General Details

Dataset Title:	Domestic Energy Consumption, 2011
Time Period of Dataset(s):	01/01/2011 to 31/12/2011
Geographic Coverage:	England and Wales
Lowest Area Output:	Lower Layer Super Output Areas (LSOA)
Supplier:	Department of Energy and Climate Change (DECC)
Department:	Energy Statistics
National Statistics Data?	National Statistics (Region, LA, FLA, MSOA) Experimental Statistics (LSOA)
Revisions:	None

Data Quality

This document provides a range of information that describes the quality of the data and details any points that should be noted when using the data.
ONS has developed Guidelines For Measuring Statistical Quality; these are based upon the six European Statistical Service (ESS) Dimensions of Quality developed by Eurostat. The dimensions are:

- Relevance
- Accuracy
- Timeliness and Punctuality
- Accessibility and Clarity
- Comparability
- Coherence

About the dataset

(including the quality dimensions: Relevance and Timeliness and Punctuality)

The dataset provides total and average consumption of domestic ordinary electricity, economy 7 electricity and gas as well as counts of meter points at regional, Local Authority (LA), MSOA and LSOA level.

The data cover annual consumption. For the electricity data the time period is 28th January 2011 to 27th January 2012. For the gas data the time period is the 1st October 2010 to 30th September 2011. The SOA data are updated annually at the end of March and there are currently data available for 2005 to 2011. LSOA data was produced for the first time in 2008.

The data cover all metered domestic gas and electricity consumption. Industrial consumption is excluded from the Neighbourhood Statistics dataset, although it is available on the DECC website.

The production of the data was driven by the Government's 2003 Energy White Paper which emphasised the importance of decision making at local and regional level for energy policy. The data are intended to assist local authorities to plan, implement and monitor local energy policy. The data are also used in the production of CO2 emissions information at a sub-national level, which supports the Local Government Performance Framework indicator on "Per capita reduction of CO2 emissions in the Local Authority area" (NI186).

How the data are collected

Electricity

DECC has an agreement with all the electricity suppliers in Great Britain, whereby they agree to provide DECC with annualised consumption data for each Meter Point Administration Number (MPAN) or electricity meter. The consumption data for each MPAN is not weather corrected and represents consumption covering the 365 days commencing in late January each year. As well as the meter number and energy consumption, DECC also receive address point data for each meter.

The address point data is then used to match each MPAN to a local authority, MSOA and LSOA using the National Statistics Postcode Directory and the Postal Address File (PAF).

Gas

A similar process is used to compile the gas data. Gas transporters supply DECC with the Annualised Quantity (AQ) for each Meter Point Reference Number (MPRN) or gas meter as well as address point data. An AQ is an estimate of annualised consumption using consumption recorded between two meter readings at least six months apart and the closing reading is taken within the period 1 October to 30 September. The estimate is then weather corrected to reflect a 17 year trend. The MPRN data is then matched to a local authority and SOAs using the National Statistics Postcode Directory and the Postal Address File (PAF).

Further details on the data collection process are available on the DECC website. Further information on weather correction can be found on the National Grid website.

Concepts and Definitions

Ordinary domestic electricity meter – A domestic meter with a tariff which charges electricity use at a standard rate, except potentially the first X kWh of consumption each year which can be at a higher rate, and replace the standing charge bill element (where X varies between individual suppliers and tariffs).

Economy 7 domestic electricity meter – A domestic meter with a tariff which charges a lower rate for electricity used overnight. Electricity used during the day is usually charged at a slightly higher rate than an ordinary domestic meter.

Gas domestic meter - the general approach of the gas industry is to allocate all meters with an annual consumption less than 73,200 kWh to the domestic sector.

Data Classifications

Standard Classifications used (if any):	Not Applicable

Validation and Quality Assurance

(including the quality dimensions: Accuracy, Comparability and Coherence)

Data validation checks include comparisons of electricity and gas meter points against the number of households in a particular area (although it is possible for some households to have more than one electricity meter, or not to be connected to the gas network). As part of the validation process, it is assumed that no domestic electricity meter should record annual consumption of 100,000 kWh or above, and special attention is also paid to meters showing annual consumption in excess of 50,000 kWh.

The data are compiled using meter readings from all domestic gas and electricity meters in England and Wales which are matched to their LA, MSOA and LSOA using address point data. Not all meters can be matched to a LA, MSOA or LSOA due to missing or incorrect address information. See 'Geographic Referencing' for more information.

The meter readings are based on a mixture of actual and estimated gas and electricity meter readings. For the gas data, the general approach of the gas industry is to allocate all meters with an annual consumption less than 73,200 kWh to the domestic sector. This is because, unlike electricity meters which have a profile class indicating usage type associated with them, there is no similar reliable marker associated with gas meters. Consequently, the gas meters of around 2 million small and medium sized businesses are incorrectly classed as domestic.

The data (Region, LA, FLA, MSOA) are National Statistics and can be used in a time series analysis. The LSOA data are currently Experimental Statistics.

There have been improvements in matching the meter point data to LAs, MSOAs and LSOAs which will affect the comparability over time; data for previous years are not revised to take account of improved matching.

In processing this data for publication ONS have carried out checks to ensure the quality of the data.

Note: Figures in this dataset have all been rounded to zero decimal places, which may result in small differences to the sub-national figures published on the DECC website.

Note: Some LSOAs are grouped in our dataset and therefore the consumption and number of meters has been split evenly between the areas within that group (and rounded appropriately).

Note: This dataset excludes grouped MSOAs and unallocated consumption and meters (meters with insufficient address information that subsequently could not be matched to a super output area or local authority).

Geographic Referencing

The data are collected at meter point level, and each meter point has an address associated to it. Most addresses also include a postcode. Where a postcode is available, it is validated against the National Statistics Postcode Directory in order to directly map to LA/ MSOA area codes. If a post code is not available, other address variables can be used to identify the LA code; however in such cases, MSOA or LSOA data are not available for these meters.

In 2011, 0.24% of domestic electricity meters (0.21% of consumption) could not be allocated to a LA, 0.38% of meters (0.35% of total consumption) could not be allocated to an MSOA and 0.46% of meters (0.43% of total consumption) could not be allocated to an LSOA.

For the domestic gas data, in 2011, 0.14% of meters (0.14% of total consumption) could not be allocated to a LA, 0.37% of meters (0.33% of total consumption) could not be allocated to an MSOA and 0.84% of meters (0.72% of total consumption) could not be allocated to an LSOA.

As a consequence, the sum of meter points or domestic energy consumption at MSOA level does not always equal the sum of meter points or domestic energy consumption at the associated LA level. Similarly, the sum of meter points or domestic energy consumption at LSOA level does not always equal the sum of meter points of domestic energy consumption at the associated MSOA level.

Disclosure Control

When publishing statistics that are produced by the Government Statistical Service reasonable steps are taken to protect confidentiality. In this dataset all of the variables have been given protection through the use of Statistical Disclosure Control techniques.

Sources for Further Information or Advice

(including the quality dimension: Accessibility and Clarity)

The data and a guidance note are also available on the DECC website.

Contact: Sabena Khan, Area 6B, DECC, 3 Whitehall Place, London SW1A 2AW.
Tel: 0300 068 5054; Email: sabena.khan@decc.gsi.gov.uk

Rinu Ogundeji, Area 6B, DECC, 3 Whitehall Place, London SW1A 2AW.
Tel: 0300 068 5045; Email: rinu.ogundeji@decc.gsi.gov.uk