2.90	3.57 e	..	..	..	-
Liquid / natural gas	6.73	10.19	7.73	7.74	3.69 e	..	..	..	-
Solid / liquid / gas	0.34	0.25	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	13.11	12.80	10.08	8.77	8.77	8.12	8.12
Internal combustion	-	-	0.02	0.60	0.80	0.65	0.65	0.60	0.06
Gas turbine	-	-	0.54	0.85	0.80	0.75	0.74	0.80	0.80
Combined cycle	-	-	1.04	1.45	5.64	7.30	8.17	9.48	10.64
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	10.76	11.16	..	13.96	16.96	17.48	17.16
Available capacity	..	..	15.10	1.59	..	..	26.00	26.50	28.00

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**1.56**	**1.59**	**2.24**	**2.56**	**2.84**	**5.11**	**5.31**	**5.33**	**6.26**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	0.01	0.05	0.06	0.08	0.13
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.03	0.06	0.43	0.44	0.45	0.71
Other (e.g. fuel cells)	-	-	-	0.03	0.03	0.05	0.05	0.05	0.05
Combustible fuels	1.56	1.59	2.24	2.50	2.75	4.57	4.75	4.75	5.36
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	0.01 e	..	..	..	-
Natural gas	-	-	-	-	2.53 e	..	..	..	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	1.56	1.59	2.24	2.50	0.22 e	..	..	..	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	0.74	0.75	0.86	0.77	0.77	0.74	0.84
Internal combustion	-	-	0.24	0.46	0.73	2.84	3.02	3.05	3.55
Gas turbine	-	-	0.56	0.48	0.53	0.53	0.52	0.52	0.53
Combined cycle	-	-	0.67	0.81	0.63	0.44	0.44	0.44	0.44
Other	-	-	0.03	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	40.25	57.72	58.95	..	..	..	..	..	..
Heavy fuel oil (t)	89.46	173.60	..	..	..	..	..	..	..
Natural gas (MWh)(1)	6.67	12.66	9.43	..	..	..	..	..	..
				Euro/ toe					
Steam coal	57.50	82.46	84.21	..	..	..	..	..	..
Heavy fuel oil	91.66	177.87	..	..	..	..	..	..	..
Natural gas(2)	86.26	163.56	121.81	..	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	30.60	53.40	43.20	61.90	90.90	99.80	87.65	85.15	85.20
of which: tax	-	-	-	2.40	10.75	10.90	10.90	10.80	11.10
Household									
Price	80.90	103.30	96.80	142.20	165.97	185.73	166.97	170.98	185.35
of which: tax	12.30	15.70	15.10	48.40	34.12	31.95	31.85	33.19	38.04

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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NEW ZEALAND

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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NEW ZEALAND

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	8.02	8.98	12.87	17.06	18.29	18.17	18.57	2.8	1.7
GDP (billion 2005 USD)	56.48	57.15	69.78	93.77	118.26	119.53	123.08	1.3	2.6
TPES/GDP(1)	0.14	0.16	0.18	0.18	0.15	0.15	0.15	1.5	-0.9
Population (millions)	2.97	3.14	3.37	3.87	4.38	4.42	4.45	0.7	1.3
TPES/population(2)	2.70	2.86	3.82	4.41	4.17	4.11	4.17	2.1	0.4
TPES/GDP (2005 = 100)	95	106	124	122	104	102	101	1.5	-0.9
Ele.TFC/GDP(2005=100)(3)	84	102	120	109	98	96	..	2.1	..
Ele.TFC/population(4)	5363	6209	8368	8866	8930	8751	..	2.7	..
Elec. generated (TWh)(5)	18.53	22.60	32.27	39.25	44.88	44.50	44.26	3.3	1.4

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**8.02**	**8.98**	**12.87**	**17.06**	**18.29**	**18.17**	**18.57**	**2.8**	**1.7**
Coal	1.26	1.02	1.18	1.11	1.31	1.44	1.39	-0.4	0.7
Oil	4.17	4.01	3.55	5.68	6.10	5.95	6.17	-0.9	2.5
Natural gas	0.28	0.79	3.87	5.06	3.73	3.41	3.84	16.6	-0.0
Biofuels & waste	-	0.52	0.75	1.11	1.19	1.20	1.21	-	2.2
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	1.07	1.02	1.48	1.95	3.64	3.80	3.77	1.9	4.4
Solar, wind, tide(1)	-	-	-	0.01	0.15	0.18	0.18	-	-
Hydro	1.23	1.63	1.99	2.10	2.13	2.16	1.96	2.9	-0.1
Net electricity imports(2)	-	-	-	-	-	-	-	-	-
Heat	-	-	0.04	0.04	0.04	0.04	0.04	-	-0.3

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**18.5**	**22.6**	**32.3**	**39.2**	**43.0**	**44.9**	**44.5**	**44.3**
Nuclear	-	-	-	-	-	-	-	-
Hydro	14.3	18.9	23.2	24.4	23.3	24.7	25.1	22.8
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	1.2	1.2	2.1	2.9	3.2	5.9	6.1	6.2
Solar	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.1	0.6	1.6	2.0	2.0
Combustible fuels	3.0	2.5	6.9	11.7	15.8	12.6	11.3	13.2
Coal	*1.6*	*0.4*	*0.7*	*1.5*	*5.9*	*2.1*	*2.2*	*3.6*
Oil	*1.1*	*0.0*	*0.0*	*-*	*0.0*	*0.0*	*0.0*	*0.0*
Natural gas	*0.3*	*1.7*	*5.7 e*	*9.6*	*9.4*	*9.9*	*8.5*	*9.0*
Biofuels & waste	*-*	*0.3*	*0.5*	*0.6*	*0.5*	*0.6*	*0.6*	*0.6*
Other (e.g. fuel cells)	-	-	0.1	0.1	0.1	0.1	0.1	0.1
- Own use by power plant	0.4	0.2	0.8	1.2	1.5	1.4	1.4	..
Net production	**18.1**	**22.4**	**31.5**	**38.1**	**41.5**	**43.5**	**43.1**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	18.9	23.0	24.2	23.1	24.5	24.8	..
Geothermal	..	1.2	2.0	2.8	3.0	5.6	5.8	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.1	0.6	1.6	1.9	..
Combustible fuels	..	2.3	6.4	10.9	14.8	11.8	10.5	..
Other (e.g. fuel cells)	..	-	0.1	0.1	0.1	0.1	0.1	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	-	-	-	-	-	-	-	-
- Exports	-	-	-	-	-	-	-	-
Electrical energy supplied	**18.1**	**22.4**	**31.5**	**38.1**	**41.5**	**43.5**	**43.1**	**..**
- Transmission & distr. losses	2.2	2.8	2.4	3.0	3.0	3.1	3.1	..
- Statistical difference	-	-0.0	0.6	0.2	0.1	0.7	0.9	..
Total consumption	**15.9**	**19.5**	**28.5**	**34.8**	**38.5**	**39.6**	**39.1**	**..**
- Energy industry consumption[2]	0.0	0.0	0.3	0.5	0.5	0.5	0.5	..
Final consumption	**15.9**	**19.5**	**28.2**	**34.3**	**38.0**	**39.1**	**38.6**	**..**
Industry	5.6	7.7	11.2	14.0	15.3	14.1	14.0	..
Transport	0.0	0.0	0.1	0.1	0.1	0.1	0.1	..
Commercial & publ. serv.	2.5	3.3	5.3	6.8	8.2	9.2	9.1	..
Residential	7.4	8.0	10.2	11.3	12.1	13.2	12.9	..
Agriculture & fishing	0.4	0.5	0.7	1.3	1.5	1.9	1.9	..
Sector non specified	-	-	0.8	0.8	0.8	0.6	0.6	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**18.83**	**22.60**	**32.27**	**39.25**	**43.46**	**44.88**	**44.50**	**3.4**	**1.5**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**18.83**	**22.60**	**32.27**	**39.25**	**43.46**	**44.88**	**44.50**	**3.4**	**1.5**
Main activity producers									
Gross production	18.55	22.29	31.41	37.67	42.14	43.49	43.21	3.3	1.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	18.55	22.29	31.41	37.67	42.14	43.49	43.21	3.3	1.5
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	14.20	18.93	23.18	24.43	24.21	24.70	25.07	3.1	0.4
Geothermal	1.29	1.19	2.07	2.88	4.81	5.83	6.06	3.0	5.2
Solar, wind, tide(2)	-	-	-	0.12	1.48	1.63	1.95	-	-
Coal	1.23	0.43	0.47	0.95	2.71	1.39	1.58	-5.9	6.0
Oil	1.70	0.04	0.01	-	0.01	0.00	0.00	-27.5	-7.4
Natural gas	0.12	1.67	5.65	9.21	8.80	9.79	8.41	27.1	1.9
Biofuels & waste	0.01	0.03	0.03	0.08	0.13	0.14	0.14	7.9	8.2
Autoproducers									
Gross production	0.28	0.31	0.85	1.58	1.32	1.39	1.29	7.2	2.0
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.28	0.31	0.85	1.58	1.32	1.39	1.29	7.2	2.0
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	0.01	0.01	0.01	-	-
Geothermal	-	-	0.06	0.04	0.05	0.05	0.05	-	-0.3
Solar, wind, tide(2)	-	-	0.07	0.07	0.06	0.06	0.06	-	-0.3
Coal	-	-	0.20	0.60	0.59	0.67	0.59	-	5.3
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	0.03 e	0.06	0.36	0.14	0.13	0.11	-	2.7
Biofuels & waste	0.28	0.28	0.47	0.51	0.47	0.46	0.47	3.3	-0.1

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**262**	**289**	**799**	**1473**	**1229**	**1300**	**1204**	**2.0**
Total energy	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**-**	**-**	**573**	**1057**	**1128**	**1204**	**1110**	**3.2**
Iron and steel	-	-	120	508	528	607	527	7.3
Chemical and petrochemical	-	-	63	63	53	57	59	-0.3
Non-ferrous metals	-	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	-	-	-	-
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	-	-	-	-	70	64	62	-
Pulp and printing	-	-	-	-	-	-	-	-
Wood and wood products	-	-	390	486	477	476	462	0.8
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	-	-	-	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**262 e**	**289 e**	**226**	**416**	**101**	**96**	**94**	**-4.1**
Commerce and pub. services	-	-	106	70	101	96	94	-0.6
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	262 e	289 e	120	346	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**1610**	**1610**	**1947**	**1468**	**1518**	**1518**	**-0.3**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	1610	1610	1947	1468	1518	1518	-0.3
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	-	-	-	-	-	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	1610	1610	1947	1468	1518	..	-0.3
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	1610	1610	1947	1468	1518	..	-0.3
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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NEW ZEALAND
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.88**	**0.57**	**1.55**	**2.43**	**2.47**	**2.42**	**2.20**	**3.4**	**1.7**
Coal	0.37	0.15	0.17	0.38	0.79	0.50	0.53	-4.5	5.7
Oil	0.43	0.02	0.01	-	0.00	-	-	-22.2	-
Natural gas	0.08	0.33	1.24	1.90	1.53	1.76	1.51	17.4	0.9
Biofuels & waste	-	0.08	0.13	0.15	0.15	0.16	0.16	-	0.7
of which: ***main activity prod.***									
Total	**..**	**0.50**	**1.35**	**2.04**	**2.15**	**2.07**	**1.89**	**..**	**1.6**
Coal	..	0.15	0.12	0.22	0.62	0.31	0.37	..	5.7
Oil	..	0.02	0.01	-	0.00	-	-	..	-
Natural gas	..	0.33	1.22	1.81	1.50	1.73	1.48	..	0.9
Biofuels & waste	..	0.01	0.01	0.02	0.03	0.04	0.04	..	8.2

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**1.07**	**1.02**	**1.31**	**1.76**	**2.73**	**3.42**	**3.58**	**1.2**	**4.9**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	1.07	1.02	1.31	1.76	2.73	3.42	3.58	1.2	4.9
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**1.23**	**1.63**	**1.99**	**2.11**	**2.21**	**2.27**	**2.32**	**2.9**	**0.7**
Hydro	1.23	1.63	1.99	2.10	2.08	2.13	2.16	2.9	0.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.13	0.14	0.17	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	288	232	430	1270	637	761	5.8
Fuel input (TJ)	5841	4888	9096	26004	13039	15511	5.7
Electricity production (GWh)	428	467	951	2705	1391	1580	6.0
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	15	6	-	2	-	-	-
Fuel input (TJ)	664	137	-	93	17	18	-9.2
Electricity production (GWh)	39	10	-	9	2	2	-7.4
Natural gas[2]							
Fuel input (TJ)	15164	56983	70830	53970	62582	51566	-0.5
Electricity production (GWh)	1674	5650	7953	7499	8351	6972	1.0
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	379	288	830	1709	1765	1758	9.0
Electricity production (GWh)	32	27	76	158	163	162	8.9
Total combustible fuels[3]							
Electricity production (GWh)	2173	6154	8980	10371	9907	8716	1.7

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	28	18	3	2	2	-11.8
Fuel input (TJ)	-	585	391	52	48	43	-11.7
Electricity production (GWh)	-	52	35	5	4	4	-11.5
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	13	13	19	16	16	1.0
Fuel input (TJ)	-	185	185	256	226	216	0.7
Electricity production (GWh)	-	17	17	24	21	20	0.8
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	1540	6518	6764	7772	6757	7.3
Electricity production (GWh)	-	128	543	564	648	563	7.3
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Natural gas[2]							
Fuel input (TJ)	272	714	17466	17262	19405	18649	16.8
Electricity production (GWh)	30 e	60	1619	1431	1565	1540	16.7
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	2876	4059	5162	3858	3977	4011	-0.1
Electricity production (GWh)	280	360	478	368	370	376	0.2
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1229	363	793	759	740	-2.4
Electricity production (GWh)	-	113	33	73	70	69	-2.3
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Electricity production (GWh)	310	730	2725	2465	2678	2572	6.2
CHP Heat production (TJ)	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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NEW ZEALAND
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**5.87**	**6.91**	**9.72**	**12.94**	**12.46**	**12.81**	**12.66**	**3.0**	**1.3**
Geothermal	-	-	0.17	0.19	0.23	0.23	0.22	-	1.3
Solar thermal	-	-	-	-	0.01	0.01	0.01	-	-
Coal	0.90	0.82	0.67	0.52	0.55	0.60	0.56	-1.7	-0.9
Oil	3.49	3.62	4.03	5.31	5.81	5.84	5.80	0.8	1.8
Natural gas	0.12	0.35	1.80	3.01	1.67	1.73	1.70	17.5	-0.3
Biofuels & waste	-	0.44	0.62	0.96	0.91	1.04	1.05	-	2.5
Electricity	1.37	1.68	2.43	2.95	3.27	3.36	3.32	3.4	1.5
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**1.97**	**2.41**	**3.60**	**4.26**	**3.70**	**3.98**	**3.93**	**3.6**	**0.4**
Geothermal	-	-	0.11	0.14	0.15	0.15	0.15	-	1.4
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.71	0.56	0.54	0.43	0.48	0.52	0.45	-1.5	-0.9
Oil	0.74	0.61	0.28	0.34	0.39	0.35	0.33	-5.5	0.7
Natural gas	0.03	0.26	1.23	1.34	0.78	0.88	0.90	23.8	-1.5
Biofuels & waste	-	0.32	0.47	0.81	0.76	0.89	0.90	-	3.1
Electricity	0.48	0.66	0.96	1.21	1.13	1.21	1.21	4.1	1.1
Heat	-	-	-	-	-	-	-	-	-
Transport	**1.94**	**2.29**	**2.96**	**4.06**	**4.57**	**4.57**	**4.58**	**2.5**	**2.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.00	0.00	0.00	0.00	0.00	0.00	-	-2.1
Oil	1.94	2.28	2.89	4.06	4.56	4.56	4.56	2.4	2.2
Natural gas	-	0.01	0.06	0.00	0.00	0.00	0.00	-	-16.8
Biofuels & waste	-	-	-	-	0.00	0.00	0.01	-	-
Electricity	0.00	0.00	0.00	0.01	0.00	0.01	0.01	2.2	0.2
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.51**	**0.71**	**0.80**	**0.93**	**1.13**	**1.16**	**1.13**	**2.6**	**1.6**
Geothermal	-	-	0.04	0.04	0.06	0.06	0.05	-	0.6
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	0.12	0.04	0.04	0.03	0.03	0.03	12.6	-0.9
Oil	0.24	0.25	0.17	0.12	0.10	0.13	0.14	-2.0	-0.8
Natural gas	0.06	0.05	0.09	0.14	0.16	0.15	0.12	2.9	1.1
Biofuels & waste	-	0.00	0.00	0.00	0.01	0.01	0.01	-	8.9
Electricity	0.21	0.29	0.46	0.59	0.78	0.79	0.78	4.6	2.6
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**0.90**	**1.01**	**1.21**	**1.36**	**1.51**	**1.50**	**1.47**	**1.7**	**0.9**
Geothermal	-	-	0.01	0.01	0.01	0.01	0.01	-	-0.0
Solar thermal	-	-	-	-	0.01	0.01	0.01	-	-
Coal	0.16	0.14	0.09	0.02	0.02	0.01	0.02	-3.5	-7.5
Oil	0.08	0.02	0.01	0.05	0.06	0.07	0.07	-10.4	8.8
Natural gas	0.02	0.04	0.08	0.16	0.14	0.13	0.12	6.8	2.4
Biofuels & waste	-	0.12 e	0.15	0.15	0.14	0.14	0.14	-	-0.4
Electricity	0.64	0.69	0.88	0.97	1.14	1.13	1.11	1.9	1.1
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**0.28**	**0.27**	**0.47**	**0.62**	**0.64**	**0.64**	**0.69**	**3.1**	**1.9**
Geothermal	-	-	0.01	0.01	0.02	0.02	0.02	-	3.8
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.01	0.01	0.02	0.04	0.06	-	9.9
Oil	0.25	0.23	0.35	0.44	0.41	0.38	0.41	2.0	0.8
Natural gas	-	-	0.04	0.05	0.04	0.03	0.04	-	-0.8
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.03	0.04	0.06	0.11	0.16	0.17	0.17	3.8	5.1
Heat	-	-	-	-	-	-	-	-	-
Other	**0.03**	**-**	**0.07**	**0.07**	**0.06**	**0.05**	**0.05**	**4.9**	**-0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.03	-	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	0.07	0.07	0.06	0.05	0.05	-	-0.9
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.24**	**0.22**	**0.62**	**1.64**	**0.84**	**0.91**	**0.81**	**5.68**	**1.28**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**5.87**	**6.91**	**9.72**	**12.94**	**12.68**	**12.46**	**12.81**	**12.66**
Total industry (Mtoe)	**1.97**	**2.41**	**3.60**	**4.26**	**3.95**	**3.70**	**3.98**	**3.93**
Iron and steel	0.23	0.33	0.20	0.21	0.23	0.21	0.23	0.22
Chem. and petrochemical	0.02	0.02	0.78	0.84	0.29	0.37	0.40	0.37
Non-ferrous metals	-	-	0.38	0.44	0.42	0.37	0.46	0.47
Non-metallic minerals	0.02	0.09	0.04	0.06	0.06	0.13	0.12	0.09
Transport equipment	-	0.01	0.01	0.01	0.00	0.00	0.00	0.00
Machinery	0.02	0.04	0.04	0.04	0.03	0.02	0.04	0.05
Mining and quarrying	0.01	0.06	0.05	0.08	0.13	0.14	0.11	0.10
Food and tobacco	0.13	0.46	0.33	0.39	0.38	0.65	0.78	0.78
Paper, pulp and printing	-	0.04	0.42	0.49	0.38	0.39	0.37	0.37
Wood and wood products	0.13	0.52	0.52	0.93	1.01	0.94	1.06	1.09
Construction	0.01	0.08	0.08	0.09	0.11	0.12	0.11	0.11
Textile and leather	0.02	0.02	0.04	0.04	0.03	0.03	0.02	0.03
Non specified/other	1.38	0.74	0.70	0.63	0.89	0.33	0.27	0.24
Electricity consumption (Mtoe)	**1.37**	**1.68**	**2.43**	**2.95**	**3.29**	**3.27**	**3.36**	**3.32**
Total industry (Mtoe)	**0.48**	**0.66**	**0.96**	**1.21**	**1.20**	**1.13**	**1.21**	**1.21**
Iron and steel	0.18	0.25	0.09	0.11	0.13	0.12	0.13	0.13
Chem. and petrochemical	0.02	0.02	0.03	0.04	0.04	0.03	0.03	0.03
Non-ferrous metals	-	-	0.38	0.43	0.42	0.36	0.45	0.47
Non-metallic minerals	0.02	0.02	0.02	0.02	0.02	0.02	0.02	0.02
Transport equipment	-	-	0.01	0.01	0.00	0.00	0.00	0.00
Machinery	0.02	0.03	0.02	0.02	0.02	0.01	0.01	0.01
Mining and quarrying	0.01	0.01	0.01	0.02	0.03	0.03	0.03	0.03
Food and tobacco	0.07	0.10	0.13	0.16	0.18	0.19	0.17	0.16
Paper, pulp and printing	-	-	0.22	0.26	0.17	0.17	0.15	0.15
Wood and wood products	0.13	0.20	0.01	0.07	0.12	0.12	0.13	0.13
Construction	0.01	0.01	0.00	0.02	0.02	0.02	0.02	0.02
Textile and leather	0.02	0.02	0.02	0.02	0.01	0.01	0.01	0.01
Non specified/other	0.01	0.01	0.02	0.03	0.05	0.05	0.05	0.05
Total industry (TWh)	**5.62**	**7.68**	**11.20**	**14.03**	**13.94**	**13.16**	**14.06**	**14.03**
Iron and steel	2.08	2.93	1.09	1.30	1.47	1.38	1.50	1.51
Chem. and petrochemical	0.19	0.20	0.30	0.41	0.44	0.39	0.40	0.40
Non-ferrous metals	-	-	4.38	5.05	4.83	4.24	5.27	5.41
Non-metallic minerals	0.23	0.24	0.21	0.26	0.26	0.23	0.26	0.27
Transport equipment	-	-	0.08	0.07	0.03	0.03	0.03	0.03
Machinery	0.27	0.33	0.23	0.20	0.21	0.17	0.16	0.15
Mining and quarrying	0.08	0.12	0.15	0.24	0.33	0.39	0.34	0.31
Food and tobacco	0.84	1.16	1.52	1.88	2.12	2.15	1.98	1.88
Paper, pulp and printing	-	-	2.59	3.00	1.93	1.96	1.78	1.70
Wood and wood products	1.50	2.27	0.17	0.86	1.41	1.38	1.51	1.54
Construction	0.06	0.08	0.02	0.20	0.20	0.19	0.19	0.18
Textile and leather	0.22	0.24	0.24	0.19	0.14	0.12	0.12	0.12
Non specified/other	0.15	0.13	0.23	0.39	0.57	0.53	0.54	0.54

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**4.60**	**5.82**	**7.18**	**7.68**	**8.15**	**9.11**	**9.14**	**9.38**	**9.38**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3.48	3.95	4.62	5.26	5.19	5.37	5.32	5.25	5.25
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	0.16	0.14	0.26	0.27	0.41	0.59	0.63	0.72	0.72
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.04	0.32	0.50	0.51	0.51
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.96	1.73	2.30	2.16	2.51	2.83	2.70	2.90	2.90
of which:									
Single-fired:									
Coal and coal products	0.20	0.18	0.11	-	-	-	-	-	-
Liquid fuels	0.24	0.47	0.34	0.28	-	0.16	0.16	0.16	0.16
Natural gas	0.18	0.22	0.20	0.87	1.50	1.50	1.47	1.67	1.67
Biofuels & waste	-	-	-	0.01	0.01	0.02	0.02	0.02	0.02
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	0.98	1.00	1.00	-	-	-	-
Liquid / natural gas	0.35	0.86	0.67	-	-	0.15	0.05	0.05	0.05
Solid / liquid / gas	-	-	-	-	-	1.00	1.00	1.00	1.00
Type of generation									
Steam	-	-	1.78	1.70	1.68	1.33	1.29	1.32	1.32
Internal combustion	-	-	0.01	-	-	0.02	0.02	0.02	0.02
Gas turbine	-	-	0.50	0.46	0.48	0.32	0.22	0.42	0.42
Combined cycle	-	-	-	-	0.35	1.17	1.17	1.14	1.14
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	5.12	5.24	5.57	6.22	6.38	6.32	6.65
Available capacity	..	..	6.18	6.98	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**0.24**	**0.24**	**0.26**	**0.25**	**0.25**	**0.25**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	0.01	0.01	0.01	0.01	0.01	0.01
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	0.02	0.02	0.02	0.02
Combustible fuels	-	-	-	0.23	0.23	0.23	0.22	0.22	0.22
of which:									
Single-fired:									
Coal and coal products	-	-	-	0.02	0.11	0.01	0.01	0.01	0.01
Liquid fuels	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	0.08	0.03	0.01	0.01	0.01	0.01
Biofuels & waste	-	-	-	0.13	0.09	0.06	0.05	0.05	0.05
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	0.15	0.15	0.15	0.15
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	-	0.06	0.19	0.22	0.21	0.21	0.21
Internal combustion	-	-	-	0.17	0.04	0.01	0.01	0.02	0.02
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				New Zealand Dollars/ unit					
Steam coal (t)	c	c	c	c	c	c	c	c	c
Heavy fuel oil (t)	c	c	c	c	c	c	c	c	c
Natural gas (MWh)(1)	c	c	c	c	c	c	c	c	c
				New Zealand Dollars/ toe					
Steam coal	c	c	c	c	c	c	c	c	c
Heavy fuel oil	c	c	c	c	c	c	c	c	c
Natural gas(2)	c	c	c	c	c	c	c	c	c
End-user prices of electricity									
				New Zealand Dollars/ MWh					
Industry									
Price	17.80	28.30	57.20	61.70	101.84	104.00	99.38	110.78	116.50
of which: tax	-	-	-	-	-	-	-	-	-
Household									
Price	23.00	34.40	91.70	132.40	234.31	242.28	253.44	271.67	286.20
of which: tax	-	-	10.20	14.70	26.03	26.92	29.32	35.02	37.33

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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NORWAY

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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NORWAY

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	14.26	18.32	21.00	26.09	32.34	28.14	29.82	2.3	1.6
GDP (billion 2005 USD)	108.67	147.85	189.55	272.72	315.80	319.64	329.77	3.3	2.5
TPES/GDP(1)	0.13	0.12	0.11	0.10	0.10	0.09	0.09	-1.0	-0.9
Population (millions)	3.96	4.09	4.24	4.49	4.89	4.95	5.02	0.4	0.8
TPES/population(2)	3.60	4.48	4.95	5.81	6.61	5.68	5.94	1.9	0.8
TPES/GDP (2005 = 100)	149	141	126	109	116	100	103	-1.0	-0.9
Ele.TFC/GDP(2005=100)(3)	154	139	140	110	99	91	..	-0.5	..
Ele.TFC/population(4)	15353	18318	22835	24398	23214	21288	..	2.4	..
Elec. generated (TWh)(5)	73.03	83.75	121.61	142.51	123.24	126.89	146.77	3.0	0.9

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**14.26**	**18.32**	**21.00**	**26.09**	**32.34**	**28.14**	**29.82**	**2.3**	**1.6**
Coal	0.91	1.01	0.86	1.05	0.76	0.85	0.85	-0.3	-0.1
Oil	7.53	8.71	8.06	8.95	12.79	10.29	11.06	0.4	1.4
Natural gas	-	0.87	1.98	4.14	6.23	4.94	5.17	-	4.5
Biofuels & waste	-	0.58	1.03	1.36	1.73	1.80	1.91	-	2.8
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	-	0.00	0.08	0.11	0.13	-	-
Hydro	6.27	7.19	10.42	12.20	10.04	10.39	12.20	3.0	0.7
Net electricity imports(2)	-0.45	-0.04	-1.37	-1.64	0.65	-0.26	-1.53	6.8	0.5
Heat	-	-	0.02	0.02	0.06	0.03	0.03	-	2.6

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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NORWAY

3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**73.1**	**84.1**	**121.8**	**143.0**	**138.0**	**123.6**	**128.1**	**147.8**
Nuclear	-	-	-	-	-	-	-	-
Hydro	72.9	84.0	121.4	142.3	136.5	117.2	122.1	142.9
of which:								
pumped storage production	*0.0*	*0.3*	*0.2*	*0.5*	*0.8*	*0.4*	*1.3*	*1.1*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.0	0.5	0.9	1.3	1.6
Combustible fuels	0.2	0.1	0.3	0.6	0.9	5.5	4.7	3.3
Coal	*0.0*	*0.0*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*	*0.1*
Oil	*0.1*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*	*0.0*
Natural gas	*-*	*-*	*-*	*0.2*	*0.4*	*4.9*	*4.1*	*2.6*
Biofuels & waste	*-*	*-*	*0.2*	*0.3*	*0.4*	*0.5*	*0.5*	*0.5*
Other (e.g. fuel cells)	-	-	0.1 e	0.1 e	0.1	0.2	0.1	0.0
- Own use by power plant	0.5	0.9	1.0	0.7	0.6	0.6	0.6	..
Net production	**72.5**	**83.2**	**120.8**	**142.3**	**137.4**	**123.1**	**127.5**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	83.1	120.4	141.6	135.9	116.7	121.5	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.0	0.5	0.9	1.3	..
Combustible fuels	..	0.1	0.3	0.6	0.9	5.4	4.6	..
Other (e.g. fuel cells)	..	-	0.1	0.1	0.1	0.2	0.1	..
- Used for heat pumps	-	-	0.0	0.0	0.1	0.2	0.2	0.2
- Used for electric boilers	-	-	0.3	0.4	0.6	0.7	0.6	0.6
- Used for pumped storage	0.0	0.5	0.3	0.7 e	1.1	0.6	1.8	1.5
+ Imports	0.1	2.0	0.3	1.5	3.7	14.7	11.3	4.2
- Exports	5.3	2.5	16.2	20.5	15.7	7.1	14.3	22.0
Electrical energy supplied	**67.3**	**82.2**	**104.3**	**122.2**	**123.5**	**129.2**	**122.0**	**..**
- Transmission & distr. losses	6.3	7.1	6.9	11.7	10.0	9.5	10.3	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**61.0**	**75.1**	**97.4**	**110.5**	**113.5**	**119.7**	**111.7**	**..**
- Energy industry consumption[2]	0.2	0.3	0.6	1.0	2.8	6.3	6.3	..
Final consumption	**60.8**	**74.8**	**96.8**	**109.5**	**110.7**	**113.5**	**105.4**	**..**
Industry	37.2	39.9	45.8	51.6	52.0	44.5	44.0	..
Transport	0.5	0.7	0.7	0.6	0.6	0.7	0.7	..
Commercial & publ. serv.	6.6	11.0	19.4	20.6	22.0	26.3	23.1	..
Residential	16.0	22.5	30.3	34.6	34.0	39.8	35.4	..
Agriculture & fishing	0.5	0.7	0.7	2.1	2.1	2.2	2.1	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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NORWAY

4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**76.70**	**84.10**	**121.85**	**142.98**	**131.77**	**123.64**	**128.15**	**2.9**	**0.2**
- Hydro pumped storage	*0.05*	*0.35*	*0.24*	*0.47*	*0.79*	*0.40*	*1.26*	*10.6*	*8.3*
Total generation(1)	**76.65**	**83.75**	**121.61**	**142.51**	**130.98**	**123.24**	**126.89**	**2.9**	**0.2**
Main activity producers									
Gross production	65.66	72.53	109.00	127.83	122.26	113.59	118.62	3.2	0.4
- Hydro pumped storage	*0.05*	*0.35*	*0.23*	*0.40*	*0.77*	*0.38*	*1.24*	*10.3*	*8.4*
Total generation(1)	65.61	72.18	108.77	127.43	121.49	113.21	117.38	3.2	0.4
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	65.58	72.15	108.56	127.24	120.30	112.00	115.71	3.2	0.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.07	0.05	0.98	0.91	1.32	-	15.4
Coal	0.03	0.01	0.08	0.07	0.10	0.11	0.12	7.7	1.8
Oil	0.01	0.02	0.01	-	-	-	-	1.1	-
Natural gas	-	-	-	-	c	c	c	-	c
Biofuels & waste	-	-	0.06	0.06	0.11	0.20	0.23	-	6.7
Autoproducers									
Gross production	11.04	11.57	12.85	15.16	9.51	10.05	9.53	1.0	-1.4
- Hydro pumped storage	-	-	*0.01*	*0.07*	*0.02*	*0.02*	*0.02*	-	*3.4*
Total generation(1)	11.04	11.57	12.84	15.08	9.49	10.03	9.51	0.9	-1.4
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	11.01	11.47	12.59	14.57	4.98	4.75	5.10	0.8	-4.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.07	0.06	0.07	0.13	0.06	-	-1.0
Coal	-	-	-	-	-	-	-	-	-
Oil	0.03	0.10	-	0.01	0.03	0.03	0.03	-	-
Natural gas	-	-	-	0.21	4.23	4.87	4.06	-	-
Biofuels & waste	-	-	0.18	0.23	0.17	0.26	0.26	-	1.6

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**10972**	**11473**	**12756**	**15081**	**9500**	**9978**	**9531**	**-1.4**
Total energy	**10947**	**11370**	**12448**	**211**	**4076**	**4640**	**3876**	**-5.4**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	4076	4640	3876	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	-	-
Energy non specified/other	10947	11370	12448	211	-	-	-	-
Total industry	**25**	**103**	**308**	**13149**	**5407**	**5321**	**5640**	**14.8**
Iron and steel	9	36	108	707	817	997	903	10.6
Chemical and petrochemical	-	-	-	2410	1300	1226	1446	-
Non-ferrous metals	-	-	-	8945	3076	2802	2990	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	-	1	1	1	-
Mining and quarrying	-	-	-	-	30	31	30	-
Food and tobacco	-	-	-	-	3	4	8	-
Pulp and printing	16	67	200	964	166	244	247	1.0
Wood and wood products	-	-	-	-	5	5	4	-
Construction	-	-	-	-	3	2	2	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	123	6	9	9	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**-**	**1721**	**17**	**17**	**15**	**-**
Commerce and pub. services	-	-	-	646	17	17	15	-
Residential	-	-	-	18	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	-	-	-	1057 e	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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NORWAY
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**6471 e**	**8222 e**	**12727 e**	**22256**	**23277**	**23277**	**6.3**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	162	462	360	258	260	260	2.3
Oil	-	60	529	447	2977	1481	1481	16.5
Natural gas	-	-	102	316	643	628	628	-
Biofuels & waste	-	3669 e	4522	7219	12481	16728	16728	7.5
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	776 e	697 e	1048 e	1374	615	615	-1.1
Heat pumps	-	56	309	529	1877	1347	1347	16.4
Electric boilers	-	1039	1383	2263	2384	1979	1979	3.1
Other sources(1)	-	709 e	218 e	545 e	262	239	239	-5.0
of which:								
Main activity producers								
Total	-	4922	7269	11093	20620	22423	..	7.5
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	162	462	360	258	260	..	2.3
Oil	-	60	526	443	2977	1481	..	16.5
Natural gas	-	-	102	316	643	628	..	-
Biofuels & waste	-	3605	4495	7190	12481	16728	..	7.6
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	56	309	524	1877	1347	..	16.4
Electric boilers	-	1039	1375	2260	2384	1979	..	3.1
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	1549 e	953 e	1634 e	1636	854	..	-2.8
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	3	4	-	-	..	-
Natural gas	-	-	-	-	c	c	..	c
Biofuels & waste	-	64 e	27	29	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	776 e	697 e	1048 e	1374	615	..	-1.1
Heat pumps	-	-	-	5	-	-	..	-
Electric boilers	-	-	8	3	-	-	..	-
Other sources(1)	-	709 e	218 e	545 e	262	239	..	-5.0

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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NORWAY
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.05**	**0.04**	**0.16**	**0.23**	**0.93**	**1.32**	**1.24**	**7.6**	**10.2**
Coal	0.01	0.01	0.02	0.02	0.03	0.03	0.03	3.5	1.0
Oil	0.03	0.03	0.00	0.02	0.04	0.08	0.04	-11.7	11.9
Natural gas	-	-	-	0.03 e	0.56	0.79	0.63	-	-
Biofuels & waste	-	-	0.13 e	0.17	0.31	0.41	0.53	-	6.8
of which: ***main activity prod.***									
Total	**..**	**0.01**	**0.14**	**0.18**	**0.35**	**0.50**	**0.58**	**..**	**7.2**
Coal	..	0.01	0.02	0.02	0.03	0.03	0.03	..	1.0
Oil	..	0.00	0.00	0.02	0.03	0.08	0.04	..	11.5
Natural gas	..	-	-	0.00 e	0.02	0.02	0.02	..	-
Biofuels & waste	..	-	0.11 e	0.14	0.28	0.38	0.50	..	7.5

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**6.27**	**7.19**	**10.42**	**12.20**	**10.86**	**10.12**	**10.50**	**3.0**	**0.0**
Hydro	6.27	7.19	10.42	12.20	10.77	10.04	10.39	3.0	-0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00	0.08	0.08	0.11	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	309 e	255 e	292	329	406	1.3
Electricity production (GWh)	-	39 e	32 e	57	64	79	3.4
Petroleum products							
Fuel input (1000 t)	27	2	1	3	3	3	1.9
Fuel input (TJ)	1164	72	39	135	138	132	2.9
Electricity production (GWh)	124	6	9	30	31	30	8.0
Natural gas (1)							
Fuel input (TJ)	-	-	1269	25481	36196	28783	-
Electricity production (GWh)	-	-	211	4234	4865	4059	-
Wood and other solid waste							
Fuel input (TJ)	-	946	1163	866	1271	1286	1.5
Electricity production (GWh)	-	184	226	166	244	247	1.4
Industrial waste							
Fuel input (TJ)	-	-	-	60	115	115	-
Electricity production (GWh)	-	-	-	6	11	11	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	85	50	69	-
Electricity production (GWh)	-	-	-	11	7	10	-
Total combustible fuels(2)							
Electricity production (GWh)	124	229	478	4504	5222	4436	15.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	4	21	23	26	26	25	0.8
Fuel input (TJ)	121	578	652	735	735	735	1.2
Electricity production (GWh)	13	43	40	41	41	40	-0.3
CHP Heat production (TJ)	-	108	456	234	244	244	4.0
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	-	-	c	c	c	c
Electricity production (GWh)	-	-	-	c	c	c	c
CHP Heat production (TJ)	-	-	-	c	c	c	c
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	1988	2390	3146	6880	8910	7.4
Electricity production (GWh)	-	58	60	99	185	216	6.5
CHP Heat production (TJ)	-	1421	1777	2520	5532	7244	8.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	38	13	-
Electricity production (GWh)	-	-	-	-	6	2	-
CHP Heat production (TJ)	-	-	-	-	14	5	-
Total combustible fuels(2)							
Electricity production (GWh)	13	101	100	140	232	258	4.6
CHP Heat production (TJ)	-	1529	2233	2754	5790	7493	7.9

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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NORWAY
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	54	10	20	23	26	-3.4
Heat production (TJ)	-	54	6	12	14	16	-5.6
Petroleum products							
Fuel input (1000 t)	-	2	16	32	77	39	15.2
Fuel input (TJ)	-	76	681	1433	3354	1680	15.9
Heat production (TJ)	-	60	529	1216	2977	1481	16.5
Natural gas(1)							
Fuel input (TJ)	-	-	126	700	752	735	-
Heat production (TJ)	-	-	102	620	643	628	-
Wood and other solid waste							
Fuel input (TJ)	-	126 e	296	3222	4755	4460	18.5
Heat production (TJ)	-	73 e	160	1891	3237	2761	18.9
Industrial waste							
Fuel input (TJ)	-	-	471	633	1004	3726	-
Heat production (TJ)	-	-	471	633	1004	3726	-
Municipal waste							
Fuel input (TJ)	-	2527	2588	4756	3116	3600	1.7
Heat production (TJ)	-	2175	2102	4128	2630	2924	1.4
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	14	13	77	82	-
Heat production (TJ)	-	-	12	11	64	68	-
Total combustible fuels(2)							
Heat production (TJ)	-	2362	3382	8511	10569	11604	7.9

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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NORWAY
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**13.36**	**15.98**	**17.44**	**19.80**	**20.03**	**21.35**	**20.29**	**1.6**	**0.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.82	0.87	0.78	0.95	0.47	0.59	0.61	-0.3	-1.1
Oil	7.31	8.09	7.36	7.51	8.21	8.54	8.17	0.0	0.5
Natural gas	-	-	-	0.59	0.70	0.77	0.85	-	-
Biofuels & waste	-	0.58	0.90	1.20	1.13	1.30	1.25	-	1.6
Electricity	5.23	6.43	8.33	9.42	9.23	9.76	9.06	2.8	0.4
Heat	-	-	0.07	0.13	0.30	0.38	0.34	-	7.4
of which:									
Total industry	**5.84**	**6.43**	**6.03**	**6.87**	**5.49**	**6.08**	**6.05**	**0.2**	**0.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.76	0.84	0.77	0.88	0.43	0.54	0.56	0.1	-1.5
Oil	1.88	1.98	0.93	0.77	0.90	0.98	0.95	-4.1	0.1
Natural gas	-	-	-	0.17	0.21	0.26	0.24	-	-
Biofuels & waste	-	0.18	0.38	0.60	0.37	0.43	0.48	-	1.1
Electricity	3.20	3.43	3.94	4.43	3.55	3.83	3.79	1.2	-0.2
Heat	-	-	0.02	0.02	0.03	0.04	0.03	-	3.6
Transport	**2.30**	**2.89**	**3.41**	**4.06**	**4.65**	**4.85**	**4.69**	**2.4**	**1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	2.25	2.83	3.35	4.00	4.45	4.62	4.45	2.4	1.4
Natural gas	-	-	-	0.00	0.05	0.05	0.06	-	-
Biofuels & waste	-	-	-	-	0.09	0.12	0.12	-	-
Electricity	0.04	0.06	0.06	0.05	0.06	0.06	0.06	1.3	0.2
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.58**	**1.63**	**2.04**	**2.12**	**2.80**	**2.81**	**2.49**	**7.7**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	-	-	-	-	-	0.00	-	-
Oil	0.01	0.69	0.34	0.24	0.24	0.24	0.21	23.0	-2.3
Natural gas	-	-	-	0.00	0.02	0.02	0.02	-	-
Biofuels & waste	-	-	-	0.03	0.03	0.03	0.03	-	-
Electricity	0.57	0.95	1.67	1.77	2.31	2.26	1.99	6.6	0.8
Heat	-	-	0.03	0.09	0.20	0.25	0.23	-	9.7

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**1.87**	**3.19**	**3.60**	**3.82**	**3.99**	**4.42**	**3.90**	**3.9**	**0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.06	0.03	0.01	0.00	-	-	-	-12.9	-
Oil	0.44	0.82	0.45	0.25	0.17	0.20	0.15	0.2	-5.1
Natural gas	-	-	-	0.00	0.00	0.00	0.00	-	-
Biofuels & waste	-	0.40	0.52	0.58	0.64	0.71	0.63	-	0.9
Electricity	1.37	1.94	2.61	2.98	3.12	3.42	3.05	3.8	0.7
Heat	-	-	0.02	0.02	0.06	0.09	0.07	-	4.9
Agriculture & fishing	**0.06**	**0.27**	**0.51**	**0.77**	**0.80**	**0.82**	**0.81**	**12.9**	**2.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.00	-	-	-	-	-	-
Oil	0.02	0.21	0.45	0.58	0.59	0.61	0.61	20.4	1.5
Natural gas	-	-	-	-	0.02	0.02	0.01	-	-
Biofuels & waste	-	-	-	0.00	0.00	0.00	0.00	-	-
Electricity	0.05	0.06	0.06	0.18	0.18	0.19	0.18	1.5	5.5
Heat	-	-	0.00	0.00	0.00	0.00	0.00	-	-2.1
Other	**1.60**	**-**	**-**	**-**	**0.08**	**0.08**	**0.08**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.60	-	-	-	0.08	0.08	0.08	-	-
Natural gas	-	-	-	-	-	-	0.00	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**1.11**	**1.57**	**1.84**	**2.15**	**2.21**	**2.28**	**2.28**	**3.03**	**1.03**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**13.36**	**15.98**	**17.44**	**19.80**	**20.96**	**20.03**	**21.35**	**20.29**
Total industry (Mtoe)	**5.84**	**6.43**	**6.03**	**6.87**	**6.62**	**5.49**	**6.08**	**6.05**
Iron and steel	1.30	1.36	1.27	1.25	0.76	0.54	0.66	0.72
Chem. and petrochemical	0.68	0.88	0.76	1.17	1.40	1.21	1.45	1.42
Non-ferrous metals	1.18	1.43	1.54	1.75	2.07	1.73	1.74	1.72
Non-metallic minerals	0.15	0.41	0.23	0.29	0.31	0.25	0.27	0.29
Transport equipment	0.03	0.11	0.07	0.08	0.08	0.06	0.07	0.05
Machinery	0.08	0.22	0.19	0.15	0.14	0.11	0.13	0.11
Mining and quarrying	0.06	0.15	0.12	0.08	0.10	0.09	0.11	0.13
Food and tobacco	0.11	0.44	0.40	0.40	0.38	0.35	0.38	0.36
Paper, pulp and printing	0.39	0.80	0.97	1.17	0.89	0.73	0.81	0.78
Wood and wood products	0.04	0.21	0.18	0.26	0.15	0.12	0.15	0.15
Construction	0.03	0.36	0.26	0.18	0.25	0.25	0.25	0.26
Textile and leather	0.02	0.05	0.03	0.03	0.02	0.01	0.01	0.01
Non specified/other	1.76	0.01	0.03	0.07	0.06	0.04	0.05	0.06
Electricity consumption (Mtoe)	**5.23**	**6.43**	**8.33**	**9.42**	**9.63**	**9.23**	**9.76**	**9.06**
Total industry (Mtoe)	**3.20**	**3.43**	**3.94**	**4.43**	**4.36**	**3.55**	**3.83**	**3.79**
Iron and steel	0.72	0.72	0.71	0.68	0.45	0.31	0.40	0.44
Chem. and petrochemical	0.49	0.52	0.52	0.67	0.68	0.56	0.67	0.66
Non-ferrous metals	1.16	1.26	1.45	1.65	1.98	1.64	1.61	1.61
Non-metallic minerals	0.07	0.06	0.07	0.08	0.08	0.06	0.07	0.07
Transport equipment	0.03	0.05	0.05	0.07	0.06	0.04	0.05	0.04
Machinery	0.08	0.13	0.15	0.12	0.11	0.08	0.10	0.09
Mining and quarrying	0.06	0.07	0.06	0.04	0.04	0.04	0.05	0.05
Food and tobacco	0.11	0.15	0.20	0.27	0.25	0.22	0.23	0.22
Paper, pulp and printing	0.39	0.32	0.62	0.66	0.49	0.41	0.43	0.39
Wood and wood products	0.04	0.06	0.05	0.07	0.06	0.05	0.06	0.06
Construction	0.03	0.06	0.05	0.05	0.09	0.09	0.10	0.10
Textile and leather	0.02	0.02	0.01	0.02	0.01	0.01	0.01	0.01
Non specified/other	0.00	0.00	0.01	0.06	0.05	0.04	0.04	0.04
Total industry (TWh)	**37.19**	**39.93**	**45.81**	**51.57**	**50.66**	**41.29**	**44.54**	**44.04**
Iron and steel	8.33	8.42	8.26	7.88	5.18	3.64	4.68	5.16
Chem. and petrochemical	5.69	6.06	6.09	7.76	7.86	6.52	7.81	7.66
Non-ferrous metals	13.51	14.62	16.83	19.21	22.98	19.12	18.68	18.78
Non-metallic minerals	0.79	0.69	0.76	0.90	0.98	0.74	0.86	0.82
Transport equipment	0.39	0.57	0.56	0.79	0.71	0.50	0.56	0.49
Machinery	0.94	1.54	1.69	1.39	1.32	0.96	1.17	1.02
Mining and quarrying	0.67	0.85	0.71	0.51	0.50	0.44	0.56	0.60
Food and tobacco	1.27	1.69	2.29	3.13	2.89	2.50	2.72	2.61
Paper, pulp and printing	4.50	3.77	7.21	7.71	5.69	4.75	5.06	4.53
Wood and wood products	0.46	0.70	0.57	0.84	0.74	0.56	0.72	0.65
Construction	0.37	0.72	0.53	0.59	1.04	1.07	1.17	1.21
Textile and leather	0.24	0.25	0.16	0.21	0.14	0.09	0.08	0.08
Non specified/other	0.03	0.04	0.16	0.65	0.64	0.41	0.50	0.44

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**66**	**2039**	**334**	**2301**	**1474**	**3412**	**5651**	**14673**	**11255**
Imports from:									
Total from OECD	**20**	**1990**	**334**	**2221**	**1238**	**3236**	**5428**	**14464**	**11056**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	669	-	499	146	427	1453	4056	2413
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	2	63	174	59	126	156	127
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	326	1215	2259	1489
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	20	1321	332	1659	918	2424	2634	7993	7027
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**46**	**49**	**-**	**80**	**236**	**176**	**223**	**209**	**199**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	46	49	-	80	236	176	223	209	199
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**5259**	**2501**	**16241**	**8966**	**20529**	**17275**	**14634**	**7124**	**14329**
Exports to:									
Total to OECD	**5259**	**2501**	**16241**	**8966**	**20529**	**17275**	**14634**	**7124**	**14329**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	667	3950	1525	4634	4806	3834	1459	3600
Estonia	-	-	-	-	-	-	-	-	-
Finland	3	9	125	53	131	159	112	114	131
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	3369	2920	1377	3492
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	5256	1825	12166	7388	15764	8941	7768	4174	7106
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**14.22**	**17.49**	**24.72**	**25.65**	**26.08**	**29.46**	**29.62**	**29.61**	**29.61**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	14.16	17.41	24.63	25.58	25.96	28.53	28.65	28.63	28.63
of which: pumped storage	*0.13*	*0.33*	*1.07*	*0.64*	*1.15*	*1.31*	*1.31*	*1.29 e*	*1.29*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.01	0.40	0.42	0.43	0.43
Other (e.g. fuel cells)	-	-	-	-	-	0.01 e	0.01	0.01 e	0.01
Combustible fuels	0.06	0.08	0.09	0.07	0.11	0.53	0.53	0.54	0.54
of which:									
Single-fired:									
Coal and coal products	-	0.01	0.02	0.05	0.06	-	-	-	-
Liquid fuels	0.06	0.08	0.05	0.01	0.01	-	-	-	-
Natural gas	-	-	-	-	-	0.45	0.45	0.48	0.48
Biofuels & waste	-	-	0.01	0.01	0.04	0.06	0.06	0.05 e	0.05
Multi-fired:									
Solid / liquid	-	-	-	-	-	0.02	0.02	0.01 e	0.01
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	0.07	..	0.10	0.07	0.07	0.05 e	0.05
Internal combustion	-	-	0.02	..	0.01	0.01	0.01	- e	-
Gas turbine	-	-	0.01	..	-	0.45	0.45	0.48	0.48
Combined cycle	-	-	-	..	-	-	-	-	-
Other	-	-	-	0.07	-	-	-	-	-
Peak load	10.88	14.23	17.23	20.37	20.40	21.59	21.95 e	23.99 e	23.99
Available capacity	..	..	..	24.10	23.00	25.81	26.31	25.73	25.73

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**2.02**	**2.52**	**2.42**	**2.67**	**2.34**	**1.11**	**1.65**	**2.08**	**2.08**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.92	2.37	2.25	2.47	2.17	0.89	0.89	1.06	1.06
of which: pumped storage	-	-	-	*0.04*	*0.21*	*0.04*	*0.04*	*0.04 e*	*0.04*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.01	0.01	0.01 e	0.01	0.01 e	0.01
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	0.02 e	0.02	0.02 e	0.02
Combustible fuels	0.11	0.15	0.16	0.19	0.16	0.19	0.73	0.99	0.99
of which:									
Single-fired:									
Coal and coal products	0.01	-	0.02	0.05	0.02	-	-	-	-
Liquid fuels	0.10	0.15	0.08	-	0.01	0.02	0.02	0.02 e	0.02
Natural gas	-	-	-	0.04	0.04	0.09	0.61	0.90	0.90
Biofuels & waste	-	-	0.06	0.11	0.10	0.08	0.10	0.07 e	0.07
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	0.16	..	0.12	0.08	0.10	0.07 e	0.07
Internal combustion	-	-	-	-	0.01	0.02	0.02	0.02 e	0.02
Gas turbine	-	-	-	..	0.04	0.09	0.61	0.90	0.90
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	0.19	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Norwegian Crowns/ unit					
Steam coal (t)	..	..	..	..	..	..	..	..	..
Heavy fuel oil (t)	x	x	x	x	x	x	x	x	x
Natural gas (MWh)[1]	..	..	..	..	..	..	..	..	..
				Norwegian Crowns/ toe					
Steam coal	..	..	..	..	..	..	..	..	..
Heavy fuel oil	x	x	x	x	x	x	x	x	x
Natural gas[2]	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Norwegian Crowns/ MWh					
Industry									
Price	61.00	90.00	220.00	170.97	359.00	369.10	445.60	398.44	334.69
of which: tax	15.00	20.00	39.00	31.97	72.00	73.85	89.10	79.69	66.94
Household									
Price	149.00	175.00	459.00	508.57	854.30	834.10	1062.80	955.70	790.73
of which: tax	42.00	43.00	115.00	180.70	275.90	275.00	322.60	303.20	272.05

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

1973

2011

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	92.88	126.62	103.10	89.12	101.54	101.31	96.54	0.6	-0.3
GDP (billion 2005 USD)	156.74	181.39	180.14	261.10	382.59	399.89	407.34	0.8	3.8
TPES/GDP(1)	0.59	0.70	0.57	0.34	0.27	0.25	0.24	-0.2	-3.9
Population (millions)	33.37	35.58	38.03	38.26	38.52	38.53	38.45	0.8	0.0
TPES/population(2)	2.78	3.56	2.71	2.33	2.64	2.63	2.51	-0.2	-0.3
TPES/GDP (2005 = 100)	195	230	188	112	87	83	78	-0.2	-3.9
Ele.TFC/GDP(2005=100)(3)	107	135	154	109	90	88	..	2.2	..
Ele.TFC/population(4)	1746	2391	2531	2579	3090	3166	..	2.2	..
Elec. generated (TWh)(5)	83.91	120.94	134.42	143.17	157.09	163.12	161.60	2.8	0.8

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**92.88**	**126.62**	**103.10**	**89.12**	**101.54**	**101.31**	**96.54**	**0.6**	**-0.3**
Coal	74.70	99.80	78.87	56.30	55.40	54.62	50.21	0.3	-2.0
Oil	10.68	16.65	13.04	19.16	25.43	25.59	23.75	1.2	2.8
Natural gas	6.25	8.77	8.94	9.96	12.80	12.83	13.60	2.1	1.9
Biofuels & waste	1.27	1.21	2.23	4.06	7.60	8.21	8.61	3.4	6.3
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	0.00	0.01	0.01	0.02	-	-
Solar, wind, tide(1)	-	-	-	0.00	0.15	0.29	0.42	-	-
Hydro	0.13	0.20	0.12	0.18	0.25	0.20	0.18	-0.2	1.7
Net electricity imports(2)	-0.15	-0.02	-0.09	-0.55	-0.12	-0.45	-0.24	-3.0	4.7
Heat	-	-	-	-	0.01	0.01	0.02	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**84.3**	**121.9**	**136.3**	**145.2**	**156.9**	**157.7**	**163.5**	**162.0**
Nuclear	-	-	-	-	-	-	-	-
Hydro	1.9	3.3	3.3	4.1	3.8	3.5	2.8	2.5
of which:								
pumped storage production	*0.4*	*0.9*	*1.9*	*2.0*	*1.6*	*0.6*	*0.4*	*0.4*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.0	0.1	1.7	3.2	4.7
Combustible fuels	82.5	118.6	133.0	141.1	153.0	152.5	157.6	154.9
Coal	*78.8*	*114.5*	*131.0*	*137.7*	*143.3*	*138.3*	*141.4*	*136.3*
Oil	*2.0*	*3.5*	*1.6*	*1.9*	*2.8*	*2.9*	*2.5*	*2.1*
Natural gas	*1.4*	*0.1*	*0.1*	*0.9*	*5.2*	*4.8*	*5.8*	*6.1*
Biofuels & waste	*0.3*	*0.4*	*0.3*	*0.6*	*1.7*	*6.5*	*7.9*	*10.4*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	7.8	11.7	12.9	13.0	13.3	14.2	14.7	..
Net production	**76.5**	**110.2**	**123.4**	**132.2**	**143.6**	**143.4**	**148.9**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	3.3	3.3	4.1	3.7	3.5	2.7	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.0	0.1	1.7	3.2	..
Combustible fuels	..	106.9	120.1	128.1	139.7	138.3	143.0	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	0.1	0.1	0.1
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.6	1.2	2.6	2.8	2.2	0.8	0.6	0.6
+ Imports	2.0	4.2	10.4	3.3	5.0	6.3	6.8	9.8
- Exports	3.8	4.4	11.5	9.7	16.2	7.7	12.0	12.6
Electrical energy supplied	**74.2**	**108.7**	**119.8**	**123.1**	**130.2**	**141.2**	**142.9**	**..**
- Transmission & distr. losses	7.0	12.2	10.6	14.2	14.6	11.9	10.6	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**67.2**	**96.5**	**109.2**	**108.8**	**115.6**	**129.3**	**132.3**	**..**
- Energy industry consumption[2]	8.9	11.5	13.0	10.2	10.2	10.3	10.3	..
Final consumption	**58.2**	**85.0**	**96.2**	**98.6**	**105.4**	**119.0**	**121.9**	**..**
Industry	38.1	52.1	42.7	40.5	41.3	41.8	44.6	..
Transport	3.5	4.8	5.5	4.7	4.0	3.3	3.3	..
Commercial & publ. serv.	7.2	9.6	19.3	27.8	33.4	43.6	44.3	..
Residential	5.5	10.7	20.2	21.0	25.3	28.6	28.3	..
Agriculture & fishing	2.2	5.4	8.5	4.8	1.5	1.6	1.6	..
Sector non specified	1.8	2.4	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**91.60**	**121.87**	**136.31**	**145.18**	**151.72**	**157.66**	**163.55**	**2.5**	**0.9**
- Hydro pumped storage	*0.33*	*0.93*	*1.90*	*2.01*	*0.60*	*0.57*	*0.43*	*11.5*	*-6.8*
Total generation(1)	**91.27**	**120.94**	**134.42**	**143.17**	**151.12**	**157.09**	**163.12**	**2.4**	**0.9**
Main activity producers									
Gross production	81.92	111.53	128.21	137.95	144.84	149.69	155.21	2.8	0.9
- Hydro pumped storage	*0.33*	*0.93*	*1.90*	*2.01*	*0.60*	*0.57*	*0.43*	*11.5*	*-6.8*
Total generation(1)	81.59	110.60	126.31	135.94	144.24	149.12	154.78	2.8	1.0
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2.12	2.35	1.42	2.10	2.37	2.92	2.33	-2.5	2.4
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.01	1.08	1.66	3.21	-	-
Coal	77.48	105.81	124.29	132.28	131.32	134.33	137.54	3.0	0.5
Oil	1.63	2.42	0.59	0.66	0.60	0.62	0.67	-6.1	0.6
Natural gas	0.36	0.02	0.01	0.82	4.54	4.42	4.89	-20.1	34.3
Biofuels & waste	-	-	0.01	0.07	4.33	5.18	6.14	-	34.6
Autoproducers									
Gross production	9.68	10.34	8.10	7.24	6.88	7.97	8.34	-1.1	0.1
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	9.68	10.34	8.10	7.24	6.88	7.97	8.34	-1.1	0.1
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	8.71	8.74	6.76	5.38	3.37	3.94	3.90	-1.6	-2.6
Oil	0.52	1.07	0.98	1.25	2.13	2.27	1.78	4.0	2.9
Natural gas	0.13	0.12	0.12	0.11	0.25	0.38	0.93	-0.6	10.5
Biofuels & waste	0.33	0.41	0.25	0.48	1.13	1.37	1.72	-1.7	9.7

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**8094**	**8247**	**6070**	**6586**	**6454**	**7479**	**7845**	**1.2**
Total energy	**-**	**-**	**1795**	**2107**	**2561**	**2820**	**2792**	**2.1**
Coal mines	-	-	-	97	12	15	37	-
Oil and gas extraction	-	-	-	-	10	15	27	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	412	480	616	560	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	4	4	3	-
Oil refineries	-	-	-	1393	2013	2153	2134	-
Energy non specified/other	-	-	1795	205	42	17	31	-17.6
Total industry	**-**	**-**	**4275**	**4448**	**3585**	**4218**	**4546**	**0.3**
Iron and steel	-	-	814	917	379	344	382	-3.5
Chemical and petrochemical	-	-	2105	1849	1661	1923	1872	-0.6
Non-ferrous metals	-	-	188	303	-	-	-	-
Non-metallic minerals	-	-	2	4	-	-	-	-
Transport equipment	-	-	66	59	-	-	-	-
Machinery	-	-	54	17	2	3	2	-14.5
Mining and quarrying	-	-	24	7	-	-	-	-
Food and tobacco	-	-	436	413	274	326	341	-1.2
Pulp and printing	-	-	465	747	1201	1538	1882	6.9
Wood and wood products	-	-	10	10	6	9	9	-0.5
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	111	41	-	-	-	-
Non specified/other industries	-	-	-	81	62	75	58	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**8094**	**8247**	**-**	**31**	**308**	**441**	**507**	**-**
Commerce and pub. services	-	-	-	31	308	441	507	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	8094	8247	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**837323**	**739569**	**340684**	**340716**	**344796**	**309782**	**315790**	**-4.1**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	748961	668484	319134	309050	301073	265734	264428	-4.3
Oil	54491	42499	7937	4958	6565	6006	6176	-8.9
Natural gas	23839	14606	10985	21374	21559	19179	19826	1.3
Biofuels & waste	10032	13980	2628	5334	14711	17917	24263	1.2
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	888	946	1097	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	351256	332290	295329	294265	315575	281539	..	-0.8
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	337931	324017	280490	273226	282119	247822	..	-1.3
Oil	11641	7874	5099	2043	1972	1384	..	-7.9
Natural gas	1684	350	8547	17053	18958	17198	..	20.4
Biofuels & waste	-	49	1193	1943	11638	14189	..	31.0
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	888	946	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	486067	407279	45355	46451	29221	28243	..	-11.9
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	411030	344467	38644	35824	18954	17912	..	-13.1
Oil	42850	34625	2838	2915	4593	4622	..	-9.1
Natural gas	22155	14256	2438	4321	2601	1981	..	-9.0
Biofuels & waste	10032	13931	1435	3391	3073	3728	..	-6.1
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**39.54**	**57.52**	**55.04**	**40.61**	**40.26**	**41.95**	**42.32**	**2.0**	**-1.2**
Coal	37.03 e	53.89	52.45	39.34	36.97	38.30	38.27	2.1	-1.5
Oil	1.16	2.47	1.60	0.58	0.53	0.59	0.52	1.9	-5.2
Natural gas	0.96	0.77	0.52	0.52	1.24	1.25	1.36	-3.6	4.7
Biofuels & waste	0.40	0.39	0.47	0.17	1.52	1.81	2.16	1.1	7.5
of which: ***main activity prod.***									
Total	**..**	**38.54**	**39.80**	**38.13**	**38.52**	**39.89**	**40.21**	**..**	**0.0**
Coal	..	37.53	39.40	37.35	35.94	37.13	37.12	..	-0.3
Oil	..	0.95	0.39	0.30	0.17	0.18	0.18	..	-3.5
Natural gas	..	0.06	0.01	0.43	1.15	1.14	1.19	..	23.9
Biofuels & waste	..	-	0.00	0.05	1.25	1.45	1.71	..	32.9

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**0.13**	**0.20**	**0.12**	**0.18**	**0.30**	**0.39**	**0.48**	**-0.2**	**6.7**
Hydro	0.13	0.20	0.12	0.18	0.20	0.25	0.20	-0.2	2.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00	0.09	0.14	0.28	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Natural gas (1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	396	-	-	-	-
Electricity production (GWh)	-	-	31	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	-	-	31	-	-	-	-

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	77529	59361	44514	41519	44072	43816	-1.4
Fuel input (TJ)	1480962	1211894	962652	903479	946890	933247	-1.2
Electricity production (GWh)	89226	75774	82419	83187	87941	87325	0.7
CHP Heat production (TJ)	440954	358447	174179	158836	162875	149024	-4.1
Brown coal							
Fuel input (1000 t)	33839	66565	59066	56026	55697	61769	-0.4
Fuel input (TJ)	264768	552146	505127	493666	477036	516650	-0.3
Electricity production (GWh)	24442	54587	53469	50234	48651	52529	-0.2
CHP Heat production (TJ)	4668	5442	8575	5137	5990	5507	0.1
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	29821	25805	22064	25968	34967	33509	1.3
Electricity production (GWh)	879	684	1779	1275	1675	1589	4.1
CHP Heat production (TJ)	17492	16178	5373	7838	10709	10875	-1.9
Petroleum products							
Fuel input (1000 t)	2350	1288	451	514	571	515	-4.3
Fuel input (TJ)	95287	51947	18126	20810	23215	20914	-4.2
Electricity production (GWh)	3492	1570	1916	2723	2892	2453	2.1
CHP Heat production (TJ)	48006	31434	2856	3201	5225	5098	-8.3
Natural gas(1)							
Fuel input (TJ)	4976	3295	13914	45628	45178	52108	14.1
Electricity production (GWh)	144	125	928	4787	4798	5821	20.1
CHP Heat production (TJ)	2889	1607	3696	10824	11870	10681	9.4
Wood and other solid waste							
Fuel input (TJ)	9867	10408	2926	53147	64241	78121	10.1
Electricity production (GWh)	248	55	190	4904	5905	7149	26.1
CHP Heat production (TJ)	6094	8109	1347	8834	9889	12876	2.2
Industrial waste							
Fuel input (TJ)	5289	5172	3233	5090	5398	5666	0.4
Electricity production (GWh)	161	203	331	227	234	253	1.1
CHP Heat production (TJ)	3077	2902	754	1648	2139	2213	-1.3
Municipal waste							
Fuel input (TJ)	-	-	-	368	367	403	-
Electricity production (GWh)	-	-	-	9	10	10	-
CHP Heat production (TJ)	-	-	-	253	251	238	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	3128	3647	4447	-
Electricity production (GWh)	-	-	-	323	399	453	-
CHP Heat production (TJ)	-	-	-	799	739	973	-
Total combustible fuels(2)							
Electricity production (GWh)	118592	132998	141032	147669	152505	157582	0.8
CHP Heat production (TJ)	523180	424119	196780	197370	209687	197485	-3.6

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	18452	18722	7234	5554	6390	5254	-5.9
Fuel input (TJ)	415793	398909	157362	125267	145911	119302	-5.6
Heat production (TJ)	280200	282920	129698	102085	120196	98745	-4.9
Brown coal							
Fuel input (1000 t)	318	357	39	33	36	31	-11.0
Fuel input (TJ)	3042	3427	439	361	404	358	-10.2
Heat production (TJ)	2063	2399	349	292	330	293	-9.5
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	5287	4675	1246	906	1142	1575	-5.0
Heat production (TJ)	3584	3098	960	770	973	1290	-4.1
Petroleum products							
Fuel input (1000 t)	234	380	154	33	40	26	-12.0
Fuel input (TJ)	9566	15299	6344	1341	1604	1078	-11.9
Heat production (TJ)	6485	11065	5081	1115	1340	908	-11.2
Natural gas(1)							
Fuel input (TJ)	30925	20751	10115	11959	12855	11304	-2.9
Heat production (TJ)	20950	12999	7289	8940	9689	8498	-2.0
Wood and other solid waste							
Fuel input (TJ)	793	4163	535	1936	1878	1772	-4.0
Heat production (TJ)	538	2895	455	1614	1590	1498	-3.1
Industrial waste							
Fuel input (TJ)	476	93	40	5	95	114	1.0
Heat production (TJ)	323	64	35	4	90	105	2.4
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	14	47	27	15	16	0.6
Heat production (TJ)	-	10	37	23	13	14	1.6
Total combustible fuels(2)							
Heat production (TJ)	314143	315450	143904	114843	134221	111351	-4.8

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC(1)	**60.55**	**78.01**	**61.42**	**58.18**	**64.50**	**69.91**	**68.31**	**0.1**	**0.5**
Geothermal	-	-	-	0.00	0.01	0.01	0.01	-	-
Solar thermal	-	-	-	-	0.01	0.01	0.01	-	-
Coal	29.02	31.96	17.34	13.25	11.19	13.28	11.88	-3.0	-1.8
Oil	8.96	13.00	10.93	17.51	22.24	23.06	23.11	1.2	3.6
Natural gas	4.42	6.96	7.69	8.16	9.82	10.55	10.36	3.3	1.4
Biofuels & waste	0.81	0.76	1.63	3.89	5.13	5.78	6.04	4.2	6.4
Electricity	5.01	7.31	8.28	8.48	9.69	10.23	10.49	3.0	1.1
Heat	12.33	18.01	15.56	6.88	6.40	6.99	6.41	1.4	-4.1
of which:									
Total industry	**26.24**	**32.20**	**23.00**	**17.50**	**14.04**	**14.64**	**15.33**	**-0.8**	**-1.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	10.07	10.43	6.56	7.48	3.62	3.92	4.21	-2.5	-2.1
Oil	1.45	2.07	0.94	1.82	1.27	1.13	1.04	-2.5	0.5
Natural gas	2.97	3.82	2.51	2.28	2.93	3.10	3.19	-1.0	1.1
Biofuels & waste	0.16	0.31	0.68	0.99	1.37	1.48	1.58	8.7	4.1
Electricity	3.28	4.48	3.68	3.48	3.42	3.60	3.83	0.7	0.2
Heat	8.30	11.09	8.64	1.45	1.42	1.41	1.48	0.2	-8.1
Transport	**8.97**	**9.17**	**7.12**	**9.51**	**15.94**	**16.94**	**17.15**	**-1.3**	**4.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	3.66	1.80	0.17	-	-	-	-	-16.4	-
Oil	5.01	6.96	6.48	9.05	14.74	15.55	15.72	1.5	4.3
Natural gas	-	-	-	0.06	0.26	0.22	0.22	-	-
Biofuels & waste	-	-	-	-	0.66	0.89	0.93	-	-
Electricity	0.30	0.41	0.47	0.40	0.28	0.28	0.28	2.7	-2.4
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**5.53**	**7.65**	**4.95**	**4.96**	**7.61**	**8.55**	**8.11**	**-0.6**	**2.4**
Geothermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	4.27 e	5.63 e	2.15 e	0.52	0.80	0.96	0.80	-3.9	-4.6
Oil	-	-	-	0.39	0.60	0.73	0.68	-	-
Natural gas	0.08	0.29	0.33	0.92	1.81	1.99	1.87	8.4	8.6
Biofuels & waste	0.06	0.04	0.02	0.22	0.19	0.21	0.21	-6.3	11.7
Electricity	0.61	0.83	1.66	2.39	3.48	3.75	3.81	6.0	4.0
Heat	0.50	0.87	0.79	0.52	0.71	0.90	0.73	2.8	-0.4

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**13.80**	**20.17**	**17.83**	**17.19**	**18.74**	**21.12**	**19.00**	**1.5**	**0.3**
Geothermal	-	-	-	0.00	0.01	0.01	0.01	-	-
Solar thermal	-	-	-	-	0.00	0.01	0.01	-	-
Coal	9.51 e	12.48 e	7.33 e	4.28	5.66	7.05	5.73	-1.5	-1.2
Oil	0.12	0.17	0.04	0.89	0.79	0.70	0.66	-6.2	14.2
Natural gas	0.31	1.27	2.92	3.05	3.22	3.54	3.23	14.1	0.5
Biofuels & waste	0.57	0.39	-	2.27	2.45	2.69	2.75	-	-
Electricity	0.47	0.92	1.74	1.81	2.37	2.46	2.43	8.0	1.6
Heat	2.82	4.93	5.80	4.90	4.24	4.66	4.18	4.3	-1.5
Agriculture & fishing	**2.15**	**3.22**	**3.38**	**4.62**	**3.54**	**3.78**	**3.64**	**2.7**	**0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.74	1.08	0.94	0.90	1.07	1.27	1.05	1.4	0.5
Oil	0.91	1.26	1.37	2.87	1.81	1.81	1.83	2.4	1.4
Natural gas	0.03	0.01	0.01	0.01	0.04	0.04	0.04	-5.3	6.0
Biofuels & waste	0.01	0.02	-	0.41	0.45	0.50	0.57	-	-
Electricity	0.19	0.46	0.73	0.41	0.14	0.14	0.14	8.2	-7.7
Heat	0.26	0.40	0.33	0.02	0.03	0.03	0.02	1.4	-12.3
Other	**0.65**	**1.04**	**0.93**	**0.04**	**0.00**	**0.00**	**0.00**	**2.1**	**-27.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.05	0.12	-	-	-	-	-	-	-
Oil	-	-	-	0.04	0.00	0.00	0.00	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	0.93	-	-	-	-	-	-
Electricity	0.15	0.21	-	-	-	-	-	-	-
Heat	0.45	0.72	-	-	-	-	-	-	-
Non-energy use(1)	**3.22**	**4.55**	**4.21**	**4.35**	**4.62**	**4.88**	**5.08**	**1.59**	**0.90**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**60.55**	**78.01**	**61.42**	**58.18**	**65.62**	**64.50**	**69.91**	**68.31**
Total industry (Mtoe)	**26.24**	**32.20**	**23.00**	**17.50**	**15.31**	**14.04**	**14.64**	**15.33**
Iron and steel	5.81	7.09	4.83	3.46	2.19	1.51	1.70	1.86
Chem. and petrochemical	4.08	4.79	4.21	4.11	3.65	3.67	3.60	3.75
Non-ferrous metals	0.83	1.01	0.56	0.76	0.67	0.58	0.52	0.56
Non-metallic minerals	5.02	5.37	3.46	2.59	2.65	2.56	2.72	3.00
Transport equipment	0.77	1.12	0.61	0.42	0.45	0.34	0.36	0.36
Machinery	2.36	3.30	2.06	0.89	0.74	0.63	0.70	0.70
Mining and quarrying	1.48	1.82	1.47	0.47	0.32	0.26	0.37	0.39
Food and tobacco	2.44	2.87	2.37	1.98	1.83	1.75	1.78	1.77
Paper, pulp and printing	0.84	1.07	0.97	1.12	1.18	1.21	1.26	1.24
Wood and wood products	0.54	0.72	0.64	0.60	0.71	0.68	0.75	0.77
Construction	0.96	1.35	0.79	0.19	0.22	0.26	0.24	0.23
Textile and leather	1.05	1.54	0.98	0.41	0.17	0.13	0.13	0.11
Non specified/other	0.06	0.15	0.06	0.52	0.55	0.45	0.50	0.59
Electricity consumption (Mtoe)	**5.01**	**7.31**	**8.28**	**8.48**	**10.12**	**9.69**	**10.23**	**10.49**
Total industry (Mtoe)	**3.28**	**4.48**	**3.68**	**3.48**	**3.81**	**3.42**	**3.60**	**3.83**
Iron and steel	0.50	0.73	0.64	0.62	0.58	0.43	0.51	0.54
Chem. and petrochemical	0.84	0.97	0.90	0.73	0.73	0.69	0.65	0.71
Non-ferrous metals	0.18	0.23	0.19	0.31	0.25	0.20	0.15	0.17
Non-metallic minerals	0.23	0.36	0.27	0.28	0.35	0.36	0.38	0.42
Transport equipment	0.14	0.18	0.11	0.13	0.21	0.14	0.15	0.17
Machinery	0.43	0.62	0.46	0.30	0.33	0.28	0.31	0.34
Mining and quarrying	0.27	0.35	0.27	0.13	0.12	0.12	0.18	0.19
Food and tobacco	0.18	0.25	0.25	0.32	0.44	0.43	0.44	0.44
Paper, pulp and printing	0.14	0.16	0.17	0.23	0.27	0.29	0.31	0.30
Wood and wood products	0.07	0.10	0.11	0.12	0.16	0.16	0.16	0.16
Construction	0.09	0.22	0.11	0.05	0.06	0.06	0.07	0.07
Textile and leather	0.21	0.29	0.18	0.11	0.07	0.05	0.05	0.04
Non specified/other	0.01	0.02	0.01	0.16	0.24	0.21	0.24	0.29
Total industry (TWh)	**38.12**	**52.13**	**42.74**	**40.45**	**44.26**	**39.80**	**41.83**	**44.57**
Iron and steel	5.87	8.50	7.48	7.19	6.74	5.01	5.89	6.32
Chem. and petrochemical	9.75	11.32	10.45	8.50	8.47	8.04	7.57	8.24
Non-ferrous metals	2.05	2.72	2.16	3.65	2.96	2.32	1.71	1.94
Non-metallic minerals	2.66	4.23	3.17	3.29	4.09	4.16	4.39	4.84
Transport equipment	1.65	2.07	1.29	1.51	2.39	1.66	1.75	1.93
Machinery	5.04	7.17	5.41	3.45	3.85	3.26	3.63	3.97
Mining and quarrying	3.09	4.07	3.19	1.46	1.42	1.39	2.15	2.22
Food and tobacco	2.05	2.96	2.86	3.76	5.06	4.95	5.09	5.10
Paper, pulp and printing	1.64	1.81	1.96	2.67	3.19	3.42	3.66	3.52
Wood and wood products	0.79	1.19	1.27	1.34	1.82	1.82	1.86	1.85
Construction	1.02	2.52	1.27	0.55	0.67	0.75	0.77	0.80
Textile and leather	2.45	3.39	2.14	1.25	0.78	0.57	0.57	0.51
Non specified/other	0.07	0.18	0.11	1.83	2.80	2.48	2.81	3.33

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**2011**	**4161**	**10437**	**4356**	**3290**	**9034**	**7403**	**6310**	**6780**
Imports from:									
Total from OECD	**-**	**-**	**-**	**4020**	**2498**	**7701**	**7201**	**6310**	**6720**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	119	64	29	129	137	44
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	3901	2006	5576	5616	5331	5136
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	3	31	62	82	26
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	425	2065	1394	760	1514
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**336**	**792**	**1333**	**202**	**-**	**60**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	163	554	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	336	629	779	202	-	60
Non-specified/others	**2011**	**4161**	**10437**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**3765**	**4396**	**11478**	**7157**	**9663**	**9703**	**9594**	**7664**	**12022**
Exports to:									
Total to OECD	**-**	**-**	**-**	**7157**	**9663**	**9703**	**9594**	**7664**	**12004**
Austria	-	-	-	1663	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	2765	7219	6912	6869	5504	8243
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	2729	688	95	134	167	432
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	1702	2551	2337	1499	3052
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	54	145	254	494	277
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**18**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	18
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**3765**	**4396**	**11478**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**16.17**	**21.77**	**25.52**	**27.25**	**28.67**	**31.05**	**31.38**	**31.56**	**32.82**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.79	1.30	1.89	2.06	2.18	2.33	2.34	2.34	2.35
of which: pumped storage	*0.15*	*0.65*	*1.21*	*1.37*	*1.37*	*1.41*	*1.41*	*1.41*	*1.41*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.53	0.71	1.11	1.80
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	15.38	20.48	23.63	25.18	26.49	28.19	28.33	28.12	28.68
of which:									
Single-fired:									
Coal and coal products	15.38	20.48	23.63	25.18	26.28	27.37	27.51	27.29	27.79
Liquid fuels	-	-	-	-	-	-	-	-	0.02
Natural gas	-	-	-	-	0.20	0.81	0.81	0.81	0.79
Biofuels & waste	-	-	-	-	-	-	-	0.01	0.07
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	15.38	20.48	23.63	25.18	26.29	27.39	27.53	27.30	27.88
Internal combustion	-	-	-	-	0.01	0.03	0.03	0.03	0.03
Gas turbine	-	-	-	-	-	0.04	0.04	0.04	0.06
Combined cycle	-	-	-	-	0.19	0.73	0.73	0.74	0.70
Other	-	-	-	-	-	-	-	-	-
Peak load	13.45	17.09	22.90	22.69	22.80	23.95	22.60	25.12	23.43
Available capacity	14.15	17.69	23.25	26.12	27.78	27.44	28.22	27.26	27.66

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**2.45**	**2.95**	**2.36**	**2.24**	**1.89**	**1.62**	**1.66**	**1.80**	**1.73**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	2.45	2.95	2.36	2.24	1.89	1.62	1.66	1.80	1.73
of which:									
Single-fired:									
Coal and coal products	2.45	2.95	2.36	2.23	1.52	1.00	1.00	1.11	0.99
Liquid fuels	-	-	-	-	0.35	0.49	0.49	0.49	0.45
Natural gas	-	-	-	-	0.01	0.04	0.05	0.06	0.07
Biofuels & waste	-	-	-	-	0.01	0.10	0.11	0.13	0.21
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	0.01	0.01	0.01	0.01
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	2.45	2.95	2.36	2.24	1.87	1.53	1.54	1.66	1.57
Internal combustion	-	-	-	-	-	0.06	0.07	0.09	0.12
Gas turbine	-	-	-	-	0.01	0.01	0.01	0.01	0.01
Combined cycle	-	-	-	-	-	0.02	0.04	0.04	0.04
Other	-	-	-	-	-	-	-	-	-
Peak load	1.59	1.62	1.37	1.52	1.22	1.22	1.25	1.24	1.19
Available capacity	1.59	1.62	1.37	1.52	1.22	1.22	1.25	1.24	1.19

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Polish Zlotys/ unit					
Steam coal (t)	..	0.01	10.82	122.66	190.95	250.88	236.67	251.38	270.35
Heavy fuel oil (t)	..	..	81.9	489.7	1266.9	1229.5	1522.3	1994.6	2325.7
Natural gas (MWh)(1)	..	..	..	..	77.73	75.21	75.62	81.39	92.19
				Polish Zlotys/ toe					
Steam coal	..	-	23.1	241.2	379.4	489.4	461.7	490.4	527.4
Heavy fuel oil	..	..	83.6	500.1	1293.7	1250.1	1550.9	2032.0	2369.3
Natural gas(2)	..	..	..	..	1004	972	977	1052	1191
End-user prices of electricity									
				Polish Zlotys/ MWh					
Industry									
Price	..	..	24.10	160.30	287.44	373.48	362.88	360.15	372.62
of which: tax	..	..	-	-	20.00	20.00	20.00	20.00	20.00
Household									
Price	0.10	0.10	9.80	284.50	465.04	522.42	539.97	587.12	620.69
of which: tax	-	-	-	51.30	103.86	114.21	117.37	129.79	136.06

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	6.90	9.99	16.74	24.67	23.54	23.08	21.95	5.4	1.2
GDP (billion 2005 USD)	80.45	99.81	137.44	184.10	197.17	194.10	187.95	3.2	1.4
TPES/GDP(1)	0.09	0.10	0.12	0.13	0.12	0.12	0.12	2.1	-0.2
Population (millions)	8.72	9.86	10.00	10.23	10.64	10.65	10.64	0.8	0.3
TPES/population(2)	0.79	1.01	1.67	2.41	2.21	2.17	2.06	4.5	1.0
TPES/GDP (2005 = 100)	62	73	88	97	87	86	85	2.1	-0.2
Ele.TFC/GDP(2005=100)(3)	42	60	71	86	105	103	..	3.1	..
Ele.TFC/population(4)	938	1455	2356	3754	4692	4542	..	5.6	..
Elec. generated (TWh)(5)	9.79	15.21	28.36	43.37	53.69	51.88	45.54	6.5	2.2

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**6.90**	**9.99**	**16.74**	**24.67**	**23.54**	**23.08**	**21.95**	**5.4**	**1.2**
Coal	0.51	0.43	2.76	3.81	1.66	2.21	2.91	10.5	0.2
Oil	5.12	8.00	10.70	14.91	11.55	10.88	9.51	4.4	-0.5
Natural gas	-	-	-	2.03	4.49	4.46	4.03	-	-
Biofuels & waste	0.64	0.72	2.48	2.77	3.18	3.21	3.23	8.3	1.2
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	0.00	0.00	0.07	0.19	0.20	0.13	-	18.4
Solar, wind, tide(1)	-	-	0.01	0.03	0.87	0.88	0.98	-	22.6
Hydro	0.63	0.69	0.79	0.97	1.39	0.99	0.48	1.3	-2.2
Net electricity imports(2)	-0.00	0.16	0.00	0.08	0.23	0.24	0.68	-	27.6
Heat	-	-	-	-	0.00	0.00	0.00	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**9.8**	**15.3**	**28.5**	**43.8**	**46.6**	**54.1**	**52.5**	**46.6**
Nuclear	-	-	-	-	-	-	-	-
Hydro	7.4	8.1	9.3	11.7	5.1	16.5	12.1	6.6
of which:								
pumped storage production	*0.0*	*0.1*	*0.1*	*0.4*	*0.4*	*0.4*	*0.6*	*1.0*
Geothermal	-	0.0	0.0	0.1	0.1	0.2	0.2	0.2
Solar	-	-	0.0	0.0	0.0	0.2	0.3	0.4
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.2	1.8	9.2	9.2	10.3
Combustible fuels	2.5	7.2	19.2	31.8	39.6	28.0	30.7	29.2
Coal	*0.4*	*0.3*	*9.1*	*14.7*	*15.2*	*7.1*	*9.8*	*13.1*
Oil	*1.9*	*6.5*	*9.4*	*8.4*	*8.8*	*3.0*	*2.7*	*2.4*
Natural gas	*-*	*-*	*-*	*7.1*	*13.6*	*14.9*	*14.9*	*10.4*
Biofuels & waste	*0.2*	*0.3*	*0.7*	*1.6*	*2.0*	*2.9*	*3.2*	*3.2*
Other (e.g. fuel cells)	-	-	-	-	-	0.0	0.0	0.0
- Own use by power plant	0.2	0.5	1.2	1.5	1.6	1.3	1.3	..
Net production	**9.6**	**14.7**	**27.3**	**42.2**	**45.0**	**52.8**	**51.1**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	7.9	9.1	11.6	5.0	16.3	12.0	..
Geothermal	..	0.0	0.0	0.1	0.1	0.2	0.2	..
Solar	..	-	0.0	0.0	0.0	0.2	0.3	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.2	1.8	9.1	9.1	..
Combustible fuels	..	6.8	18.1	30.4	38.1	27.0	29.6	..
Other (e.g. fuel cells)	..	-	-	-	-	0.0	0.0	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.0	0.1	0.2	0.6	0.6	0.5	0.7	1.3
+ Imports	0.1	2.3	1.7	4.7	9.6	5.8	6.7	10.8
- Exports	0.1	0.5	1.7	3.8	2.8	3.2	3.9	2.9
Electrical energy supplied	**9.5**	**16.5**	**27.1**	**42.6**	**51.2**	**54.9**	**53.2**	**..**
- Transmission & distr. losses	1.2	1.9	3.2	3.6	4.2	4.3	4.1	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**8.3**	**14.6**	**24.0**	**38.9**	**47.0**	**50.6**	**49.1**	**..**
- Energy industry consumption[2]	0.1	0.3	0.4	0.6	0.7	0.7	0.8	..
Final consumption	**8.2**	**14.3**	**23.5**	**38.4**	**46.3**	**49.9**	**48.4**	**..**
Industry	5.1	8.2	12.2	16.0	17.2	17.5	17.0	..
Transport	0.2	0.2	0.3	0.4	0.5	0.5	0.4	..
Commercial & publ. serv.	1.1	2.5	4.8	11.3	14.4	16.4	16.3	..
Residential	1.7	3.3	5.9	10.1	13.2	14.5	13.8	..
Agriculture & fishing	0.1	0.1	0.3	0.7	1.0	1.0	1.0	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**10.75**	**15.26**	**28.50**	**43.76**	**50.21**	**54.09**	**52.46**	**6.3**	**2.9**
- Hydro pumped storage	*0.06*	*0.06*	*0.15*	*0.39*	*0.73*	*0.40*	*0.58*	*5.7*	*6.7*
Total generation(1)	**10.69**	**15.21**	**28.36**	**43.37**	**49.48**	**53.69**	**51.88**	**6.3**	**2.9**
Main activity producers									
Gross production	10.22	14.38	27.06	38.97	43.69	46.35	44.12	6.3	2.4
- Hydro pumped storage	*0.06*	*0.06*	*0.15*	*0.39*	*0.73*	*0.40*	*0.58*	*5.7*	*6.7*
Total generation(1)	10.16	14.32	26.92	38.58	42.97	45.95	43.54	6.3	2.3
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	7.79	7.98	9.13	11.31	8.27	16.13	11.53	1.0	1.1
Geothermal	-	0.00	0.00	0.08	0.18	0.20	0.21	-	20.8
Solar, wind, tide(2)	-	-	0.00	0.17	7.74	9.39	9.36	-	49.5
Coal	0.31	0.31	9.06	14.60	12.90	7.10	9.85	23.5	0.4
Oil	2.06	6.03	8.73	5.72	1.79	1.49	1.35	9.4	-8.5
Natural gas	-	-	-	6.70	11.77	11.01	10.56	-	-
Biofuels & waste	-	-	-	0.01	0.32	0.63	0.69	-	-
Autoproducers									
Gross production	0.53	0.88	1.44	4.79	6.52	7.74	8.34	6.5	8.7
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.53	0.88	1.44	4.79	6.52	7.74	8.34	6.5	8.7
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.04	0.04	0.03	0.02	0.02	0.02	0.01	-1.5	-3.4
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	0.00	0.08	-	-
Coal	0.03	0.04	0.05	0.09	-	-	-	1.8	-
Oil	0.28	0.49	0.67	2.70	1.49	1.52	1.33	5.7	3.3
Natural gas	-	-	-	0.44	2.94	3.89	4.36	-	-
Biofuels & waste	0.18	0.32	0.69	1.55	2.07	2.31	2.56	8.8	6.4

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**491**	**846**	**1437**	**4791**	**6514**	**7743**	**8343**	**8.7**
Total energy	**-**	**-**	**326**	**507**	**652**	**1075**	**999**	**5.5**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	13	9	3	2	2	-8.5
Oil refineries	-	-	313	498	649	1073	997	5.7
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**483**	**839**	**1098**	**3661**	**4978**	**5692**	**6220**	**8.6**
Iron and steel	53	50	45	93	-	-	-	-
Chemical and petrochemical	139	240	145	408	521	702	775	8.3
Non-ferrous metals	5	-	-	-	-	-	-	-
Non-metallic minerals	-	-	-	125	193	199	220	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	3	-	-	37	-	12	16	-
Mining and quarrying	-	-	-	-	287	289	328	-
Food and tobacco	2	3	19	228	376	371	390	15.5
Pulp and printing	259	520	852	1588	2490	3061	3513	7.0
Wood and wood products	-	-	2	284	232	220	200	24.5
Construction	-	-	-	8	-	-	-	-
Textile and leather	22	3	35	890	870	794	730	15.6
Non specified/other industries	-	23	-	-	9	44	48	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**8**	**7**	**13**	**623**	**884**	**976**	**1124**	**23.7**
Commerce and pub. services	-	-	12	571	866	904	977	23.3
Residential	-	-	-	-	-	39	113	-
Agriculture and fishing	-	-	1	52	18	33	34	18.3
Sector non specified	8	7	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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PORTUGAL
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**892**	**1188**	**5626**	**13712**	**21106**	**20640**	**21294**	**14.6**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-
Oil	892	1188	4274	5015	2863	2378	2658	3.4
Natural gas	-	-	1352	8697	18209	18218	18591	-
Biofuels & waste	-	-	-	-	-	-	-	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	34	44	45	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	892	1188	2130	3835	43	21	..	-17.5
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	892	1188	1981	2037	43	21	..	-17.5
Natural gas	-	-	149	1798	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	3496	9877	21063	20619	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	2293	2978	2820	2357	..	-
Natural gas	-	-	1203	6899	18209	18218	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	34	44	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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PORTUGAL
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.70**	**1.68**	**4.30**	**6.55**	**6.69**	**5.64**	**6.18**	**11.3**	**1.7**
Coal	0.22	0.10	2.05	3.24	2.83	1.60	2.21	14.1	0.4
Oil	0.42	1.50	2.10	1.78	0.75	0.61	0.51	9.9	-6.6
Natural gas	-	-	-	1.17	2.57	2.77	2.75	-	-
Biofuels & waste	0.06	0.08	0.15	0.36	0.54	0.66	0.72	5.6	7.7
of which: ***main activity prod.***									
Total	**..**	**1.49**	**4.01**	**5.59**	**5.21**	**3.86**	**4.37**	**..**	**0.4**
Coal	..	0.09	2.03	3.20	2.83	1.60	2.21	..	0.4
Oil	..	1.40	1.98	1.31	0.45	0.32	0.28	..	-8.9
Natural gas	..	-	-	1.08	1.82	1.73	1.65	..	-
Biofuels & waste	..	-	-	0.00	0.10	0.22	0.23	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**0.00**	**0.00**	**0.07**	**0.18**	**0.20**	**0.22**	**-**	**22.0**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	0.00	0.00	0.07	0.17	0.18	0.19	-	21.5
Solar	-	-	0.00	0.00	0.01	0.02	0.02	-	30.7
Non-Thermal									
Total	**0.63**	**0.69**	**0.79**	**0.99**	**1.36**	**2.18**	**1.78**	**1.3**	**4.0**
Hydro	0.63	0.69	0.79	0.97	0.71	1.39	0.99	1.3	1.1
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.01	0.65	0.79	0.79	-	54.4
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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PORTUGAL

8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	212	3259	5171	4638	2610	3692	0.6
Fuel input (TJ)	3584	84866	133879	118641	66881	92423	0.4
Electricity production (GWh)	311	9059	14595	12896	7100	9848	0.4
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	1277	1976	1197	350	293	254	-9.3
Fuel input (TJ)	49115	79414	48181	14047	11949	10248	-9.3
Electricity production (GWh)	5656	8534	5191	1463	1298	1158	-9.1
Natural gas[2]							
Fuel input (TJ)	-	-	49183	84827	80645	77366	-
Electricity production (GWh)	-	-	6620	11782	11022	10590	-
Wood and other solid waste							
Fuel input (TJ)	-	-	169	5115	9948	10869	-
Electricity production (GWh)	-	-	7	349	666	745	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	301	152	-
Electricity production (GWh)	-	-	-	-	34	16	-
Municipal waste							
Fuel input (TJ)	-	-	7295	8293	8030	8245	-
Electricity production (GWh)	-	-	514	579	577	592	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	879	1146	1730	-
Electricity production (GWh)	-	-	-	73	90	149	-
Total combustible fuels[3]							
Electricity production (GWh)	5967	17593	26927	27142	20787	23098	1.3

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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PORTUGAL

9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	601	833	1922	-	-	-	-
Electricity production (GWh)	38	45	93	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	241	226	680	430	332	271	0.9
Fuel input (TJ)	9706	9071	27577	17396	13565	10993	0.9
Electricity production (GWh)	866	865	3230	1822	1710	1526	2.7
CHP Heat production (TJ)	892	1188	4274	4749	2863	2378	3.4
Natural gas[2]							
Fuel input (TJ)	-	-	5299	34834	48426	50525	-
Electricity production (GWh)	-	-	518	2930	3878	4326	-
CHP Heat production (TJ)	-	-	1352	11306	18209	18218	-
Wood and other solid waste							
Fuel input (TJ)	3450	6253	7382	8058	8112	8747	1.6
Electricity production (GWh)	319	689	1030	1364	1560	1722	4.5
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	83	42	64	-
Electricity production (GWh)	-	-	-	9	5	9	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	48	117	141	153	-
Electricity production (GWh)	-	-	2	11	11	11	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels[3]							
Electricity production (GWh)	1223	1599	4873	6136	7164	7594	7.7
CHP Heat production (TJ)	892	1188	5626	16055	21072	20596	14.6

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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PORTUGAL
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**5.74**	**7.91**	**13.35**	**19.44**	**18.93**	**18.94**	**18.12**	**5.1**	**1.5**
Geothermal	-	-	-	0.00	0.01	0.01	0.01	-	-
Solar thermal	-	-	0.01	0.02	0.04	0.06	0.07	-	9.1
Coal	0.24	0.25	0.65	0.48	0.02	0.05	0.02	6.0	-15.2
Oil	4.21	5.77	8.31	12.30	10.19	10.12	9.39	4.1	0.6
Natural gas	-	-	-	0.79	1.44	1.56	1.64	-	-
Biofuels & waste	0.58	0.64	2.33	2.41	2.80	2.52	2.49	8.5	0.3
Electricity	0.70	1.23	2.02	3.30	4.12	4.29	4.16	6.4	3.5
Heat	-	0.02	0.03	0.13	0.31	0.34	0.33	-	12.5
of which:									
Total industry	**2.32**	**3.33**	**4.65**	**6.22**	**5.24**	**5.46**	**5.33**	**4.2**	**0.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.14	0.20	0.59	0.43	0.02	0.05	0.02	8.9	-14.9
Oil	1.42	2.10	1.80	2.36	1.15	1.06	0.92	1.4	-3.2
Natural gas	-	-	-	0.66	0.95	1.05	1.15	-	-
Biofuels & waste	0.32	0.31	1.18	1.26	1.42	1.48	1.48	8.0	1.1
Electricity	0.44	0.71	1.05	1.37	1.39	1.50	1.46	5.3	1.6
Heat	-	0.02	0.03	0.13	0.30	0.32	0.32	-	12.2
Transport	**1.60**	**2.26**	**3.24**	**5.97**	**6.49**	**6.44**	**5.99**	**4.3**	**3.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.02	0.00	-	-	-	-	-	-	-
Oil	1.56	2.24	3.22	5.94	6.21	6.06	5.64	4.4	2.7
Natural gas	-	-	-	0.00	0.01	0.01	0.01	-	-
Biofuels & waste	-	-	-	-	0.22	0.32	0.30	-	-
Electricity	0.02	0.02	0.03	0.03	0.04	0.04	0.03	2.1	1.3
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.25**	**0.43**	**0.60**	**1.39**	**2.05**	**1.90**	**1.85**	**5.3**	**5.5**
Geothermal	-	-	-	0.00	0.01	0.01	0.01	-	-
Solar thermal	-	-	0.01	0.01	0.02	0.02	0.03	-	6.4
Coal	0.01	0.01	0.01	0.02	-	-	-	-0.4	-
Oil	0.14	0.20	0.17	0.34	0.44	0.24	0.18	0.9	0.5
Natural gas	-	-	-	0.06	0.20	0.20	0.22	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.10	0.22	0.42	0.97	1.37	1.41	1.40	8.9	6.0
Heat	-	-	-	0.00	0.01	0.01	0.01	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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PORTUGAL

11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**0.81**	**1.03**	**2.29**	**2.80**	**3.20**	**2.98**	**2.79**	**6.3**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.01	0.02	0.03	0.04	-	12.2
Coal	0.06	0.03	0.04	0.03	-	-	-	-1.8	-
Oil	0.35	0.39	0.58	0.68	0.53	0.68	0.59	3.1	0.1
Natural gas	-	-	-	0.07	0.26	0.30	0.26	-	-
Biofuels & waste	0.26	0.33	1.15	1.15	1.16	0.71	0.71	9.1	-2.3
Electricity	0.14	0.28	0.51	0.86	1.22	1.25	1.18	7.7	4.1
Heat	-	-	-	0.00	0.00	0.01	0.01	-	-
Agriculture & fishing	**0.37**	**0.32**	**0.46**	**0.71**	**0.43**	**0.46**	**0.43**	**1.3**	**-0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.36	0.31	0.44	0.65	0.33	0.37	0.34	1.1	-1.2
Natural gas	-	-	-	0.00	0.01	0.00	0.01	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.00	0.01	0.02	0.06	0.09	0.09	0.08	10.2	6.4
Heat	-	-	-	0.00	0.00	0.00	0.00	-	-
Other	**0.01**	**0.01**	**-**	**-**	**0.00**	**0.00**	**0.00**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.01	0.01	-	-	-	-	-	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.00	0.00	0.00	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.38**	**0.52**	**2.10**	**2.33**	**1.52**	**1.71**	**1.73**	**10.64**	**-0.93**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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PORTUGAL

12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**5.74**	**7.91**	**13.35**	**19.44**	**19.52**	**18.93**	**18.94**	**18.12**
Total industry (Mtoe)	**2.32**	**3.33**	**4.65**	**6.22**	**5.57**	**5.24**	**5.46**	**5.33**
Iron and steel	0.12	0.21	0.19	0.22	0.19	0.14	0.14	0.16
Chem. and petrochemical	0.23	0.33	0.46	0.47	0.55	0.55	0.60	0.60
Non-ferrous metals	0.02	0.13	0.04	0.04	0.04	0.03	0.03	0.03
Non-metallic minerals	0.83	1.15	1.35	2.11	1.75	1.51	1.59	1.48
Transport equipment	0.02	0.04	0.04	0.09	0.07	0.06	0.07	0.06
Machinery	0.03	0.06	0.10	0.11	0.17	0.17	0.16	0.17
Mining and quarrying	0.02	0.02	0.05	0.10	0.13	0.14	0.13	0.13
Food and tobacco	0.30	0.34	0.42	0.51	0.51	0.53	0.57	0.55
Paper, pulp and printing	0.18	0.33	0.95	1.24	1.23	1.21	1.28	1.30
Wood and wood products	0.05	0.08	0.13	0.22	0.13	0.12	0.09	0.11
Construction	0.06	0.07	0.18	0.35	0.24	0.24	0.25	0.23
Textile and leather	0.26	0.38	0.58	0.62	0.41	0.39	0.38	0.36
Non specified/other	0.21	0.19	0.15	0.14	0.15	0.16	0.17	0.16
Electricity consumption (Mtoe)	**0.70**	**1.23**	**2.02**	**3.30**	**4.16**	**4.12**	**4.29**	**4.16**
Total industry (Mtoe)	**0.44**	**0.71**	**1.05**	**1.37**	**1.52**	**1.39**	**1.50**	**1.46**
Iron and steel	0.02	0.04	0.05	0.07	0.13	0.09	0.09	0.11
Chem. and petrochemical	0.08	0.11	0.17	0.20	0.22	0.19	0.21	0.21
Non-ferrous metals	0.02	0.07	0.01	0.01	0.01	0.01	0.01	0.01
Non-metallic minerals	0.06	0.10	0.15	0.19	0.21	0.18	0.19	0.17
Transport equipment	0.01	0.01	0.02	0.04	0.04	0.04	0.04	0.04
Machinery	0.02	0.05	0.08	0.09	0.11	0.11	0.12	0.11
Mining and quarrying	0.01	0.01	0.03	0.04	0.05	0.04	0.05	0.05
Food and tobacco	0.03	0.06	0.09	0.13	0.15	0.16	0.16	0.16
Paper, pulp and printing	0.04	0.07	0.13	0.18	0.22	0.23	0.26	0.26
Wood and wood products	0.02	0.03	0.05	0.08	0.06	0.05	0.05	0.05
Construction	0.00	0.00	0.02	0.05	0.05	0.06	0.05	0.05
Textile and leather	0.08	0.11	0.21	0.20	0.13	0.11	0.13	0.10
Non specified/other	0.05	0.04	0.03	0.10	0.13	0.13	0.14	0.13
Total industry (TWh)	**5.11**	**8.21**	**12.22**	**15.95**	**17.62**	**16.17**	**17.47**	**16.96**
Iron and steel	0.26	0.49	0.61	0.82	1.49	1.09	1.10	1.29
Chem. and petrochemical	0.89	1.30	2.00	2.31	2.51	2.17	2.49	2.40
Non-ferrous metals	0.26	0.86	0.15	0.11	0.14	0.12	0.14	0.12
Non-metallic minerals	0.73	1.16	1.76	2.25	2.44	2.09	2.19	2.00
Transport equipment	0.10	0.16	0.24	0.49	0.48	0.41	0.44	0.43
Machinery	0.27	0.56	0.88	1.02	1.27	1.24	1.35	1.32
Mining and quarrying	0.07	0.10	0.32	0.42	0.56	0.52	0.56	0.58
Food and tobacco	0.40	0.70	1.10	1.56	1.77	1.84	1.91	1.87
Paper, pulp and printing	0.46	0.82	1.47	2.05	2.58	2.72	3.06	3.08
Wood and wood products	0.19	0.33	0.62	0.92	0.67	0.56	0.58	0.57
Construction	0.04	0.06	0.21	0.56	0.62	0.65	0.61	0.56
Textile and leather	0.89	1.27	2.46	2.33	1.54	1.29	1.46	1.22
Non specified/other	0.56	0.41	0.40	1.11	1.55	1.49	1.59	1.53

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**68**	**2346**	**1733**	**2655**	**4698**	**10744**	**7598**	**5814**	**6742**
Imports from:									
Total from OECD	**68**	**2346**	**1733**	**2655**	**4698**	**10744**	**7598**	**5814**	**6742**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	68	2346	1733	2655	4698	10744	7598	5814	6742
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [1]	**78**	**518**	**1696**	**1741**	**3767**	**1313**	**2822**	**3191**	**3929**
Exports to:									
Total to OECD	**78**	**518**	**1696**	**1741**	**3767**	**1313**	**2822**	**3191**	**3929**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	78	518	1696	1741	3767	1313	2822	3191	3929
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**2.72**	**4.11**	**6.86**	**8.63**	**9.78**	**14.26**	**15.71**	**17.09**	**17.99**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	2.11	2.50	3.33	4.40	4.52	5.05	5.07	5.09	5.55
of which: pumped storage	*-*	*-*	*0.56*	*0.56*	*0.60*	*1.03*	*1.03*	*1.03*	*1.03*
Geothermal	-	-	-	0.01	0.01	0.03	0.03	0.03	0.03
Solar	-	-	-	-	-	0.06	0.12	0.13	0.11
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	0.08	2.86	3.33	3.80	4.26
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.62	1.61	3.53	4.22	5.16	6.27	7.17	8.05	8.05
of which:									
Single-fired:									
Coal and coal products	-	-	1.17	1.78	1.78	1.76	1.76	1.76	1.76
Liquid fuels	0.48	1.47	2.23	2.30	1.67	2.33	2.37	2.34	2.33
Natural gas	-	-	-	-	1.00	2.17	3.03	3.87	3.87
Biofuels & waste	-	-	-	-	0.01	-	-	-	0.01
Multi-fired:									
Solid / liquid	0.14	0.14	0.14	0.14	-	-	-	0.02	0.02
Solid / natural gas	-	-	-	-	-	0.01	0.01	0.06	0.06
Liquid / natural gas	-	-	-	-	0.71	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	3.02	3.68	3.55	3.48	3.47	3.48	3.51
Internal combustion	-	-	0.18	0.20	0.29	0.43	0.47	0.50	0.48
Gas turbine	-	-	0.33	0.33	0.33	0.20	0.20	0.20	0.20
Combined cycle	-	-	-	-	0.99	2.17	3.03	3.87	3.87
Other	0.62	1.61	-	-	-	-	-	-	-
Peak load	..	..	5.03	5.25	6.56	8.97	9.22	9.40	9.19
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.19**	**0.33**	**0.53**	**0.68**	**1.12**	**1.51**	**1.69**	**1.83**	**1.95**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.02	0.02	0.01	0.01	0.01	0.01	0.01	0.01	0.01
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	0.06
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.17	0.32	0.52	0.68	1.11	1.50	1.68	1.82	1.89
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	0.04	0.18	0.34	0.46	0.67	0.64	0.52	0.52	0.52
Natural gas	-	-	-	-	0.15	0.36	0.53	0.56	0.61
Biofuels & waste	-	-	0.01	-	0.07	0.04	0.04	0.04	0.05
Multi-fired:									
Solid / liquid	0.13	0.13	0.17	0.22	0.21	0.20	0.18	0.22	0.21
Solid / natural gas	-	-	-	-	-	0.07	0.11	0.07	0.07
Liquid / natural gas	-	-	-	-	0.01	0.11	0.19	0.17	0.21
Solid / liquid / gas	-	-	-	-	-	0.09	0.12	0.25	0.21
Type of generation									
Steam	-	-	0.41	0.43	0.53	0.58	0.59	0.71	0.67
Internal combustion	-	-	0.11	0.25	0.51	0.67	0.78	0.78	0.75
Gas turbine	-	-	-	-	0.07	0.25	0.31	0.26	0.40
Combined cycle	-	-	-	-	-	-	-	0.07	0.07
Other	0.17	0.32	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	5.97	9.64	36.47	32.81	96.65	58.58	66.63	81.45	70.15
Heavy fuel oil (t)	14.47	32.42	74.30	161.32	327.20	242.12	x	x	x
Natural gas (MWh)(1)	x	x	x	..	29.09	22.37	23.97	29.80	35.85
				Euro/ toe					
Steam coal	10	16	60	54	158	96	109	133	115
Heavy fuel oil	15	34	77	168	342	253	x	x	x
Natural gas(2)	x	x	x	..	376	289	310	385	463
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	5.90	11.30	69.70	72.70	89.80	91.70	90.80	100.00	114.60
of which: tax	-	-	-	-	-	-	-	-	-
Household									
Price	10.20	17.70	104.60	129.70	150.25	154.90	162.50	176.56	202.80
of which: tax	-	-	15.70	6.20	7.16	7.38	8.47	16.41	37.92

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	15.52	19.85	21.33	17.74	17.83	17.35	16.68	1.9	-1.1
GDP (billion 2005 USD)	25.43	30.17	34.94	37.70	60.17	62.11	63.37	1.9	2.7
TPES/GDP(1)	0.61	0.66	0.61	0.47	0.30	0.28	0.26	0.0	-3.8
Population (millions)	4.67	5.00	5.30	5.40	5.43	5.44	5.46	0.8	0.1
TPES/population(2)	3.33	3.97	4.03	3.29	3.28	3.19	3.06	1.1	-1.2
TPES/GDP (2005 = 100)	155	167	155	120	75	71	67	0.0	-3.8
Ele.TFC/GDP(2005=100)(3)	101	132	140	122	84	84	..	1.9	..
Ele.TFC/population(4)	2640	3809	4421	4077	4446	4562	..	3.1	..
Elec. generated (TWh)(5)	12.30	19.97	25.50	30.80	27.46	28.29	28.31	4.4	0.5

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**15.52**	**19.85**	**21.33**	**17.74**	**17.83**	**17.35**	**16.68**	**1.9**	**-1.1**
Coal	7.96	8.20	7.83	4.27	3.90	3.70	3.48	-0.1	-3.6
Oil	5.39	7.49	4.49	2.82	3.62	3.55	3.41	-1.1	-1.2
Natural gas	1.56	2.32	5.09	5.77	5.01	4.64	4.36	7.2	-0.7
Biofuels & waste	0.19	0.18	0.17	0.41	0.89	0.96	0.88	-0.5	7.7
Nuclear	0.06	1.18	3.14	4.30	3.86	4.07	4.09	26.1	1.2
Geothermal	-	-	-	-	0.01	0.01	0.01	-	-
Solar, wind, tide(1)	-	-	-	-	0.01	0.04	0.05	-	-
Hydro	0.11	0.19	0.16	0.40	0.45	0.32	0.36	2.1	3.7
Net electricity imports(2)	0.24	0.29	0.45	-0.23	0.09	0.06	0.03	3.6	-11.6
Heat	-	-	-	-	-	-	-0.00	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**12.3**	**20.1**	**26.1 e**	**31.2 e**	**31.5**	**27.9 e**	**28.7**	**28.6**
Nuclear	0.2	4.5	12.0	16.5	17.7	14.6	15.4	15.5
Hydro	1.3	2.4	2.5	5.0	4.7	5.6	4.1	4.4
of which:								
pumped storage production	*-*	*0.1*	*0.6*	*0.4*	*0.1*	*0.4*	*0.4*	*0.3*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.0 e	0.4	0.6
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.0	0.0	0.0	0.0
Combustible fuels	10.7	13.2	11.6 e	9.7 e	9.0	7.6	8.6	8.0
Coal	*7.9*	*7.6*	*8.1*	*6.1 e*	*6.0*	*4.1*	*4.0*	*3.8*
Oil	*2.2*	*3.6*	*1.6*	*0.2 e*	*0.7*	*0.6*	*0.6*	*0.5*
Natural gas	*0.6*	*2.0*	*1.8 e*	*3.3 e*	*2.2*	*2.2*	*3.2*	*2.9*
Biofuels & waste	*-*	*-*	*-*	*0.0*	*0.1*	*0.7*	*0.8*	*0.8*
Other (e.g. fuel cells)	-	-	-	-	0.0	0.0	0.1	0.1
- Own use by power plant	1.6	2.5	3.1 e	3.4 e	2.2	2.4	2.6	..
Net production	**10.7**	**17.6**	**23.0 e**	**27.7 e**	**29.3**	**25.4 e**	**26.1**	**..**
Nuclear	..	-	10.6 e	14.6 e	16.4	12.8	14.3	..
Hydro	..	-	2.4 e	4.7 e	4.7	5.6	3.6	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	-	-	0.0 e	0.4	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	-	0.0	0.0	0.0	..
Combustible fuels	..	-	10.1 e	8.5 e	8.2	7.0	7.7	..
Other (e.g. fuel cells)	..	-	-	-	0.0	0.0	0.1	..
- Used for heat pumps	-	-	-	-	0.0	0.0	0.0	0.0
- Used for electric boilers	-	-	-	-	0.0	0.0	0.0	0.0
- Used for pumped storage	0.1	0.2	1.2	0.4	0.2	0.5	0.5	0.4
+ Imports	3.0	3.5	7.3	6.0	8.0	7.3	11.2	13.4
- Exports	0.2	0.2	2.1	8.6	11.3	6.3	10.5	13.1
Electrical energy supplied	**13.4**	**20.7**	**27.1 e**	**24.6 e**	**25.9**	**25.9**	**26.3**	**..**
- Transmission & distr. losses	1.1	1.7	2.0 e	1.8 e	1.7	0.9	0.5	..
- Statistical difference	-	-	1.7	0.4	-	-	-	..
Total consumption	**12.3**	**19.0**	**23.4**	**22.5**	**24.2**	**25.1 e**	**25.8**	**..**
- Energy industry consumption[2]	-	-	-	0.5	1.3	0.9	1.0	..
Final consumption	**12.3**	**19.0**	**23.4**	**22.0**	**22.9**	**24.1 e**	**24.8**	**..**
Industry	8.3	12.9	15.0	9.7	11.0	10.9	11.2	..
Transport	0.6	1.0	1.2	1.0	0.6	0.5	0.5	..
Commercial & publ. serv.	1.0	1.6	2.4	5.3	6.2	8.0 e	8.2	..
Residential	1.5	2.4	3.7	5.4	4.7	4.4 e	4.5	..
Agriculture & fishing	0.8	1.2	1.2	0.6	0.4	0.3	0.3	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**12.89**	**20.08**	**26.13**	**31.16**	**26.16**	**27.86**	**28.66**	**4.5**	**0.4**
- Hydro pumped storage	-	*0.11*	*0.64*	*0.36*	*0.24*	*0.39*	*0.37*	-	*-2.6*
Total generation(1)	**12.89**	**19.97**	**25.50**	**30.80**	**25.92**	**27.46**	**28.29**	**4.4**	**0.5**
Main activity producers									
Gross production	12.89	20.08	23.54	29.59	24.07	25.82	26.16	3.8	0.5
- Hydro pumped storage	-	*0.11*	*0.64*	*0.36*	*0.24*	*0.39*	*0.37*	-	*-2.6*
Total generation(1)	12.89	19.97	22.90	29.23	23.83	25.42	25.80	3.7	0.6
Nuclear	0.49	4.52	12.04	16.49	14.08	14.57	15.41	22.2	1.2
Hydro	2.22	2.26	1.88	4.62	4.26	5.15	3.68	-1.0	3.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	0.00	0.09	-	-
Coal	6.58	7.56	6.43	4.78	3.28	3.14	3.13	-0.1	-3.4
Oil	2.81	3.58	0.81	0.20	0.54	0.59	0.58	-7.5	-1.6
Natural gas	0.79	2.04	1.75	3.11	1.63	1.87	2.76	5.1	2.2
Biofuels & waste	-	-	-	0.03	0.04	0.10	0.15	-	-
Autoproducers									
Gross production	-	-	2.59	1.57	2.09	2.04	2.49	-	-0.2
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	-	-	2.59	1.57	2.09	2.04	2.49	-	-0.2
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	0.11	0.11	0.10	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	0.05	0.06	0.40	-	-
Coal	-	-	1.69	1.33	1.00	0.94	0.90	-	-2.9
Oil	-	-	0.83	-	0.09	0.01	0.01	-	-20.9
Natural gas	-	-	0.07	0.24	0.34	0.33	0.39	-	8.5
Biofuels & waste	-	-	-	-	0.51	0.59	0.69	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**-**	**-**	**2347**	**1432**	**2064**	**2040 e**	**2163**	**-0.4**
Total energy	**-**	**-**	**-**	**-**	**-**	**-**	**17**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	3	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	-	-	-	14	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**-**	**-**	**-**	**-**	**1955**	**1833**	**1816**	**-**
Iron and steel	-	-	-	-	838	960	971	-
Chemical and petrochemical	-	-	-	-	223	39	68	-
Non-ferrous metals	-	-	-	-	31	29	21	-
Non-metallic minerals	-	-	-	-	-	-	-	-
Transport equipment	-	-	-	-	4	4	3	-
Machinery	-	-	-	-	2	2	6	-
Mining and quarrying	-	-	-	-	8	17	9	-
Food and tobacco	-	-	-	-	54	43	54	-
Pulp and printing	-	-	-	-	733	695	398	-
Wood and wood products	-	-	-	-	60	42	37	-
Construction	-	-	-	-	2	2	7	-
Textile and leather	-	-	-	-	-	-	-	-
Non specified/other industries	-	-	-	-	-	-	242	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**2347**	**1432**	**109**	**207**	**330**	**-8.9**
Commerce and pub. services	-	-	-	-	107	197 e	297	-
Residential	-	-	-	-	-	7 e	-	-
Agriculture and fishing	-	-	-	-	2	3	33	-
Sector non specified	-	-	2347	1432	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**27226**	**33552 e**	**36824 e**	**52545**	**48582**	**43747**	**42693**	**1.3**
Nuclear	-	-	-	2233	2499	2210	2115	-
Geothermal	-	-	-	140	139	104	104	-
Coal	-	18300 e	11578 e	10937	11771	11313	11052	-2.3
Oil	-	3424 e	861 e	257	6379	5286	5163	2.1
Natural gas	9986	11828 e	21493 e	36585	23421	20060	19594	2.5
Biofuels & waste	-	-	2892 e	2336	4300	4692	4584	-
Non-spec. comb. fuels	17240	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	6	3	8	8	-
Electric boilers	-	-	-	2	1	1	1	-
Other sources(1)	-	-	-	49	69	73	72	-
of which:								
Main activity producers								
Total	27226	27785 e	29041 e	43447	44663	40159	..	1.8
Nuclear	-	-	-	2233	2499	2210	..	-
Geothermal	-	-	-	80	82	92	..	-
Coal	-	15237 e	9990 e	10038	11437	11026	..	-1.5
Oil	-	3340 e	861 e	125	6352	5281	..	2.2
Natural gas	9986	9208 e	15298 e	30764	21941	18566	..	3.4
Biofuels & waste	-	-	2892 e	207	2352	2983	..	-
Non-spec. comb. fuels	17240	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	1	..	-
Autoproducers								
Total	-	5767 e	7783 e	9098	3919	3588	..	-2.2
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	60	57	12	..	-
Coal	-	3063 e	1588 e	899	334	287	..	-10.7
Oil	-	84 e	-	132	27	5	..	-12.6
Natural gas	-	2620 e	6195 e	5821	1480	1494	..	-2.6
Biofuels & waste	-	-	-	2129	1948	1709	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	6	3	8	..	-
Electric boilers	-	-	-	2	1	1	..	-
Other sources(1)	-	-	-	49	69	72	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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SLOVAK REPUBLIC
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**2.46**	**4.08**	**3.61**	**3.23**	**2.64**	**2.88**	**2.92**	**2.3**	**-1.0**
Coal	1.92	2.89	2.33	1.71	1.29	1.28	1.26	1.2	-2.9
Oil	0.42	0.64	0.31	0.10	0.26	0.30	0.27	-1.8	-0.6
Natural gas	0.12	0.55	0.97	1.33	0.87	0.98	1.00	13.0	0.2
Biofuels & waste	-	-	-	0.09	0.23	0.33	0.39	-	-
of which: ***main activity prod.***									
Total	**..**	**3.41**	**3.09**	**2.78**	**2.25**	**2.48**	**2.47**	**..**	**-1.1**
Coal	..	2.47	2.01	1.48	1.15	1.15	1.13	..	-2.7
Oil	..	0.42	0.20	0.10	0.23	0.29	0.27	..	1.3
Natural gas	..	0.52	0.88	1.10	0.81	0.91	0.92	..	0.2
Biofuels & waste	..	-	-	0.09	0.07	0.13	0.15	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**0.06**	**1.18**	**3.14**	**4.30**	**3.72**	**3.86**	**4.10**	**26.1**	**1.3**
Nuclear	0.06	1.18	3.14	4.30	3.72	3.86	4.07	26.1	1.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.00	0.03	-	-
Non-Thermal									
Total	**0.11**	**0.19**	**0.16**	**0.40**	**0.38**	**0.45**	**0.33**	**2.1**	**3.4**
Hydro	0.11	0.19	0.16	0.40	0.38	0.45	0.32	2.1	3.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.00	0.00	0.00	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	1850	- e	-	-	-	-	-
Fuel input (TJ)	37120	- e	-	-	-	-	-
Electricity production (GWh)	4119	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	3817	2036 e	1704 e	899	-	-	-
Fuel input (TJ)	46570	24840 e	19990 e	9135	-	-	-
Electricity production (GWh)	3384	2306 e	1683 e	757	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	- e	-	-	-	-
Electricity production (GWh)	57	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	1	3	31 e	2	1	1	-5.1
Fuel input (TJ)	40	120	1681 e	77	44	24	-7.4
Electricity production (GWh)	-	8 e	202 e	6	5	3	-4.6
Natural gas (1)							
Fuel input (TJ)	-	11454 e	9563 e	3527	6721	10098	-0.6
Electricity production (GWh)	-	669 e	552 e	384	586	1275	3.1
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	180 e	-	-	-	-
Electricity production (GWh)	-	-	32 e	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	5	14	305	-
Electricity production (GWh)	-	-	-	1	2	39	-
Total combustible fuels(2)							
Electricity production (GWh)	7560	2983 e	2469 e	1148	593	1317	-3.8

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	1976 e	1329 e	771	709	678	-5.0
Fuel input (TJ)	-	48809 e	33011 e	19454	17626	16646	-5.0
Electricity production (GWh)	-	4472 e	3369 e	1646	1395	1304	-5.7
CHP Heat production (TJ)	-	8988 e	4498 e	2742	2799	2593	-5.7
Brown coal							
Fuel input (1000 t)	-	1590 e	1256 e	1953	2879	2986	3.0
Fuel input (TJ)	-	19158 e	14686 e	22583	32700	32927	2.6
Electricity production (GWh)	-	728 e	532 e	1452	2175	2250	5.5
CHP Heat production (TJ)	-	7917 e	6228 e	6464	8632	8438	0.3
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	3501 e	2998 e	2531	3003	3024	-0.7
Electricity production (GWh)	-	617 e	527 e	421	510	484	-1.1
CHP Heat production (TJ)	-	175 e	170 e	132	147	135	-1.2
Petroleum products							
Fuel input (1000 t)	578	254	-	267	307	281	0.5
Fuel input (TJ)	23230	10210	-	10752	12381	11297	0.5
Electricity production (GWh)	3583	1627 e	-	620	595	583	-4.8
CHP Heat production (TJ)	-	1974 e	-	5214	6366	5286	4.8
Natural gas(1)							
Fuel input (TJ)	13874	25758 e	29340 e	18540	19322	20386	-1.1
Electricity production (GWh)	2044	1154 e	2792 e	1586	1620	1875	2.3
CHP Heat production (TJ)	9986	6235 e	5098 e	7108	7418	7089	0.6
Wood and other solid waste							
Fuel input (TJ)	-	-	-	6051	9828	11385	-
Electricity production (GWh)	-	-	-	493	606	682	-
CHP Heat production (TJ)	-	-	-	1167	2454	2399	-
Industrial waste							
Fuel input (TJ)	-	-	-	60	100	130	-
Electricity production (GWh)	-	-	-	2	11	11	-
CHP Heat production (TJ)	-	-	-	33	14	63	-
Municipal waste							
Fuel input (TJ)	-	-	-	1171	792	907	-
Electricity production (GWh)	-	-	-	36	35	39	-
CHP Heat production (TJ)	-	-	-	45	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	263	331	767	-
Electricity production (GWh)	-	-	-	21	32	74	-
CHP Heat production (TJ)	-	-	-	16	50	138	-
Total combustible fuels(2)							
Electricity production (GWh)	5627	8598 e	7220 e	6277	6979	7302	-0.8
CHP Heat production (TJ)	27226	25289 e	15994 e	22921	27880	26141	0.2

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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SLOVAK REPUBLIC
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	2 e	3 e	1	1	1	-3.2
Fuel input (TJ)	-	45 e	73 e	16	21	14	-5.4
Heat production (TJ)	-	34 e	53 e	12	16	10	-5.7
Brown coal							
Fuel input (1000 t)	-	114 e	68 e	12	12	10	-10.9
Fuel input (TJ)	-	1371 e	790 e	199	207	157	-9.8
Heat production (TJ)	-	1160 e	592 e	136	157	118	-10.3
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	42 e	58 e	21	26	29	-1.7
Heat production (TJ)	-	26 e	37 e	16	20	19	-1.5
Petroleum products							
Fuel input (1000 t)	93	63 e	77 e	-	-	-	-
Fuel input (TJ)	3740	2620 e	3101 e	12	14	-	-
Heat production (TJ)	-	1450 e	861 e	9	13	-	-
Natural gas(1)							
Fuel input (TJ)	-	7768 e	22771 e	18513	19398	16010	3.5
Heat production (TJ)	-	5593 e	16395 e	15136	16003	12971	4.1
Wood and other solid waste							
Fuel input (TJ)	-	-	-	1631	2667	2710	-
Heat production (TJ)	-	-	-	1239	1602	1849	-
Industrial waste							
Fuel input (TJ)	-	-	3708 e	228	64	113	-
Heat production (TJ)	-	-	2892 e	185	58	106	-
Municipal waste							
Fuel input (TJ)	-	-	-	71	130	150	-
Heat production (TJ)	-	-	-	56	102	121	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	8	30	48	-
Heat production (TJ)	-	-	-	3	20	16	-
Total combustible fuels(2)							
Heat production (TJ)	-	8263 e	20830 e	16792	17991	15210	2.9

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**10.86**	**13.03**	**15.75**	**11.42**	**10.85**	**11.44**	**10.97**	**2.2**	**-1.7**
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.01	-	-
Coal	3.84	4.09	4.11	1.41	1.39	1.18	1.18	0.4	-5.8
Oil	3.83	5.04	4.89	3.01	2.89	3.07	3.00	1.4	-2.3
Natural gas	1.40	1.63	3.91	4.17	3.24	3.70	3.32	6.2	-0.8
Biofuels & waste	0.19	0.18	0.17	0.32	0.57	0.56	0.57	-0.5	5.8
Electricity	1.06	1.64	2.01	1.89	1.99	2.08	2.13	3.9	0.3
Heat	0.53	0.45	0.65	0.62	0.77	0.85	0.77	1.2	0.8
of which:									
Total industry	**5.64**	**6.34**	**6.09**	**3.63**	**3.12**	**3.23**	**3.26**	**0.4**	**-2.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	2.66	1.75	1.90	1.12	0.81	0.79	0.76	-2.0	-4.2
Oil	1.45	2.82	1.37	0.22	0.14	0.11	0.11	-0.3	-11.4
Natural gas	0.61	0.46	1.33	1.12	0.76	0.89	0.93	4.7	-1.7
Biofuels & waste	0.19	0.18	0.17	0.32	0.41	0.39	0.38	-0.5	3.8
Electricity	0.72	1.11	1.29	0.84	0.93	0.94	0.97	3.5	-1.4
Heat	0.02	0.02	0.02	0.02	0.08	0.11	0.11	-0.8	8.9
Transport	**1.68**	**1.50**	**1.45**	**1.43**	**2.31**	**2.59**	**2.59**	**-0.9**	**2.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.62	1.21	1.35	1.35	1.76	2.05	2.01	-1.1	1.9
Natural gas	-	0.21	-	-	0.41	0.40	0.44	-	-
Biofuels & waste	-	-	-	-	0.08	0.10	0.10	-	-
Electricity	0.05	0.08	0.10	0.08	0.04	0.05	0.05	3.6	-3.6
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.54**	**2.77**	**3.66**	**2.20**	**1.94**	**2.11**	**1.60**	**11.9**	**-3.9**
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar thermal	-	-	-	-	0.00	0.00	0.00	-	-
Coal	-	1.86	1.65	0.19	0.49	0.28	0.31	-	-7.6
Oil	-	0.29	0.24	0.01	0.02	0.02	0.00	-	-20.0
Natural gas	0.33	0.38	1.33	1.36	0.57	0.84	0.36	8.5	-6.1
Biofuels & waste	-	-	-	0.00	0.02	0.02	0.02	-	-
Electricity	0.09	0.14	0.21	0.45	0.61	0.69	0.71	5.0	6.0
Heat	0.12	0.10	0.23	0.18	0.22	0.25	0.20	3.9	-0.7

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**0.72**	**1.15**	**2.25**	**2.59**	**2.15**	**2.31**	**2.12**	**6.9**	**-0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	0.00	0.00	-	-
Coal	-	0.20	0.44	0.06	0.05	0.05	0.05	-	-10.0
Oil	0.02	0.02	0.04	0.01	0.02	0.01	0.01	5.0	-7.7
Natural gas	0.21	0.41	1.09	1.64	1.21	1.33	1.17	10.1	0.3
Biofuels & waste	-	-	-	0.00 e	0.04	0.04	0.04	-	-
Electricity	0.13	0.21	0.32	0.47	0.38	0.38	0.39	5.2	1.0
Heat	0.36	0.31	0.37	0.41	0.46	0.49	0.46	0.1	1.0
Agriculture & fishing	**0.12**	**0.83**	**0.71**	**0.21**	**0.13**	**0.13**	**0.16**	**10.7**	**-6.9**
Geothermal	-	-	-	-	0.00	0.00	0.00	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.07	0.09	0.01	0.00	0.00	0.00	-	-21.8
Oil	-	0.61	0.32	0.09	0.07	0.07	0.07	-	-7.1
Natural gas	0.04	0.03	0.16	0.05	0.03	0.03	0.04	9.1	-6.6
Biofuels & waste	-	-	-	0.00 e	0.00	0.00	0.02	-	-
Electricity	0.07	0.10	0.10	0.05	0.03	0.02	0.03	2.4	-6.2
Heat	0.02	0.02	0.03	0.01	0.00	0.00	0.00	2.0	-10.0
Other	**1.65**	**0.18**	**0.01**	**-**	**-**	**-**	**-**	**-28.8**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	1.19	0.18	-	-	-	-	-	-	-
Oil	0.47	0.00	0.01	-	-	-	-	-23.3	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.49**	**0.25**	**1.61**	**1.36**	**1.20**	**1.08**	**1.24**	**7.20**	**-1.20**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**10.86**	**13.03**	**15.75**	**11.42**	**11.82**	**10.85**	**11.44**	**10.97**
Total industry (Mtoe)	**5.64**	**6.34**	**6.09**	**3.63**	**3.65**	**3.12**	**3.23**	**3.26**
Iron and steel	1.06	0.78	1.11	1.15	1.06	0.86	1.01	1.02
Chem. and petrochemical	-	0.33	0.65	0.61	0.51	0.35	0.34	0.33
Non-ferrous metals	-	0.05	0.07	0.03	0.26	0.22	0.25	0.25
Non-metallic minerals	-	0.23	0.40	0.72	0.46	0.37	0.37	0.40
Transport equipment	-	-	0.13	0.08	0.13	0.12	0.13	0.14
Machinery	-	0.22	0.17	0.17	0.21	0.15	0.18	0.18
Mining and quarrying	-	0.02	0.04	0.05	0.04	0.01	0.01	0.01
Food and tobacco	-	0.15	0.22	0.20	0.16	0.14	0.12	0.12
Paper, pulp and printing	-	0.16	0.27	0.23	0.55	0.63	0.53	0.50
Wood and wood products	-	0.00	0.04	0.03	0.07	0.07	0.06	0.06
Construction	-	0.01	0.10	0.06	0.05	0.05	0.05	0.06
Textile and leather	-	0.14	0.18	0.09	0.04	0.03	0.04	0.05
Non specified/other	4.58	4.25	2.72	0.22	0.13	0.12	0.13	0.14
Electricity consumption (Mtoe)	**1.06**	**1.64**	**2.01**	**1.89**	**2.13**	**1.99**	**2.08**	**2.13**
Total industry (Mtoe)	**0.72**	**1.11**	**1.29**	**0.84**	**1.08**	**0.93**	**0.94**	**0.97**
Iron and steel	-	-	-	0.28	0.21	0.16	0.20	0.20
Chem. and petrochemical	-	-	-	0.12	0.13	0.12	0.07	0.08
Non-ferrous metals	-	-	-	-	0.22	0.19	0.21	0.21
Non-metallic minerals	-	-	-	0.09	0.07	0.06	0.06	0.07
Transport equipment	-	-	-	0.02	0.06	0.05	0.06	0.07
Machinery	-	-	-	0.07	0.12	0.08	0.09	0.09
Mining and quarrying	-	-	-	0.01	0.01	0.00	0.00	0.00
Food and tobacco	-	-	-	0.10	0.05	0.04	0.04	0.04
Paper, pulp and printing	-	-	-	0.06	0.11	0.10	0.09	0.09
Wood and wood products	-	-	-	0.02	0.02	0.02	0.01	0.01
Construction	-	-	-	0.01	0.01	0.02	0.01	0.02
Textile and leather	-	-	-	0.03	0.01	0.01	0.01	0.01
Non specified/other	0.72	1.11	1.29	0.03	0.06	0.06	0.07	0.07
Total industry (TWh)	**8.32**	**12.86**	**15.01**	**9.74**	**12.56**	**10.77**	**10.93**	**11.24**
Iron and steel	-	-	-	3.25	2.42	1.89	2.35	2.34
Chem. and petrochemical	-	-	-	1.45	1.56	1.39	0.80	0.92
Non-ferrous metals	-	-	-	-	2.50	2.25	2.46	2.45
Non-metallic minerals	-	-	-	1.02	0.83	0.71	0.67	0.81
Transport equipment	-	-	-	0.25	0.75	0.63	0.74	0.85
Machinery	-	-	-	0.84	1.39	0.96	1.08	1.07
Mining and quarrying	-	-	-	0.13	0.10	0.05	0.05	0.04
Food and tobacco	-	-	-	1.12	0.54	0.48	0.48	0.44
Paper, pulp and printing	-	-	-	0.68	1.26	1.19	1.06	1.01
Wood and wood products	-	-	-	0.21	0.23	0.19	0.16	0.17
Construction	-	-	-	0.13	0.12	0.20	0.17	0.23
Textile and leather	-	-	-	0.33	0.15	0.14	0.13	0.15
Non specified/other	8.32	12.86	15.01	0.34	0.72	0.69	0.78	0.78

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**3024**	**3502**	**7255**	**3448**	**5951**	**9412**	**8994**	**7334**	**11227**
Imports from:									
Total from OECD	**-**	**-**	**-**	**1874**	**5951**	**9234**	**8892**	**7047**	**11049**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	1566	4254	6683	6555	5492	7992
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	308	-	-	-	56	5
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	1697	2551	2337	1499	3052
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**1574**	**-**	**178**	**102**	**287**	**178**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	1574	-	178	102	287	178
Non-specified/others	**3024**	**3502**	**7255**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**184**	**184**	**2059**	**2065**	**8647**	**8891**	**7682**	**6293**	**10500**
Exports to:									
Total to OECD	**-**	**-**	**-**	**2065**	**8647**	**7719**	**6204**	**5382**	**8373**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	1357	1247	232	141	365	228
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	708	7400	7456	6001	4935	8118
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	31	62	82	27
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**1172**	**1478**	**911**	**2127**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	1172	1478	911	2127
Non-specified/others	**184**	**184**	**2059**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**7.24**	**7.45**	**6.72**	**6.53**	**7.26**	**7.30**
Nuclear	-	-	-	1.76	2.64	2.20	1.82	1.82	1.94
Hydro	-	-	-	2.26	2.42	2.52	2.46	2.49	2.49
of which: pumped storage	*-*	*-*	*-*	*0.74*	*0.74 e*	*0.92*	*0.92*	*0.92*	*0.92*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	0.04
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	-	3.22	2.39	2.00	2.25	2.95	2.82
of which:									
Single-fired:									
Coal and coal products	-	-	-	..	..	0.96	0.96	0.96	0.96
Liquid fuels	-	-	-	..	..	-	-	0.03	0.03
Natural gas	-	-	-	..	..	0.27	0.41	1.05	0.90
Biofuels & waste	-	-	-	..	..	0.06	0.06	0.06	0.07
Multi-fired:									
Solid / liquid	-	-	-	..	..	-	-	-	-
Solid / natural gas	-	-	-	..	..	0.22	0.24	0.26	0.28
Liquid / natural gas	-	-	-	..	..	0.47	0.55	0.55	0.55
Solid / liquid / gas	-	-	-	..	..	0.02	0.03	0.03	0.03
Type of generation									
Steam	-	-	-	..	..	1.76	1.87	1.91	1.94
Internal combustion	-	-	-	..	..	0.01	0.06	0.07	0.07
Gas turbine	-	-	-	..	..	0.01	0.01	0.01	0.01
Combined cycle	-	-	-	..	..	0.22	0.30	0.95	0.79
Other	-	-	-	..	..	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**-**	**-**	**0.64**	**0.63**	**0.62**	**0.76**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	-	-	0.03	0.03	0.03	0.03
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	0.02	0.15
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.01	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	0.02	0.02	0.02	0.02
Combustible fuels	-	-	-	-	-	0.59	0.58	0.55	0.56
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	-	0.03	0.03	0.08	0.10
Natural gas	-	-	-	-	-	0.07	0.02	0.03	0.08
Biofuels & waste	-	-	-	-	-	0.10	0.12	0.13	0.13
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	0.23	0.25	0.25	0.20
Liquid / natural gas	-	-	-	-	-	0.09	0.13	0.05	0.05
Solid / liquid / gas	-	-	-	-	-	0.07	0.02	0.02	-
Type of generation									
Steam	-	-	-	-	-	0.53	0.51	0.48	0.32
Internal combustion	-	-	-	-	-	-	0.01	0.01	0.11
Gas turbine	-	-	-	-	-	0.02	0.01	0.01	0.07
Combined cycle	-	-	-	-	-	0.04	0.04	0.04	0.03
Other	-	-	-	-	-	-	-	0.01	0.02
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	2	2	4	..	..	..	..	..	..
Heavy fuel oil (t)	34	34	73	..	x	x	x	x	x
Natural gas (MWh)(1)	2.4	2.8	5.1	13.4	43.8	40.9	25.9	31.9	41.4
				Euro/ toe					
Steam coal	3	3	7	..	..	..	..	..	..
Heavy fuel oil	35	35	75	..	x	x	x	x	x
Natural gas(2)	31	36	66	173	566	529	334	412	536
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	9.92	11.58	17.39	64.86	123.30	140.20	127.70	128.28	132.06
of which: tax	-	-	..	0.66	-	-	-	-	-
Household									
Price	16.43	18.26	16.50	76.94	155.90	166.20	160.80	173.73	178.66
of which: tax	-	-	..	7.73	24.90	26.50	25.60	28.95	28.94

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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SLOVENIA

1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	..	..	5.71	6.41	7.23	7.25	7.14	..	1.0
GDP (billion 2005 USD)	..	..	24.90	29.90	39.01	39.24	38.32	..	2.0
TPES/GDP(1)	..	..	0.23	0.21	0.19	0.18	0.19	..	-0.9
Population (millions)	..	..	2.00	1.99	2.05	2.05	2.06	..	0.1
TPES/population(2)	..	..	2.86	3.22	3.53	3.53	3.47	..	0.9
TPES/GDP (2005 = 100)	..	..	112	105	91	90	91	..	-0.9
Ele.TFC/GDP(2005=100)(3)	..	..	104	99	86	90	..	..	..
Ele.TFC/population(4)	..	..	4630	5291	5842	6143	..	..	..
Elec. generated (TWh)(5)	..	..	12.44	13.62	16.25	15.91	15.53	..	1.0

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**..**	**..**	**5.71**	**6.41**	**7.23**	**7.25**	**7.14**	**..**	**1.0**
Coal	..	..	1.58	1.31	1.45	1.47	1.48	..	-0.3
Oil	..	..	1.73	2.37	2.54	2.56	2.56	..	1.8
Natural gas	..	..	0.76	0.83	0.86	0.74	0.71	..	-0.3
Biofuels & waste	..	..	0.27	0.46	0.65	0.62	0.63	..	4.0
Nuclear	..	..	1.20	1.24	1.47	1.62	1.44	..	0.8
Geothermal	..	..	-	-	0.03	0.04	0.04	..	-
Solar, wind, tide(1)	..	..	-	-	0.01	0.01	0.02	..	-
Hydro	..	..	0.25	0.33	0.39	0.31	0.33	..	1.3
Net electricity imports(2)	..	..	-0.08	-0.11	-0.18	-0.11	-0.08	..	-0.4
Heat	..	..	-	-	-	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**..**	**..**	**12.4**	**13.6**	**15.1**	**16.4**	**16.1**	**15.7**
Nuclear	..	..	4.6	4.8	5.9	5.7	6.2	5.5
Hydro	..	..	3.0	3.8	3.5	4.7	3.7	4.1
of which:								
pumped storage production	..	..	-	-	-	*0.2*	*0.1*	*0.2*
Geothermal	..	..	-	-	-	-	-	-
Solar	..	..	-	-	-	0.0	0.1	0.2
Tide, wave, ocean	..	..	-	-	-	-	-	-
Wind	..	..	-	-	-	-	-	-
Combustible fuels	..	..	4.9	5.0	5.8	6.1	6.1	5.9
Coal	..	..	*3.9*	*4.6*	*5.3*	*5.3*	*5.3*	*5.1*
Oil	..	..	*1.0*	*0.1*	*0.0*	*0.0*	*0.0*	*0.0*
Natural gas	..	..	*0.0*	*0.3*	*0.3*	*0.5*	*0.5*	*0.5*
Biofuels & waste	..	..	-	*0.1*	*0.1*	*0.2*	*0.3*	*0.3*
Other (e.g. fuel cells)	..	..	-	-	-	-	-	-
- Own use by power plant	..	..	1.3	0.8	1.0	1.0	1.1	..
Net production	**..**	**..**	**11.2**	**12.8**	**14.1**	**15.4**	**15.0**	**..**
Nuclear	..	..	4.4	4.5	5.6	5.4	5.9	..
Hydro	..	..	2.9	3.8	3.4	4.6	3.6	..
Geothermal	..	..	-	-	-	-	-	..
Solar	..	..	-	-	-	0.0	0.1	..
Tide, wave, ocean	..	..	-	-	-	-	-	..
Wind	..	..	-	-	-	-	-	..
Combustible fuels	..	..	3.9	4.5	5.1	5.4	5.4	..
Other (e.g. fuel cells)	..	..	-	-	-	-	-	..
- Used for heat pumps	..	..	-	-	-	-	-	-
- Used for electric boilers	..	..	-	-	-	-	-	-
- Used for pumped storage	..	..	-	-	-	0.2	0.2	0.3
+ Imports	..	..	1.7	4.2	9.3	8.6	7.0	7.5
- Exports	..	..	2.7	5.6	9.7	10.7	8.3	8.4
Electrical energy supplied	**..**	**..**	**10.2**	**11.5**	**13.8**	**13.1**	**13.5**	**..**
- Transmission & distr. losses	..	..	0.8	0.8	1.0	1.0	0.8	..
- Statistical difference	..	..	-	-	-	-	-	..
Total consumption	**..**	**..**	**9.4**	**10.7**	**12.9**	**12.1**	**12.7**	**..**
- Energy industry consumption[2]	..	..	0.2	0.1	0.1	0.1	0.1	..
Final consumption	**..**	**..**	**9.2**	**10.5**	**12.7**	**12.0**	**12.6**	**..**
Industry	..	..	6.0	5.5	7.2	5.5	5.9	..
Transport	..	..	0.2	0.3	0.2	0.2	0.2	..
Commercial & publ. serv.	..	..	0.8	2.1	2.4	3.1	3.4	..
Residential	..	..	2.2	2.6	3.0	3.2	3.2	..
Agriculture & fishing	..	..	-	-	-	-	-	..
Sector non specified	..	..	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**..**	**..**	**12.44**	**13.62**	**16.40**	**16.43**	**16.06**	**..**	**1.2**
- Hydro pumped storage	..	..	-	-	-	*0.19*	*0.14*	..	-
Total generation(1)	**..**	**..**	**12.44**	**13.62**	**16.40**	**16.25**	**15.91**	**..**	**1.2**
Main activity producers									
Gross production	..	..	11.35	12.99	15.94	15.97	15.62	..	1.5
- Hydro pumped storage	..	..	-	-	-	*0.19*	*0.14*	..	-
Total generation(1)	..	..	11.35	12.99	15.94	15.78	15.48	..	1.5
Nuclear	..	..	4.62	4.76	5.74	5.66	6.22	..	1.4
Hydro	..	..	2.86	3.65	4.55	4.35	3.44	..	0.9
Geothermal	..	..	-	-	-	-	-	..	-
Solar, wind, tide(2)	..	..	-	-	0.00	0.00	0.00	..	-
Coal	..	..	3.82	4.57	5.09	5.24	5.26	..	1.5
Oil	..	..	0.05	0.00	0.02	0.01	0.02	..	-5.8
Natural gas	..	..	-	0.00	0.45	0.42	0.40	..	-
Biofuels & waste	..	..	-	-	0.09	0.11	0.16	..	-
Autoproducers									
Gross production	..	..	1.10	0.64	0.47	0.46	0.43	..	-4.3
- Hydro pumped storage	..	..	-	-	-	-	-	..	-
Total generation(1)	..	..	1.10	0.64	0.47	0.46	0.43	..	-4.3
Nuclear	..	..	-	-	-	-	-	..	-
Hydro	..	..	0.09	0.19	0.16	0.16	0.12	..	1.2
Geothermal	..	..	-	-	-	-	-	..	-
Solar, wind, tide(2)	..	..	-	-	0.00	0.01	0.06	..	-
Coal	..	..	0.08	0.04	0.04	0.05	0.05	..	-1.9
Oil	..	..	0.93	0.05	0.01	-	0.00	..	-27.8
Natural gas	..	..	0.00	0.29	0.15	0.13	0.09	..	20.0
Biofuels & waste	..	..	-	0.07	0.10	0.11	0.11	..	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**-**	**-**	**987**	**593**	**425**	**425**	**401**	**-4.2**
Total energy	**-**	**-**	**12**	**173**	**-**	**-**	**-**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	22	-	-	-	-
Energy non specified/other	-	-	12	151	-	-	-	-
Total industry	**-**	**-**	**960**	**319**	**256**	**258**	**217**	**-6.8**
Iron and steel	-	-	66	-	-	-	-	-
Chemical and petrochemical	-	-	16	9	25	23	10	-2.2
Non-ferrous metals	-	-	21	-	-	-	-	-
Non-metallic minerals	-	-	-	-	6	7	6	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	-	-	-	2	4	3	5	-
Mining and quarrying	-	-	13	-	-	-	-	-
Food and tobacco	-	-	42	17	4	3	-	-
Pulp and printing	-	-	693	246	153	149	125	-7.8
Wood and wood products	-	-	11	-	41	45	46	7.1
Construction	-	-	-	-	-	-	-	-
Textile and leather	-	-	98	30	23	25	23	-6.7
Non specified/other industries	-	-	-	15	-	3	2	-
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**-**	**-**	**15**	**101**	**169**	**167**	**184**	**12.7**
Commerce and pub. services	-	-	-	12	90	86	75	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	-	-	-	-
Sector non specified	-	-	15	89	79	81	109	9.9

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**8223**	**9389**	**10104**	**9806**	**9745**	**9544**	**0.8**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	47	47	47	-
Coal	-	5332	5481	6374	6027	5606	5213	0.2
Oil	-	821	198	205	189	147	200	-7.9
Natural gas	-	1921	3433	3133	2602	2849	2782	1.9
Biofuels & waste	-	149	277	392	941	1096	1302	10.0
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	7460	8458	9906	9663	9669	..	1.2
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	47	47	..	-
Coal	-	5254	5481	6356	6027	5606	..	0.3
Oil	-	821	198	183	182	141	..	-8.0
Natural gas	-	1236	2502	3088	2561	2812	..	4.0
Biofuels & waste	-	149	277	279	846	1063	..	9.8
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	763	931	198	143	76	..	-10.4
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	78	-	18	-	-	..	-
Oil	-	-	-	22	7	6	..	-
Natural gas	-	685	931	45	41	37	..	-13.0
Biofuels & waste	-	-	-	113	95	33	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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SLOVENIA
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**..**	**..**	**1.55**	**1.41**	**1.59**	**1.62**	**1.64**	**..**	**0.3**
Coal	..	..	1.32	1.25	1.35	1.38	1.40	..	0.3
Oil	..	..	0.17	0.02	0.01	0.01	0.01	..	-13.5
Natural gas	..	..	0.05	0.13	0.16	0.16	0.15	..	5.2
Biofuels & waste	..	..	0.00	0.02	0.07	0.07	0.09	..	16.0
of which: ***main activity prod.***									
Total	**..**	**..**	**1.37**	**1.32**	**1.54**	**1.57**	**1.61**	**..**	**0.7**
Coal	..	..	1.30	1.24	1.34	1.37	1.39	..	0.3
Oil	..	..	0.03	0.01	0.01	0.01	0.01	..	-6.4
Natural gas	..	..	0.03	0.07	0.14	0.14	0.14	..	7.3
Biofuels & waste	..	..	0.00	0.01	0.04	0.05	0.07	..	14.8

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**..**	**..**	**1.20**	**1.24**	**1.50**	**1.48**	**1.63**	**..**	**1.4**
Nuclear	..	..	1.20	1.24	1.50	1.47	1.62	..	1.4
Geothermal	..	..	-	-	-	-	-	..	-
Solar	..	..	-	-	0.00	0.00	0.01	..	-
Non-Thermal									
Total	**..**	**..**	**0.25**	**0.33**	**0.41**	**0.39**	**0.31**	**..**	**0.9**
Hydro	..	..	0.25	0.33	0.41	0.39	0.31	..	0.9
Tide, wave, ocean	..	..	-	-	-	-	-	..	-
Wind	..	..	-	-	-	-	-	..	-
Other (e.g. fuel cells)	..	..	-	-	-	-	-	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	597	609	627	443	613	0.1
Fuel input (TJ)	..	4914	6833	7268	5902	7528	2.1
Electricity production (GWh)	..	352	646	708	573	744	3.6
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	6	2	4	1	2	-5.1
Fuel input (TJ)	..	260	85	157	59	105	-4.2
Electricity production (GWh)	..	51	3	12	4	10	-7.5
Natural gas (1)							
Fuel input (TJ)	..	-	53	61	66	94	-
Electricity production (GWh)	..	-	3	4	4	6	-
Wood and other solid waste							
Fuel input (TJ)	..	-	-	73	-	-	-
Electricity production (GWh)	..	-	-	7	-	-	-
Industrial waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	-	121	107	89	-
Electricity production (GWh)	..	-	-	9	7	6	-
Total combustible fuels(2)							
Electricity production (GWh)	..	403	652	740	588	766	3.1

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	2	4	2	-
Fuel input (TJ)	..	-	-	57	109	67	-
Electricity production (GWh)	..	-	-	1	1	1	-
CHP Heat production (TJ)	..	-	-	42	63	34	-
Brown coal							
Fuel input (1000 t)	..	4681	4221	4237	4395	4328	-0.4
Fuel input (TJ)	..	38530	45346	49047	51857	50897	1.3
Electricity production (GWh)	..	3538	3965	4423	4714	4562	1.2
CHP Heat production (TJ)	..	5147	5481	5491	5964	5572	0.4
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	152	11	3	2	2	-18.6
Fuel input (TJ)	..	6116	443	136	52	63	-19.6
Electricity production (GWh)	..	929	52	16	4	6	-21.3
CHP Heat production (TJ)	..	164	24	30	11	3	-17.3
Natural gas(1)							
Fuel input (TJ)	..	937	2689	5754	5147	4695	8.0
Electricity production (GWh)	..	2	290	589	544	483	29.9
CHP Heat production (TJ)	..	685	931	941	892	939	1.5
Wood and other solid waste							
Fuel input (TJ)	..	-	521	1546	1524	1566	-
Electricity production (GWh)	..	-	58	113	120	126	-
CHP Heat production (TJ)	..	-	-	492	538	554	-
Industrial waste							
Fuel input (TJ)	..	-	-	24	21	263	-
Electricity production (GWh)	..	-	-	4	5	8	-
CHP Heat production (TJ)	..	-	-	-	-	80	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	124	729	1059	1315	-
Electricity production (GWh)	..	-	12	59	90	122	-
CHP Heat production (TJ)	..	-	-	107	194	229	-
Total combustible fuels(2)							
Electricity production (GWh)	..	4469	4377	5205	5478	5308	0.8
CHP Heat production (TJ)	..	5996	6436	7103	7662	7411	1.0

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	..	25	-	-	-	-	-
Fuel input (TJ)	..	206	-	-	-	-	-
Heat production (TJ)	..	185	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	..	19	4	6	4	4	-7.2
Fuel input (TJ)	..	773	179	267	207	165	-7.1
Heat production (TJ)	..	657	174	233	178	144	-7.0
Natural gas(1)							
Fuel input (TJ)	..	1510	3138	1852	2083	2292	2.0
Heat production (TJ)	..	1236	2502	1572	1710	1910	2.1
Wood and other solid waste							
Fuel input (TJ)	..	159	327	236	269	347	3.8
Heat production (TJ)	..	149	263	185	209	233	2.2
Industrial waste							
Fuel input (TJ)	..	-	14	-	-	-	-
Heat production (TJ)	..	-	14	-	-	-	-
Municipal waste							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	-	-	-	-	-
Heat production (TJ)	..	-	-	-	-	-	-
Total combustible fuels(2)							
Heat production (TJ)	..	2227	2953	1990	2097	2287	0.1

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC(1)	**..**	**..**	**3.69**	**4.65**	**5.00**	**5.12**	**5.04**	**..**	**1.5**
Geothermal	..	..	-	-	0.01	0.03	0.04	..	-
Solar thermal	..	..	-	-	0.01	0.01	0.01	..	-
Coal	..	..	0.23	0.09	0.06	0.05	0.06	..	-6.5
Oil	..	..	1.50	2.33	2.56	2.53	2.55	..	2.6
Natural gas	..	..	0.71	0.69	0.66	0.70	0.58	..	-1.0
Biofuels & waste	..	..	0.26	0.43	0.54	0.58	0.53	..	3.4
Electricity	..	..	0.79	0.90	0.97	1.03	1.08	..	1.5
Heat	..	..	0.19	0.20	0.18	0.19	0.19	..	-0.0
of which:									
Total industry	**..**	**..**	**1.53**	**1.42**	**1.22**	**1.27**	**1.24**	**..**	**-1.0**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	0.12	0.09	0.05	0.05	0.05	..	-4.0
Oil	..	..	0.23	0.27	0.15	0.13	0.11	..	-3.2
Natural gas	..	..	0.57	0.49	0.45	0.48	0.43	..	-1.4
Biofuels & waste	..	..	0.06	0.07	0.08	0.09	0.08	..	1.5
Electricity	..	..	0.51	0.48	0.43	0.47	0.50	..	-0.1
Heat	..	..	0.04	0.03	0.06	0.05	0.06	..	1.9
Transport	**..**	**..**	**0.90**	**1.21**	**1.75**	**1.77**	**1.90**	**..**	**3.6**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	-	-	-	-	-	..	-
Oil	..	..	0.88	1.19	1.70	1.71	1.85	..	3.6
Natural gas	..	..	-	-	-	-	-	..	-
Biofuels & waste	..	..	-	-	0.03	0.05	0.03	..	-
Electricity	..	..	0.02	0.02	0.01	0.01	0.01	..	-1.5
Heat	..	..	-	-	-	-	-	..	-
Comm. & public serv.	**..**	**..**	**0.29**	**0.52**	**0.50**	**0.51**	**0.53**	**..**	**2.8**
Geothermal	..	..	-	-	-	0.01	0.01	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	-	-	-	-	-	..	-
Oil	..	..	-	0.25	0.19	0.17	0.14	..	-
Natural gas	..	..	0.11	0.02	0.02	0.02	0.04	..	-4.8
Biofuels & waste	..	..	0.05	0.00	0.00	0.00	0.00	..	-14.2
Electricity	..	..	0.07	0.18	0.26	0.27	0.29	..	7.0
Heat	..	..	0.06	0.07	0.03	0.04	0.04	..	-1.5

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**..**	**..**	**0.95**	**1.12**	**1.22**	**1.26**	**1.17**	**..**	**1.0**
Geothermal	..	..	-	-	0.01	0.01	0.02	..	-
Solar thermal	..	..	-	-	0.01	0.01	0.01	..	-
Coal	..	..	0.11	0.00	-	-	-	..	-
Oil	..	..	0.38	0.38	0.30	0.31	0.25	..	-1.9
Natural gas	..	..	0.03	0.06	0.11	0.11	0.11	..	7.1
Biofuels & waste	..	..	0.15	0.36	0.43	0.44	0.41	..	5.0
Electricity	..	..	0.19	0.22	0.27	0.28	0.28	..	1.7
Heat	..	..	0.09	0.09	0.10	0.10	0.09	..	-0.2
Agriculture & fishing	**..**	**..**	**-**	**0.08**	**0.07**	**0.07**	**0.07**	**..**	**-**
Geothermal	..	..	-	-	-	0.01	0.01	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	-	-	-	-	-	..	-
Oil	..	..	-	0.08	0.07	0.07	0.07	..	-
Natural gas	..	..	-	-	-	-	-	..	-
Biofuels & waste	..	..	-	-	-	-	-	..	-
Electricity	..	..	-	-	-	-	-	..	-
Heat	..	..	-	-	-	-	-	..	-
Other	**..**	**..**	**0.01**	**0.04**	**0.02**	**0.03**	**0.02**	**..**	**3.1**
Geothermal	..	..	-	-	-	-	-	..	-
Solar thermal	..	..	-	-	-	-	-	..	-
Coal	..	..	-	-	-	-	-	..	-
Oil	..	..	-	0.04	0.02	0.03	0.02	..	-
Natural gas	..	..	0.01	-	-	-	-	..	-
Biofuels & waste	..	..	-	-	-	-	-	..	-
Electricity	..	..	-	-	-	-	-	..	-
Heat	..	..	-	-	-	-	-	..	-
Non-energy use(1)	**..**	**..**	**0.01**	**0.24**	**0.23**	**0.21**	**0.12**	**..**	**12.95**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**..**	**..**	**3.69**	**4.65**	**5.50**	**5.00**	**5.12**	**5.04**
Total industry (Mtoe)	**..**	**..**	**1.53**	**1.42**	**1.48**	**1.22**	**1.27**	**1.24**
Iron and steel	..	..	0.22	0.17	0.16	0.12	0.15	0.14
Chem. and petrochemical	..	..	0.06	0.12	0.16	0.16	0.17	0.16
Non-ferrous metals	..	..	0.21	0.12	0.14	0.10	0.09	0.14
Non-metallic minerals	..	..	0.11	0.22	0.27	0.19	0.20	0.19
Transport equipment	..	..	-	0.02	0.04	0.03	0.04	0.03
Machinery	..	..	0.16	0.12	0.16	0.12	0.15	0.14
Mining and quarrying	..	..	-	0.01	0.02	0.02	0.02	0.01
Food and tobacco	..	..	0.09	0.09	0.08	0.07	0.07	0.07
Paper, pulp and printing	..	..	0.13	0.21	0.19	0.19	0.18	0.17
Wood and wood products	..	..	0.05	0.05	0.06	0.05	0.06	0.05
Construction	..	..	0.15	0.10	0.06	0.05	0.04	0.03
Textile and leather	..	..	0.12	0.09	0.04	0.03	0.03	0.03
Non specified/other	..	..	0.23	0.10	0.10	0.08	0.09	0.08
Electricity consumption (Mtoe)	**..**	**..**	**0.79**	**0.90**	**1.10**	**0.97**	**1.03**	**1.08**
Total industry (Mtoe)	**..**	**..**	**0.51**	**0.48**	**0.54**	**0.43**	**0.47**	**0.50**
Iron and steel	..	..	0.11	0.08	0.07	0.05	0.06	0.06
Chem. and petrochemical	..	..	0.03	0.04	0.05	0.05	0.06	0.06
Non-ferrous metals	..	..	0.14	0.10	0.11	0.06	0.06	0.10
Non-metallic minerals	..	..	0.01	0.04	0.04	0.03	0.04	0.03
Transport equipment	..	..	-	0.01	0.02	0.02	0.02	0.02
Machinery	..	..	0.06	0.06	0.08	0.07	0.08	0.08
Mining and quarrying	..	..	-	0.00	0.01	0.01	0.01	0.01
Food and tobacco	..	..	0.02	0.02	0.03	0.02	0.02	0.02
Paper, pulp and printing	..	..	0.06	0.06	0.06	0.06	0.06	0.05
Wood and wood products	..	..	0.03	0.01	0.02	0.01	0.01	0.01
Construction	..	..	0.02	0.01	0.01	0.01	0.00	0.00
Textile and leather	..	..	0.03	0.02	0.02	0.01	0.01	0.01
Non specified/other	..	..	0.01	0.03	0.04	0.03	0.04	0.04
Total industry (TWh)	**..**	**..**	**5.97**	**5.53**	**6.31**	**4.97**	**5.49**	**5.86**
Iron and steel	..	..	1.23	0.87	0.77	0.59	0.74	0.73
Chem. and petrochemical	..	..	0.32	0.42	0.62	0.62	0.66	0.65
Non-ferrous metals	..	..	1.66	1.19	1.28	0.67	0.71	1.20
Non-metallic minerals	..	..	0.14	0.45	0.51	0.33	0.41	0.39
Transport equipment	..	..	-	0.11	0.23	0.20	0.21	0.22
Machinery	..	..	0.74	0.67	0.95	0.78	0.93	0.91
Mining and quarrying	..	..	-	0.04	0.08	0.09	0.10	0.09
Food and tobacco	..	..	0.22	0.26	0.30	0.28	0.28	0.28
Paper, pulp and printing	..	..	0.66	0.67	0.67	0.65	0.65	0.63
Wood and wood products	..	..	0.32	0.17	0.19	0.16	0.17	0.17
Construction	..	..	0.22	0.11	0.07	0.06	0.06	0.05
Textile and leather	..	..	0.39	0.29	0.19	0.15	0.15	0.13
Non specified/other	..	..	0.09	0.30	0.46	0.40	0.43	0.42

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**..**	**..**	**1716**	**740**	**4232**	**6225**	**7780**	**8625**	**7036**
Imports from:									
Total from OECD	**..**	**..**	**-**	**682**	**3821**	**1309**	**2594**	**2132**	**2445**
Austria	..	..	-	327	3815	1214	2534	2008	2380
Belgium	..	..	-	-	-	-	-	-	-
Canada	..	..	-	-	-	-	-	-	-
Czech Republic	..	..	-	-	-	-	-	-	-
Denmark	..	..	-	-	-	-	-	-	-
Estonia	..	..	-	-	-	-	-	-	-
Finland	..	..	-	-	-	-	-	-	-
France	..	..	-	-	-	-	-	-	-
Germany	..	..	-	-	-	-	-	-	-
Greece	..	..	-	-	-	-	-	-	-
Hungary	..	..	-	-	-	-	-	-	-
Ireland	..	..	-	-	-	-	-	-	-
Italy	..	..	-	27	6	95	60	124	65
Luxembourg	..	..	-	-	-	-	-	-	-
Mexico	..	..	-	-	-	-	-	-	-
Netherlands	..	..	-	-	-	-	-	-	-
Norway	..	..	-	-	-	-	-	-	-
Poland	..	..	-	-	-	-	-	-	-
Portugal	..	..	-	-	-	-	-	-	-
Slovak Republic	..	..	-	-	-	-	-	-	-
Slovenia	..	..	-	-	-	-	-	-	-
Spain	..	..	-	-	-	-	-	-	-
Sweden	..	..	-	-	-	-	-	-	-
Switzerland	..	..	-	328	-	-	-	-	-
Turkey	..	..	-	-	-	-	-	-	-
United Kingdom	..	..	-	-	-	-	-	-	-
United States	..	..	-	-	-	-	-	-	-
Total from non-OECD	**..**	**..**	**-**	**58**	**403**	**4916**	**5186**	**6493**	**4591**
Albania	..	..	-	-	-	-	-	-	-
Azerbaijan	..	..	-	-	-	-	-	-	-
Belarus	..	..	-	-	-	-	-	-	-
Bulgaria	..	..	-	-	-	-	-	-	-
Croatia	..	..	-	58	403	4916	5186	6493	4591
F.Y.R. of Macedonia	..	..	-	-	-	-	-	-	-
Georgia	..	..	-	-	-	-	-	-	-
Lativia	..	..	-	-	-	-	-	-	-
Lithuania	..	..	-	-	-	-	-	-	-
Romania	..	..	-	-	-	-	-	-	-
Russian Federation	..	..	-	-	-	-	-	-	-
Serbia	..	..	-	-	-	-	-	-	-
Turkmenistan	..	..	-	-	-	-	-	-	-
Ukraine	..	..	-	-	-	-	-	-	-
Non-specified/others	**..**	**..**	**1716**	**-**	**8**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**..**	**..**	**2704**	**2392**	**5553**	**7824**	**10839**	**10717**	**8298**
Exports to:									
Total to OECD	**..**	**..**	**-**	**101**	**2946**	**5601**	**7265**	**8071**	**5179**
Austria	..	..	-	1	1276	873	468	583	401
Belgium	..	..	-	-	-	-	-	-	-
Canada	..	..	-	-	-	-	-	-	-
Czech Republic	..	..	-	-	-	-	-	-	-
Denmark	..	..	-	-	-	-	-	-	-
Estonia	..	..	-	-	-	-	-	-	-
Finland	..	..	-	-	-	-	-	-	-
France	..	..	-	-	-	-	-	-	-
Germany	..	..	-	-	-	-	-	-	-
Greece	..	..	-	-	-	-	-	-	-
Hungary	..	..	-	-	-	-	-	-	-
Ireland	..	..	-	-	-	-	-	-	-
Italy	..	..	-	100	1670	4728	6797	7488	4778
Luxembourg	..	..	-	-	-	-	-	-	-
Mexico	..	..	-	-	-	-	-	-	-
Netherlands	..	..	-	-	-	-	-	-	-
Norway	..	..	-	-	-	-	-	-	-
Poland	..	..	-	-	-	-	-	-	-
Portugal	..	..	-	-	-	-	-	-	-
Slovak Republic	..	..	-	-	-	-	-	-	-
Slovenia	..	..	-	-	-	-	-	-	-
Spain	..	..	-	-	-	-	-	-	-
Sweden	..	..	-	-	-	-	-	-	-
Switzerland	..	..	-	-	-	-	-	-	-
Turkey	..	..	-	-	-	-	-	-	-
United Kingdom	..	..	-	-	-	-	-	-	-
United States	..	..	-	-	-	-	-	-	-
Total to non-OECD	**..**	**..**	**-**	**2281**	**2607**	**2223**	**3574**	**2646**	**3119**
Albania	..	..	-	-	-	-	-	-	-
Azerbaijan	..	..	-	-	-	-	-	-	-
Belarus	..	..	-	-	-	-	-	-	-
Bulgaria	..	..	-	-	-	-	-	-	-
Croatia	..	..	-	2281	2607	2223	3574	2646	3119
F.Y.R. of Macedonia	..	..	-	-	-	-	-	-	-
Georgia	..	..	-	-	-	-	-	-	-
Lativia	..	..	-	-	-	-	-	-	-
Lithuania	..	..	-	-	-	-	-	-	-
Romania	..	..	-	-	-	-	-	-	-
Russian Federation	..	..	-	-	-	-	-	-	-
Serbia	..	..	-	-	-	-	-	-	-
Turkmenistan	..	..	-	-	-	-	-	-	-
Ukraine	..	..	-	-	-	-	-	-	-
Non-specified/others	**..**	**..**	**2704**	**10**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**2.41**	**2.43**	**2.81**	**2.86**	**3.01**	**3.04**
Nuclear	-	-	-	0.66	0.66	0.67	0.67	0.67	0.69
Hydro	-	-	-	0.73	0.75	0.91	0.95	1.14	1.14
of which: pumped storage	-	-	-	-	-	-	-	*0.18*	*0.18*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	-	1.01	1.02	1.23	1.24	1.20	1.21
of which:									
Single-fired:									
Coal and coal products	-	-	-	0.87	1.01	0.88	0.88	0.84	0.84
Liquid fuels	-	-	-	0.06	-	-	-	-	-
Natural gas	-	-	-	0.08	0.01	0.35	0.35	0.36	0.36
Biofuels & waste	-	-	-	-	-	0.01	0.01	0.01	0.02
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	-	0.93	1.01	0.82	0.90	0.86	0.87
Internal combustion	-	-	-	-	-	0.04	0.04	0.04	0.04
Gas turbine	-	-	-	0.08	0.01	0.38	0.30	0.31	0.31
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	1.55	1.71	1.95	1.91	1.94	1.95
Available capacity	..	..	..	..	2.18	1.96	2.14	2.35	2.20

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**-**	**0.11**	**0.19**	**0.18**	**0.19**	**0.18**	**0.23**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	-	0.03	0.09	0.11	0.12	0.12	0.12
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	0.01	0.06
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	-	0.08	0.10	0.06	0.07	0.06	0.06
of which:									
Single-fired:									
Coal and coal products	-	-	-	-	-	-	-	-	-
Liquid fuels	-	-	-	-	0.01	-	-	-	-
Natural gas	-	-	-	-	0.04	0.03	0.03	0.03	0.03
Biofuels & waste	-	-	-	-	-	0.01	0.02	0.02	0.02
Multi-fired:									
Solid / liquid	-	-	-	0.08	0.02	-	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	0.02	0.01	0.01	-	-
Solid / liquid / gas	-	-	-	-	-	0.02	0.02	0.01	0.01
Type of generation									
Steam	-	-	-	0.08	0.08	0.05	0.06	0.05	0.05
Internal combustion	-	-	-	-	0.01	0.01	0.01	0.01	0.01
Gas turbine	-	-	-	-	0.01	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	..	..	..	..	..	..	..	..	..
Heavy fuel oil (t)	..	..	..	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				Euro/ toe					
Steam coal	..	..	..	..	..	..	..	..	..
Heavy fuel oil	..	..	..	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	..	..	..	..	88.60	96.78	91.65	90.83	91.63
of which: tax	..	..	..	..	3.05	4.51	8.58	8.42	7.49
Household									
Price	..	..	..	..	114.62	131.76	140.03	145.07	150.50
of which: tax	..	..	..	..	23.49	28.31	34.54	34.52	34.02

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	51.57	67.69	90.09	121.86	127.75	125.57	124.68	3.3	1.5
GDP (billion 2005 USD)	467.63	547.32	730.87	963.13	1178.90	1183.83	1167.03	2.7	2.2
TPES/GDP(1)	0.11	0.12	0.12	0.13	0.11	0.11	0.11	0.7	-0.6
Population (millions)	34.96	37.67	39.01	40.26	46.07	46.13	46.08	0.6	0.8
TPES/population(2)	1.48	1.80	2.31	3.03	2.77	2.72	2.71	2.7	0.7
TPES/GDP (2005 = 100)	88	99	98	101	86	85	85	0.7	-0.6
Ele.TFC/GDP(2005=100)(3)	59	77	80	91	97	95	..	1.8	..
Ele.TFC/population(4)	1689	2384	3226	4682	5315	5204	..	3.9	..
Elec. generated (TWh)(5)	75.66	109.23	151.21	220.92	298.32	289.05	293.50	4.2	3.1

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**51.57**	**67.69**	**90.09**	**121.86**	**127.75**	**125.57**	**124.68**	**3.3**	**1.5**
Coal	9.00	12.43	19.28	20.94	7.94	12.44	15.20	4.6	-1.1
Oil	37.60	49.77	45.47	62.10	58.16	54.81	51.17	1.1	0.5
Natural gas	0.94	1.45	4.97	15.21	31.12	28.98	28.24	10.3	8.2
Biofuels & waste	0.01	0.27	4.07	4.13	6.59	7.17	7.54	40.2	2.8
Nuclear	1.71	1.35	14.14	16.21	16.15	15.05	15.99	13.2	0.6
Geothermal	-	-	0.00	0.01	0.02	0.02	0.02	-	7.6
Solar, wind, tide(1)	-	-	0.00	0.44	4.84	5.00	5.72	-	44.6
Hydro	2.49	2.54	2.19	2.43	3.64	2.63	1.76	-0.7	-1.0
Net electricity imports(2)	-0.17	-0.12	-0.04	0.38	-0.72	-0.52	-0.96	-8.8	16.1
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**76.3**	**110.5**	**151.9**	**224.5**	**294.1**	**301.5**	**291.4**	**297.1**
Nuclear	6.5	5.2	54.3	62.2	57.5	62.0	57.7	61.4
Hydro	29.5	30.8	26.2	31.8 e	23.0 e	45.5	32.9	24.1
of which:								
pumped storage production	*0.6*	*1.3*	*0.7*	*3.6*	*4.6*	*3.2*	*2.3*	*3.6*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	0.0	0.0	0.0 e	7.2	8.7	11.9
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	4.7	21.2 e	44.3	42.4	49.1
Combustible fuels	40.2	74.5	71.4	125.7 e	187.3 e	142.4	149.4	150.4
Coal	*14.3*	*32.8*	*60.7*	*80.9*	*80.8*	*26.3*	*44.9*	*55.9*
Oil	*25.1*	*38.4*	*8.6*	*22.6*	*24.4*	*16.6*	*14.8*	*15.7*
Natural gas	*0.8*	*2.9*	*1.5*	*20.2*	*79.0*	*94.9*	*84.5*	*73.2*
Biofuels & waste	*0.1*	*0.4*	*0.7*	*2.1*	*3.1 e*	*4.7*	*5.2*	*5.6*
Other (e.g. fuel cells)	-	-	-	-	5.0	0.2	0.2	0.2
- Own use by power plant	3.3	5.3	7.3	10.0	11.9	10.6	10.1	..
Net production	**72.9**	**105.2**	**144.6**	**214.4**	**282.1**	**291.0**	**281.3**	**..**
Nuclear	..	4.9	51.9	59.8	55.4	59.4	55.3	..
Hydro	..	30.4	25.8	31.5 e	22.7	44.7	32.3	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	0.0	0.0	0.0 e	7.1	8.6	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	4.7	21.1	43.2	41.4	..
Combustible fuels	..	69.9	66.9	118.4 e	178.4	136.4	143.5	..
Other (e.g. fuel cells)	..	-	-	-	4.5	0.1	0.2	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	1.5	1.9	1.0	4.9	6.4	4.5	3.2	5.0
+ Imports	0.3	2.3	3.2	12.3	10.2	5.2	7.9	7.8
- Exports	2.3	3.7	3.6	7.8	11.6	13.5	14.0	19.0
Electrical energy supplied	**69.4**	**102.0**	**143.2**	**214.0**	**274.4**	**278.2**	**272.0**	**..**
- Transmission & distr. losses	8.7	10.0	14.0	19.3	26.0	27.4	26.8	..
- Statistical difference	-	-	-	-	-	0.6	0.0	..
Total consumption	**60.7**	**92.0**	**129.2**	**194.7**	**248.5 e**	**250.2**	**245.2**	**..**
- Energy industry consumption[2]	1.7	2.2	3.4	6.3	6.2 e	5.4	5.3	..
Final consumption	**59.0**	**89.8**	**125.8**	**188.5**	**242.2 e**	**244.8**	**239.9**	**..**
Industry	37.9	53.9	63.3	85.6	105.0 e	73.5	72.0	..
Transport	1.5	1.9	3.7	4.2	5.4 e	3.2	3.2	..
Commercial & publ. serv.	7.5	12.2	25.1	50.0	63.8 e	83.9	82.2	..
Residential	10.9	19.6	30.2	43.6	62.6 e	75.7	74.2	..
Agriculture & fishing	1.3	2.1	3.5	5.0	5.3 e	4.1	4.1	..
Sector non specified	-	-	-	-	0.1 e	4.4	4.3	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**80.86**	**110.48**	**151.92**	**224.47**	**294.62**	**301.53**	**291.36**	**4.0**	**3.1**
- Hydro pumped storage	*0.78*	*1.26*	*0.71*	*3.55*	*2.75*	*3.21*	*2.32*	*-0.5*	*5.8*
Total generation(1)	**80.08**	**109.23**	**151.21**	**220.92**	**291.87**	**298.32**	**289.05**	**4.1**	**3.1**
Main activity producers									
Gross production	77.36	107.16	147.45	196.02	256.50	262.76	250.83	4.1	2.6
- Hydro pumped storage	*0.78*	*1.26*	*0.71*	*3.55*	*2.75*	*3.21*	*2.32*	*-0.5*	*5.8*
Total generation(1)	76.58	105.90	146.74	192.47	253.74	259.55	248.51	4.1	2.5
Nuclear	7.22	5.19	54.27	62.21	52.76	61.99	57.73	13.4	0.3
Hydro	29.16	28.15	24.15	27.43	25.80	41.46	29.74	-1.2	1.0
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.02	4.73	44.14	51.42	51.08	-	45.3
Coal	12.19	32.59	59.99 e	79.57	36.20	25.53	44.23	10.5	-1.4
Oil	27.58	37.10	7.51	13.98	14.54	13.10	12.24	-7.8	2.4
Natural gas	0.43	2.87	0.75	3.62	79.69	65.37	52.71	3.6	22.4
Biofuels & waste	-	0.01	0.05	0.94	0.60	0.69	0.79	-	14.0
Autoproducers									
Gross production	3.49	3.32	4.47	28.45	38.13	38.77	40.53	1.6	11.1
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	3.49	3.32	4.47	28.45	38.13	38.77	40.53	1.6	11.1
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.41	1.40	1.32	0.83	0.61	0.85	0.86	-0.4	-2.0
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.02	0.38	0.20	0.21	-	-
Coal	0.75	0.19	0.68	1.29	0.74	0.79	0.69	-0.6	0.1
Oil	1.27	1.34	1.09	8.60	4.70	3.46	2.53	-0.9	4.1
Natural gas	0.02	0.05	0.76	16.56	28.05	29.49	31.81	26.8	19.5
Biofuels & waste	0.05	0.35	0.62	1.16 e	3.65	3.99	4.43	16.9	9.8

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**1905**	**1704**	**4227 e**	**27383**	**36509**	**37327**	**39451**	**11.2**
Total energy	**-**	**-**	**922 e**	**3328**	**3789**	**4067**	**4669**	**8.0**
Coal mines	-	-	-	24 e	77	251	259	-
Oil and gas extraction	-	-	-	120	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	69 e	22	21	21	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	3115 e	3534	3724	4308	-
Energy non specified/other	-	-	922 e	-	156	71	81	-10.9
Total industry	**1905**	**1704**	**3305 e**	**20507**	**24289**	**21877**	**22257**	**9.5**
Iron and steel	625	534	331 e	-	154	139	112	-5.0
Chemical and petrochemical	247	51	1565 e	3901	5123	3593	3174	3.4
Non-ferrous metals	253	298	274 e	229	269	667	639	4.1
Non-metallic minerals	-	-	-	2650	1708	1843	1903	-
Transport equipment	4	-	-	482	410	453	413	-
Machinery	4	-	-	293	330	309	311	-
Mining and quarrying	25	-	-	1440	585	602	584	-
Food and tobacco	135	217	279 e	3545 e	5487	4607	4779	14.5
Pulp and printing	387	604	856 e	4078	6324	7218	7817	11.1
Wood and wood products	-	-	-	1629	825	628	685	-
Construction	-	-	-	63	6	224	223	-
Textile and leather	225	-	-	2002	1074	980	973	-
Non specified/other industries	-	-	-	195	1994	614	644	-
Total transport	**-**	**-**	**-**	**86**	**3**	**3**	**3**	**-**
Rail and pipeline	-	-	-	-	3	3	3	-
Transport non specified	-	-	-	86	-	-	-	-
Other	**-**	**-**	**-**	**3462 e**	**8428**	**11380**	**12522**	**-**
Commerce and pub. services	-	-	-	974 e	6809	9288	10168	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	275	1023	1234	1294	-
Sector non specified	-	-	-	2213 e	596	858	1060	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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SPAIN
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**181 e**	**-**	**-**	**-**	**-**	**-**	**-**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-
Oil	-	181 e	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	181 e	-	-	-	-	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	181 e	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	-	-	-	-	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**8.37**	**17.27**	**16.79**	**26.51**	**30.12**	**25.38**	**27.94**	**4.2**	**2.5**
Coal	3.01	7.83	14.20	18.68	8.53	6.09	10.71	9.5	-1.3
Oil	5.21	8.75	2.17	4.45	3.93	3.47	3.21	-5.0	1.9
Natural gas	0.13	0.59	0.27	2.68 e	16.29	14.62	12.70	4.4	20.1
Biofuels & waste	0.01	0.10	0.14 e	0.69 e	1.37	1.20	1.32	15.2	11.1
of which: ***main activity prod.***									
Total	**..**	**16.90**	**16.13**	**22.88**	**24.34**	**19.29**	**21.65**	**..**	**1.4**
Coal	..	7.79	14.07	18.48	8.43	5.97	10.58	..	-1.4
Oil	..	8.53	1.87	3.38	3.26	2.93	2.85	..	2.0
Natural gas	..	0.58	0.17	0.71	12.43	10.21	8.03	..	20.0
Biofuels & waste	..	0.00	0.01 e	0.30 e	0.21	0.18	0.20	..	16.3

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**1.71**	**1.35**	**14.14**	**16.21**	**14.30**	**17.01**	**16.19**	**13.3**	**0.6**
Nuclear	1.71	1.35	14.14	16.21	13.75	16.15	15.05	13.2	0.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	0.00	0.00	0.55	0.85	1.14	-	44.3
Non-Thermal									
Total	**2.49**	**2.54**	**2.19**	**2.84**	**5.55**	**7.45**	**6.28**	**-0.7**	**5.1**
Hydro	2.49	2.54	2.19	2.43	2.27	3.64	2.63	-0.7	0.9
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.41	3.28	3.81	3.65	-	46.5
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	9434	18829	27981	14212	9963	17747	-0.3
Fuel input (TJ)	191609	402388	644102	328178	231853	397830	-0.1
Electricity production (GWh)	18650	42248	67155	33786	23799	39554	-0.3
Brown coal							
Fuel input (1000 t)	16176	20947 e	12914	1401	931	2839	-9.1
Fuel input (TJ)	144101	181818 e	118785	17754	11800	37759	-7.2
Electricity production (GWh)	13269	17108 e	11482	1887	1282	3973	-6.7
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	6644	5984 e	16429 e	8723	8200	9674	2.3
Electricity production (GWh)	673	632	1704	903	841	985	2.1
Petroleum products							
Fuel input (1000 t)	9201	1566 e	3562 e	3489	3059	2994	3.1
Fuel input (TJ)	372843	63627 e	143924 e	130991	118332	110960	2.7
Electricity production (GWh)	38439	6196 e	14147 e	14542	13102	12242	3.3
Natural gas (1)							
Fuel input (TJ)	29655	8246	34058	609231	529106	440214	20.9
Electricity production (GWh)	2913	774	3660	82893	70975	59148	22.9
Wood and other solid waste							
Fuel input (TJ)	-	180	2622	6863	14596	17144	24.2
Electricity production (GWh)	-	17	176	631	1342	1572	24.1
Industrial waste							
Fuel input (TJ)	-	353	3134 e	..	..	-	-
Electricity production (GWh)	-	50	274	..	..	-	-
Municipal waste							
Fuel input (TJ)	-	-	9605	26728	14586	14612	-
Electricity production (GWh)	-	-	667	1522	1318	1406	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	4344	6387	7369	7507	-
Electricity production (GWh)	-	-	304 e	479	696	709	-
Total combustible fuels(2)							
Electricity production (GWh)	74306	67025	99569 e	136643	113355	119589	2.8

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	62	83	127	55	73	74	-0.5
Fuel input (TJ)	1210	2175	2771	1375	1808	1675	-1.2
Electricity production (GWh)	137	381	457	237	253	232	-2.3
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	548	3152	598	815	1081	1316	-4.1
Electricity production (GWh)	47	294	60	125	148	183	-2.2
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	709 e	1069 e	663	546	379	-2.9
Fuel input (TJ)	-	28612 e	43249 e	27006	22006	15200	-3.0
Electricity production (GWh)	-	2408 e	8431 e	4700	3460	2530	0.2
CHP Heat production (TJ)	-	181 e	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	4476	90833	148704	151076	150716	18.2
Electricity production (GWh)	-	735	16518	24853	23876	25369	18.4
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	2165	9260	16859	12553	14887	9.6
Electricity production (GWh)	-	445	665	1566	1166	1365	5.5
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	3325	..	-	-	-	-
Electricity production (GWh)	-	160	..	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	98	367	1193	1299	-
Electricity production (GWh)	-	-	14	51	152	166	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	184	4423	26145 e	31532	29055	29845	9.5
CHP Heat production (TJ)	-	181	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**38.54**	**48.12**	**60.61**	**85.49**	**90.89**	**92.19**	**88.60**	**2.7**	**1.8**
Geothermal	-	-	0.00	0.01	0.01	0.02	0.02	-	7.5
Solar thermal	-	-	-	0.03	0.16	0.18	0.20	-	-
Coal	4.16	2.78	3.39	1.37	0.88	0.98	1.23	-1.2	-4.7
Oil	28.86	36.73	38.15	52.16	51.01	49.98	46.34	1.7	0.9
Natural gas	0.45	0.72	4.32	12.29	13.38	14.81	14.59	14.3	6.0
Biofuels & waste	-	0.17	3.92	3.43	4.83	5.17	5.58	-	1.7
Electricity	5.08	7.72	10.82	16.21	20.62	21.05	20.64	4.6	3.1
Heat	-	-	-	-	-	-	-	-	-
of which:									
Total industry	**17.20**	**18.81**	**19.26**	**24.64**	**20.71**	**20.90**	**20.49**	**0.7**	**0.3**
Geothermal	-	-	-	-	-	0.00	0.00	-	-
Solar thermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	3.59	2.18	2.81	1.11	0.65	0.77	1.06	-1.4	-4.6
Oil	9.96	11.22	5.76	5.71	4.72	4.91	4.35	-3.2	-1.3
Natural gas	0.39	0.60	3.40	9.15	7.53	7.76	7.63	13.5	3.9
Biofuels & waste	-	0.17	1.85	1.30	1.20	1.14	1.25	-	-1.8
Electricity	3.26	4.64	5.44	7.37	6.60	6.32	6.19	3.1	0.6
Heat	-	-	-	-	-	-	-	-	-
Transport	**10.85**	**15.07**	**21.28**	**30.21**	**34.46**	**33.89**	**32.05**	**4.0**	**2.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.02	0.01	-	-	-	-	-	-	-
Oil	10.71	14.90	20.97	29.77	33.05	32.08	29.97	4.0	1.7
Natural gas	-	-	-	0.01	0.08	0.09	0.09	-	-
Biofuels & waste	-	-	-	0.07	1.07	1.44	1.72	-	-
Electricity	0.12	0.16	0.32	0.36	0.26	0.28	0.27	5.6	-0.7
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**1.37**	**2.17**	**3.41**	**6.70**	**9.40**	**9.79**	**9.54**	**5.5**	**5.0**
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	9.9
Solar thermal	-	-	-	0.01	0.03	0.04	0.04	-	-
Coal	0.05	0.08	0.05	0.06 e	0.02	0.03	0.00	-1.1	-12.0
Oil	0.67	1.01	1.05	1.69	1.42	1.41	1.35	2.7	1.2
Natural gas	0.01	0.03	0.16	0.59	0.90	1.03	1.02	18.3	9.1
Biofuels & waste	-	-	-	0.05	0.06	0.06	0.06	-	-
Electricity	0.64	1.05	2.16	4.30	6.97	7.21	7.07	7.4	5.8
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**3.63**	**5.13**	**9.15**	**11.98**	**15.86**	**16.87**	**16.20**	**5.6**	**2.8**
Geothermal	-	-	-	-	0.01	0.01	0.01	-	-
Solar thermal	-	-	-	0.02	0.12	0.14	0.16	-	-
Coal	0.50	0.51	0.53	0.20	0.17	0.14	0.10	0.3	-7.5
Oil	2.15	2.85	3.57	4.05	3.32	3.35	2.89	3.0	-1.0
Natural gas	0.04	0.08	0.39	1.97	3.66	4.25	4.18	13.5	12.0
Biofuels & waste	-	-	2.07	1.99	2.44	2.46	2.47	-	0.8
Electricity	0.93	1.68	2.60	3.75	6.14	6.51	6.38	6.2	4.4
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**2.12**	**2.32**	**1.67**	**2.56**	**2.35**	**2.23**	**2.06**	**-1.4**	**1.0**
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	1.4
Solar thermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	-	-	0.01	-	-	-	-	-	-
Oil	2.01	2.14	1.35	2.02	1.72	1.67	1.50	-2.3	0.5
Natural gas	-	-	0.00	0.09	0.09	0.14	0.13	-	20.7
Biofuels & waste	-	-	-	0.01	0.06	0.06	0.07	-	-
Electricity	0.11	0.18	0.30	0.43	0.47	0.36	0.35	6.0	0.7
Heat	-	-	-	-	-	-	-	-	-
Other	**-**	**-**	**-**	**0.00**	**0.96**	**1.48**	**1.48**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	-	-	-	-	0.04	0.04	0.07	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	0.73	1.06	1.04	-	-
Biofuels & waste	-	-	-	0.00	-	0.00	0.00	-	-
Electricity	-	-	-	-	0.18	0.38	0.37	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**3.36**	**4.61**	**5.84**	**9.40**	**7.15**	**7.03**	**6.77**	**3.30**	**0.71**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**38.54**	**48.12**	**60.61**	**85.49**	**97.95**	**90.89**	**92.19**	**88.60**
Total industry (Mtoe)	**17.20**	**18.81**	**19.26**	**24.64**	**25.25**	**20.71**	**20.90**	**20.49**
Iron and steel	4.24	3.89	2.86	3.25	3.12	2.09	2.46	2.38
Chem. and petrochemical	2.48	3.14	3.07	3.75	4.19	3.04	3.18	3.15
Non-ferrous metals	0.27	1.31	0.97	1.16	1.16	1.23	1.24	1.23
Non-metallic minerals	4.11	4.67	4.54	6.37	6.26	4.47	4.54	4.57
Transport equipment	0.24	0.37	0.52	0.93	0.73	0.56	0.47	0.45
Machinery	0.45	0.54	0.85	1.04	1.20	1.16	1.09	1.02
Mining and quarrying	0.28	0.34	0.27	0.35	0.31	0.27	0.26	0.25
Food and tobacco	1.41	1.64	1.67	2.56	2.20	2.14	2.21	2.10
Paper, pulp and printing	0.93	1.24	1.15	2.09	2.18	1.93	1.43	1.48
Wood and wood products	0.17	0.23	0.16	0.60	0.69	0.52	0.51	0.50
Construction	0.16	0.11	0.11	0.26	0.47	0.67	0.51	0.48
Textile and leather	0.74	0.76	0.85	1.21	0.49	0.51	0.43	0.42
Non specified/other	1.72	0.57	2.23	1.08	2.25	2.12	2.57	2.48
Electricity consumption (Mtoe)	**5.08**	**7.72**	**10.82**	**16.21**	**21.94**	**20.62**	**21.05**	**20.64**
Total industry (Mtoe)	**3.26**	**4.64**	**5.44**	**7.37**	**8.10**	**6.60**	**6.32**	**6.19**
Iron and steel	0.62	0.89	0.82	1.27	1.47	1.06	1.23	1.21
Chem. and petrochemical	0.59	0.82	0.89	1.10	0.95	0.76	0.74	0.73
Non-ferrous metals	0.27	0.71	0.70	0.80	0.87	0.82	0.74	0.73
Non-metallic minerals	0.33	0.47	0.60	0.83	0.91	0.67	0.66	0.65
Transport equipment	0.09	0.18	0.23	0.35	0.31	0.27	0.25	0.24
Machinery	0.25	0.27	0.40	0.49	0.56	0.44	0.33	0.32
Mining and quarrying	0.07	0.11	0.14	0.11	0.11	0.09	0.10	0.10
Food and tobacco	0.20	0.27	0.50	0.77	0.90	0.87	0.90	0.88
Paper, pulp and printing	0.19	0.26	0.34	0.32	0.66	0.56	0.34	0.33
Wood and wood products	0.05	0.08	0.12	0.13	0.18	0.13	0.12	0.12
Construction	0.07	0.07	0.07	0.13	0.28	0.26	0.24	0.23
Textile and leather	0.20	0.21	0.33	0.36	0.22	0.18	0.19	0.18
Non specified/other	0.34	0.32	0.30	0.71	0.69	0.49	0.47	0.47
Total industry (TWh)	**37.95**	**53.94**	**63.28**	**85.64**	**94.19**	**76.80**	**73.49**	**72.03**
Iron and steel	7.19	10.30	9.53	14.73	17.15	12.27	14.32	14.03
Chem. and petrochemical	6.90	9.55	10.32	12.80	11.00	8.85	8.64	8.47
Non-ferrous metals	3.20	8.24	8.14	9.29	10.07	9.51	8.65	8.48
Non-metallic minerals	3.84	5.44	6.93	9.61	10.58	7.84	7.70	7.55
Transport equipment	1.06	2.07	2.70	4.01	3.64	3.17	2.85	2.79
Machinery	2.86	3.12	4.70	5.65	6.55	5.13	3.83	3.75
Mining and quarrying	0.83	1.25	1.67	1.30	1.31	1.08	1.21	1.19
Food and tobacco	2.30	3.10	5.77	8.97	10.42	10.16	10.47	10.26
Paper, pulp and printing	2.16	3.01	3.98	3.77	7.65	6.55	3.96	3.88
Wood and wood products	0.57	0.97	1.44	1.51	2.06	1.47	1.42	1.39
Construction	0.77	0.77	0.78	1.51	3.23	3.01	2.77	2.71
Textile and leather	2.36	2.48	3.82	4.20	2.50	2.05	2.16	2.12
Non specified/other	3.93	3.67	3.50	8.28	8.04	5.72	5.52	5.41

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**315**	**2306**	**3208**	**7633**	**12268**	**5881**	**6751**	**5206**	**7932**
Imports from:									
Total from OECD	**315**	**2306**	**3208**	**7633**	**12267**	**5866**	**6743**	**5172**	**7916**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	237	1792	1511	5891	8500	4552	3942	1983	3986
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	78	514	1697	1742	3767	1314	2801	3189	3930
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**1**	**15**	**8**	**34**	**16**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**2331**	**3688**	**3628**	**3147**	**7827**	**16920**	**14855**	**13539**	**14023**
Exports to:									
Total to OECD	**2298**	**3609**	**3609**	**3037**	**5293**	**12415**	**9960**	**9337**	**9207**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	2166	1267	1875	376	595	1662	2352	3514	2463
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	132	2342	1734	2661	4698	10753	7608	5823	6744
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**33**	**79**	**19**	**110**	**2534**	**4505**	**4895**	**4202**	**4816**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**22.33**	**28.77**	**42.10**	**43.62**	**49.18**	**93.65**	**96.58**	**101.79**	**102.80**
Nuclear	1.09	1.09	6.97	7.07	7.50	7.37	7.37	7.45	7.45
Hydro	11.22	12.99	15.66	16.51	17.96	18.45	18.51	18.54	18.54
of which: pumped storage	*-*	*-*	*5.06*	*5.35*	*5.35*	*5.41*	*5.44*	*5.26*	*5.26*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.01	0.01	3.45	3.77	4.65	5.48
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.10	2.21	16.56	19.18	20.69	21.55
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	10.02	14.69	19.46	19.94	21.50	47.83	47.76	50.46	49.79
of which:									
Single-fired:									
Coal and coal products	2.85	6.02	9.78	10.20	11.00	..	..	..	-
Liquid fuels	6.24	7.68	7.26	7.32	6.87	..	..	..	-
Natural gas	-	-	-	-	-	..	..	..	-
Biofuels & waste	-	-	-	-	0.22	..	..	..	-
Multi-fired:									
Solid / liquid	0.93	0.06	0.50	0.50	0.30	..	-	-	-
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	0.93	1.93	1.93	3.12	..	-	..	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	14.25	18.43	18.87	20.23	..	-	..	-
Internal combustion	-	0.18	0.36	0.36	0.49	..	-	..	-
Gas turbine	-	0.26	0.44	0.48	0.48	..	-	..	-
Combined cycle	-	-	0.24	0.24	0.30	..	-	..	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	25.16	25.81	33.24	42.96	44.44	44.12	44.12
Available capacity	..	..	25.13	32.27	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**1.03**	**1.17**	**1.32**	**2.28**	**4.74**	**..**	**..**	**..**	**-**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.44	0.49	0.57	0.28	..	..	..	..	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.60	0.69	0.75	2.00	4.74	..	..	..	-
of which:									
Single-fired:									
Coal and coal products	0.13	0.11	0.12	0.10	0.06	..	..	..	-
Liquid fuels	0.40	0.44	0.39	0.64	1.27	..	..	..	-
Natural gas	-	-	0.06	0.49	3.16	..	..	..	-
Biofuels & waste	0.07	0.10	0.10	0.13	0.24	..	..	..	-
Multi-fired:									
Solid / liquid	-	-	-	0.16	-	-	-	-	-
Solid / natural gas	-	-	0.02	0.01	-	-	-	-	-
Liquid / natural gas	-	0.03	0.06	0.36	-	-	-	-	-
Solid / liquid / gas	-	-	-	0.12	-	-	-	-	-
Type of generation									
Steam	-	0.06	0.03	0.74	0.87	..	..	..	-
Internal combustion	-	0.03	0.02	0.06	1.94	..	..	..	-
Gas turbine	-	-	-	0.47	1.06	..	..	..	-
Combined cycle	-	0.59	0.70	0.73	0.88	..	..	..	-
Other	-	-	-	-	-	-	..	..	-
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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SPAIN

16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Euro/ unit					
Steam coal (t)	15.43	23.62	..	..	..	..	..	..	..
Heavy fuel oil (t)	40.57	72.57	87.60	246.67	..	..	..	..	..
Natural gas (MWh)(1)	3.07	6.08	8.02	15.39	..	..	..	..	..
				Euro/ toe					
Steam coal	28	43	..	..	..	..	..	..	..
Heavy fuel oil	43	77	93	262	..	..	..	..	..
Natural gas(2)	40	79	104	199	..	..	..	..	..
End-user prices of electricity									
				Euro/ MWh					
Industry									
Price	12.90	19.10	59.70	46.20	85.60	74.25	99.57	106.92	..
of which: tax	..	1.00	-	2.20	4.16	3.61	4.84	5.20	..
Household									
Price	26.40	34.50	116.30	127.10	149.12	152.84	186.27	212.24	..
of which: tax	..	0.50	12.50	22.80	26.82	27.49	36.09	41.12	..

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	38.84	40.49	47.20	47.56	51.32	49.04	48.88	1.2	0.2
GDP (billion 2005 USD)	187.78	212.36	263.88	324.51	401.62	416.51	420.04	2.0	2.1
TPES/GDP(1)	0.21	0.19	0.18	0.15	0.13	0.12	0.12	-0.9	-1.9
Population (millions)	8.14	8.31	8.56	8.87	9.38	9.45	9.53	0.3	0.5
TPES/population(2)	4.77	4.87	5.51	5.36	5.47	5.19	5.13	0.9	-0.3
TPES/GDP (2005 = 100)	149	137	129	105	92	85	84	-0.9	-1.9
Ele.TFC/GDP(2005=100)(3)	104	113	129	112	93	85	..	1.3	..
Ele.TFC/population(4)	8508	10220	14066	14514	13995	13193	..	3.0	..
Elec. generated (TWh)(5)	78.06	96.32	145.98	145.23	148.46	150.25	165.43	3.8	0.6

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**38.84**	**40.49**	**47.20**	**47.56**	**51.32**	**49.04**	**48.88**	**1.2**	**0.2**
Coal	1.63	1.70	2.96	2.45	2.49	2.49	2.24	3.6	-1.3
Oil	27.91	22.64	14.30	13.57	13.92	13.73	12.57	-3.9	-0.6
Natural gas	-	-	0.58	0.78	1.47	1.16	1.01	-	2.6
Biofuels & waste	3.54	4.13	5.51	8.26	11.90	10.01	10.53	2.6	3.0
Nuclear	0.55	6.90	17.77	14.94	15.07	15.76	16.56	22.7	-0.3
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(1)	-	-	0.00	0.04	0.31	0.53	0.63	-	26.3
Hydro	5.15	5.06	6.24	6.76	5.71	5.71	6.76	1.1	0.4
Net electricity imports(2)	0.06	0.05	-0.15	0.40	0.18	-0.62	-1.68	-	11.5
Heat	-	-	-	0.36	0.27	0.26	0.27	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**78.1**	**96.7**	**146.5**	**145.3**	**158.4**	**148.6**	**150.4**	**165.5**
Nuclear	2.1	26.5	68.2	57.3	72.4	57.8	60.5	63.5
Hydro	59.9	59.2	73.0	78.6	72.9	66.5	66.6	78.6
of which:								
pumped storage production	*0.0*	*0.4*	*0.5*	*0.0*	*0.1*	*0.1*	*0.1*	*0.0*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.0	0.0	0.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.5	0.9	3.5	6.1	7.2
Combustible fuels	16.1	11.0	5.3	8.9	12.2	20.7	17.3	16.1
Coal	*0.5*	*0.2*	*1.6*	*2.5*	*1.9*	*2.7*	*2.0*	*2.1*
Oil	*15.2*	*10.0*	*1.3*	*1.5*	*1.4*	*1.8*	*0.8*	*1.0*
Natural gas	*-*	*-*	*0.4*	*0.5*	*0.6*	*2.9*	*1.5*	*1.6*
Biofuels & waste	*0.4*	*0.8*	*2.0 e*	*4.3*	*8.4*	*13.4*	*12.9*	*11.4*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	1.7	2.3	4.0	3.7	3.8	3.3	3.4	..
Net production	**76.4**	**94.4**	**142.5**	**141.6**	**154.6**	**145.3**	**146.9**	**..**
Nuclear	..	25.3	65.2	54.8	69.5	55.6	58.0	..
Hydro	..	58.5	72.3	77.9	72.3	66.4	66.2	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.0	0.0	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.5	0.9	3.5	6.1	..
Combustible fuels	..	10.5	5.0	8.5	11.9	19.8	16.7	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	2.2	1.9	1.5	1.2	1.6
- Used for electric boilers	-	-	-	2.1	0.3	0.1	0.1	0.2
- Used for pumped storage	0.0	0.5	0.8	0.0	0.1	0.1	0.2	0.0
+ Imports	6.0	3.4	12.9	18.3	14.6	14.9	12.5	11.7
- Exports	5.2	2.8	14.7	13.6	22.0	12.9	19.7	31.3
Electrical energy supplied	**77.1**	**94.4**	**140.0**	**142.0**	**144.9**	**145.6**	**138.2**	**..**
- Transmission & distr. losses	7.7	8.3	9.2	10.8	11.7	10.6	10.6	..
- Statistical difference	-	-	0.0	-	-	-	-	..
Total consumption	**69.4**	**86.1**	**130.7**	**131.1**	**133.2**	**135.0**	**127.6**	**..**
- Energy industry consumption[2]	0.2	1.2	10.4	2.4	2.5	3.8	3.0	..
Final consumption	**69.2**	**84.9**	**120.3**	**128.7**	**130.7**	**131.2**	**124.6**	**..**
Industry	39.5	40.6	54.0	56.9	57.6	54.4	53.8	..
Transport	2.1	2.3	2.5	3.2	2.8	2.4	2.6	..
Commercial & publ. serv.	11.1	15.2	24.4	25.4	26.1	32.7	30.6	..
Residential	15.7	25.7	38.1	42.0	42.7	40.4	36.4	..
Agriculture & fishing	0.7	1.1	1.5	1.2	1.5	1.3	1.2	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**75.13**	**96.70**	**146.51**	**145.27**	**136.73**	**148.56**	**150.38**	**4.3**	**0.1**
- Hydro pumped storage	*0.02*	*0.38*	*0.53*	*0.04*	*0.13*	*0.10*	*0.12*	*22.7*	*-6.8*
Total generation(1)	**75.11**	**96.32**	**145.98**	**145.23**	**136.60**	**148.46**	**150.25**	**4.2**	**0.1**
Main activity producers									
Gross production	75.13	85.31	139.32	141.05	131.14	141.96	144.36	3.9	0.2
- Hydro pumped storage	*0.02*	*0.38*	*0.53*	*0.04*	*0.13*	*0.10*	*0.12*	*22.7*	*-6.8*
Total generation(1)	75.11	84.94	138.79	141.02	131.02	141.85	144.24	3.9	0.2
Nuclear	2.05	26.49	68.19	57.32	52.17	57.83	60.48	24.5	-0.6
Hydro	57.27	51.65	68.05	78.36	65.84	66.38	66.42	1.1	-0.1
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.01	0.46	2.49	3.51	6.09	-	39.0
Coal	0.45	0.17	1.51	2.27	1.52	2.16	1.73	7.9	0.6
Oil	14.99	6.40	0.52	0.76	0.40	1.26	0.44	-18.9	-0.8
Natural gas	-	-	0.31	0.40	1.50	2.78	1.44	-	7.7
Biofuels & waste	0.36	0.22 e	0.21	1.46	7.10	7.93	7.65	-3.3	18.7
Autoproducers									
Gross production	-	11.38	7.20	4.21	5.59	6.61	6.02	-	-0.9
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	-	11.38	7.20	4.21	5.59	6.61	6.02	-	-0.9
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	7.22	4.45	0.23	0.02	0.01	0.02	-	-23.7
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	-	-	-	-	-
Coal	-	0.01	0.08	0.27	0.08	0.52	0.26	-	5.8
Oil	-	3.59	0.78	0.77	0.33	0.51	0.35	-	-3.7
Natural gas	-	-	0.09	0.07	0.05	0.10	0.11	-	1.0
Biofuels & waste	-	0.56	1.80	2.88	5.11	5.47	5.28	-	5.3

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**..**	**4029**	**7036**	**4096**	**5588**	**6432**	**5805**	**-0.9**
Total energy	**..**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Coal mines	..	-	-	-	-	-	-	-
Oil and gas extraction	..	-	-	-	-	-	-	-
Patent fuel plants	..	-	-	-	-	-	-	-
Coke ovens	..	-	-	-	-	-	-	-
Gas works	..	-	-	-	-	-	-	-
BKB	..	-	-	-	-	-	-	-
Oil refineries	..	-	-	-	-	-	-	-
Energy non specified/other	..	-	-	-	-	-	-	-
Total industry	**..**	**4029**	**7014**	**4096**	**5588**	**6432**	**5805**	**-0.9**
Iron and steel	..	-	5	204	71	366	115	16.1
Chemical and petrochemical	..	50	870	105	77	90	81	-10.7
Non-ferrous metals	..	-	6	-	-	-	-	-
Non-metallic minerals	..	-	-	-	-	-	-	-
Transport equipment	..	-	1	-	-	-	-	-
Machinery	..	-	13	-	1	-	-	-
Mining and quarrying	..	-	-	17	27	14	15	-
Food and tobacco	..	70	93	61	48	43	44	-3.5
Pulp and printing	..	3909	3834	3709	5363	5919	5550	1.8
Wood and wood products	..	-	2155	-	-	-	-	-
Construction	..	-	-	-	-	-	-	-
Textile and leather	..	-	10	-	1	-	-	-
Non specified/other industries	..	-	27	-	-	-	-	-
Total transport	**..**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	..	-	-	-	-	-	-	-
Transport non specified	..	-	-	-	-	-	-	-
Other	**..**	**-**	**22**	**-**	**-**	**-**	**-**	**-**
Commerce and pub. services	..	-	-	-	-	-	-	-
Residential	..	-	-	-	-	-	-	-
Agriculture and fishing	..	-	-	-	-	-	-	-
Sector non specified	..	-	22	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**107326 e**	**78134**	**157919**	**181066**	**224111**	**178460**	**208589**	**4.0**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	2286 e	34901	15461	21678	19977	17746	14858	-3.2
Oil	98628 e	12372	9902	10458	14975	6655	7313	-2.9
Natural gas	16 e	6327	7800	6591	18791	13895	7248	3.8
Biofuels & waste	6396 e	24534	90539	118879	150349	121620	158218	7.9
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	..	..	26941	22298	19670	18202	20098	..
Electric boilers	..	..	7276	1162	349	342	854	..
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	107326 e	78134	141201	154488	206611	165799	..	3.6
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	2286 e	34901	15461	21678	19977	17746	..	-3.2
Oil	98628 e	12372	9902	10458	14975	6655	..	-2.9
Natural gas	16 e	6327	7800	6591	18791	13895	..	3.8
Biofuels & waste	6396 e	24534	73821	92301	132849	108959	..	7.4
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	..	..	26941	22298	19670	18202	..	..
Electric boilers	..	..	7276	1162	349	342	..	..
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	16718	26578	17500	12661	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	16718	26578	17500	12661	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**2.47**	**2.96**	**2.67**	**4.45**	**6.51**	**8.02**	**6.29**	**0.5**	**4.2**
Coal	0.05	0.08	1.15	0.77	0.72	0.86	0.69	19.8	-2.4
Oil	2.33	2.60	0.45	0.45	0.32	0.62	0.28	-9.2	-2.2
Natural gas	-	-	0.20	0.26	0.55	0.73	0.48	-	4.3
Biofuels & waste	0.09	0.27	0.87	2.97	4.93	5.81	4.83	14.4	8.5
of which: ***main activity prod.***									
Total	**..**	**2.44**	**2.38**	**3.50**	**5.55**	**6.76**	**5.29**	**..**	**3.9**
Coal	..	0.08	1.14	0.71	0.70	0.79	0.66	..	-2.6
Oil	..	2.15	0.37	0.38	0.28	0.56	0.24	..	-2.0
Natural gas	..	-	0.19	0.25	0.54	0.72	0.47	..	4.4
Biofuels & waste	..	0.21	0.69	2.17	4.03	4.69	3.92	..	8.6

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**0.55**	**6.90**	**17.77**	**14.94**	**13.60**	**15.07**	**15.76**	**22.7**	**-0.6**
Nuclear	0.55	6.90	17.77	14.94	13.60	15.07	15.76	22.7	-0.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00	0.00	0.00	0.00	-	-
Non-Thermal									
Total	**5.15**	**5.06**	**6.24**	**6.80**	**5.88**	**6.01**	**6.24**	**1.1**	**0.0**
Hydro	5.15	5.06	6.24	6.76	5.66	5.71	5.71	1.1	-0.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.04	0.21	0.30	0.52	-	39.0
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	149	466	2325	-	-	-	-
Electricity production (GWh)	25	47	210	-	-	-	-
Petroleum products							
Fuel input (1000 t)	190	11	23	36	69	10	-0.5
Fuel input (TJ)	7895	451	945	1546	2673	443	-0.1
Electricity production (GWh)	730	32	64	161	254	35	0.4
Natural gas (1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	755	79	274	161	254	35	-3.8

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	85	829	501	343	438	365	-3.8
Fuel input (TJ)	2318	22562	13955	9169	12920	9656	-4.0
Electricity production (GWh)	158	1081	1636	515	1022	657	-2.3
CHP Heat production (TJ)	1276 e	15376	5329	5490	7442	6107	-4.3
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	185	429	964	988	879	7.7
Fuel input (TJ)	-	2405	4667	12501	11155	8775	6.4
Electricity production (GWh)	-	56	70	710	748	598	11.9
CHP Heat production (TJ)	-	1922	3842	7452	6454	5515	5.1
Coal manufactured gases(1)							
Fuel input (TJ)	24	4734	7153	6106	9697	8418	2.8
Electricity production (GWh)	2	405	620	375	905	734	2.9
CHP Heat production (TJ)	6 e	2054	2600	3232	4277	4437	3.7
Petroleum products							
Fuel input (1000 t)	2577	271	264	194	373	186	-1.8
Fuel input (TJ)	106678	11646	11076	5869	15979	7866	-1.9
Electricity production (GWh)	9266	1269	1469	569	1520	756	-2.4
CHP Heat production (TJ)	54584 e	5264	3878	2551	8077	3766	-1.6
Natural gas(1)							
Fuel input (TJ)	-	6066	9990	24910	32541	21808	6.3
Electricity production (GWh)	-	395	462	1548	2877	1549	6.7
CHP Heat production (TJ)	-	3645	6238	15938	17840	13377	6.4
Wood and other solid waste							
Fuel input (TJ)	4784	12330	70998	115429	140000	103349	10.7
Electricity production (GWh)	663 e	1902	3970	10103	10260	9641	8.0
CHP Heat production (TJ)	975 e	3845	45738	55590	74500	53895	13.4
Industrial waste							
Fuel input (TJ)	-	-	1039	846	868	1583	-
Electricity production (GWh)	-	-	101	50	61	151	-
CHP Heat production (TJ)	-	-	489	520	527	764	-
Municipal waste							
Fuel input (TJ)	2000	5560	14368	35988	43800	45724	10.6
Electricity production (GWh)	116 e	103	239	1747	2860	3100	17.6
CHP Heat production (TJ)	1115 e	4673	10971	23681	26341	28830	9.1
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	823	5445	3382	515	-
Electricity production (GWh)	-	-	32	309	216	35	-
CHP Heat production (TJ)	-	-	589	3262	1633	319	-
Total combustible fuels(2)							
Electricity production (GWh)	10205	5211	8599	15926	20469	17221	5.9
CHP Heat production (TJ)	57956	36779	79674	117716	147091	117010	5.7

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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SWEDEN
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	357	1	-	-	-	-
Fuel input (TJ)	-	9711	30	-	-	-	-
Heat production (TJ)	-	8529	26	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	629	334	138	143	185	-5.7
Fuel input (TJ)	-	7548	3983	1702	1663	1840	-6.5
Heat production (TJ)	-	6462	3485	1521	1350	1361	-7.1
Coal manufactured gases(1)							
Fuel input (TJ)	1167	655	201	537	600	441	-1.9
Heat production (TJ)	1004 e	558	179	205	454	326	-2.5
Petroleum products							
Fuel input (1000 t)	1235	190	161	95	192	92	-3.4
Fuel input (TJ)	51183	8253	6888	4017	7866	3927	-3.5
Heat production (TJ)	44044 e	7108	6024	3567	6898	2889	-4.2
Natural gas(1)							
Fuel input (TJ)	19	3214	1876	526	1263	701	-7.0
Heat production (TJ)	16 e	2682	1562	442	951	518	-7.5
Wood and other solid waste							
Fuel input (TJ)	147	9509	30283	35911	39550	43010	7.5
Heat production (TJ)	126 e	8141	26592	32406	35000	31825	6.7
Industrial waste							
Fuel input (TJ)	-	-	22	-	-	-	-
Heat production (TJ)	-	-	19	-	-	-	-
Municipal waste							
Fuel input (TJ)	4860	9080	6501	9059	8000	4062	-3.8
Heat production (TJ)	4180 e	7875	5688	7809	6850	3004	-4.5
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	519	3750	7750	4033	-
Heat production (TJ)	-	-	453	3333	5498	2983	-
Total combustible fuels(2)							
Heat production (TJ)	49370	41355	44028	49283	57001	42906	0.2

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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SWEDEN
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**34.82**	**34.60**	**32.12**	**35.30**	**32.01**	**35.28**	**32.73**	**-0.5**	**0.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.01	0.01	0.01	0.01	-	6.1
Coal	1.03	0.92	1.07	0.77	0.51	0.85	0.89	0.2	-0.9
Oil	24.38	20.16	14.02	14.17	10.61	11.24	11.14	-3.2	-1.1
Natural gas	-	-	0.33	0.44	0.56	0.66	0.66	-	3.3
Biofuels & waste	3.46	3.86	4.64	5.29	5.45	6.09	5.17	1.7	0.5
Electricity	5.95	7.30	10.35	11.07	10.61	11.28	10.72	3.3	0.2
Heat	-	2.36	1.71	3.55	4.26	5.14	4.13	-	4.3
of which:									
Total industry	**13.26**	**11.95**	**11.86**	**13.68**	**10.67**	**12.07**	**10.63**	**-0.7**	**-0.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.85	0.79	0.96	0.73	0.48	0.82	0.87	0.7	-0.5
Oil	6.08	4.65	2.16	3.07	1.07	1.16	1.11	-5.9	-3.1
Natural gas	-	-	0.25	0.30	0.29	0.32	0.34	-	1.4
Biofuels & waste	2.94	3.02	3.67	4.33	4.03	4.64	3.32	1.3	-0.5
Electricity	3.40	3.49	4.64	4.90	4.42	4.68	4.63	1.8	-0.0
Heat	-	-	0.17	0.34	0.38	0.45	0.38	-	4.0
Transport	**5.26**	**5.83**	**6.91**	**7.39**	**7.67**	**7.82**	**8.20**	**1.6**	**0.8**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.00	-	-	-	-	-	-	-
Oil	5.09	5.63	6.70	7.11	7.06	7.18	7.45	1.6	0.5
Natural gas	-	-	-	0.01	0.02	0.03	0.04	-	-
Biofuels & waste	-	-	-	-	0.38	0.40	0.48	-	-
Electricity	0.18	0.20	0.21	0.27	0.21	0.21	0.23	1.0	0.3
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.99**	**1.35**	**4.00**	**4.40**	**4.23**	**5.02**	**4.53**	**8.6**	**0.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.02	0.01	0.00	0.01	0.00	0.00	-	-2.7
Oil	0.03	0.02	1.35	1.05	0.55	0.60	0.52	24.9	-4.4
Natural gas	-	-	0.03	0.03	0.05	0.10	0.09	-	5.0
Biofuels & waste	-	0.01	0.02	0.01	0.05	0.05	0.04	-	4.2
Electricity	0.96	1.31	2.10	2.18	2.30	2.82	2.63	4.7	1.1
Heat	-	-	0.50	1.12	1.29	1.45	1.24	-	4.5

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**10.74**	**9.75**	**6.54**	**7.29**	**6.95**	**7.56**	**6.96**	**-2.9**	**0.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.00	0.00	0.01	0.01	0.01	-	6.1
Coal	0.14	0.06	0.02	0.03	0.01	0.01	0.00	-11.8	-6.5
Oil	8.73	6.65	1.54	0.88	0.08	0.07	0.05	-9.7	-14.9
Natural gas	-	-	0.03	0.08	0.07	0.08	0.07	-	3.5
Biofuels & waste	0.52	0.83	0.63	0.62	0.68	0.68	1.18	1.2	3.0
Electricity	1.35	2.21	3.28	3.61	3.52	3.48	3.13	5.3	-0.2
Heat	-	-	1.04	2.08	2.58	3.23	2.50	-	4.3
Agriculture & fishing	**0.50**	**0.67**	**0.87**	**0.76**	**0.72**	**0.68**	**0.47**	**3.3**	**-2.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	0.01	0.04	-	-	-	-	-	-
Oil	0.44	0.57	0.38	0.30	0.21	0.23	0.19	-0.9	-3.2
Natural gas	-	-	0.01	0.02	0.02	0.02	0.02	-	2.8
Biofuels & waste	-	0.00	0.31	0.33	0.32	0.32	0.15	-	-3.5
Electricity	0.06	0.10	0.13	0.10	0.16	0.11	0.10	4.2	-1.0
Heat	-	-	-	0.01	0.01	0.01	0.01	-	-
Other	**1.88**	**3.48**	**-**	**0.04**	**0.01**	**0.01**	**-**	**-**	**-**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	0.00	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	1.88	1.12	-	0.04	0.01	0.01	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	2.36	-	-	-	-	-	-	-
Non-energy use(1)	**2.18**	**1.57**	**1.93**	**1.73**	**1.76**	**2.11**	**1.93**	**-0.71**	**-0.00**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**34.82**	**34.60**	**32.12**	**35.30**	**33.25**	**32.01**	**35.28**	**32.73**
Total industry (Mtoe)	**13.26**	**11.95**	**11.86**	**13.68**	**11.59**	**10.67**	**12.07**	**10.63**
Iron and steel	1.91	1.47	1.06	1.17	1.23	0.76	1.04	1.03
Chem. and petrochemical	0.85	0.95	1.22	2.03	0.69	0.54	0.57	0.60
Non-ferrous metals	0.32	0.32	0.33	0.33	0.33	0.27	0.27	0.27
Non-metallic minerals	1.20	0.77	0.63	0.50	0.44	0.38	0.43	0.44
Transport equipment	0.26	0.36	0.25	0.28	0.23	0.18	0.20	0.19
Machinery	0.81	0.71	0.70	0.29	0.21	0.26	0.44	0.44
Mining and quarrying	0.44	0.42	0.34	0.33	0.41	0.33	0.42	0.44
Food and tobacco	0.57	0.56	0.54	0.52	0.40	0.40	0.42	0.40
Paper, pulp and printing	5.41	5.16	5.33	5.99	5.96	5.91	6.72	5.28
Wood and wood products	0.65	0.68	0.78	1.08	0.59	0.54	0.59	0.54
Construction	0.07	0.07	0.04	0.06	0.08	0.09	0.14	0.10
Textile and leather	0.20	0.14	0.12	0.05	0.04	0.03	0.03	0.03
Non specified/other	0.58	0.33	0.51	1.05	0.97	0.98	0.82	0.88
Electricity consumption (Mtoe)	**5.95**	**7.30**	**10.35**	**11.07**	**11.06**	**10.61**	**11.28**	**10.72**
Total industry (Mtoe)	**3.40**	**3.49**	**4.64**	**4.90**	**4.96**	**4.42**	**4.68**	**4.63**
Iron and steel	0.50	0.44	0.38	0.46	0.45	0.31	0.22	0.21
Chem. and petrochemical	0.46	0.44	0.57	0.47	0.51	0.38	0.42	0.41
Non-ferrous metals	0.20	0.19	0.23	0.24	0.26	0.20	0.21	0.20
Non-metallic minerals	0.11	0.10	0.12	0.10	0.11	0.08	0.09	0.09
Transport equipment	-	0.12	0.20	0.21	0.18	0.15	0.16	0.16
Machinery	0.35	0.29	0.42	0.16	0.13	0.18	0.34	0.33
Mining and quarrying	0.18	0.18	0.20	0.22	0.26	0.21	0.26	0.25
Food and tobacco	0.10	0.14	0.22	0.26	0.21	0.21	0.22	0.21
Paper, pulp and printing	1.13	1.22	1.77	2.03	2.11	1.92	2.14	2.07
Wood and wood products	0.11	0.13	0.17	0.20	0.19	0.18	0.19	0.19
Construction	0.07	0.07	0.04	0.06	0.08	0.09	0.14	0.10
Textile and leather	0.03	0.03	0.08	0.03	0.02	0.01	0.02	0.02
Non specified/other	0.15	0.12	0.21	0.46	0.45	0.50	0.26	0.39
Total industry (TWh)	**39.54**	**40.57**	**53.96**	**56.94**	**57.66**	**51.43**	**54.39**	**53.80**
Iron and steel	5.82	5.14	4.45	5.37	5.20	3.66	2.54	2.46
Chem. and petrochemical	5.38	5.11	6.66	5.42	5.90	4.47	4.91	4.76
Non-ferrous metals	2.30	2.26	2.73	2.80	3.03	2.30	2.40	2.32
Non-metallic minerals	1.33	1.22	1.45	1.17	1.23	0.96	1.05	1.02
Transport equipment	-	1.38	2.31	2.46	2.11	1.74	1.88	1.82
Machinery	4.06	3.41	4.91	1.89	1.50	2.04	4.00	3.87
Mining and quarrying	2.12	2.15	2.35	2.59	3.00	2.42	3.06	2.96
Food and tobacco	1.17	1.58	2.60	2.99	2.50	2.38	2.58	2.50
Paper, pulp and printing	13.15	14.21	20.62	23.56	24.52	22.31	24.86	24.09
Wood and wood products	1.29	1.57	1.98	2.33	2.22	2.07	2.23	2.16
Construction	0.76	0.86	0.49	0.66	0.92	1.07	1.65	1.11
Textile and leather	0.39	0.33	0.96	0.31	0.27	0.17	0.19	0.18
Non specified/other	1.78	1.37	2.46	5.39	5.26	5.84	3.05	4.56

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**5950**	**3369**	**12909**	**7720**	**18308**	**12754**	**13765**	**14931**	**12481**
Imports from:									
Total from OECD	**5950**	**3369**	**12909**	**7720**	**18308**	**12754**	**13765**	**14931**	**12481**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	289	703	219	627	1619	1368	2310	4703	2537
Estonia	-	-	-	-	-	-	-	-	-
Finland	260	1163	360	213	830	3088	2959	4563	3035
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	20	83	512	1128	2288	600
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	5401	1503	12330	6860	15723	7641	7114	2883	6032
Poland	-	-	-	-	53	145	254	494	277
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**5216**	**2834**	**14677**	**9401**	**13630**	**14715**	**9080**	**12853**	**19714**
Exports to:									
Total to OECD	**5216**	**2834**	**14677**	**9401**	**13630**	**14715**	**9080**	**12853**	**19714**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	918	1174	7921	2091	3392	6213	2989	2465	4984
Estonia	-	-	-	-	-	-	-	-	-
Finland	4133	669	6356	3820	8234	2774	1773	1911	5158
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	2269	664	2541	946	1011	2073
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	165	991	400	1221	915	1122	1979	6706	5986
Poland	-	-	-	-	425	2065	1393	760	1513
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**20.77**	**27.42**	**32.41**	**32.13**	**32.71**	**32.63**	**34.05**	**35.33**	**33.83**
Nuclear	1.06	4.61	9.97	10.06	9.46	8.94	8.84	8.98	9.32
Hydro	12.31	14.86	15.39	15.41	16.47	16.43	16.65	16.73	16.57
of which: pumped storage	*-*	*-*	*0.43*	*0.43*	*0.02*	*0.09*	*0.11*	*0.11*	*0.10*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.01	0.01	0.01	0.01
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.01	0.07	0.21	0.81	1.45	2.02	2.77
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	7.39	7.95	7.04	6.59	6.57	6.44	7.10	7.60	5.15
of which:									
Single-fired:									
Coal and coal products	-	-	..	..	..	..	-	-	-
Liquid fuels	7.39	7.95	..	..	..	..	..	..	-
Natural gas	-	-	..	..	..	..	..	..	-
Biofuels & waste	-	-	..	..	..	..	..	..	-
Multi-fired:									
Solid / liquid	-	-	..	..	..	..	-	-	-
Solid / natural gas	-	-	..	..	..	-	-	-	-
Liquid / natural gas	-	-	..	..	..	..	..	..	-
Solid / liquid / gas	-	-	..	..	..	..	..	..	-
Type of generation									
Steam	-	-	5.33	4.77	4.38	4.30	5.12	5.55	3.40
Internal combustion	-	-	0.02	0.09	0.08	0.09	0.05	0.12	0.12
Gas turbine	-	-	1.69	1.73	1.93	1.66	1.65	1.62	1.31
Combined cycle	-	-	-	-	0.18	0.39	0.29	0.31	0.31
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	21.97	24.40	26.00	23.59	24.90	26.20	26.00
Available capacity	..	..	..	..	28.70	..	24.40	24.45	27.80

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**1.78**	**1.50**	**1.01**	**1.31**	**1.24**	**1.12**	**1.40**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.94	0.74	0.06	-	-	-	-
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	0.84	0.76	0.95	1.31	1.24	1.12	1.40
of which:									
Single-fired:									
Coal and coal products	-	-	..	..	..	..	-	-	-
Liquid fuels	-	-	..	..	..	..	..	..	-
Natural gas	-	-	..	..	..	..	..	..	-
Biofuels & waste	-	-	..	..	..	..	..	..	-
Multi-fired:									
Solid / liquid	-	-	..	..	..	..	..	..	-
Solid / natural gas	-	-	..	..	..	..	..	..	-
Liquid / natural gas	-	-	..	..	..	..	..	..	-
Solid / liquid / gas	-	-	..	..	..	..	..	..	-
Type of generation									
Steam	-	-	0.84	0.76	0.95	1.31	1.24	1.12	1.40
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	-	-	-	-	-	-	-
Combined cycle	-	-	-	-	-	-	-	-	-
Other	-	-	-	-	-	-	-	-	-
Peak load	..	..	1.33	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Swedish Crowns/ unit					
Steam coal (t)	215	370	..	..	..	..	..	..	..
Heavy fuel oil (t)	416	842	632	..	..	..	..	..	..
Natural gas (MWh)(1)	..	..	..	..	..	..	..	..	..
				Swedish Crowns/ toe					
Steam coal	323	555	..	..	..	..	..	..	..
Heavy fuel oil	433.3	877.1	658.3	..	..	..	..	..	..
Natural gas(2)	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Swedish Crowns/ MWh					
Industry									
Price	130.00	170.00	295.00	..	629.00	633.00	693.50	675.40	603.75
of which: tax	20.00	30.00	55.00	..	5.00	5.00	5.00	5.00	4.64
Household									
Price	210.00	250.00	520.00	..	1441.00	1485.00	1570.00	1608.70	1516.00
of which: tax	30.00	40.00	156.00	..	543.00	565.00	580.00	590.55	577.65

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	18.91	20.04	24.36	25.00	26.20	25.37	25.50	1.5	0.2
GDP (billion 2005 USD)	253.95	259.70	323.50	360.56	427.91	436.15	440.43	1.4	1.4
TPES/GDP(1)	0.07	0.08	0.08	0.07	0.06	0.06	0.06	0.1	-1.2
Population (millions)	6.44	6.39	6.80	7.21	7.79	7.87	7.93	0.3	0.7
TPES/population(2)	2.94	3.14	3.58	3.47	3.36	3.22	3.22	1.2	-0.5
TPES/GDP (2005 = 100)	110	114	112	103	91	86	86	0.1	-1.2
Ele.TFC/GDP(2005=100)(3)	77	91	97	97	94	90	..	1.4	..
Ele.TFC/population(4)	4505	5523	6856	7267	7680	7448	..	2.5	..
Elec. generated (TWh)(5)	36.82	48.18	54.99	66.12	66.06	62.90	67.99	2.4	1.0

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**18.91**	**20.04**	**24.36**	**25.00**	**26.20**	**25.37**	**25.50**	**1.5**	**0.2**
Coal	0.33	0.33	0.36	0.14	0.15	0.14	0.13	0.5	-4.5
Oil	14.45	12.51	12.26	11.02	10.35	9.98	9.97	-1.0	-0.9
Natural gas	0.15	0.87	1.63	2.43	3.01	2.67	2.93	15.1	2.7
Biofuels & waste	0.24	0.47	1.48	1.81	2.34	2.27	2.38	11.3	2.2
Nuclear	1.64	3.74	6.18	6.92	6.90	6.99	6.66	8.1	0.3
Geothermal	-	-	0.07	0.10	0.26	0.25	0.24	-	5.8
Solar, wind, tide(1)	-	-	0.00	0.01	0.04	0.06	0.06	-	15.6
Hydro	2.40	2.82	2.56	3.17	3.10	2.79	3.32	0.4	1.2
Net electricity imports(2)	-0.30	-0.70	-0.18	-0.61	0.04	0.22	-0.19	-2.9	0.2
Heat	-	-	-	0.00	0.00	0.00	0.00	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**38.0**	**49.2**	**56.2**	**67.5**	**59.6**	**67.8**	**64.6**	**69.7**
Nuclear	6.3	14.3	23.6	26.4	23.3	26.3	26.7	25.4
Hydro	29.1	33.9	31.0	38.2	33.1	37.8	34.1	40.3
of which:								
pumped storage production	*1.2*	*1.1*	*1.2*	*1.4*	*1.9*	*1.8*	*1.7*	*1.7*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	0.0	0.0	0.0	0.1	0.1	0.1
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.0	0.0	0.0	0.1	0.1
Combustible fuels	2.6 e	1.0	1.6	2.8	3.2	3.5	3.6	3.7
Coal	-	*0.1*	*0.0*	-	-	-	-	-
Oil	*2.6*	*0.5*	*0.4*	*0.2*	*0.2*	*0.1*	*0.1*	*0.1*
Natural gas	-	*0.3*	*0.3*	*0.9*	*0.9*	*1.0*	*1.0*	*1.0*
Biofuels & waste	-	*0.2*	*0.8*	*1.7*	*2.1*	*2.4*	*2.5*	*2.6*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	0.9	1.1	1.7	2.0	1.8	1.7	1.7	..
Net production	**37.2**	**48.2**	**54.5**	**65.5**	**57.8**	**66.1**	**63.0**	**..**
Nuclear	..	13.7	22.3	24.9	22.0	25.2	25.6	..
Hydro	..	33.5	30.7	37.9	32.8	37.5	33.8	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	0.0	0.0	0.0	0.1	0.1	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.0	0.0	0.0	0.1	..
Combustible fuels	..	1.0	1.5	2.7	3.0	3.4	3.4	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	0.0	0.0	0.0	0.0	0.0
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	1.7	1.5	1.7	2.0	2.6	2.5	2.5	2.4
+ Imports	7.0	8.5	20.8	24.3	38.3	33.4	34.8	31.5
- Exports	10.5	16.7	22.9	31.4	32.0	32.9	32.2	33.7
Electrical energy supplied	**31.9**	**38.5**	**50.7**	**56.5**	**61.6**	**64.2**	**63.1**	**..**
- Transmission & distr. losses	2.9	3.2	4.1	4.1	4.2	4.4	4.5	..
- Statistical difference	-	-	-	-	-	0.0	-	..
Total consumption	**29.0**	**35.3**	**46.6**	**52.4**	**57.3**	**59.8**	**58.6**	**..**
- Energy industry consumption[2]	-	-	-	-	-	-	-	..
Final consumption	**29.0**	**35.3**	**46.6**	**52.4**	**57.3**	**59.8**	**58.6**	**..**
Industry	11.1	11.9	17.2	18.1	18.9	19.3	19.2	..
Transport	2.0	2.1	2.6	2.6	3.0	3.2	3.1	..
Commercial & publ. serv.	8.3	10.8	12.7	14.9	16.8	17.7	17.4	..
Residential	7.3	10.1	13.2	15.7	17.6	18.6	17.9	..
Agriculture & fishing	0.3	0.4	0.9	1.0	1.0	1.0	1.0	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**38.18**	**49.25**	**56.18**	**67.52**	**68.46**	**67.82**	**64.64**	**2.4**	**0.7**
- Hydro pumped storage	*1.08*	*1.07*	*1.19*	*1.40*	*1.78*	*1.76*	*1.74*	*0.6*	*1.8*
Total generation(1)	**37.10**	**48.18**	**54.99**	**66.12**	**66.67**	**66.06**	**62.90**	**2.5**	**0.6**
Main activity producers									
Gross production	34.55	44.86	51.33	61.80	62.56	61.61	58.64	2.5	0.6
- Hydro pumped storage	*1.08*	*1.07*	*1.15*	*1.37*	*1.78*	*1.76*	*1.73*	*0.4*	*2.0*
Total generation(1)	33.47	43.79	50.19	60.43	60.77	59.86	56.91	2.6	0.6
Nuclear	7.07	14.35	23.64	26.45	27.69	26.34	26.71	7.8	0.6
Hydro	24.25	28.87	26.23	33.88	32.83	33.27	29.92	0.5	0.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.00	0.02	0.04	0.07	-	-
Coal	-	0.03	0.01	-	-	-	-	-	-
Oil	2.15	0.25	0.26	0.00	0.00	0.00	0.00	-12.5	-20.6
Natural gas	-	0.12	0.06	0.10	0.11	0.13	0.08	-	1.6
Biofuels & waste	-	0.17	-	0.00	0.12	0.08	0.13	-	-
Autoproducers									
Gross production	3.63	4.39	4.85	5.72	5.90	6.21	6.00	1.8	1.0
- Hydro pumped storage	-	-	*0.04*	*0.03*	-	*0.01*	*0.01*	-	*-6.5*
Total generation(1)	3.63	4.39	4.81	5.70	5.90	6.20	5.99	1.8	1.1
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3.52	3.94	3.57	2.96	2.89	2.79	2.47	0.1	-1.7
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.00	0.01	0.05	0.08	0.15	-	26.9
Coal	-	0.03	0.03	-	-	-	-	-	-
Oil	0.11	0.24	0.13	0.22	0.10	0.07	0.06	0.9	-4.0
Natural gas	-	0.17	0.28	0.76	0.60	0.92	0.92	-	5.9
Biofuels & waste	-	-	0.80	1.75	2.26	2.34	2.40	-	5.3

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers
(GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**..**	**420**	**4751**	**5555**	**5726**	**6016**	**5807**	**1.0**
Total energy	**..**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Coal mines	..	-	-	-	-	-	-	-
Oil and gas extraction	..	-	-	-	-	-	-	-
Patent fuel plants	..	-	-	-	-	-	-	-
Coke ovens	..	-	-	-	-	-	-	-
Gas works	..	-	-	-	-	-	-	-
BKB	..	-	-	-	-	-	-	-
Oil refineries	..	-	-	-	-	-	-	-
Energy non specified/other	..	-	-	-	-	-	-	-
Total industry	**..**	**420**	**949**	**3665**	**3915 e**	**4126 e**	**4008 e**	**7.1**
Iron and steel	..	-	-	-	-	-	-	-
Chemical and petrochemical	..	-	-	631 e	595 e	572 e	524 e	-
Non-ferrous metals	..	-	-	691 e	653 e	628 e	576 e	-
Non-metallic minerals	..	-	-	35 e	32 e	31 e	28 e	-
Transport equipment	..	-	-	-	-	-	-	-
Machinery	..	-	-	61 e	57 e	55 e	51 e	-
Mining and quarrying	..	-	-	-	-	-	-	-
Food and tobacco	..	-	-	5 e	4 e	4 e	3 e	-
Pulp and printing	..	-	-	108 e	103 e	99 e	91 e	-
Wood and wood products	..	-	-	-	-	-	-	-
Construction	..	-	-	-	-	-	-	-
Textile and leather	..	-	-	-	-	-	-	-
Non specified/other industries	..	420	949	2134	2471 e	2737 e	2735 e	5.2
Total transport	**..**	**-**	**-**	**1338 e**	**1203 e**	**1199 e**	**1099 e**	**-**
Rail and pipeline	..	-	-	-	-	-	-	-
Transport non specified	..	-	-	1338 e	1203 e	1199 e	1099 e	-
Other	**..**	**-**	**3802**	**552**	**608 e**	**691 e**	**700 e**	**-7.7**
Commerce and pub. services	..	-	-	-	-	-	-	-
Residential	..	-	-	-	-	-	-	-
Agriculture and fishing	..	-	-	-	-	-	-	-
Sector non specified	..	-	3802	552	608 e	691 e	700 e	-7.7

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**8930**	**11286**	**14289**	**16667**	**18901**	**17361**	**18320**	**2.1**
Nuclear	121	890	1100	1100	1300	1290	1320	1.8
Geothermal	-	-	-	-	-	-	-	-
Coal	-	198	-	-	-	-	-	-
Oil	-	1571	318	404	151	140	148	-10.9
Natural gas	-	3132	5040	5473	4459	3201	3390	0.1
Biofuels & waste	-	5495	7758	9643	12850	12598	13341	4.0
Non-spec. comb. fuels	8809	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	73	47	141	132	121	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	8930	5458	6099	6565	6676	5306	..	-0.1
Nuclear	121	890	1100	1100	1300	1290	..	1.8
Geothermal	-	-	-	-	-	-	..	-
Coal	-	198	-	-	-	-	..	-
Oil	-	1303	176	296	102	92	..	-11.9
Natural gas	-	3067	4709	5029	3942	2690	..	-0.6
Biofuels & waste	-	-	114	140	1332	1234	..	-
Non-spec. comb. fuels	8809	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	5828	8190	10102	12225	12055	..	3.5
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	268	142	108	49	48	..	-7.9
Natural gas	-	65	331	444	517	511	..	10.3
Biofuels & waste	-	5495	7644	9503	11518	11364	..	3.5
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	73	47	141	132	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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SWITZERLAND
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**0.44**	**0.39**	**0.84**	**1.08**	**1.25**	**1.32**	**1.33**	**3.9**	**2.2**
Coal	-	0.02	0.01	-	-	-	-	-	-
Oil	0.44	0.12	0.13	0.04	0.02	0.01	0.01	-6.9	-11.0
Natural gas	-	0.10	0.12	0.22	0.19	0.23	0.20	-	2.3
Biofuels & waste	-	0.15	0.58 e	0.82	1.04	1.07	1.12	-	3.2
of which: ***main activity prod.***									
Total	**..**	**0.30**	**0.21**	**0.15**	**0.20**	**0.19**	**0.17**	**..**	**-0.9**
Coal	..	0.01	0.01	-	-	-	-	..	-
Oil	..	0.11	0.11	0.01	0.00	0.00	0.00	..	-15.5
Natural gas	..	0.03	0.09	0.14	0.12	0.12	0.08	..	-0.5
Biofuels & waste	..	0.15	0.00	0.00	0.08	0.07	0.09	..	47.6

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**1.64**	**3.74**	**6.18**	**6.92**	**7.25**	**6.90**	**7.00**	**8.1**	**0.6**
Nuclear	1.64	3.74	6.18	6.92	7.25	6.90	6.99	8.1	0.6
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	0.00	0.00	0.00	0.01	0.01	-	26.9
Non-Thermal									
Total	**2.40**	**2.82**	**2.56**	**3.17**	**3.07**	**3.10**	**2.79**	**0.4**	**0.4**
Hydro	2.40	2.82	2.56	3.17	3.07	3.10	2.79	0.4	0.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00	0.00	0.00	0.01	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	72	4	4	3	2	-15.7
Fuel input (TJ)	-	2878	154	189	144	103	-14.7
Electricity production (GWh)	-	242	15	18	14	10	-14.1
Natural gas (1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	5534	6964	1644	1548	1592	-5.8
Electricity production (GWh)	-	206	318	130	116	120	-2.5
Biogases and liquid biofuels							
Fuel input (TJ)	-	183	398	55	36	36	-7.5
Electricity production (GWh)	-	20	44	6	4	4	-7.4
Total combustible fuels(2)							
Electricity production (GWh)	-	468	377	154	134	134	-5.8

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	23	21	-	-	-	-	-
Fuel input (TJ)	197	507	-	-	-	-	-
Electricity production (GWh)	65	40	-	-	-	-	-
CHP Heat production (TJ)	-	198	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	150	53	28	11	9	8	-8.6
Fuel input (TJ)	6281	2203	1179	468	369	343	-8.5
Electricity production (GWh)	492	145	212	86	56	48	-5.1
CHP Heat production (TJ)	-	1293	197	73	88	71	-12.9
Natural gas(1)							
Fuel input (TJ)	4840	3572	6035	4799	6626	6301	2.7
Electricity production (GWh)	294	331	857	712	1043	993	5.4
CHP Heat production (TJ)	-	1458	1565	895	1107	892	-2.3
Wood and other solid waste							
Fuel input (TJ)	-	186	348	4018	3782	4691	16.6
Electricity production (GWh)	-	40	59	165	151	206	8.1
CHP Heat production (TJ)	-	7	64	1071	1393	1377	28.6
Industrial waste							
Fuel input (TJ)	-	253	1466	1465	1298	1109	7.3
Electricity production (GWh)	-	44	268	264	227	185	7.1
CHP Heat production (TJ)	-	42	326	390	369	355	10.7
Municipal waste							
Fuel input (TJ)	6406	17036	24096	35090	36802	38098	3.9
Electricity production (GWh)	173	434	952	1624	1722	1786	7.0
CHP Heat production (TJ)	-	5264	7018	9854	11086	10866	3.5
Biogases and liquid biofuels							
Fuel input (TJ)	-	302	535	1136	1279	1417	7.6
Electricity production (GWh)	-	60	105	185	206	226	6.5
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	1024	1094	2453	3036	3405	3444	5.6
CHP Heat production (TJ)	8809	8262	9170	12283	14043	13561	2.4

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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SWITZERLAND
10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	8	3	1	2	1	-9.4
Fuel input (TJ)	-	320	140	61	72	47	-8.7
Heat production (TJ)	-	278	121	53	63	69	-6.4
Natural gas(1)							
Fuel input (TJ)	-	2136	4434	4143	4278	2946	1.5
Heat production (TJ)	-	1674	3475	3247	3352	2309	1.5
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	608	516	-	-	-	-
Heat production (TJ)	-	182	300	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	1	110	13	6	-	-
Heat production (TJ)	-	-	50	7	2	-	-
Total combustible fuels(2)							
Heat production (TJ)	-	2134	3946	3307	3417	2378	0.5

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**16.67**	**16.62**	**18.67**	**19.57**	**20.15**	**21.04**	**19.45**	**0.7**	**0.2**
Geothermal	-	-	0.07	0.10	0.21	0.26	0.25	-	6.3
Solar thermal	-	-	0.00	0.01	0.03	0.03	0.04	-	14.0
Coal	0.42	0.33	0.35	0.14	0.15	0.15	0.14	-1.0	-4.2
Oil	13.41	12.04	11.60	11.32	10.77	11.01	10.00	-0.8	-0.7
Natural gas	0.11	0.71	1.49	2.19	2.49	2.76	2.46	16.6	2.4
Biofuels & waste	0.24	0.32	0.91	0.99	1.19	1.27	1.15	8.1	1.1
Electricity	2.49	3.03	4.01	4.50	4.94	5.14	5.04	2.8	1.1
Heat	-	0.19	0.25	0.31	0.37	0.41	0.38	-	2.0
of which:									
Total industry	**3.99**	**3.88**	**3.37**	**3.84**	**3.76**	**3.94**	**3.74**	**-1.0**	**0.5**
Geothermal	-	-	0.00	0.01	0.02	0.02	0.02	-	6.4
Solar thermal	-	-	0.00	0.00	0.00	0.00	0.00	-	14.2
Coal	0.11	0.22	0.31	0.11	0.14	0.14	0.13	6.0	-3.9
Oil	2.92	2.13	0.75	0.89	0.70	0.68	0.53	-7.7	-1.6
Natural gas	0.01	0.35	0.58	0.69	0.79	0.85	0.82	24.6	1.7
Biofuels & waste	-	0.12	0.20	0.44	0.40	0.44	0.43	-	3.7
Electricity	0.95	1.02	1.48	1.55	1.57	1.66	1.65	2.6	0.5
Heat	-	0.03	0.05	0.13	0.15	0.15	0.15	-	5.7
Transport	**3.54**	**3.70**	**5.16**	**5.84**	**6.07**	**6.05**	**5.97**	**2.2**	**0.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	3.36	3.52	4.92	5.60	5.76	5.73	5.66	2.3	0.7
Natural gas	-	-	0.01	0.01	0.04	0.04	0.04	-	5.1
Biofuels & waste	-	-	-	0.00	0.01	0.01	0.01	-	-
Electricity	0.17	0.18	0.22	0.23	0.26	0.27	0.26	1.4	0.8
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.72**	**2.68**	**3.37**	**3.33**	**3.46**	**3.66**	**3.26**	**9.5**	**-0.2**
Geothermal	-	-	0.01	0.01	0.03	0.03	0.03	-	5.9
Solar thermal	-	-	0.00	0.00	0.00	0.01	0.01	-	12.5
Coal	-	-	0.00	-	-	-	-	-	-
Oil	-	1.55	1.84	1.24	1.02	1.09	0.87	-	-3.5
Natural gas	-	0.09	0.30	0.50	0.51	0.58	0.48	-	2.2
Biofuels & waste	-	-	0.02	0.23	0.33	0.34	0.30	-	12.6
Electricity	0.72	0.93	1.09	1.28	1.49	1.52	1.50	2.5	1.5
Heat	-	0.11	0.10	0.07	0.08	0.10	0.09	-	-0.4

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**1.27**	**5.40**	**5.23**	**5.60**	**5.99**	**6.46**	**5.53**	**8.7**	**0.3**
Geothermal	-	-	0.05	0.08	0.17	0.21	0.20	-	6.4
Solar thermal	-	-	0.00	0.01	0.02	0.03	0.03	-	14.3
Coal	0.30	0.10	0.01	0.01	0.01	0.01	0.01	-17.0	-1.5
Oil	-	3.94	3.33	2.89	2.65	2.82	2.25	-	-1.9
Natural gas	0.10	0.26	0.60	0.85	1.02	1.16	0.97	11.4	2.4
Biofuels & waste	0.24	0.17	-	0.29	0.43	0.47	0.39	-	-
Electricity	0.63	0.87	1.14	1.35	1.54	1.60	1.54	3.5	1.5
Heat	-	0.05	0.11	0.11	0.13	0.16	0.14	-	1.3
Agriculture & fishing	**0.12**	**0.15**	**0.18**	**0.25**	**0.24**	**0.24**	**0.26**	**2.6**	**1.6**
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	6.6
Solar thermal	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	0.09	0.09	0.11	-	-	-	-	0.7	-
Natural gas	-	0.00	-	0.13	0.14	0.14	0.15	-	-
Biofuels & waste	-	0.02	0.00	0.03	0.02	0.02	0.02	-	14.0
Electricity	0.02	0.03	0.08	0.09	0.09	0.09	0.09	7.3	0.6
Heat	-	-	-	-	-	-	-	-	-
Other	**6.28**	**0.19**	**0.80**	**0.14**	**0.14**	**0.14**	**0.12**	**-11.4**	**-8.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	0.03	0.02	-	-	-	-	-
Oil	6.28	0.19	0.09	0.12	0.14	0.14	0.12	-21.9	1.2
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	0.68	-	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.75**	**0.62**	**0.56**	**0.57**	**0.50**	**0.54**	**0.57**	**-1.72**	**0.11**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**16.67**	**16.62**	**18.67**	**19.57**	**20.62**	**20.15**	**21.04**	**19.45**
Total industry (Mtoe)	**3.99**	**3.88**	**3.37**	**3.84**	**4.04**	**3.76**	**3.94**	**3.74**
Iron and steel	0.02	-	-	0.16	0.24	0.18	0.22	0.23
Chem. and petrochemical	0.17	0.39	0.59	0.63	0.76	0.70	0.72	0.73
Non-ferrous metals	0.16	0.18	0.19	0.13	0.05	0.05	0.06	0.06
Non-metallic minerals	0.01	0.22	0.56	0.51	0.48	0.48	0.49	0.45
Transport equipment	-	-	-	-	-	-	-	-
Machinery	0.28	0.37	0.62	0.44	0.67	0.60	0.64	0.61
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	0.04	0.05	0.15	0.41	0.44	0.49	0.51	0.47
Paper, pulp and printing	0.10	0.21	0.38	0.58	0.57	0.46	0.49	0.42
Wood and wood products	-	0.03	-	-	-	-	-	-
Construction	0.01	0.02	0.04	0.21	0.22	0.23	0.23	0.20
Textile and leather	0.10	0.10	0.16	0.10	0.07	0.06	0.06	0.05
Non specified/other	3.10	2.30	0.70	0.65	0.55	0.52	0.53	0.54
Electricity consumption (Mtoe)	**2.49**	**3.03**	**4.01**	**4.50**	**5.05**	**4.94**	**5.14**	**5.04**
Total industry (Mtoe)	**0.95**	**1.02**	**1.48**	**1.55**	**1.66**	**1.57**	**1.66**	**1.65**
Iron and steel	-	-	-	0.09	0.13	0.10	0.12	0.13
Chem. and petrochemical	0.14	0.16	0.20	0.22	0.31	0.31	0.31	0.32
Non-ferrous metals	0.16	0.16	0.14	0.10	0.03	0.03	0.03	0.03
Non-metallic minerals	-	0.05	0.06	0.15	0.10	0.10	0.11	0.10
Transport equipment	-	-	-	-	-	-	-	-
Machinery	0.27	0.29	0.31	0.23	0.37	0.33	0.36	0.37
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	0.03	0.03	0.04	0.15	0.17	0.20	0.20	0.20
Paper, pulp and printing	0.09	0.11	0.13	0.22	0.22	0.20	0.21	0.19
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	0.01	0.01	0.06	0.05	0.06	0.05	0.05
Textile and leather	0.10	0.09	0.09	0.05	0.03	0.02	0.02	0.02
Non specified/other	0.18	0.13	0.50	0.29	0.25	0.23	0.24	0.23
Total industry (TWh)	**11.06**	**11.90**	**17.24**	**18.08**	**19.28**	**18.21**	**19.27**	**19.21**
Iron and steel	-	-	-	1.00 e	1.57	1.16	1.44	1.56
Chem. and petrochemical	1.61	1.88	2.36	2.59 e	3.56	3.60	3.65	3.74
Non-ferrous metals	1.81	1.84	1.62	1.15 e	0.35	0.29	0.35	0.35
Non-metallic minerals	-	0.63	0.71	1.73	1.16	1.16	1.26	1.17
Transport equipment	-	-	-	-	-	-	-	-
Machinery	3.11	3.37	3.57	2.68 e	4.33	3.88	4.13	4.33
Mining and quarrying	-	-	-	-	-	-	-	-
Food and tobacco	0.30	0.36	0.47	1.72 e	2.01	2.28	2.32	2.29
Paper, pulp and printing	1.04	1.23	1.51	2.52 e	2.54	2.30	2.40	2.26
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	0.07	0.08	0.75 e	0.55	0.67	0.63	0.55
Textile and leather	1.15	1.01	1.10	0.53 e	0.32	0.25	0.27	0.28
Non specified/other	2.05	1.51	5.81	3.42	2.90	2.63	2.81	2.68

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**7018**	**8487**	**20754**	**19419**	**24330**	**31601**	**31368**	**33401**	**34824**
Imports from:									
Total from OECD	**-**	**-**	**20754**	**19419**	**24330**	**31601**	**31368**	**33401**	**34824**
Austria	-	-	767	1965	4189	7651	8886	8176	7623
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	11106	9702	9613	9300	8473	9783	12375
Germany	-	-	8811	7663	10450	14182	13433	14856	14315
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	70	89	78	468	576	586	511
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**7018**	**8487**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**10516**	**16668**	**22862**	**26690**	**31400**	**32736**	**33525**	**32881**	**32237**
Exports to:									
Total to OECD	**-**	**-**	**22696**	**26513**	**31178**	**32422**	**33446**	**32822**	**32170**
Austria	-	-	75	288	213	105	23	53	102
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	743	816	2068	3945	4496	5504	2193
Germany	-	-	4796	6469	6560	3896	3666	3750	3972
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	17082	18940	22337	24476	25261	23515	25903
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**10516**	**16668**	**166**	**177**	**222**	**314**	**79**	**59**	**67**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**13.32**	**15.54**	**14.20**	**14.68**	**16.03**	**16.18**	**16.34**	**18.44**	**18.47**
Nuclear	1.01	1.94	2.95	3.08	3.20	3.22	3.24	3.25	3.28
Hydro	11.72	12.90	11.15	11.50	12.79	12.85	12.99	15.03	15.03
of which: pumped storage	*1.31*	*1.45*	*1.39 e*	*1.41 e*	*1.60 e*	*1.69*	*1.75*	*1.75*	*1.75*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	0.01	0.02	0.04	0.05
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.59	0.70	0.10 e	0.10 e	0.03 e	0.09	0.10	0.11	0.11
of which:									
Single-fired:									
Coal and coal products	-	-	- e	-	-	0.03	-	-	-
Liquid fuels	0.59	0.70	0.08 e	0.07 e	- e	0.01	0.01	0.01	0.01
Natural gas	-	-	0.02 e	0.03 e	0.03 e	-	0.03	0.03	0.03
Biofuels & waste	-	-	-	-	-	0.02	0.02	0.03	0.02
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	0.01	0.01
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	0.04	0.04	0.04	0.04
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	0.07 e	0.06 e	0.02 e	0.04	0.04	0.05	0.05
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	0.01 e	0.01 e	- e	0.01	0.01	0.01	0.01
Combined cycle	-	-	0.01 e	0.02 e	0.01 e	0.05	0.05	0.05	0.05
Other	0.59	0.70	0.02 e	0.01 e	- e	-	-	-	-
Peak load	..	..	8.54	8.63	9.03	9.48	9.85	10.37	9.71
Available capacity	..	..	8.71	9.85	11.74	9.21	10.73	12.91	9.62

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**0.91**	**0.97**	**1.23**	**1.44**	**1.39**	**1.51**	**1.56**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	-	-	0.53	0.40	0.45	0.62	0.53	0.55	0.55
of which: pumped storage	*-*	*-*	*0.07 e*	*0.05 e*	*0.06 e*	*0.08*	*0.07*	*0.06*	*0.07*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.01	0.02	0.05	0.07	0.11	0.19
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	-	-	0.39 e	0.56 e	0.77 e	0.78	0.79	0.84	0.82
of which:									
Single-fired:									
Coal and coal products	-	-	0.01 e	-	-	-	-	-	-
Liquid fuels	-	-	0.04 e	0.04 e	0.06 e	0.10	0.09	0.08	0.08
Natural gas	-	-	0.09 e	0.19 e	0.21 e	0.17	0.11	0.17	0.20
Biofuels & waste	-	-	0.25 e	0.33 e	0.49 e	0.24	0.28	0.31	0.24
Multi-fired:									
Solid / liquid	-	-	-	-	-	0.12	0.08	0.08	0.12
Solid / natural gas	-	-	-	-	-	0.08	0.13	0.02	0.11
Liquid / natural gas	-	-	-	-	-	0.01	0.05	0.06	0.01
Solid / liquid / gas	-	-	-	-	-	0.06	0.04	0.12	0.05
Type of generation									
Steam	-	-	0.27 e	0.33 e	0.41 e	0.52	0.55	0.55	0.54
Internal combustion	-	-	-	-	-	0.15	0.13	0.13	0.14
Gas turbine	-	-	0.03 e	0.04 e	0.05 e	0.04	0.04	0.04	0.04
Combined cycle	-	-	0.02 e	0.12 e	0.23 e	0.07	0.07	0.12	0.10
Other	-	-	0.06 e	0.07 e	0.08 e	-	-	-	-
Peak load	..	..	..	..	..	0.46	0.40	0.38	0.36
Available capacity	..	..	0.41	0.34	0.41	0.45	0.44	0.47	0.35

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Swiss Francs/ unit					
Steam coal (t)	x	x	x	x	x	x	x	x	x
Heavy fuel oil (t)	..	..	..	..	..	..	..	..	..
Natural gas (MWh)[1]	..	..	..	..	..	..	..	..	..
				Swiss Francs/ toe					
Steam coal	x	x	x	x	x	x	x	x	x
Heavy fuel oil	..	..	..	..	..	..	..	..	..
Natural gas[2]	..	..	..	..	..	..	..	..	..
End-user prices of electricity									
				Swiss Francs/ MWh					
Industry									
Price	91.70	94.40	123.80	116.60	101.60	101.60	117.00	117.00	122.10
of which: tax	-	-	-	-	-	4.50	4.50	4.50	4.50
Household									
Price	118.00	121.60	153.80	187.90	167.20	178.03	187.68	197.60	191.40
of which: tax	-	-	-	13.10	11.80	17.03	17.73	19.18	18.68

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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TURKEY

Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	24.35	31.44	52.76	76.35	105.13	112.46	115.70	4.7	3.6
GDP (billion 2005 USD)	127.59	162.29	269.69	386.59	565.10	614.68	628.44	4.5	3.9
TPES/GDP(1)	0.19	0.19	0.20	0.20	0.19	0.18	0.18	0.1	-0.3
Population (millions)	38.07	44.44	55.12	64.25	73.00	73.95	74.98	2.2	1.4
TPES/population(2)	0.64	0.71	0.96	1.19	1.44	1.52	1.54	2.4	2.2
TPES/GDP (2005 = 100)	109	111	112	113	106	105	105	0.1	-0.3
Ele.TFC/GDP(2005=100)(3)	29	45	63	93	113	112	..	4.6	..
Ele.TFC/population(4)	261	440	816	1493	2328	2486	..	6.9	..
Elec. generated (TWh)(5)	12.43	23.28	57.54	124.92	211.21	229.39	239.50	9.4	6.7

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**24.35**	**31.44**	**52.76**	**76.35**	**105.13**	**112.46**	**115.70**	**4.7**	**3.6**
Coal	5.15	6.99	16.91	22.91	32.03	33.93	35.07	7.2	3.4
Oil	12.48	15.62	23.40	30.40	30.12	30.42	31.25	3.8	1.3
Natural gas	-	-	2.85	12.63	31.39	36.78	37.25	-	12.4
Biofuels & waste	6.45	7.68	7.21	6.51	4.56	3.66	3.70	0.7	-3.0
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	0.05	0.06	0.43	0.68	1.97	2.06	2.26	13.8	7.8
Solar, wind, tide(1)	-	-	0.03	0.26	0.68	1.04	0.95	-	17.4
Hydro	0.22	0.98	1.99	2.66	4.45	4.50	4.98	13.7	4.3
Net electricity imports(2)	-	0.12	-0.06	0.29	-0.07	0.08	0.25	-	-
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**12.4**	**23.3**	**57.5**	**124.9**	**162.0**	**211.2**	**229.4**	**239.5**
Nuclear	-	-	-	-	-	-	-	-
Hydro	2.6	11.3	23.1	30.9	39.6	51.8	52.3	57.9
of which:								
pumped storage production	-	-	-	-	-	-	-	-
Geothermal	-	-	0.1	0.1	0.1	0.7	0.7	0.9
Solar	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	-	0.0	0.1	2.9	4.7	5.9
Combustible fuels	9.8	11.9	34.3	93.9	122.2	155.8	171.6	174.9
Coal	*3.2*	*6.0*	*20.2*	*38.2*	*43.2*	*55.0*	*66.2*	*68.0*
Oil	*6.4*	*5.8*	*3.9*	*9.3*	*5.5*	*2.2*	*0.9*	*1.6*
Natural gas	-	-	*10.2*	*46.2*	*73.4*	*98.1*	*104.0*	*104.5*
Biofuels & waste	*0.2*	*0.1*	-	*0.2*	*0.1*	*0.5*	*0.5*	*0.7*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	0.6	1.4	3.3	6.2	6.5	8.2	11.8	..
Net production	**11.8**	**21.9**	**54.2**	**118.7**	**155.5**	**203.0**	**217.6**	**..**
Nuclear	..	-	-	-	-	-	-	..
Hydro	..	11.2	22.7	30.2	39.3	51.4	51.2	..
Geothermal	..	-	0.1	0.1	0.1	0.6	0.6	..
Solar	..	-	-	-	-	-	-	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	-	0.0	0.1	2.9	4.7	..
Combustible fuels	..	10.7	31.4	88.4	116.1	148.1	161.1	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	-	-	-	-	-	-
+ Imports	-	1.3	0.2	3.8	0.6	1.1	4.6	4.4
- Exports	-	-	0.9	0.4	1.8	1.9	3.6	1.5
Electrical energy supplied	**11.8**	**23.2**	**53.5**	**122.1**	**154.3**	**202.3**	**218.5**	**..**
- Transmission & distr. losses	1.3	2.8	6.7	23.8	24.0	30.2	32.4	..
- Statistical difference	-	-	-	-	-	-	0.0	..
Total consumption	**10.5**	**20.4**	**46.8**	**98.3**	**130.3**	**172.1**	**186.1**	**..**
- Energy industry consumption[2]	0.6	0.9	1.9	2.4	1.6	2.2	2.3	..
Final consumption	**9.9**	**19.5**	**45.0**	**95.9**	**128.6**	**169.9**	**183.8**	**..**
Industry	6.4	12.2	27.3	46.1	60.7	77.2	85.7	..
Transport	0.1	0.1	0.3	0.8	0.8	0.6	0.7	..
Commercial & publ. serv.	1.8	3.5	7.4	22.1	32.2	45.1	48.0	..
Residential	1.4	3.5	9.1	23.9	30.9	41.4	44.3	..
Agriculture & fishing	0.1	0.2	0.6	3.1	4.1	5.6	5.1	..
Sector non specified	0.2	0.0	0.2	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source
(TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**13.48**	**23.28**	**57.54**	**124.92**	**194.81**	**211.21**	**229.39**	**9.5**	**6.8**
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	**13.48**	**23.28**	**57.54**	**124.92**	**194.81**	**211.21**	**229.39**	**9.5**	**6.8**
Main activity producers									
Gross production	12.63	21.09	54.18	108.96	181.31	198.76	217.15	9.5	6.8
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	12.63	21.09	54.18	108.96	181.31	198.76	217.15	9.5	6.8
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	3.33	11.29	23.14	30.82	34.37	50.57	51.10	12.9	3.8
Geothermal	-	-	0.08	0.08	0.44	0.67	0.69	-	10.8
Solar, wind, tide(2)	-	-	-	0.03	1.49	2.91	4.72	-	-
Coal	3.68	5.11	19.81	36.17	52.53	51.59	62.93	11.1	5.7
Oil	5.63	4.69	0.97	5.75	3.18	1.36	0.31	-10.4	-5.3
Natural gas	-	-	10.19	36.13	89.11	91.37	97.08	-	11.3
Biofuels & waste	-	-	-	-	0.20	0.28	0.32	-	-
Autoproducers									
Gross production	0.85	2.19	3.36	15.96	13.50	12.45	12.24	9.0	6.3
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	0.85	2.19	3.36	15.96	13.50	12.45	12.24	9.0	6.3
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.03	0.06	0.01	0.06	1.59	1.22	1.24	-6.4	25.8
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	0.00	0.00	0.00	0.00	-	-
Coal	0.19	0.85	0.38	2.02	3.15	3.45	3.29	4.2	10.9
Oil	0.42	1.14	2.97	3.57	1.63	0.82	0.59	13.1	-7.4
Natural gas	-	-	0.00	10.09	6.99	6.78	6.96	-	52.4
Biofuels & waste	0.21	0.14	-	0.22	0.14	0.17	0.15	-	-

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**798**	**1914**	**3085**	**15288**	**12824**	**11790**	**11608**	**6.5**
Total energy	**-**	**-**	**-**	**580**	**941**	**922**	**935**	**-**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	-	580	941	922	935	-
Energy non specified/other	-	-	-	-	-	-	-	-
Total industry	**769 e**	**1878**	**3085**	**14409**	**11738**	**10755**	**10442**	**6.0**
Iron and steel	242 e	756	-	3662	4088	4009	3960	-
Chemical and petrochemical	82 e	246	-	1111	1724	1485	1444	-
Non-ferrous metals	-	-	-	164	1561	1207	1283	-
Non-metallic minerals	37 e	36	-	1638	895	861	384	-
Transport equipment	-	-	-	-	-	-	-	-
Machinery	1 e	1	-	480	209	114	129	-
Mining and quarrying	42 e	61	-	62	35	65	79	-
Food and tobacco	150 e	409	-	724	785	871	833	-
Pulp and printing	-	-	-	719	544	696	792	-
Wood and wood products	150 e	294	-	166	210	262	314	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	42 e	73	-	3202	774	1058	1090	-
Non specified/other industries	23 e	2	3085	2481	913	127	134	-13.9
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**29 e**	**36**	**-**	**299**	**145**	**113**	**231**	**-**
Commerce and pub. services	29 e	36 e	-	299	144	111	230	-
Residential	-	-	-	-	-	-	-	-
Agriculture and fishing	-	-	-	-	1	2	1	-
Sector non specified	-	-	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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TURKEY
6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**-**	**16183**	**35597**	**51330**	**50917**	**54785**	**-**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	-	916	654	863	1038	3023	-
Oil	-	-	1124	1476	939	898	1701	-
Natural gas	-	-	14143	33467	49315	48610	48974	-
Biofuels & waste	-	-	-	-	213	371	1087	-
Non-spec. comb. fuels	-	-	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	-	115	14669	29840	28871	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	-	-	-	-	..	-
Oil	-	-	-	335	-	-	..	-
Natural gas	-	-	115	14334	29627	28500	..	-
Biofuels & waste	-	-	-	-	213	371	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	-	16068	20928	21490	22046	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	-	916	654	863	1038	..	-
Oil	-	-	1124	1141	939	898	..	-
Natural gas	-	-	14028	19133	19688	20110	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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TURKEY
7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**2.54**	**3.29**	**8.72**	**19.93**	**31.17**	**31.57**	**34.57**	**7.5**	**6.8**
Coal	1.28	1.82	5.48	9.88	13.49	13.85	16.46	9.0	5.4
Oil	1.26	1.47	1.11	2.59	1.22	0.56	0.24	-0.8	-7.0
Natural gas	-	-	2.13	7.40	16.37	17.05	17.75	-	10.6
Biofuels & waste	-	-	-	0.06 e	0.08	0.12	0.11	-	-
of which: ***main activity prod.***									
Total	**..**	**2.69**	**7.50**	**16.58**	**28.04**	**28.53**	**31.45**	**..**	**7.1**
Coal	..	1.52	5.02	9.36	12.49	12.74	15.33	..	5.5
Oil	..	1.16	0.35	1.84	0.76	0.29	0.07	..	-7.4
Natural gas	..	-	2.13	5.37	14.75	15.43	15.97	..	10.1
Biofuels & waste	..	-	-	-	0.04	0.07	0.07	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**-**	**-**	**0.07**	**0.07**	**0.38**	**0.57**	**0.60**	**-**	**10.8**
Nuclear	-	-	-	-	-	-	-	-	-
Geothermal	-	-	0.07	0.07	0.38	0.57	0.60	-	10.8
Solar	-	-	-	-	-	-	-	-	-
Non-Thermal									
Total	**0.22**	**0.98**	**1.99**	**2.66**	**3.22**	**4.71**	**4.91**	**13.7**	**4.4**
Hydro	0.22	0.98	1.99	2.66	3.09	4.45	4.50	13.7	4.0
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.00	0.13	0.25	0.41	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	703	444	1921	6328	6908	10091	16.0
Fuel input (TJ)	12943	6986	29456	140281	153676	230310	18.1
Electricity production (GWh)	804	564	2868	14641	16393	24845	19.8
Brown coal							
Fuel input (1000 t)	5473	29632	52330	62831	55393	60212	3.4
Fuel input (TJ)	46833	203063	369857	397783	394314	426746	3.6
Electricity production (GWh)	4302	19241	34036	39197	36491	39342	3.5
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	9986	20037	24335	24799	-
Electricity production (GWh)	-	-	793	1233	1459	1451	-
Petroleum products							
Fuel input (1000 t)	1267	433	2458	1124	478	151	-4.9
Fuel input (TJ)	51711	17486	100902	44291	18255	6081	-4.9
Electricity production (GWh)	4690	1176	8056	4273	1858	540	-3.6
Natural gas (1)							
Fuel input (TJ)	-	98996	312911	673442	692505	721131	9.9
Electricity production (GWh)	-	10191	43045	89905	91253	96193	11.3
Wood and other solid waste							
Fuel input (TJ)	-	-	855	166	232	19	-
Electricity production (GWh)	-	-	53	10	14	1	-
Industrial waste							
Fuel input (TJ)	-	-	648	1056	1496	1499	-
Electricity production (GWh)	-	-	54	88	125	126	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	209	1672	2465	2284	-
Electricity production (GWh)	-	-	21	207	279	275	-
Total combustible fuels(2)							
Electricity production (GWh)	9796	31172	88926	149554	147872	162773	8.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	62	30	21	33	26	26	-0.7
Fuel input (TJ)	1700	778	646	756	642	603	-1.2
Electricity production (GWh)	108	57	96	51	58	57	-
CHP Heat production (TJ)	-	-	-	134	88	75	-
Brown coal							
Fuel input (1000 t)	559	252	210	252	463	458	2.9
Fuel input (TJ)	7024	3654	3289	3873	5527	5428	1.9
Electricity production (GWh)	746	319	330	340	436	345	0.4
CHP Heat production (TJ)	-	-	916	425	775	963	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	-	686	2792	2551	2184	-
Electricity production (GWh)	-	-	64	222	210	177	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	323	722	227	147	102	100	-9.0
Fuel input (TJ)	13151	30026	9434	6176	4551	4297	-8.8
Electricity production (GWh)	1141	2766	1255	531	322	364	-9.2
CHP Heat production (TJ)	-	-	1124	911	939	898	-
Natural gas(1)							
Fuel input (TJ)	-	9	31614	88218	100689	104989	56.2
Electricity production (GWh)	-	1	3171	6190	6891	7855	53.3
CHP Heat production (TJ)	-	-	14143	42752	49315	48610	-
Wood and other solid waste							
Fuel input (TJ)	1134	-	730	335	371	252	-
Electricity production (GWh)	136	-	92	20	22	15	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	-	- e	296	381	753	-
Electricity production (GWh)	-	-	-	15	17	52	-
CHP Heat production (TJ)	-	-	-	161	213	371	-
Total combustible fuels(2)							
Electricity production (GWh)	2131	3143	5008	7369	7956	8865	5.1
CHP Heat production (TJ)	-	-	16183	44383	51330	50917	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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TURKEY
11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**19.86**	**26.32**	**40.07**	**57.85**	**73.16**	**77.61**	**81.46**	**4.2**	**3.4**
Geothermal	0.05	0.06	0.36	0.62	1.25	1.39	1.46	12.6	6.8
Solar thermal	-	-	0.03	0.26	0.30	0.30	0.44	-	14.0
Coal	2.97	4.20	7.53	10.84	12.81	14.12	13.09	5.6	2.7
Oil	9.54	12.69	20.37	26.13	28.60	28.39	28.23	4.6	1.6
Natural gas	-	-	0.71	4.91	11.25	13.13	17.67	-	16.5
Biofuels & waste	6.45	7.68	7.21	6.45	4.58	4.44	3.55	0.7	-3.3
Electricity	0.85	1.68	3.87	8.25	13.31	14.61	15.80	9.3	6.9
Heat	-	-	-	0.39	1.06	1.23	1.22	-	-
of which:									
Total industry	**3.71**	**6.55**	**10.90**	**19.74**	**18.61**	**22.58**	**24.96**	**6.5**	**4.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	0.01	0.10	-	-	-	-	-
Coal	1.14	2.17	4.50	8.83	5.94	7.29	6.94	8.4	2.1
Oil	2.02	3.33	3.54	4.80	1.33	1.12	1.56	3.4	-3.8
Natural gas	-	-	0.49	1.67	4.39	6.31	7.88	-	14.1
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.55	1.05	2.35	3.96	5.88	6.64	7.37	8.9	5.6
Heat	-	-	-	0.39	1.06	1.23	1.22	-	-
Transport	**4.38**	**5.49**	**9.22**	**11.76**	**14.94**	**14.63**	**14.85**	**4.5**	**2.3**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.52	0.18	0.01	0.00	-	-	-	-18.9	-
Oil	3.85	5.29	9.18	11.65	14.69	14.35	14.56	5.2	2.2
Natural gas	-	-	-	0.04	0.19	0.22	0.22	-	-
Biofuels & waste	-	-	-	-	0.01	0.01	0.02	-	-
Electricity	0.01	0.01	0.03	0.07	0.06	0.05	0.06	7.6	3.2
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**0.31**	**0.31**	**0.64**	**2.31**	**6.49**	**5.69**	**6.45**	**4.3**	**11.7**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.00	0.00	0.00	-	0.83	0.27	0.28	-9.1	33.5
Oil	0.16	-	-	-	-	-	-	-	-
Natural gas	-	-	-	0.42	2.07	1.54	2.04	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.15	0.30	0.64	1.90	3.59	3.88	4.13	8.8	9.3
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**10.08**	**12.21**	**14.53**	**17.59**	**21.40**	**22.45**	**23.53**	**2.2**	**2.3**
Geothermal	0.05	0.06	0.36	0.62	1.25	1.39	1.46	12.6	6.8
Solar thermal	-	-	0.02	0.16	0.30	0.30	0.44	-	15.9
Coal	1.30	1.85	3.01	2.02	5.90	6.46	5.79	5.1	3.2
Oil	2.16	2.32	3.11	3.59	1.62	1.45	1.27	2.2	-4.2
Natural gas	-	-	0.04	2.69	4.40	4.85	7.23	-	28.0
Biofuels & waste	6.45	7.68	7.21	6.45	4.58	4.43	3.53	0.7	-3.3
Electricity	0.12	0.30	0.78	2.05	3.37	3.56	3.81	11.7	7.8
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**0.79**	**0.93**	**1.95**	**2.92**	**4.74**	**4.96**	**5.39**	**5.4**	**5.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	0.00	0.00	-	-	-
Oil	0.79	0.91	1.90	2.65	4.29	4.45	4.89	5.3	4.6
Natural gas	-	-	-	-	0.03	0.02	0.05	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.00	0.01	0.05	0.26	0.42	0.48	0.44	14.9	11.0
Heat	-	-	-	-	-	-	-	-	-
Other	**0.02**	**0.00**	**0.02**	**-**	**0.13**	**0.09**	**0.09**	**1.3**	**7.6**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	0.13	0.09	0.09	-	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	-	-	-	-	-
Electricity	0.02	0.00	0.02	-	-	-	-	1.3	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**0.57**	**0.84**	**2.81**	**3.52**	**6.85**	**7.20**	**6.20**	**9.83**	**3.84**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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TURKEY

12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**19.86**	**26.32**	**40.07**	**57.85**	**74.38**	**73.16**	**77.61**	**81.46**
Total industry (Mtoe)	**3.71**	**6.55**	**10.90**	**19.74**	**18.01**	**18.61**	**22.58**	**24.96**
Iron and steel	0.41	1.09	1.69	2.34	3.33	2.97	3.92	4.66
Chem. and petrochemical	0.43	0.62	1.50	1.35	1.07	1.21	1.43	2.03
Non-ferrous metals	0.03	0.30	0.70	0.70	0.36	0.64	0.71	0.86
Non-metallic minerals	0.10	0.17	0.54	1.05	2.10	2.07	2.21	2.29
Transport equipment	-	-	0.00	0.02	0.04	0.06	0.04	0.25
Machinery	0.03	0.05	0.13	0.25	0.44	0.38	0.48	0.53
Mining and quarrying	0.02	0.02	0.04	0.06	0.12	0.12	0.22	0.21
Food and tobacco	0.22	0.38	1.03	1.17	1.02	1.10	1.48	1.98
Paper, pulp and printing	-	0.23	0.15	0.41	0.36	0.36	0.35	0.43
Wood and wood products	0.05	0.09	0.17	0.06	0.14	0.47	0.47	0.21
Construction	0.20	0.29	1.35	1.31	3.04	2.31	2.60	3.16
Textile and leather	0.28	0.46	0.84	1.37	1.17	1.47	1.72	1.80
Non specified/other	1.95	2.85	2.76	9.66	4.81	5.45	6.96	6.54
Electricity consumption (Mtoe)	**0.85**	**1.68**	**3.87**	**8.25**	**13.71**	**13.31**	**14.61**	**15.80**
Total industry (Mtoe)	**0.55**	**1.05**	**2.35**	**3.96**	**6.22**	**5.88**	**6.64**	**7.37**
Iron and steel	0.07	0.16	0.42	0.72	1.38	1.38	1.43	1.72
Chem. and petrochemical	0.06	0.11	0.29	0.23	0.32	0.28	0.37	0.35
Non-ferrous metals	0.02	0.13	0.22	0.22	0.21	0.17	0.20	0.21
Non-metallic minerals	0.10	0.17	0.34	0.50	0.77	0.77	0.86	0.95
Transport equipment	..	..	..	..	-	-	-	-
Machinery	0.03	0.03	0.10	0.21	0.31	0.34	0.41	0.47
Mining and quarrying	0.02	0.02	0.04	0.06	0.12	0.11	0.16	0.09
Food and tobacco	0.07	0.13	0.22	0.27	0.42	0.42	0.44	0.54
Paper, pulp and printing	..	..	..	0.14	0.17	0.16	0.19	0.22
Wood and wood products	0.05	0.09	0.17	0.06	0.14	0.14	0.16	0.16
Construction	0.00	0.02	0.03	0.10	0.19	0.17	0.19	0.24
Textile and leather	0.11	0.15	0.34	0.78	0.99	1.03	1.19	1.17
Non specified/other	0.02	0.05	0.19	0.68	1.20	0.92	1.02	1.23
Total industry (TWh)	**6.44**	**12.15**	**27.34**	**46.09**	**72.32**	**68.39**	**77.17**	**85.66**
Iron and steel	0.84	1.82	4.84	8.40	16.02	16.00	16.58	20.05
Chem. and petrochemical	0.66	1.22	3.37	2.62	3.69	3.22	4.34	4.08
Non-ferrous metals	0.23	1.52	2.55	2.51	2.47	1.92	2.31	2.48
Non-metallic minerals	1.21	2.00	3.99	5.87	9.01	8.92	10.01	11.00
Transport equipment	..	..	..	..	-	-	-	-
Machinery	0.30	0.39	1.14	2.48	3.65	4.00	4.81	5.46
Mining and quarrying	0.21	0.18	0.47	0.68	1.41	1.33	1.88	1.10
Food and tobacco	0.85	1.54	2.59	3.09	4.83	4.92	5.13	6.27
Paper, pulp and printing	..	..	..	1.64	1.96	1.83	2.21	2.54
Wood and wood products	0.61	1.02	1.92	0.67	1.63	1.64	1.85	1.91
Construction	0.02	0.19	0.40	1.21	2.17	1.92	2.26	2.84
Textile and leather	1.22	1.74	3.92	9.06	11.55	12.01	13.89	13.64
Non specified/other	0.29	0.52	2.15	7.86	13.95	10.68	11.91	14.30

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**-**	**1341**	**176**	**-**	**3791**	**789**	**812**	**1144**	**4556**
Imports from:									
Total from OECD	**-**	**-**	**-**	**-**	**-**	**30**	**-**	**-**	**839**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	30	-	-	839
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**1341**	**176**	**-**	**3501**	**759**	**812**	**1144**	**3717**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	94	125	156	330
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	750	-	-	3297	-	-	-	2094
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	591	176	-	204	215	182	303	219
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	450	505	685	1074
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**290**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [(1)]	**-**	**-**	**907**	**696**	**437**	**1122**	**1546**	**1918**	**3645**
Exports to:									
Total to OECD	**-**	**-**	**-**	**-**	**-**	**59**	**-**	**-**	**1790**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	59	-	-	1790
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**907**	**673**	**437**	**54**	**-**	**-**	**642**
Albania	-	-	84	-	-	-	-	-	-
Azerbaijan	-	-	-	495	437	-	-	-	20
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	506	-	-	-	-	-	622
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	122	178	-	54	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	195	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**23**	**-**	**1009**	**1546**	**1918**	**1213**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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TURKEY

15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**3.31**	**4.52**	**15.12**	**19.61**	**24.27**	**38.29**	**41.71**	**46.38**	**49.89**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	1.44	2.12	6.75	9.85	11.14	13.28	14.01	15.29	16.59
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	0.02	0.02	0.02	0.03	0.08	0.09	0.11
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	0.02	0.36	0.79	1.32	1.73
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	1.87	2.40	8.35	9.74	13.10	24.62	26.83	29.68	31.46
of which:									
Single-fired:									
Coal and coal products	0.79	1.20	5.02	6.21	6.69	9.84	10.24	11.60	12.20
Liquid fuels	1.08	1.21	1.13	0.98	0.98	1.28	1.40	1.35	1.09
Natural gas	-	-	2.21	2.55	4.24	9.59	11.04	12.48	12.39
Biofuels & waste	-	-	-	-	-	0.03	0.05	0.07	0.09
Multi-fired:									
Solid / liquid	-	-	-	-	-	-	-	-	0.03
Solid / natural gas	-	-	-	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	1.19	3.89	4.10	4.18	5.66
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	..	..	-	-	7.37	9.21	9.61	10.97	11.57
Internal combustion	..	..	-	-	0.10	0.87	1.21	1.33	1.64
Gas turbine	..	..	-	-	0.02	0.58	1.35	1.37	1.85
Combined cycle	..	..	-	-	5.61	13.91	14.58	15.91	16.30
Other	..	..	8.35	9.74	-	0.05	0.08	0.10	0.10
Peak load	2.23	3.82	8.82	13.49	17.29	28.55	28.06	31.64	34.49
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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TURKEY

15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**0.43**	**0.60**	**1.19**	**1.35**	**3.00**	**3.53**	**3.06**	**3.14**	**3.02**
Nuclear	-	-	-	-	-	-	-	-	-
Hydro	0.01	0.01	0.01	0.01	0.04	0.55	0.54	0.54	0.54
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	-	-	-	-
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	0.42	0.59	1.18	1.34	2.96	2.98	2.51	2.60	2.47
of which:									
Single-fired:									
Coal and coal products	0.16	0.18	0.18	0.16	0.30	0.36	0.35	0.35	0.35
Liquid fuels	0.20	0.21	0.62	0.38	0.61	0.54	0.30	0.24	0.21
Natural gas	-	-	-	0.33	0.66	1.07	0.78	0.83	0.75
Biofuels & waste	0.01	0.01	-	0.01	0.02	0.03	0.04	0.04	0.04
Multi-fired:									
Solid / liquid	0.05	0.18	0.37	0.41	0.41	0.46	0.16	0.18	0.18
Solid / natural gas	-	-	-	-	-	0.02	0.02	0.03	0.03
Liquid / natural gas	-	-	-	0.04	0.95	0.51	0.63	0.69	0.67
Solid / liquid / gas	-	-	-	-	-	-	0.25	0.25	0.25
Type of generation									
Steam	..	..	-	-	1.15	1.34	1.38	1.47	1.46
Internal combustion	..	..	-	-	0.14	0.44	0.24	0.24	0.24
Gas turbine	..	..	-	-	0.43	0.67	0.73	0.72	0.71
Combined cycle	..	..	-	-	1.24	0.53	0.16	0.16	0.05
Other	..	..	1.18	1.34	-	0.01	0.01	0.01	0.01
Peak load	0.07	0.13	0.36	0.68	2.10	1.97	1.81	1.75	1.63
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				New Turkish Lira/ unit					
Steam coal (t)	..	-	0.02	9.01	42.01	49.69	54.53	62.50	69.57
Heavy fuel oil (t)	-	0.0	0.6	128.9	1297.7	1241.5	1395.2	1873.3	2183.2
Natural gas (MWh)(1)	..	..	0.0	9.1	63.9	62.0	51.2	55.7	73.4
				New Turkish Lira/ toe					
Steam coal	..	0.01	0.12	45.06	210.07	248.46	272.65	312.51	347.86
Heavy fuel oil	-	0.02	0.65	134.23	1351.79	1293.26	1453.30	1951.37	2274.15
Natural gas(2)	..	..	0.41	117.07	825.44	801.42	660.96	719.82	948.46
End-user prices of electricity									
				New Turkish Lira/ MWh					
Industry									
Price	0.00	0.00	0.21	49.99	180.27	212.91	226.22	231.38	265.56
of which: tax	0.00	0.00	0.02	7.63	33.39	39.42	41.88	42.84	49.16
Household									
Price	0.00	0.01	0.13	52.78	214.04	255.38	276.02	282.63	331.00
of which: tax	0.00	0.00	0.02	9.76	46.10	54.99	59.43	60.86	71.27

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	218.07	198.43	205.92	222.94	201.83	188.07	192.38	-0.3	-0.3
GDP (billion 2005 USD)	1081.57	1155.16	1510.32	1984.06	2363.18	2386.63	2393.14	2.0	2.1
TPES/GDP(1)	0.20	0.17	0.14	0.11	0.09	0.08	0.08	-2.3	-2.4
Population (millions)	56.22	56.33	57.24	58.89	62.26	62.74	63.22	0.1	0.5
TPES/population(2)	3.88	3.52	3.60	3.79	3.24	3.00	3.04	-0.4	-0.8
TPES/GDP (2005 = 100)	208	177	141	116	88	81	83	-2.3	-2.4
Ele.TFC/GDP(2005=100)(3)	142	134	120	109	92	88	..	-1.0	..
Ele.TFC/population(4)	4147	4161	4796	5596	5283	5071	..	0.9	..
Elec. generated (TWh)(5)	281.35	284.07	317.76	374.38	378.62	364.90	360.22	0.7	0.6

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**218.07**	**198.43**	**205.92**	**222.94**	**201.83**	**188.07**	**192.38**	**-0.3**	**-0.3**
Coal	76.43	68.80	63.11	36.50	30.20	30.66	38.61	-1.1	-2.2
Oil	108.90	79.34	76.37	73.22	63.31	60.50	58.79	-2.1	-1.2
Natural gas	25.11	40.31	47.19	87.37	84.79	70.18	66.29	3.8	1.6
Biofuels & waste	-	-	0.63	1.92	5.83	6.27	6.96	-	11.6
Nuclear	7.30	9.65	17.13	22.17	16.19	17.98	18.35	5.2	0.3
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Solar, wind, tide(1)	-	-	0.01	0.09	0.97	1.46	1.89	-	26.4
Hydro	0.33	0.33	0.45	0.44	0.31	0.49	0.45	1.8	0.0
Net electricity imports(2)	0.01	0.00	1.03	1.22	0.23	0.54	1.04	36.1	0.0
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**282.0**	**285.3**	**319.7**	**377.1**	**398.4**	**381.8**	**367.8**	**363.2**
Nuclear	28.0	37.0	65.7	85.1	81.6	62.1	69.0	70.4
Hydro	4.6	5.1	7.2	7.8	7.9	6.8	8.6	8.2
of which:								
pumped storage production	*0.7*	*1.2*	*2.0*	*2.7*	*2.9*	*3.2*	*2.9*	*3.0*
Geothermal	-	-	-	-	-	-	-	-
Solar	-	-	-	0.0	0.0	0.0	0.3	1.3
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	0.0	0.9	2.9	10.2	15.5	19.4
Combustible fuels	249.5	243.2	246.8	283.3	306.0	302.6	274.5	263.9
Coal	*174.6*	*207.9*	*206.4 e*	*122.3*	*136.3*	*108.8*	*109.6*	*143.6*
Oil	*72.2*	*33.1*	*34.7 e*	*8.4*	*5.3*	*4.8*	*3.7*	*3.6*
Natural gas	*2.7*	*2.1*	*5.0 e*	*148.1*	*152.6*	*175.7*	*146.8*	*99.7*
Biofuels & waste	-	-	*0.7*	*4.5*	*11.7*	*13.4*	*14.4*	*17.0*
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-
- Own use by power plant	19.2	19.0	19.6	16.3	17.9	16.1	16.5	..
Net production	**262.9**	**266.3**	**300.1**	**360.8**	**380.5**	**365.7**	**351.3**	**..**
Nuclear	..	32.3	58.7	78.3	75.2	56.4	62.7	..
Hydro	..	5.1	7.1	7.7	7.5	6.8	8.5	..
Geothermal	..	-	-	-	-	-	-	..
Solar	..	-	-	0.0	0.0	0.0	0.3	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	0.0	0.9	2.9	10.2	15.5	..
Combustible fuels	..	228.9	234.4	273.8	294.9	292.3	264.4	..
Other (e.g. fuel cells)	..	-	-	-	-	-	-	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	0.9	1.5	2.6	3.5	3.7	4.2	3.8	3.8
+ Imports	0.2	0.0	12.0	14.3	11.2	7.1	8.7	13.8
- Exports	0.1	0.0	0.0	0.1	2.8	4.5	2.5	1.7
Electrical energy supplied	**262.1**	**264.9**	**309.4**	**371.4**	**385.1**	**364.1**	**353.7**	**..**
- Transmission & distr. losses	19.6	21.5	25.0	31.1	27.9	26.7	27.9	..
- Statistical difference	-	-	-	-	0.0	-0.0	-0.0	..
Total consumption	**242.5**	**243.3**	**284.4**	**340.3**	**357.2**	**337.5**	**325.9**	**..**
- Energy industry consumption[2]	9.4	9.0	10.0	10.9	8.5	8.7	7.9	..
Final consumption	**233.1**	**234.3**	**274.4**	**329.4**	**348.7**	**328.8**	**318.0**	**..**
Industry	91.3	87.3	100.6	114.1	116.0	104.5	102.4	..
Transport	2.6	3.0	5.3	8.6	4.1	4.1	4.1	..
Commercial & publ. serv.	43.9	53.9	70.9	90.5	98.9	97.3	96.0	..
Residential	91.3	86.1	93.8	111.8	125.7	118.8	111.6	..
Agriculture & fishing	4.0	4.0	3.8	4.4	4.0	4.0	3.9	..
Sector non specified	-	-	-	-	-	-	-	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**273.13**	**285.30**	**319.74**	**377.07**	**376.78**	**381.77**	**367.80**	**1.0**	**0.7**
- Hydro pumped storage	*0.73*	*1.23*	*1.98*	*2.69*	*3.69*	*3.15*	*2.91*	*6.4*	*1.8*
Total generation(1)	**272.40**	**284.07**	**317.76**	**374.38**	**373.09**	**378.62**	**364.90**	**1.0**	**0.7**
Main activity producers									
Gross production	250.47	266.38	298.50	337.68	334.76	339.94	324.32	1.1	0.4
- Hydro pumped storage	*0.73*	*1.23*	*1.98*	*2.69*	*3.69*	*3.15*	*2.91*	*6.4*	*1.8*
Total generation(1)	249.74	265.15	296.51	334.98	331.07	336.79	321.41	1.1	0.4
Nuclear	29.40	33.46	61.31	85.06	69.10	62.14	68.98	4.7	0.6
Hydro	3.50	3.27	4.39	4.33	4.29	2.76	4.59	1.4	0.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	-	-	6.90	7.95	12.68	-	-
Coal	140.78	201.72	201.33	117.03	99.29	103.94	104.80	2.3	-3.1
Oil	66.64	26.16	29.48	2.42	3.84	2.27	1.08	-5.0	-14.6
Natural gas	9.42	0.54	-	125.71	144.98	154.04	124.76	-	-
Biofuels & waste	-	-	-	0.44	2.67	3.69	4.53	-	-
Autoproducers									
Gross production	22.67	18.92	21.24	39.39	42.02	41.83	43.49	-0.4	3.5
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	22.67	18.92	21.24	39.39	42.02	41.83	43.49	-0.4	3.5
Nuclear	4.22	3.56	4.44	-	-	-	-	0.3	-
Hydro	0.57	0.63	0.81	0.76	0.95	0.89	1.09	2.3	1.4
Geothermal	-	-	-	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	0.01	0.95	2.42	2.26	3.07	-	32.0
Coal	8.05	6.18	5.11	5.28	5.16	4.86	4.83	-2.8	-0.3
Oil	8.77	6.98	5.20	6.03	2.16	2.53	2.59	-3.2	-3.3
Natural gas	1.06	1.58	5.00	22.37	21.52	21.62	22.06	10.2	7.3
Biofuels & waste	-	-	0.68	4.02	9.82	9.68	9.85	-	13.6

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers (GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**16814**	**13509**	**19524**	**37548**	**39947**	**39877**	**41250**	**3.6**
Total energy	**-**	**-**	**4194**	**10103**	**19471**	**20809**	**21813**	**8.2**
Coal mines	-	-	-	-	-	-	-	-
Oil and gas extraction	-	-	-	-	-	-	-	-
Patent fuel plants	-	-	-	-	-	-	-	-
Coke ovens	-	-	-	-	-	-	-	-
Gas works	-	-	-	-	-	-	-	-
BKB	-	-	-	-	-	-	-	-
Oil refineries	-	-	1982	5521	4680	5158	5323	4.8
Energy non specified/other	-	-	2212	4582	14791	15651	16490	10.0
Total industry	**16196**	**12826**	**13499**	**23336**	**15833**	**14987**	**14977**	**0.5**
Iron and steel	2049	806	1138	2531	1837	1494	1326	0.7
Chemical and petrochemical	7477	6931	7131	10505	4228	4538	4634	-2.0
Non-ferrous metals	-	-	1759	2698	3639	3605	3748	3.7
Non-metallic minerals	-	-	80	457	76	85	95	0.8
Transport equipment	354	49	52	170	142	155	136	4.7
Machinery	96	49	35	565	366	262	266	10.1
Mining and quarrying	236	40	42	245	250	228	184	7.3
Food and tobacco	490	520	1033	2038	2082	2059	2119	3.5
Pulp and printing	2443	1527	1786	3764	2791	2239	2211	1.0
Wood and wood products	-	-	-	-	-	-	-	-
Construction	-	-	-	-	-	-	-	-
Textile and leather	459	247	9	103	4	5	5	-2.8
Non specified/other industries	2592	2657	434	260	418	317	253	-2.5
Total transport	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Rail and pipeline	-	-	-	-	-	-	-	-
Transport non specified	-	-	-	-	-	-	-	-
Other	**618**	**683**	**1831**	**4109**	**4643**	**4081**	**4460**	**4.3**
Commerce and pub. services	-	-	1230	2353	2192	1906	2028	2.4
Residential	-	-	-	-	-	18	193	-
Agriculture and fishing	-	-	80	579	-	-	-	-
Sector non specified	618	683	521	1177	2451	2157	2239	7.2

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**5037**	**-**	**102110**	**57184**	**56966**	**57156**	**57156**	**-**
Nuclear	-	..	-	-	-	-	-	..
Geothermal	-	..	-	-	-	-	-	..
Coal	-	..	19641	8614	8273	8357	8357	..
Oil	5037	..	20757	1665	1612	1611	1611	..
Natural gas	-	..	61712	46905	47081	47188	47188	..
Biofuels & waste	-	..	-	-	-	-	-	..
Non-spec. comb. fuels	-	..	-	-	-	-	-	..
Chemical processes	-	..	-	-	-	-	-	..
Heat pumps	-	..	-	-	-	-	-	..
Electric boilers	-	..	-	-	-	-	-	..
Other sources(1)	-	..	-	-	-	-	-	..
of which:								
Main activity producers								
Total	-	-	-	-	-	-	..	-
Nuclear	-	..	-	-	-	-	..	..
Geothermal	-	..	-	-	-	-	..	..
Coal	-	..	-	-	-	-	..	..
Oil	-	..	-	-	-	-	..	..
Natural gas	-	..	-	-	-	-	..	..
Biofuels & waste	-	..	-	-	-	-	..	..
Non-spec. comb. fuels	-	..	-	-	-	-	..	..
Chemical processes	-	..	-	-	-	-	..	..
Heat pumps	-	..	-	-	-	-	..	..
Electric boilers	-	..	-	-	-	-	..	..
Other sources(1)	-	..	-	-	-	-	..	..
Autoproducers								
Total	5037	-	102110	57184	56966	57156	..	-
Nuclear	-	..	-	-	-	-	..	..
Geothermal	-	..	-	-	-	-	..	..
Coal	-	..	19641	8614	8273	8357	..	..
Oil	5037	..	20757	1665	1612	1611	..	..
Natural gas	-	..	61712	46905	47081	47188	..	..
Biofuels & waste	-	..	-	-	-	-	..	..
Non-spec. comb. fuels	-	..	-	-	-	-	..	..
Chemical processes	-	..	-	-	-	-	..	..
Heat pumps	-	..	-	-	-	-	..	..
Electric boilers	-	..	-	-	-	-	..	..
Other sources(1)	-	..	-	-	-	-	..	..

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**64.80**	**60.65**	**56.24**	**59.04**	**59.15**	**61.22**	**56.46**	**-0.8**	**0.0**
Coal	45.48	51.99	47.78	28.74	24.63	25.61	25.79	0.3	-2.9
Oil	18.37	8.11	7.14	1.96	1.52	1.19	0.93	-5.4	-9.3
Natural gas	0.94	0.55	1.11 e	27.04	29.56	30.74	25.60	1.0	16.1
Biofuels & waste	-	-	0.21	1.30	3.44	3.69	4.14	-	15.2
of which: ***main activity prod.***									
Total	**..**	**56.81**	**52.65**	**48.23**	**48.53**	**50.64**	**45.73**	**..**	**-0.7**
Coal	..	50.39	46.44	26.40	22.71	23.88	24.08	..	-3.1
Oil	..	6.29	6.20	0.36	0.98	0.60	0.32	..	-13.1
Natural gas	..	0.12	-	21.34	24.15	25.23	20.04	..	-
Biofuels & waste	..	-	-	0.13	0.68	0.92	1.29	..	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**7.30**	**9.65**	**17.13**	**22.17**	**18.01**	**16.20**	**18.00**	**5.2**	**0.2**
Nuclear	7.30	9.65	17.13	22.17	18.01	16.19	17.98	5.2	0.2
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	0.00	0.00	0.00	0.02	-	-
Non-Thermal									
Total	**0.33**	**0.33**	**0.45**	**0.52**	**1.25**	**1.19**	**1.82**	**1.8**	**6.9**
Hydro	0.33	0.33	0.45	0.44	0.45	0.31	0.49	1.8	0.4
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.00	0.08	0.80	0.88	1.33	-	42.6
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	91978	83330 e	45990	39465	41291	41653	-3.2
Fuel input (TJ)	2094150	1961834 e	1135944	980903	1026288	1035285	-3.0
Electricity production (GWh)	207530	202884 e	119289	102428	107090	107984	-3.0
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	9457	20962 e	35005	28320	24072	23937	0.6
Electricity production (GWh)	366	1324	1921	1005	732	767	-2.6
Petroleum products							
Fuel input (1000 t)	8486	7108 e	815 e	1173	673	353	-13.3
Fuel input (TJ)	343100	302815 e	33041 e	42499	25296	13924	-13.6
Electricity production (GWh)	33139	30176 e	2584	4008	2303	1106	-14.6
Natural gas (1)							
Fuel input (TJ)	25628	31446 e	1032197	1139020	1189212	949270	17.6
Electricity production (GWh)	2122	2198 e	128687	146377	155399	126192	21.3
Wood and other solid waste							
Fuel input (TJ)	-	-	6742	39816	50524	66332	-
Electricity production (GWh)	-	-	541	3635	4676	5499	-
Industrial waste							
Fuel input (TJ)	-	-	-	1172	841	1032	-
Electricity production (GWh)	-	-	-	140	142	118	-
Municipal waste							
Fuel input (TJ)	-	3244	15937	23771	24211	25949	10.4
Electricity production (GWh)	-	223	1304	1818	1827	1947	10.9
Biogases and liquid biofuels							
Fuel input (TJ)	-	1718	27038	62382	63277	63008	18.7
Electricity production (GWh)	-	139	2188	5030	5137	5098	18.7
Total combustible fuels(2)							
Electricity production (GWh)	243157	236944	256514	264441	277306	248711	0.2

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	-	684 e	208	216	207	204	-5.6
Fuel input (TJ)	-	15257 e	5147	5369	5145	5070	-5.1
Electricity production (GWh)	-	1780 e	661	610	604	599	-5.1
CHP Heat production (TJ)	-	-	-	-	-	-	-
Brown coal							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Coal manufactured gases(1)							
Fuel input (TJ)	-	2755 e	2640	3999	4120	2850	0.2
Electricity production (GWh)	-	450	429	405	371	272	-2.4
CHP Heat production (TJ)	-	-	-	-	-	-	-
Petroleum products							
Fuel input (1000 t)	-	862 e	685	390	470	478	-2.8
Fuel input (TJ)	-	36818 e	28588	17988	21915	22440	-2.3
Electricity production (GWh)	-	4500 e	5862	1986	2502	2559	-2.7
CHP Heat production (TJ)	5037	-	-	-	-	-	-
Natural gas(1)							
Fuel input (TJ)	-	20364 e	136230	154470	155696	156883	10.2
Electricity production (GWh)	-	2800 e	19390	20122	20257	20624	10.0
CHP Heat production (TJ)	-	-	-	-	-	-	-
Wood and other solid waste							
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Industrial waste							
Fuel input (TJ)	-	-	-	5225	1598	1405	-
Electricity production (GWh)	-	-	-	778	314	282	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Municipal waste							
Fuel input (TJ)	-	-	357	5552	6717	7692	-
Electricity production (GWh)	-	-	55	564	694	797	-
CHP Heat production (TJ)	-	-	-	-	-	-	-
Biogases and liquid biofuels							
Fuel input (TJ)	-	3904	4537	6210	7310	7859	3.4
Electricity production (GWh)	-	316	367	521	575	637	3.4
CHP Heat production (TJ)	-	-	-	-	-	-	-
Total combustible fuels(2)							
Electricity production (GWh)	-	9846	26764	24986	25317	25770	4.7
CHP Heat production (TJ)	5037	-	-	-	-	-	-

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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10. Heat produced for sale from combustible fuels in heat plants

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal and patent fuel							
Fuel input (1000 t)	..	..	656	482	477	477	..
Fuel input (TJ)	..	..	17239	11766	11495	11582	..
Heat production (TJ)	..	..	12438	7114	7046	7126	..
Brown coal							
Fuel input (1000 t)	..	..	-	-	-	-	..
Fuel input (TJ)	..	..	-	-	-	-	..
Heat production (TJ)	..	..	-	-	-	-	..
Peat							
Fuel input (1000 t)	..	..	-	-	-	-	..
Fuel input (TJ)	..	..	-	-	-	-	..
Heat production (TJ)	..	..	-	-	-	-	..
Coal manufactured gases(1)							
Fuel input (TJ)	..	..	8748	2151	2151	2151	..
Heat production (TJ)	..	..	7203	1209	1227	1231	..
Petroleum products							
Fuel input (1000 t)	..	..	710	62	62	62	..
Fuel input (TJ)	..	..	28770	2569	2630	2618	..
Heat production (TJ)	..	..	20757	1553	1612	1611	..
Natural gas(1)							
Fuel input (TJ)	..	..	89608	81928	85346	85220	..
Heat production (TJ)	..	..	61712	44583	47081	47188	..
Wood and other solid waste							
Fuel input (TJ)	..	..	-	-	-	-	..
Heat production (TJ)	..	..	-	-	-	-	..
Industrial waste							
Fuel input (TJ)	..	..	-	-	-	-	..
Heat production (TJ)	..	..	-	-	-	-	..
Municipal waste							
Fuel input (TJ)	..	..	-	-	-	-	..
Heat production (TJ)	..	..	-	-	-	-	..
Biogases and liquid biofuels							
Fuel input (TJ)	..	..	-	-	-	-	..
Heat production (TJ)	..	..	-	-	-	-	..
Total combustible fuels(2)							
Heat production (TJ)	..	..	102110	54459	56966	57156	..

Source: IEA/OECD Electricity Statistics.

(1) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.
(2) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**143.23**	**131.28**	**137.79**	**150.50**	**131.21**	**137.41**	**126.30**	**-0.2**	**-0.4**
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Solar thermal	-	-	0.01	0.01	0.07	0.09	0.11	-	11.9
Coal	31.72	14.14	10.77	4.12	2.77	2.65	2.54	-6.2	-6.6
Oil	73.09	59.62	61.22	62.57	55.77	55.98	54.14	-1.0	-0.6
Natural gas	18.37	37.24	41.77	52.42	41.83	47.01	38.75	5.0	-0.4
Biofuels & waste	-	-	0.42	0.62	1.90	2.14	2.14	-	8.1
Electricity	20.04	20.15	23.60	28.33	27.67	28.28	27.35	1.0	0.7
Heat	-	0.12	-	2.44	1.21	1.27	1.27	-	-
of which:									
Total industry	**52.54**	**39.28**	**31.83**	**33.92**	**25.69**	**26.51**	**25.97**	**-2.9**	**-1.0**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	14.04	5.96	6.38	2.51	2.10	1.96	1.88	-4.5	-5.6
Oil	21.23	12.19	6.30	6.03	4.86	4.91	4.35	-6.9	-1.8
Natural gas	9.42	13.50	10.40	14.19	9.01	9.41	9.63	0.6	-0.4
Biofuels & waste	-	-	0.10	0.28	0.38	0.41	0.46	-	7.7
Electricity	7.85	7.51	8.66	9.81	8.58	8.99	8.81	0.6	0.1
Heat	-	0.12	-	1.10	0.76	0.82	0.84	-	-
Transport	**27.63**	**30.37**	**39.18**	**41.87**	**40.91**	**40.75**	**40.31**	**2.1**	**0.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.05	0.04	0.00	-	0.01	0.01	0.01	-18.3	8.1
Oil	27.35	30.07	38.72	41.13	39.59	39.26	38.90	2.1	0.0
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.97	1.13	1.05	-	-
Electricity	0.22	0.26	0.45	0.74	0.35	0.35	0.35	4.2	-1.2
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**13.32**	**12.74**	**12.86**	**16.85**	**14.57**	**14.96**	**14.08**	**-0.2**	**0.4**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	2.92	1.32	0.90	0.04	0.04	0.02	0.02	-6.7	-17.1
Oil	5.86	4.64	3.10	1.41	0.68	0.65	0.75	-3.7	-6.5
Natural gas	0.76	2.14	2.73	6.25	5.14	5.42	4.57	7.8	2.5
Biofuels & waste	-	-	0.04	0.08	0.09	0.10	0.11	-	5.0
Electricity	3.78	4.64	6.09	7.78	8.22	8.37	8.26	2.9	1.5
Heat	-	-	-	1.29	0.39	0.39	0.38	-	-

Source: IEA/OECD *Energy Balances of OECD Countries* .

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**33.67**	**35.92**	**37.27**	**43.03**	**39.71**	**44.60**	**35.79**	**0.6**	**-0.2**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	14.62	6.80	3.48	1.56	0.61	0.66	0.63	-8.1	-7.8
Oil	3.88	2.63	2.31	3.02	2.81	3.19	2.49	-3.0	0.3
Natural gas	7.31	19.09	23.24	28.62	25.72	30.14	22.67	7.0	-0.1
Biofuels & waste	-	-	0.17	0.17	0.33	0.34	0.37	-	3.6
Electricity	7.85	7.41	8.07	9.62	10.19	10.22	9.60	0.2	0.8
Heat	-	-	-	0.04	0.05	0.05	0.05	-	-
Agriculture & fishing	**2.09**	**1.42**	**1.28**	**1.15**	**0.87**	**0.95**	**0.92**	**-2.8**	**-1.5**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	0.08	0.02	0.02	0.00	-	0.00	0.00	-8.3	-15.0
Oil	1.67	1.06	0.78	0.59	0.27	0.29	0.28	-4.4	-4.7
Natural gas	-	-	0.08	0.12	0.14	0.15	0.14	-	2.9
Biofuels & waste	-	-	0.07	0.06	0.13	0.15	0.16	-	3.8
Electricity	0.34	0.34	0.33	0.37	0.33	0.35	0.34	-0.2	0.1
Heat	-	-	-	-	-	-	-	-	-
Other	**1.92**	**4.45**	**4.55**	**2.36**	**1.49**	**1.58**	**1.48**	**5.2**	**-5.2**
Geothermal	-	-	0.00	0.00	0.00	0.00	0.00	-	-
Solar thermal	-	-	0.01	0.01	0.07	0.09	0.11	-	11.9
Coal	-	-	-	0.00	0.00	0.00	0.00	-	-
Oil	1.05	1.94	0.73	0.14	0.22	0.23	0.24	-2.1	-5.1
Natural gas	0.88	2.51	3.77	2.18	1.20	1.25	1.12	8.9	-5.6
Biofuels & waste	-	-	0.03	0.03	-	-	-	-	-
Electricity	-	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**12.06**	**7.10**	**10.82**	**11.32**	**7.97**	**8.07**	**7.75**	**-0.63**	**-1.58**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**143.23**	**131.28**	**137.79**	**150.50**	**141.58**	**131.21**	**137.41**	**126.30**
Total industry (Mtoe)	**52.54**	**39.28**	**31.83**	**33.92**	**30.06**	**25.69**	**26.51**	**25.97**
Iron and steel	9.53	4.81	4.64	3.27	2.30	1.61	1.50	1.49
Chem. and petrochemical	8.43	8.38	5.03	6.95	5.00	4.03	4.18	4.16
Non-ferrous metals	2.04	1.47	1.17	1.11	0.93	0.77	0.83	0.84
Non-metallic minerals	5.94	4.20	3.51	2.77	3.01	2.61	2.67	2.63
Transport equipment	2.28	1.47	1.05	1.57	1.29	1.10	1.14	1.14
Machinery	5.22	5.01	3.77	2.66	2.40	2.07	2.11	2.05
Mining and quarrying	0.83	0.63	0.28	0.34	-	-	-	-
Food and tobacco	4.63	4.05	3.58	3.36	3.25	2.80	2.97	2.98
Paper, pulp and printing	3.47	2.24	2.06	2.34	2.54	2.20	2.23	2.23
Wood and wood products	0.20	0.17	0.13	0.02	-	-	-	-
Construction	1.34	0.99	0.89	0.80	0.52	0.43	0.43	0.42
Textile and leather	2.78	2.06	1.08	1.10	0.91	0.79	0.79	0.79
Non specified/other	5.86	3.80	4.64	7.64	7.91	7.27	7.66	7.25
Electricity consumption (Mtoe)	**20.04**	**20.15**	**23.60**	**28.33**	**29.40**	**27.67**	**28.28**	**27.35**
Total industry (Mtoe)	**7.85**	**7.51**	**8.66**	**9.81**	**9.82**	**8.58**	**8.99**	**8.81**
Iron and steel	1.12	0.87	0.78	0.55	0.40	0.31	0.33	0.33
Chem. and petrochemical	1.77	1.64	1.56	2.04	1.74	1.52	1.59	1.51
Non-ferrous metals	0.58	0.73	0.58	0.53	0.64	0.52	0.58	0.60
Non-metallic minerals	0.45	0.45	0.65	0.70	0.68	0.60	0.62	0.60
Transport equipment	0.55	0.53	-	0.54	0.50	0.43	0.45	0.45
Machinery	1.01	0.99	1.80	1.34	1.38	1.22	1.23	1.18
Mining and quarrying	0.16	0.17	-	-	-	-	-	-
Food and tobacco	0.56	0.61	0.94	1.01	1.05	0.92	0.99	0.98
Paper, pulp and printing	0.50	0.49	0.69	0.98	1.11	0.95	0.94	0.94
Wood and wood products	0.08	0.08	-	-	-	-	-	-
Construction	0.06	0.07	0.11	0.14	0.16	0.14	0.14	0.13
Textile and leather	0.53	0.42	0.26	0.31	0.29	0.26	0.26	0.26
Non specified/other	0.50	0.45	1.29	1.68	1.87	1.70	1.85	1.83
Total industry (TWh)	**91.27**	**87.29**	**100.64**	**114.11**	**114.15**	**99.74**	**104.52**	**102.40**
Iron and steel	13.01	10.06	9.07	6.35	4.66	3.62	3.84	3.84
Chem. and petrochemical	20.53	19.12	18.19	23.73	20.29	17.70	18.45	17.50
Non-ferrous metals	6.78	8.45	6.71	6.15	7.39	6.08	6.73	6.97
Non-metallic minerals	5.19	5.25	7.51	8.11	7.93	7.01	7.27	7.01
Transport equipment	6.40	6.21	-	6.32	5.81	5.01	5.28	5.19
Machinery	11.70	11.47	20.90	15.62	16.01	14.14	14.31	13.76
Mining and quarrying	1.81	1.98	-	-	-	-	-	-
Food and tobacco	6.46	7.10	10.94	11.72	12.26	10.74	11.52	11.35
Paper, pulp and printing	5.77	5.73	7.98	11.42	12.87	11.07	10.95	10.91
Wood and wood products	0.90	0.92	-	-	-	-	-	-
Construction	0.75	0.85	1.28	1.59	1.82	1.59	1.62	1.54
Textile and leather	6.20	4.89	3.03	3.60	3.40	3.01	3.05	2.99
Non specified/other	5.77	5.25	15.03	19.51	21.73	19.77	21.49	21.33

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [1]	**177**	**22**	**11990**	**16336**	**14308**	**12294**	**6609**	**7144**	**8689**
Imports from:									
Total from OECD	**177**	**22**	**11990**	**16336**	**14308**	**12294**	**6609**	**7144**	**8689**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	177	22	11990	16306	14267	12142	6524	6998	6031
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	30	41	152	85	146	120
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	2538
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [1]	**114**	**19**	**47**	**23**	**134**	**1272**	**3748**	**4481**	**2467**
Exports to:									
Total to OECD	**114**	**19**	**47**	**23**	**134**	**1272**	**3748**	**4481**	**2467**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	-	-	-	-	-	-	-	-	-
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	114	19	47	23	1	899	3296	4103	1354
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	133	373	452	378	366
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	-	-	-	-	-	-	-
Netherlands	-	-	-	-	-	-	-	-	747
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**69.14**	**68.31**	**69.02**	**65.71**	**72.03**	**78.38**	**79.44**	**85.82**	**84.80**
Nuclear	3.75	5.77	10.73	12.37	12.49	10.98	10.86	10.87	10.66
Hydro	2.30	2.34	3.80	4.10	4.12	4.20	4.20	4.20	4.22
of which: pumped storage	-	-	*2.79*	*2.79*	*2.79*	*2.74*	*2.74*	*2.74*	*2.74*
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	-	-	-	-
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	-	-	2.32	2.80	4.23	5.21
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	63.09	60.20	54.50	49.24	55.43	60.88	61.57	66.53	64.71
of which:									
Single-fired:									
Coal and coal products	45.12	40.14	34.30	27.49	24.84	23.07	23.08	23.09	23.07
Liquid fuels	14.50	15.79	15.03	7.10	4.26	5.28	5.38	5.38	5.31
Natural gas	-	-	-	9.03	19.35	26.20	26.78	31.72	30.18
Biofuels & waste	-	-	-	0.07	0.12	0.21	0.21	0.22	1.09
Multi-fired:									
Solid / liquid	1.92	2.66	4.81	5.53	6.87	6.12	6.12	6.12	5.05
Solid / natural gas	1.57	1.61	0.37	-	-	-	-	-	-
Liquid / natural gas	-	-	-	-	-	-	-	-	-
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	51.37	38.31	34.64	32.96	32.97	32.98	31.90
Internal combustion	-	-	-	-	-	-	-	-	-
Gas turbine	-	-	3.13	1.89	1.32	1.50	1.61	1.61	1.53
Combined cycle	-	-	-	9.03	19.35	26.20	26.78	31.72	30.18
Other	-	-	-	-	0.12	0.21	0.21	0.22	1.09
Peak load	..	..	54.07	55.61	58.45	60.29	60.23	60.89	57.09
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**5.08**	**5.33**	**4.18**	**4.41**	**6.36**	**7.38**	**8.13**	**7.91**	**9.02**
Nuclear	0.54	0.69	0.62	0.39	-	-	-	-	-
Hydro	0.11	0.11	0.10	0.12	0.16	0.17	0.18	0.19	0.21
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-	-
Solar	-	-	-	-	-	0.02	0.03	0.08	0.98
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.01	0.20	0.41	1.09	1.62	1.15	1.28
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-
Combustible fuels	4.43	4.53	3.45	3.71	5.79	6.10	6.30	6.49	6.56
of which:									
Single-fired:									
Coal and coal products	-	-	1.10	1.09	1.07	0.80	0.83	0.82	0.80
Liquid fuels	4.43	4.53	0.90	0.89	0.93	0.70	0.72	0.72	0.70
Natural gas	-	-	-	0.15	1.79	2.02	1.95	1.97	1.91
Biofuels & waste	-	-	0.12	0.25	0.67	1.57	1.77	1.97	2.16
Multi-fired:									
Solid / liquid	-	-	0.60	0.60	0.27	0.20	0.21	0.20	0.20
Solid / natural gas	-	-	-	-	0.33	0.25	0.26	0.26	0.25
Liquid / natural gas	-	-	0.73	0.73	0.73	0.55	0.57	0.56	0.55
Solid / liquid / gas	-	-	-	-	-	-	-	-	-
Type of generation									
Steam	-	-	2.50	2.48	1.86	0.41	0.45	0.44	0.45
Internal combustion	-	-	0.17	0.17	0.18	0.14	0.14	0.14	0.14
Gas turbine	-	-	0.67	0.66	1.23	0.46	0.48	0.46	0.46
Combined cycle	-	-	-	0.15	1.79	2.02	1.95	1.97	1.91
Other	-	-	0.12	0.25	0.73	3.08	3.29	3.48	3.60
Peak load	..	..	..	..	..	..	..	..	-
Available capacity	..	..	..	..	..	..	..	..	-

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				Pounds Sterling/ unit					
Steam coal (t)	21.97	31.84	43.77	29.35	65.57	54.42	62.30	80.14	66.33
Heavy fuel oil (t)	49.72	85.73	53.16	119.80	291.31	259.97	408.85	502.94	540.87
Natural gas (MWh)(1)	3.05	4.43	c	5.91	16.44	14.03	14.61	19.14	21.35
				Pounds Sterling/ toe					
Steam coal	38.86	56.32	77.43	51.92	115.99	96.27	110.21	141.77	117.34
Heavy fuel oil	50.37	86.86	53.86	121.38	295.15	263.39	414.24	509.56	548.00
Natural gas(2)	39.41	57.27	c	76.37	212.40	181.31	188.81	247.36	275.95
End-user prices of electricity									
				Pounds Sterling/ MWh					
Industry									
Price	19.80	27.00	39.80	36.60	79.70	86.12	78.39	80.83	84.69
of which: tax	-	-	-	-	2.40	2.73	2.66	2.71	2.60
Household									
Price	27.20	37.50	66.70	70.50	118.92	122.62	118.53	131.82	139.33
of which: tax	-	-	-	3.40	5.66	5.84	5.64	6.28	6.63

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Figure 1. Total final consumption by fuel

Figure 2. Electricity generation by fuel

Figure 3. Electricity consumption by sector

Figure 4. Electricity indicators

Figure 5. Total final electricity consumption by sector

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1. Energy consumption, GDP and population

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	1729.94	1804.68	1915.00	2273.33	2215.50	2191.19	2132.45	0.6	0.5
GDP (billion 2005 USD)	4871.70	5796.40	7962.60	11158.10	12992.00	13225.90	13518.00	2.9	2.4
TPES/GDP(1)	0.36	0.31	0.24	0.20	0.17	0.17	0.16	-2.3	-1.9
Population (millions)	211.94	227.73	250.18	282.40	309.77	312.04	315.08	1.0	1.1
TPES/population(2)	8.16	7.92	7.65	8.05	7.15	7.02	6.77	-0.4	-0.6
TPES/GDP (2005 = 100)	192	169	130	110	92	90	85	-2.3	-1.9
Ele.TFC/GDP(2005=100)(3)	116	118	112	106	99	97	..	-0.2	..
Ele.TFC/population(4)	7870	8898	10530	12396	12278	12150	..	1.7	..
Elec. generated (TWh)(5)	1965.51	2427.32	3202.81	4025.89	4354.36	4326.63	4281.69	2.9	1.3

Source: IEA/OECD *Energy Balances of OECD Countries and OECD Main Economic Indicators.*

(1) In units of toe/2005 thousand US dollars.
(2) In units of toe/per capita.
(3) Ele.TFC = electricity total final consumption.
(4) In units of kWh/per capita.
(5) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

2. Total primary energy supply (TPES) by source

	1973	1980	1990	2000	2010	2011	2012e	Average annual percent change 73-90	90-12
TPES (Mtoe)	**1729.94**	**1804.68**	**1915.00**	**2273.33**	**2215.50**	**2191.19**	**2132.45**	**0.6**	**0.5**
Coal	311.05	376.23	460.20	533.63	502.64	479.00	426.08	2.3	-0.3
Oil	817.49	796.93	756.84	871.15	805.79	786.03	760.80	-0.5	0.0
Natural gas	514.51	476.78	438.23	547.58	555.92	568.73	594.78	-0.9	1.4
Biofuels & waste	37.50	54.49	62.26	73.23	89.30	91.46	90.31	3.0	1.7
Nuclear	23.24	69.37	159.38	207.89	218.63	214.06	208.41	12.0	1.2
Geothermal	2.11	4.60	14.10	13.09	8.41	8.55	9.59	11.8	-1.7
Solar, wind, tide(1)	-	-	0.32	2.07 e	10.03 e	12.48 e	15.19	-	19.2
Hydro	22.82	23.98	23.49	21.78	22.55	27.67	24.08	0.2	0.1
Net electricity imports(2)	1.23	2.30	0.17	2.92	2.23	3.20	3.20	-11.0	14.3
Heat	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

(1) Includes wave, ocean and other (e.g. fuel cells).
(2) Net Imports = total imports - total exports

Note: Please refer to definitions in the introductory information.

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3. Summary electricity production and consumption [1]
(TWh)

	1973	1980	1990	2000	2005	2010	2011	2012e
Gross production	**1965.5**	**2427.3**	**3218.6**	**4052.7 e**	**4294.4 e**	**4378.4 e**	**4349.6 e**	**4299.8**
Nuclear	89.2	266.2	611.6	797.7	810.7	838.9	821.4	799.7
Hydro	265.4	278.8	289.0	280.0	297.9	286.3	344.7	298.1
of which:								
pumped storage production	-	-	*15.8*	*26.8*	*25.5*	*24.1*	*22.9*	*18.1*
Geothermal	2.5	5.4	16.0	14.6	16.8	17.6	17.9	19.6
Solar	-	-	0.7	0.7 e	1.1 e	3.9 e	6.2 e	15.0
Tide, wave, ocean	-	-	-	-	-	-	-	-
Wind	-	-	3.1	5.7	17.9	95.1 e	120.9 e	140.9
Combustible fuels	1608.5	1877.0	2298.3 e	2954.0 e	3149.3	3135.6	3037.7	3025.6
Coal	*907.4*	*1242.9*	*1699.6 e*	*2129.5 e*	*2154.0 e*	*1994.2 e*	*1875.4 e*	*1640.5*
Oil	*336.0*	*263.2*	*130.6*	*118.5*	*141.3*	*48.1*	*39.5*	*29.0*
Natural gas	*364.9*	*370.5*	*381.7*	*634.3*	*782.8*	*1017.9*	*1045.3*	*1277.3*
Biofuels & waste	*0.3*	*0.5*	*86.4 e*	*71.7*	*71.2*	*75.4*	*77.5*	*78.7*
Other (e.g. fuel cells)	-	-	-	-	0.6	0.9	0.9	0.9
- Own use by power plant	100.8	141.2	188.8	235.9 e	206.4 e	221.2	215.9	..
Net production	**1864.7**	**2286.1**	**3029.8**	**3816.7 e**	**4088.0 e**	**4157.3 e**	**4133.7 e**	**..**
Nuclear	..	251.1	577.0	753.9	782.0	807.0	790.2	..
Hydro	..	276.0	286.1	275.0	295.8	284.3	342.3	..
Geothermal	..	5.1	15.1	14.1	14.7	15.2	15.4	..
Solar	..	-	0.7	0.7 e	1.1 e	3.8 e	6.0 e	..
Tide, wave, ocean	..	-	-	-	-	-	-	..
Wind	..	-	3.0	5.6	17.8	94.7 e	120.2 e	..
Combustible fuels	..	1753.9	2148.0	2767.5	2976.0	2951.4	2858.8	..
Other (e.g. fuel cells)	..	-	-	-	0.6	0.9	0.9	..
- Used for heat pumps	-	-	-	-	-	-	-	-
- Used for electric boilers	-	-	-	-	-	-	-	-
- Used for pumped storage	-	-	22.6	31.7	32.0	29.6	28.9	28.9
+ Imports	16.8	30.2	22.5	48.6	44.5	45.1	52.3	52.3
- Exports	2.6	3.5	20.5	14.7	19.8	19.1	15.0	15.0
Electrical energy supplied	**1878.9**	**2312.8**	**3009.2**	**3818.9 e**	**4080.6 e**	**4153.7 e**	**4142.1 e**	**..**
- Transmission & distr. losses	163.1	213.1	296.7	229.1 e	269.2	261.0	259.5	..
- Statistical difference	-	-	-	-	-	-	-	..
Total consumption	**1715.9**	**2099.8**	**2712.6**	**3589.8 e**	**3811.5 e**	**3892.7 e**	**3882.6 e**	**..**
- Energy industry consumption[2]	48.6	74.2	79.0	90.3	95.3	90.7	92.7	..
Final consumption	**1667.3**	**2025.5**	**2633.6**	**3499.5 e**	**3716.2 e**	**3801.9 e**	**3789.9 e**	**..**
Industry	645.8	746.1	866.5	1142.1	923.8	879.4	898.6	..
Transport	4.3	3.1	4.1	4.4	7.5	7.7	7.7	..
Commercial & publ. serv.	423.5	558.8	838.9	1160.3	1275.1	1330.1	1328.1	..
Residential	579.3	717.5	924.0	1192.4	1359.2	1445.7	1422.8	..
Agriculture & fishing	14.5	-	-	-	-	-	-	..
Sector non specified	-	-	-	0.2 e	150.5 e	139.0 e	132.8 e	..

Source: IEA/OECD Electricity Statistics.

(1) Electricity generation from main activity producer power plants and autoproducers.

(2) Energy industry consumption = electricity consumed by transformation industries for heating, traction and lighting purposes; excludes own use by power plant and electricity used for heat pumps, electric boilers and pumped storage.

Note: Please refer to definitions in the introductory information.

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4. Electricity production and generation by source (TWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 74-90	90-11
Total gross production	**1957.34**	**2427.32**	**3218.62**	**4052.67**	**4188.21**	**4378.42**	**4349.57**	**3.2**	**1.4**
- Hydro pumped storage	-	-	*15.81*	*26.78*	*22.82*	*24.07*	*22.95*	-	*1.8*
Total generation(1)	**1957.34**	**2427.32**	**3202.81**	**4025.89**	**4165.39**	**4354.36**	**4326.63**	**3.1**	**1.4**
Main activity producers									
Gross production	1957.34	2427.32	2987.97	3862.12	4039.01	4214.47	4185.00	2.7	1.6
- Hydro pumped storage	-	-	*15.81*	*26.78*	*22.82*	*24.07*	*22.95*	-	*1.8*
Total generation(1)	1957.34	2427.32	2972.16	3835.33	4016.19	4190.40	4162.06	2.6	1.6
Nuclear	121.25	266.18	611.47	797.72	830.21	838.93	821.41	10.6	1.4
Hydro	304.07	278.78	266.92	248.93	273.61	260.48	319.89	-0.8	0.9
Geothermal	2.60	5.35	9.10	14.62	17.05	17.58	17.89	8.1	3.3
Solar, wind, tide(2)	-	-	0.00	6.18	75.20	96.43	122.63	-	63.5
Coal	864.68	1242.87	1674.68 e	2074.51 e	1873.71 e	1969.15 e	1854.47 e	4.2	0.5
Oil	322.00	263.21	125.21	112.09	41.38	39.78	31.85	-5.7	-6.3
Natural gas	342.47	370.46	282.58	547.96	867.47	929.06	955.27	-1.2	6.0
Biofuels & waste	0.26	0.46	2.21	33.34	37.56	38.99	38.65	14.2	14.6
Autoproducers									
Gross production	-	-	230.65	190.55	149.20	163.95	164.57	-	-1.6
- Hydro pumped storage	-	-	-	-	-	-	-	-	-
Total generation(1)	-	-	230.65	190.55	149.20	163.95	164.57	-	-1.6
Nuclear	-	-	0.12	-	-	-	-	-	-
Hydro	-	-	6.24	4.28	1.98	1.78	1.84	-	-5.6
Geothermal	-	-	6.92	-	-	-	-	-	-
Solar, wind, tide(2)	-	-	3.73	0.18 e	2.17 e	3.57 e	5.29 e	-	1.7
Coal	-	-	24.97 e	54.99 e	18.96 e	25.04 e	20.94 e	-	-0.8
Oil	-	-	5.44	6.39	9.06	8.30	7.68	-	1.7
Natural gas	-	-	99.09	86.33	82.31	88.81	89.98	-	-0.5
Biofuels & waste	-	-	84.15	38.38	34.73	36.44	38.84	-	-3.6

Source: IEA/OECD *Energy Balances* and IEA/OECD *Energy Statistics of OECD Countries* .

(1) Electricity generated = gross production - amount of electricity produced in pumped storage plants.

(2) Includes wave, ocean and other sources (e.g. fuel cells, from chemical heat).

Note: Please refer to definitions in the introductory information.

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5. Net electricity production by autoproducers
(GWh)

	1974	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Total	**..**	**..**	**216177**	**185086 e**	**141496 e**	**155302 e**	**156191 e**	**-1.5**
Total energy	**..**	**..**	**-**	**4203 e**	**23880**	**25074**	**24857**	**-**
Coal mines	..	..	-	-	-	-	-	-
Oil and gas extraction	..	..	-	-	6314	6721	6360	-
Patent fuel plants	..	..	-	-	-	-	-	-
Coke ovens	..	..	-	-	-	-	-	-
Gas works	..	..	-	-	-	-	-	-
BKB	..	..	-	-	-	-	-	-
Oil refineries	..	..	-	-	17566	18353	18497	-
Energy non specified/other	..	..	-	4203 e	-	-	-	-
Total industry	**..**	**..**	**178649**	**64725 e**	**107676**	**118746**	**118053**	**-2.0**
Iron and steel	..	..	-	-	-	-	-	-
Chemical and petrochemical	..	..	-	-	53242	58158	59562	-
Non-ferrous metals	..	..	-	-	-	-	-	-
Non-metallic minerals	..	..	-	-	203	216	236	-
Transport equipment	..	..	-	-	254	208	168	-
Machinery	..	..	-	-	51	43	57	-
Mining and quarrying	..	..	-	-	531	589	590	-
Food and tobacco	..	..	-	-	5051	5779	6197	-
Pulp and printing	..	..	-	-	40670	41295	41006	-
Wood and wood products	..	..	-	-	1327	1355	1273	-
Construction	..	..	-	-	-	-	-	-
Textile and leather	..	..	-	-	370	570	213	-
Non specified/other industries	..	..	178649	64725 e	5977	10533	8751	-13.4
Total transport	**..**	**..**	**-**	**-**	**381**	**412**	**393**	**-**
Rail and pipeline	..	..	-	-	1	2	3	-
Transport non specified	..	..	-	-	380	410	390	-
Other	**..**	**..**	**37528**	**116158**	**9559**	**11070**	**12888**	**-5.0**
Commerce and pub. services	..	..	-	-	7761	8059	8251	-
Residential	..	..	-	-	22	103	141	-
Agriculture and fishing	..	..	-	-	235	258	259	-
Sector non specified	..	..	37528	116158 e	1541 e	2650 e	4237 e	-9.9

Source: IEA/OECD Electricity Statistics.

Notes: Data reported in this table prior to 1990 may refer to combustible fuels only.
Please refer to definitions in the introductory information.

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6. Heat production in transformation processes
(TJ)

	1980	1990	2000	2005	2010	2011	2012e	Average annual percent change 1990-2011
Total	**-**	**101308 e**	**323778 e**	**249773 e**	**508287 e**	**508637 e**	**508637**	**8.0**
Nuclear	-	-	-	-	-	-	-	-
Geothermal	-	-	-	-	-	-	-	-
Coal	-	20000 e	81572 e	50316 e	102689 e	96134 e	96134	7.8
Oil	-	-	6747 e	26682	36375	37234	37234	-
Natural gas	-	-	208341 e	156067	325217	332777	332777	-
Biofuels & waste	-	-	27118	16708	44006	42492	42492	-
Non-spec. comb. fuels	-	81308	-	-	-	-	-	-
Chemical processes	-	-	-	-	-	-	-	-
Heat pumps	-	-	-	-	-	-	-	-
Electric boilers	-	-	-	-	-	-	-	-
Other sources(1)	-	-	-	-	-	-	-	-
of which:								
Main activity producers								
Total	-	87663 e	323778 e	249773 e	508287 e	508637 e	..	8.7
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	6355 e	81572 e	50316 e	102689 e	96134 e	..	13.8
Oil	-	-	6747 e	26682	36375	37234	..	-
Natural gas	-	-	208341 e	156067	325217	332777	..	-
Biofuels & waste	-	-	27118	16708	44006	42492	..	-
Non-spec. comb. fuels	-	81308	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-
Autoproducers								
Total	-	13645 e	-	-	-	-	..	-
Nuclear	-	-	-	-	-	-	..	-
Geothermal	-	-	-	-	-	-	..	-
Coal	-	13645 e	-	-	-	-	..	-
Oil	-	-	-	-	-	-	..	-
Natural gas	-	-	-	-	-	-	..	-
Biofuels & waste	-	-	-	-	-	-	..	-
Non-spec. comb. fuels	-	-	-	-	-	-	..	-
Chemical processes	-	-	-	-	-	-	..	-
Heat pumps	-	-	-	-	-	-	..	-
Electric boilers	-	-	-	-	-	-	..	-
Other sources(1)	-	-	-	-	-	-	..	-

Source: IEA/OECD Electricity Statistics.

(1) Includes solar and recovered waste heat from industry sold to third parties.

Note: Please refer to definitions in the introductory information.

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7A. Fuel use for electricity and heat production from combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Combustible fuels									
Total	**381.98**	**438.23**	**552.65**	**689.34**	**642.87**	**678.90**	**654.94**	**2.2**	**0.8**
Coal	216.91	292.05	396.00 e	501.58 e	439.72	462.77	435.79	3.6	0.5
Oil	81.61	60.50	27.25	29.56	11.34	10.84	8.78	-6.2	-5.3
Natural gas	83.39	85.57	89.74 e	136.88 e	172.64	185.03	189.72	0.4	3.6
Biofuels & waste	0.07	0.11	39.66 e	21.31	19.17	20.25	20.65	45.1	-3.1
of which: ***main activity prod.***									
Total	**..**	**438.23**	**484.83**	**639.88**	**619.14**	**652.49**	**628.18**	**..**	**1.2**
Coal	..	292.05	391.69	489.79 e	436.62	458.35	431.97	..	0.5
Oil	..	60.50	27.25	18.41	9.30	8.99	7.01	..	-6.3
Natural gas	..	85.57	65.32	121.14 e	159.71	171.19	175.35	..	4.8
Biofuels & waste	..	0.11	0.57 e	10.54	13.51	13.96	13.85	..	16.4

Source: IEA/OECD *Energy Balances of OECD Countries.*

7B. Imputed energy used for electricity and heat production from non-combustible fuels
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Thermal									
Total	**25.34**	**73.97**	**173.32**	**220.61**	**224.62**	**227.27**	**223.05**	**12.0**	**1.2**
Nuclear	23.24	69.37	159.38	207.89	216.36	218.63	214.06	12.0	1.4
Geothermal	2.11	4.60	13.77	12.57	7.94 e	8.19 e	8.33 e	11.7	-2.4
Solar	-	-	0.17	0.15 e	0.33 e	0.46 e	0.65 e	-	6.5
Non-Thermal									
Total	**22.82**	**23.98**	**23.75**	**22.26**	**30.08**	**30.74**	**38.06**	**0.2**	**2.3**
Hydro	22.82	23.98	23.49	21.78	23.70	22.55	27.67	0.2	0.8
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	0.26	0.49	6.38	8.18 e	10.39 e	-	19.1
Other (e.g. fuel cells)	-	-	-	-	-	-	-	-	-

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Imputed inputs are calculated from the electricity produced from these energy sources using the methodology described in the introductory information.

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8. Electricity production from combustible fuels in electricity plants*

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	478660	625552 e	805132 e	771448	806918	762366	0.9
Fuel input (TJ)	12220721	15200225 e	19121463 e	17058460 e	17917708 e	16754347 e	0.5
Electricity production (GWh)	1193156	1565896 e	1949674 e	1762034 e	1851544 e	1730923 e	0.5
Brown coal							
Fuel input (1000 t)	37777	70943	68764	58039	61916	67211	-0.3
Fuel input (TJ)	538552	1061570	980785	825379	888768	973256	-0.4
Electricity production (GWh)	49715	96038	94082	79897	87353	94529	-0.1
Peat							
Fuel input (1000 t)	-	-	-	-	-	-	-
Fuel input (TJ)	-	-	-	-	-	-	-
Electricity production (GWh)	-	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	-	-	10047	4243	6526	6831	-
Electricity production (GWh)	-	-	877	233	340	339	-
Petroleum products							
Fuel input (1000 t)	62789	28779	25535	9242	9607	7533	-6.2
Fuel input (TJ)	2778658	1324986	1072721	355742	363330	278697	-7.2
Electricity production (GWh)	263213	125208	104552	34847	35469	27362	-7.0
Natural gas[2]							
Fuel input (TJ)	4020304	3039619	4404832	6239515	6746971	6953572	4.0
Electricity production (GWh)	370463	282576	426188	747486	805552	833328	5.3
Wood and other solid waste							
Fuel input (TJ)	-	222206 e	113950	144636	164893	158662	-1.6
Electricity production (GWh)	-	11539	10512	10251	11173	10807	-0.3
Industrial waste							
Fuel input (TJ)	-	9138	10421	15050	21683	22084	4.3
Electricity production (GWh)	-	749	923	1426	1598	1668	3.9
Municipal waste							
Fuel input (TJ)	-	162000 e	217946	240791	240076	248356	2.1
Electricity production (GWh)	-	9693	14525	14921	14899	15251	2.2
Biogases and liquid biofuels							
Fuel input (TJ)	-	30674	50532	93791	99886	106794	6.1
Electricity production (GWh)	-	2494	3905	7973	8560	9318	6.5
Total combustible fuels[3]							
Electricity production (GWh)	1877004	2094193 e	2605238 e	2659068	2816488	2723525	1.3

Source: IEA/OECD Electricity Statistics.

* Excludes CHP plants.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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9. Electricity and heat produced for sale from combustible fuels in combined heat and power plants (CHP plants)

	1980	1990	2000	2009	2010	2011	Average annual percent change 1990-2011
Hard coal[1] and patent fuel							
Fuel input (1000 t)	..	11445 e	30402 e	22012	23375	21865	3.1
Fuel input (TJ)	..	302045 e	788540 e	489858 e	524444 e	471610 e	2.1
Electricity production (GWh)	..	35063 e	75408 e	48127 e	51750 e	46120 e	1.3
CHP Heat production (TJ)	..	19742 e	81572 e	95870 e	95149 e	89528 e	7.5
Brown coal							
Fuel input (1000 t)	..	1096 e	1246 e	-	-	13	-19.0
Fuel input (TJ)	..	16154 e	18583 e	-	-	101	-21.5
Electricity production (GWh)	..	2651 e	3134 e	-	-	9	-23.7
CHP Heat production (TJ)	..	258 e	-	-	-	-	-
Peat							
Fuel input (1000 t)	..	-	-	-	-	-	-
Fuel input (TJ)	..	-	-	-	-	-	-
Electricity production (GWh)	..	-	-	-	-	-	-
CHP Heat production (TJ)	..	-	-	-	-	-	-
Coal manufactured gases[2]							
Fuel input (TJ)	..	-	83858 e	32604	38442	40727	-
Electricity production (GWh)	..	-	6323	2370	3207	3493	-
CHP Heat production (TJ)	..	-	-	8167	7540	6606	-
Petroleum products							
Fuel input (1000 t)	..	-	3926	3100	2243	2150	-
Fuel input (TJ)	..	-	141818	119118	90213	86196	-
Electricity production (GWh)	..	5441	13930	15598	12617	12162	3.9
CHP Heat production (TJ)	..	-	6747 e	39334	36375	37234	-
Natural gas[2]							
Fuel input (TJ)	..	1136099	1964502	1793760	1863246	1874841	2.4
Electricity production (GWh)	..	99093	208102	202290	212317	211926	3.7
CHP Heat production (TJ)	..	-	208341 e	329761	325217	332777	-
Wood and other solid waste							
Fuel input (TJ)	..	1153493 e	388431	222928	231045	232740	-7.3
Electricity production (GWh)	..	57006	32074	30227	31363	32106	-2.7
CHP Heat production (TJ)	..	-	9489	30839	26954	23028	-
Industrial waste							
Fuel input (TJ)	..	71583	58985	38004	44934	49986	-1.7
Electricity production (GWh)	..	3961	6247	4106	4772	5227	1.3
CHP Heat production (TJ)	..	-	187	3818	3807	4927	-
Municipal waste							
Fuel input (TJ)	..	11829 e	39483	33411	30125	28819	4.3
Electricity production (GWh)	..	920	2202	1988	1724	1643	2.8
CHP Heat production (TJ)	..	-	15251	11736	11362	12014	-
Biogases and liquid biofuels							
Fuel input (TJ)	..	-	12790	14106	15059	17181	-
Electricity production (GWh)	..	-	1325	1399	1340	1472	-
CHP Heat production (TJ)	..	-	2191	999	1883	2523	-
Total combustible fuels[3]							
Electricity production (GWh)	..	204135 e	348745 e	306105	319090	314158	2.1
CHP Heat production (TJ)	..	101308	323778 e	520524	508287	508637	8.0

Source: IEA/OECD Electricity Statistics.

(1) Includes sub-bituminous coal.

(2) Coal manufactured gases and natural gas are expressed on a gross calorific value basis.

(3) Includes non-specified combustible fuels not shown in this table.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
TFC[1]	**1315.37**	**1311.29**	**1293.50**	**1546.23**	**1458.67**	**1518.83**	**1503.71**	**-0.1**	**0.7**
Geothermal	-	-	0.34	0.52	0.22	0.22	0.22	-	-2.0
Solar thermal	-	-	-	1.44	1.37	1.39	1.44	-	-
Coal	74.09	56.16	55.66	32.58	23.54	26.85	24.58	-1.7	-3.8
Oil	693.49	689.14	683.29	793.42	736.79	760.53	747.31	-0.1	0.4
Natural gas	366.97	337.41	302.99	359.89	311.99	327.17	326.79	-1.1	0.4
Biofuels & waste	37.43	54.38	22.59	52.15	64.73	69.06	70.80	-2.9	5.6
Electricity	143.39	174.19	226.49	300.95	313.23	326.97	325.93	2.7	1.7
Heat	-	-	2.15	5.28	6.79	6.64	6.64	-	5.5
of which:									
Total industry	**393.80**	**387.38**	**283.73**	**332.26**	**259.16**	**287.45**	**287.01**	**-1.9**	**0.1**
Geothermal	-	-	-	0.11	0.11	0.11	0.11	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	60.25	48.25	46.02	30.36	21.95	25.34	23.28	-1.6	-3.2
Oil	72.23	89.49	44.25	25.66	27.68	30.27	30.46	-2.8	-1.8
Natural gas	177.21	151.53	109.89	137.88	105.69	118.68	118.72	-2.8	0.4
Biofuels & waste	28.57	33.94	9.05	35.85	29.65	32.17	31.92	-6.5	6.2
Electricity	55.54	64.17	74.52	98.22	68.72	75.63	77.28	1.7	0.2
Heat	-	-	-	4.17	5.37	5.24	5.25	-	-
Transport	**414.27**	**425.27**	**487.57**	**588.24**	**575.07**	**595.34**	**589.37**	**1.0**	**0.9**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	397.06	410.25	471.80	569.49	537.65	554.10	546.37	1.0	0.7
Natural gas	16.84	14.75	15.41	15.18	14.58	16.30	16.59	-0.5	0.4
Biofuels & waste	-	-	-	3.19	22.17	24.27	25.75	-	-
Electricity	0.37	0.27	0.35	0.38	0.67	0.66	0.66	-0.2	3.0
Heat	-	-	-	-	-	-	-	-	-
Comm. & public serv.	**148.72**	**142.56**	**159.27**	**193.05**	**206.69**	**206.13**	**205.41**	**0.4**	**1.2**
Geothermal	-	-	-	0.19	0.08	0.08	0.08	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	3.42	1.82	2.41	0.89 e	1.59	1.51	1.30	-2.0	-2.9
Oil	48.81	32.00	21.31	16.66	15.83	15.39	14.23	-4.8	-1.9
Natural gas	60.07	60.68	61.25	73.17	71.69	71.17	72.16	0.1	0.8
Biofuels & waste	-	-	-	1.24	2.26	2.19	2.02	-	-
Electricity	36.42	48.06	72.14	99.79	113.81	114.39	114.21	4.1	2.2
Heat	-	-	2.15 e	1.11 e	1.43 e	1.39 e	1.39 e	-	-2.0

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Total final energy consumption (TFC) includes non-energy use but excludes use in transformation and energy industries.

Note: Please refer to notes in the introductory information for data coverage.

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11. Final consumption of energy by source (continued)
(Mtoe)

	1973	1980	1990	2000	2009	2010	2011	Average annual percent change 73-90	90-11
Residential	**237.50**	**215.58**	**209.88**	**264.04**	**262.35**	**268.25**	**263.59**	**-0.7**	**1.1**
Geothermal	-	-	-	0.22	0.03	0.03	0.03	-	-
Solar thermal	-	-	-	1.44	1.37	1.39	1.44	-	-
Coal	3.18	1.57	1.49	1.33 e	-	-	-	-4.4	-
Oil	71.66	41.85	26.37	31.91	22.44	21.51	19.75	-5.7	-1.4
Natural gas	112.86	110.45	102.56	116.23	111.06	110.93	109.23	-0.6	0.3
Biofuels & waste	-	-	-	10.37	10.29	10.05	10.77	-	-
Electricity	49.82	61.70	79.47	102.55	117.15	124.33	122.36	2.8	2.1
Heat	-	-	-	-	-	-	-	-	-
Agriculture & fishing	**16.27**	**13.60**	**14.40**	**14.10**	**14.44**	**16.07**	**14.70**	**-0.7**	**0.1**
Geothermal	-	-	-	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	-	-	-	-	-	-	-	-	-
Oil	15.02	13.60	14.40	14.10	14.09	15.70	14.36	-0.2	-0.0
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	-	-	-	-	0.34	0.37	0.34	-	-
Electricity	1.24	-	-	-	-	-	-	-	-
Heat	-	-	-	-	-	-	-	-	-
Other	**16.09**	**24.97**	**19.61**	**1.51**	**12.87**	**11.96**	**11.42**	**1.2**	**-2.5**
Geothermal	-	-	0.34	-	-	-	-	-	-
Solar thermal	-	-	-	-	-	-	-	-	-
Coal	7.24	4.53	5.74	-	-	-	-	-1.4	-
Oil	-	-	-	-	-	-	-	-	-
Natural gas	-	-	-	-	-	-	-	-	-
Biofuels & waste	8.85	20.44	13.54	1.50	-	-	-	2.5	-
Electricity	-	-	-	0.02 e	12.87 e	11.96 e	11.42 e	-	-
Heat	-	-	-	-	-	-	-	-	-
Non-energy use(1)	**88.72**	**101.94**	**119.04**	**153.03**	**128.08**	**133.64**	**132.21**	**1.74**	**0.50**

Source: IEA/OECD *Energy Balances of OECD Countries*.

(1) Refers to use of refined petroleum products, natural gas or coal for non energy purposes. This includes use of products such as white spirit, paraffin waxes, lubricants and bitumen, or transformations such as coal for graphite electrodes, as well as oil and natural gas used as petrochemical feedstocks.

Note: Please refer to notes in the introductory information for data coverage.

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12. Total final industry consumption of energy and electricity

	1973	1980	1990	2000	2008	2009	2010	2011
TFC (Mtoe)	**1315.37**	**1311.29**	**1293.50**	**1546.23**	**1538.38**	**1458.67**	**1518.83**	**1503.71**
Total industry (Mtoe)	**393.80**	**387.38**	**283.73**	**332.26**	**292.95**	**259.16**	**287.45**	**287.01**
Iron and steel	43.95	30.77	18.93	28.40	20.99	17.49	20.86	20.79
Chem. and petrochemical	20.30	25.76	67.79	92.41	74.78	66.17	72.92	73.16
Non-ferrous metals	9.43	12.09	6.26	19.51	13.26	11.81	13.11	13.25
Non-metallic minerals	5.99	10.50	10.69	24.57	27.76	23.59	26.23	26.04
Transport equipment	4.56	4.68	4.24	13.25	11.01	9.81	10.89	10.98
Machinery	4.81	6.60	11.47	24.82	21.23	18.92	21.00	21.21
Mining and quarrying	2.15	1.86	2.89	3.18	2.19	1.91	2.11	2.15
Food and tobacco	7.20	7.84	9.27	27.45	31.99	28.67	32.12	32.29
Paper, pulp and printing	19.35	18.79	18.10	57.15	55.26	48.87	53.37	53.77
Wood and wood products	1.93	2.06	2.61	13.26	13.24	12.11	13.44	12.87
Construction	-	-	0.99	0.56	1.36	1.32	1.28	1.43
Textile and leather	3.89	4.92	3.77	8.67	6.00	5.28	5.84	5.88
Non specified/other	270.24	261.52	126.73	19.04	13.87	13.21	14.27	13.17
Electricity consumption (Mtoe)	**143.39**	**174.19**	**226.49**	**300.95**	**327.90**	**313.23**	**326.97**	**325.93**
Total industry (Mtoe)	**55.54**	**64.17**	**74.52**	**98.22**	**78.68**	**68.72**	**75.63**	**77.28**
Iron and steel	5.48	5.88	6.27	6.50	6.85	5.99	6.59	6.73
Chem. and petrochemical	11.94	13.00	17.62	22.63	21.66	18.92	20.82	21.28
Non-ferrous metals	8.51	10.42	4.80	8.11	7.00	6.12	6.73	6.88
Non-metallic minerals	2.36	2.64	2.95	3.43	3.62	3.16	3.48	3.56
Transport equipment	2.42	2.58	3.30	5.18	3.98	3.47	3.82	3.90
Machinery	4.20	4.97	10.30	11.83	9.84	8.59	9.46	9.66
Mining and quarrying	1.97	1.86	2.89	3.18	2.19	1.91	2.11	2.15
Food and tobacco	3.26	3.66	5.13	6.52	7.25	6.33	6.97	7.12
Paper, pulp and printing	4.07	5.10	10.86	11.46	10.48	9.15	10.07	10.29
Wood and wood products	1.46	1.60	2.47	2.83	2.49	2.18	2.39	2.45
Construction	-	-	-	-	-	-	-	-
Textile and leather	2.97	2.85	3.21	3.28	2.45	2.14	2.35	2.40
Non specified/other	6.91	9.62	4.72	13.28 e	0.87	0.76	0.83	0.85
Total industry (TWh)	**645.80**	**746.14**	**866.54**	**1142.11**	**914.90**	**799.07**	**879.42**	**898.59**
Iron and steel	63.73	68.36	72.89	75.54	79.70	69.61	76.61	78.28
Chem. and petrochemical	138.86	151.11	204.93	263.12	251.88	219.99	242.11	247.39
Non-ferrous metals	98.91	121.19	55.81	94.35	81.44	71.13	78.28	79.99
Non-metallic minerals	27.40	30.68	34.31	39.88	42.10	36.77	40.47	41.35
Transport equipment	28.15	29.97	38.38	60.18	46.23	40.37	44.43	45.40
Machinery	48.79	57.76	119.78	137.54	114.40	99.92	109.96	112.36
Mining and quarrying	22.88	21.57	33.58	36.96	25.49	22.27	24.51	25.04
Food and tobacco	37.89	42.51	59.62	75.83	84.31	73.64	81.04	82.81
Paper, pulp and printing	47.37	59.34	126.25	133.24	121.86	106.43	117.13	119.69
Wood and wood products	16.92	18.62	28.75	32.85	28.96	25.29	27.84	28.45
Construction	-	-	-	-	-	-	-	-
Textile and leather	34.59	33.14	37.34	38.19	28.44	24.84	27.34	27.94
Non specified/other	80.31	111.89	54.92	154.44 e	10.08	8.81	9.69	9.90

Source: IEA/OECD *Energy Balances of OECD Countries.*

Note: Please refer to notes in the introductory information for data coverage.

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13. Electricity imports by origin
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total imports [(1)]	**16848**	**30181**	**22506**	**46760**	**48592**	**57019**	**52191**	**45083**	**52301**
Imports from:									
Total from OECD	**16848 e**	**30181**	**22506**	**46760**	**48592**	**57019**	**52191**	**45083**	**52301**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	16848 e	30181	20555	44503	48515	55732	51109	43763	51077
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	1951	2257	77	1287	1082	1320	1224
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total from non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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14. Electricity exports by destination
(GWh)

	1973	1980	1990	1995	2000	2008	2009	2010	2011
Total exports [1]	**2570**	**3461**	**20526**	**9146**	**14678**	**24198**	**18138**	**19107**	**15038**
Exports to:									
Total to OECD	**2570 e**	**3461**	**20526**	**9146**	**14678**	**24198**	**18138**	**19107**	**15038**
Austria	-	-	-	-	-	-	-	-	-
Belgium	-	-	-	-	-	-	-	-	-
Canada	2570 e	3461	19936	7992	12685	23499	17490	18482	14385
Czech Republic	-	-	-	-	-	-	-	-	-
Denmark	-	-	-	-	-	-	-	-	-
Estonia	-	-	-	-	-	-	-	-	-
Finland	-	-	-	-	-	-	-	-	-
France	-	-	-	-	-	-	-	-	-
Germany	-	-	-	-	-	-	-	-	-
Greece	-	-	-	-	-	-	-	-	-
Hungary	-	-	-	-	-	-	-	-	-
Ireland	-	-	-	-	-	-	-	-	-
Italy	-	-	-	-	-	-	-	-	-
Luxembourg	-	-	-	-	-	-	-	-	-
Mexico	-	-	590	1154	1993	699	648	625	653
Netherlands	-	-	-	-	-	-	-	-	-
Norway	-	-	-	-	-	-	-	-	-
Poland	-	-	-	-	-	-	-	-	-
Portugal	-	-	-	-	-	-	-	-	-
Slovak Republic	-	-	-	-	-	-	-	-	-
Slovenia	-	-	-	-	-	-	-	-	-
Spain	-	-	-	-	-	-	-	-	-
Sweden	-	-	-	-	-	-	-	-	-
Switzerland	-	-	-	-	-	-	-	-	-
Turkey	-	-	-	-	-	-	-	-	-
United Kingdom	-	-	-	-	-	-	-	-	-
United States	-	-	-	-	-	-	-	-	-
Total to non-OECD	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**
Albania	-	-	-	-	-	-	-	-	-
Azerbaijan	-	-	-	-	-	-	-	-	-
Belarus	-	-	-	-	-	-	-	-	-
Bulgaria	-	-	-	-	-	-	-	-	-
Croatia	-	-	-	-	-	-	-	-	-
F.Y.R. of Macedonia	-	-	-	-	-	-	-	-	-
Georgia	-	-	-	-	-	-	-	-	-
Lativia	-	-	-	-	-	-	-	-	-
Lithuania	-	-	-	-	-	-	-	-	-
Romania	-	-	-	-	-	-	-	-	-
Russian Federation	-	-	-	-	-	-	-	-	-
Serbia	-	-	-	-	-	-	-	-	-
Turkmenistan	-	-	-	-	-	-	-	-	-
Ukraine	-	-	-	-	-	-	-	-	-
Non-specified/others	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**

Source: IEA/OECD Electricity Statistics.

(1) Total may not add-up due to rounding.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
MAIN ACTIVITY PRODUCERS									
Classification by source									
Total capacity	**420.10**	**625.92**	**690.47**	**706.11**	**621.47**	**981.26**	**996.20**	**1008.65**	**1021.02**
Nuclear	31.66	56.49	99.62	99.52	97.86	100.76	101.00	101.17	101.42
Hydro	-	76.35	90.89	96.66	91.76	99.43	100.32	100.66	100.57
of which: pumped storage	*-*	*-*	*-*	*21.39*	*19.52*	*21.86*	*22.16*	*22.20*	*22.29*
Geothermal	-	1.01	1.61	1.75	2.79	2.23	2.38	2.41	2.41
Solar	-	-	-	-	0.42 e	0.54	0.62	0.86	1.47
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	-	0.01	2.38	24.65	34.30	39.12	45.65
Other (e.g. fuel cells)	-	-	-	-	-	0.03	0.03	-	-
Combustible fuels	388.44	492.08	498.34	508.18	426.26	753.63	757.56	764.43	769.51
of which:									
Single-fired:									
Coal and coal products	174.32	240.02	263.81	254.14	263.75	309.86	310.67	312.56	313.47
Liquid fuels	80.45	104.64	55.19	46.42	25.43	56.38	55.73	54.61	50.60
Natural gas	59.55	65.80	15.00	16.53	32.07	381.85	385.48	391.43	399.52
Biofuels & waste	0.06	0.10	0.07	0.14	0.51 e	5.55	5.67	5.84	5.92
Multi-fired:									
Solid / liquid	12.40	15.09	8.13	12.48	-	-	-	-	-
Solid / natural gas	12.07	12.41	26.03	32.44	-	-	-	-	-
Liquid / natural gas	47.27	50.84	126.98	142.90	104.50	-	-	-	-
Solid / liquid / gas	2.32	3.19	3.14	3.14	-	-	-	-	-
Type of generation									
Steam	-	-	444.65	441.09	357.54	428.40	423.70	425.43	421.18
Internal combustion	-	-	4.55	4.64	5.11	7.50	7.53	7.98	8.18
Gas turbine	-	-	41.68	50.08	48.26	130.28	132.56	132.40	133.14
Combined cycle	-	-	7.46	12.19	14.66	187.31	193.59	198.46	206.84
Other	-	-	-	0.18	0.70	0.15	0.17	0.17	0.17
Peak load	..	..	546.00	620.25	678.41	752.47	725.96	767.95	770.50
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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15. Net maximum electricity generating capacity on 31 December (continued)
(GW)

	1974	1980	1990	1995	2000	2008	2009	2010	2011
AUTOPRODUCERS									
Classification by source									
Total capacity	**-**	**-**	**43.12**	**70.22**	**191.16**	**29.99**	**30.67**	**32.35**	**34.26**
Nuclear	-	-	0.02	-	-	-	-	-	-
Hydro	-	-	1.48	3.40	7.12	0.36	0.36	0.36	0.38
of which: pumped storage	-	-	-	-	-	-	-	-	-
Geothermal	-	-	1.06	1.22	-	-	-	-	-
Solar	-	-	0.34	0.40	0.17 e	1.08 e	1.47 e	2.51 e	4.18 e
Tide, wave, ocean	-	-	-	-	-	-	-	-	-
Wind	-	-	1.91	1.72	-	-	-	0.01	0.03
Other (e.g. fuel cells)	-	-	-	-	-	0.40	0.35	0.35	0.36
Combustible fuels	-	-	38.33	63.48	183.86	28.16	28.50	29.12	29.32
of which:									
Single-fired:									
Coal and coal products	-	-	6.85	1.11	57.30 e	5.46	5.56	6.40	6.46
Liquid fuels	-	-	0.82	1.50	10.13	1.07	1.05	1.04	1.10
Natural gas	-	-	18.41	21.18	63.68	15.61	15.79	15.60	15.67
Biofuels & waste	-	-	7.52	1.33	9.76 e	6.02	6.10	6.08	6.10
Multi-fired:									
Solid / liquid	-	-	-	3.18	-	-	-	-	-
Solid / natural gas	-	-	-	2.13	-	-	-	-	-
Liquid / natural gas	-	-	4.73	12.44	42.99	-	-	-	-
Solid / liquid / gas	-	-	-	20.61	-	-	-	-	-
Type of generation									
Steam	-	-	19.06	26.93	106.84	12.64	12.69	13.41	13.39
Internal combustion	-	-	0.26	1.33	1.91	0.96	0.96	0.99	1.09
Gas turbine	-	-	5.56	8.27	33.67	5.80	5.77	5.63	5.92
Combined cycle	-	-	12.74	26.83	41.16	8.69	8.98	9.01	8.85
Other	-	-	0.71	0.12	0.29	0.08	0.09	0.08	0.08
Peak load	..	..	..	..	..	..	..	..	..
Available capacity	..	..	..	..	..	..	..	..	..

Source: IEA/OECD Electricity Statistics.

Note: Please refer to notes in the introductory information for data coverage.

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16. Fuel prices to end users

	1978	1980	1990	2000	2008	2009	2010	2011	2012
Fuel prices for electricity generation									
				US Dollars/ unit					
Steam coal (t)	26.11	31.72	33.57	27.46	47.35	50.47	51.79	54.74	55.01
Heavy fuel oil (t)	88.65	178.01	139.37	178.64	572.74	381.24	528.64	766.42	873.15
Natural gas (MWh)(1)	4.85	7.50	7.92	14.86	31.16	16.14	17.32	16.13	11.57
				US Dollars/ toe					
Steam coal	42.80	51.99	55.02	45.01	77.61	82.72	84.89	89.72	90.17
Heavy fuel oil	88.76	178.22	139.54	178.85	573.43	381.70	529.27	767.34	874.20
Natural gas(2)	62.70	96.96	102.34	192.07	402.69	208.55	223.82	208.46	149.49
End-user prices of electricity									
				US Dollars/ MWh					
Industry									
Price	27.90	36.90	47.50	46.00	68.28	68.12	67.89	68.20	66.98
of which: tax	..	..	..	..	..	..	..	..	..
Household									
Price	43.10	53.60	78.50	82.00	112.63	115.07	115.77	117.17	118.83
of which: tax	..	..	..	..	..	..	..	..	..

Source: IEA/OECD *Energy Prices & Taxes.*

(1) Gross calorific value basis.

(2) Net calorific value basis.

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Energy Data Manager / Statistician

Possible Staff Vacancies

International Energy Agency, Paris, France

The IEA

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A companion volume to *Energy Statistics of OECD Countries*, this publication presents standardised energy balances expressed in million tonnes of oil equivalent. Energy supply and consumption data are divided by main fuel: coal, oil, natural gas, nuclear, hydro, geothermal/solar, biofuels/waste, electricity and heat. This allows for easy comparison of the contributions each fuel makes to the economy and their interrelationships through the conversion of one fuel to another. All of this is essential for estimating total energy supply, forecasting, energy conservation, and analysing the potential for interfuel substitution. Complete data are available for 2010 and 2011 and supply estimates are available for the most recent year (*i.e.* 2012). Historical tables summarise key energy and economic indicators as well as data on production, trade and final consumption. Each issue includes definitions of products and flows and explanatory notes on the individual country data as well as conversion factors from original units to tonnes of oil equivalent.

Published July 2013 - Price €120

Energy Statistics of Non-OECD Countries, 2013 Edition

This publication offers the same in-depth statistical coverage as the homonymous publication covering OECD countries. It includes data in original units for more than 100 individual countries and nine main regions. The consistency of OECD and non-OECD countries' detailed statistics provides an accurate picture of the global energy situation for 2010 and 2011. For a description of the content, please see *Energy Statistics of OECD Countries* above.

Published August 2013 - Price €120

Energy Balances of Non-OECD Countries, 2013 Edition

A companion volume to the publication *Energy Statistics of Non-OECD Countries*, this publication presents energy balances in thousand tonnes of oil equivalent and key economic and energy indicators for more than 100 individual countries and nine main regions. It offers the same statistical coverage as the homonymous publication covering OECD countries, and thus provides an accurate picture of the global energy situation for 2010 and 2011. For a description of the content, please see *Energy Balances of OECD Countries* above.

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Electricity Information 2013

This reference document provides essential statistics on electricity and heat for each OECD member country by bringing together information on production, installed capacity, input energy mix to electricity and heat production, input fuel prices, consumption, end-user electricity prices and electricity trades.

Published August 2013 - Price €150

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Published August 2013 - Price €165

Natural Gas Information 2013

A detailed reference work on gas supply and demand, covering not only OECD countries but also the rest of the world. Contains essential information on LNG and pipeline trade, gas reserves, storage capacity and prices. The main part of the book, however, concentrates on OECD countries, showing a detailed gas supply and demand balance for each individual country and for the three OECD regions, as well as a breakdown of gas consumption by end-user. Import and export data are reported by source and destination.

Published August 2013 - Price €165

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In order for nations to tackle the problem of climate change, they need accurate greenhouse gas emissions data. This publication provides a basis for comparative analysis of CO_2 emissions from fossil fuel combustion, a major source of anthropogenic emissions. The data in this book are designed to assist in understanding the evolution of the emissions of CO_2 from 1971 to 2011 for more than 140 countries and regions by sector and by fuel. Emissions were calculated using IEA energy databases and the default methods and emissions factors from the *Revised 1996 IPCC Guidelines for National Greenhouse Gas Inventories*.

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