

Report 2012

Creating value together – and sustainably

Condensed version



EnBW

EnBW Energie
Baden-Württemberg AG

At a glance

With revenue in excess of € 19 billion in 2012 and some 20,000 employees, EnBW Energie Baden-Württemberg AG is one of the largest energy companies in Germany and Europe.

We generate, trade in, transport and sell energy and operate in the fields of electricity and gas as well as energy and environmental services. We want to achieve sustainable and profitable growth with a balanced business portfolio and smart energy solutions – to the benefit of our partners, customers, employees and owners. Our home market is Baden-Württemberg and Germany, but we also operate in other European markets.

Even in a changing energy market, our primary objectives remain the same: supply reliability, environmental protection and profitability. This is the basis for the optimum energy mix that we strive for. In addition to the use of conventional energies, the increase in energy efficiency and expansion of renewable energies play an important role here.



Performance indicators of the EnBW group

€ millions ¹	2012	2011	Variance %
Revenue			
Electricity generation and trading	3,977.7	5,418.7	-26.6
Electricity grid and sales	11,860.9	10,742.6	10.4
Gas	2,542.0	1,814.6	40.1
Energy and environmental services	865.3	780.4	10.9
External revenue, total	19,245.9	18,756.3	2.6
Adjusted EBITDA	2,343.1	2,449.0	-4.3
EBITDA	2,293.1	1,809.6	26.7
Adjusted EBIT	1,454.8	1,600.1	-9.1
EBIT	1,275.2	677.8	88.1
Adjusted group net profit ²	652.4	647.7	0.7
Group net profit/loss ²	473.5	-842.3	-
Earnings per share from adjusted group net profit ² in €	2.54	2.65	-4.2
Earnings per share from adjusted group net profit/loss ² in €	1.84	-3.45	-
Cash flow from operating activities	856.3	1,747.4	-51.0
Free cash flow	205.8	827.0	-75.1
Recognised net financial liabilities ³	4,495.3	5,303.1	-15.2
Capital expenditure	877.4	1,314.9	-33.3
Return on Capital Employed (ROCE) (%)	11.3	11.6	-2.6
Weighted average cost of capital (WACC) before tax (%)	8.7	8.7	-
Average capital employed	14,935.5	15,434.1	-3.2
Value added	388.3	447.6	-13.2
Energy sales of the EnBW group			
Electricity (billion kWh) ¹	135.4	155.3	-12.8
Gas (billion kWh)	73.1	57.4	27.4
Sustainability			
Employees ^{1,4} on average	20,098	20,851	-3.6
Trainees at the core companies (%)	7.0	7.1	-1.4
Women in managerial positions (%)	10.6	10.1	5.0
Industrial safety			
Number of accidents per one million working hours	6.5	5.3	22.6
Sick rate (%)	4.3	4.3	-
Own generation from renewable energies (GWh)	7,230	5,982	20.9
Renewable energies generation capacity (MW)	2,527	2,461	2.7
Environmental protection expenditure	403	487	-17.2
Specific CO ₂ emissions from own electricity generation (g/kWh)	369	328	12.5

¹ Prior-year figures restated.

² In relation to the profit/loss shares attributable to the equity holders of EnBW AG.

³ Without cash and cash equivalents of the special funds and short-term investments to cover the pension and nuclear power provisions.

⁴ Number of employees without apprentices/trainees and without inactive employees.



The EnBW group

Electricity generation and trading



With our fully and partly owned power stations, investments and long-term procurement agreements, we ensure an efficient and environmentally friendly energy mix from nuclear power, coal, gas, water and other renewable energy sources.

13,400 MW installed capacity

59.1 TWh generation capacity¹

€ 1,319.7 million adjusted EBITDA

Electricity grid and sales



TransnetBW GmbH, a wholly owned subsidiary of EnBW, is one of four transmission system operators in Germany. Furthermore, the group has various distribution networks in Baden-Württemberg. We render energy and energy-related services to our customers.

58.2 TWh electricity sold
B2C/B2B

155,000 km electricity grid

€ 685.7 million adjusted EBITDA

Gas



The midstream business includes import agreements, import infrastructure, gas storage, and trading and portfolio management. The downstream business covers gas transmission, distribution and sales.

57.8 TWh gas sold
B2C/B2B

16,000 km gas grid

€ 159.4 million adjusted EBITDA

Energy and environmental services



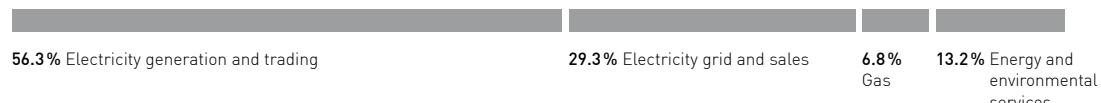
This segment comprises energy supply and energy-saving contracting services, grid and energy-related services, thermal and non-thermal waste disposal and water supply.

1.3 million t thermal waste
disposal capacity

90.3 million m³ of water sold

€ 309.6 million adjusted EBITDA

Share in adjusted EBITDA²



¹ Own generation includes long-term procurement agreements and generation from partly owned power stations.

² Holding/consolidation (share of -5.6%) not listed in the table.

Creating value for people, the planet and our company

We are actively and dynamically shaping the future of our company, EnBW. With our products and services, our innovative power and our technical plant and equipment we are ready for the new developments in the energy landscape and are actively shaping the new energy concept introduced in Germany. We are creating today the basis for sustainable, profitable business in the future. This is not feasible without the people who are to achieve and benefit from it: our employees, our customers and shareholders and the many other stakeholders associated with our company. We assume responsibility not only for society, we have also committed to responsibility for the environment. Climate conservation and the sparing use of resources are integral components of our corporate goals. For we know that our future lies in combining business success with environmental and social responsibility.

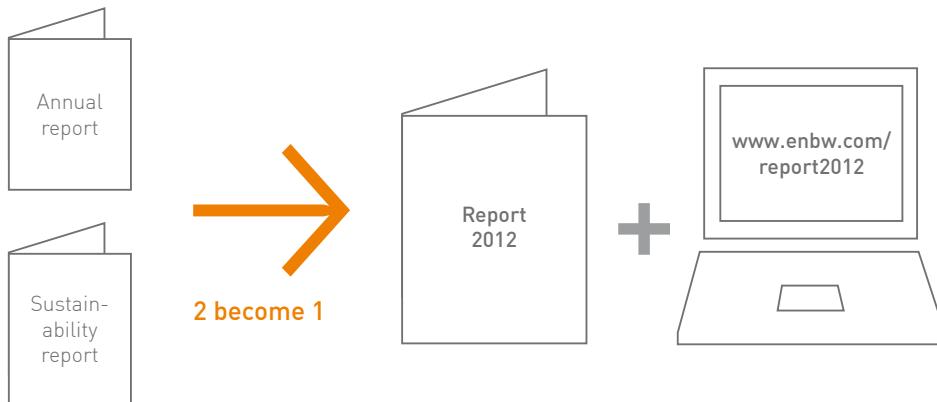
About this report

Bringing values to life, making them visible and measurable

We have started bringing together our financial and sustainability reporting in this integrated report 2012. The reporting on sustainability is based on the requirements of the Global Reporting Initiative (GRI) and the German Sustainability Code (GSC). Our aim is to present our economic, ecological and social performance in one integrated report in future. This way,

we will provide a complete and true picture of EnBW. Our corporate values will become transparent, clear and measurable benchmarks.

- For further information on sustainability at EnBW:
www.enbw.com/sustainability.



This integrated report contains a condensed version of the EnBW consolidated financial statements without the notes to the financial statements. The full consolidated financial statements and other financial reporting documents are published at > www.enbw.com/report2012.

Please note that the content of this report is intended for information purposes only and does not constitute an offer or investment recommendation and the important note on page 166.

Our actions are geared towards strategic principles

	Safeguarding low-carbon generation capacity		Creating innovation and growth
	Establishing local energy solutions		Designing sustainable processes
			Taking employees and corporate social responsibility into account

Contents



Creating value together – and sustainably

- | | |
|---|--|
| 4 Interview with the CEO | Key topics of the fiscal year |
| 8 The Board of Management | 22 Harnessing wind onshore |
| 10 Report of the Supervisory Board (condensed) | 26 Rheinhafen power station, Karlsruhe:
Upholding reliability in the future |
| Corporate and sustainability strategy | |
| 14 Creating value: step by step | 30 Smart grid technology for the new
energy concept in Germany |
| 15 Proactive and based on partnership:
Our course for the future of energy | 34 Less is more:
Never losing sight of energy efficiency |
| 16 Low-carbon and climate-compatible energy | 38 Heat supply for the winter:
EnBW's new gas storage facility |
| 18 A one-stop shop:
We provide local energy solutions | 42 Combined management report
of the EnBW group and EnBW AG |
| 20 Sustainability strategy | 143 Condensed financial statements
of the EnBW group |
| | 152 Corporate governance |
| | 158 Service |



Interview with the CEO

› Dr. Mastiaux, you have taken on the role of CEO at EnBW at a time when the whole energy industry is in a state of dramatic change. What do you see as the most important lines of development?

Frank Mastiaux: The topic of energy is at the centre of intense public debate – more so now than ever before – thereby reflecting a radical change in our energy landscape. This change is characterised by the rapid transition from nuclear and conventional energy generation to renewable energies. In Germany today, we have around 450 central power stations but the number of local generation facilities is 1.3 million. This illustrates the changes in the generation structure. The market environment has also continued to change. New market participants are trying to establish themselves, thereby increasing competitiveness as well as the demands placed on grid management. We are also seeing significant changes in customer expectations and behaviour. This is accompanied by technological developments and further regulatory interventions in the market. Overall, the technological challenges and challenges for the energy industry are increasing.

› Does this mean that the energy world of tomorrow will be completely different from the one of today?

Frank Mastiaux: Absolutely. I see a paradigm shift in the energy landscape, calling into question the traditional business model of many energy companies. Until recently, the industry's value added chain was defined as starting with generation and oriented towards distribution and sales. Market power was based on ownership of generation capacities and grids. The flow along the value added chain will change direction in future. Only those companies that consistently take into account all business activities from a customer

“I see a paradigm shift in the energy landscape, calling into question the traditional business model of many energy companies.”



point of view and orient them towards the customer's wishes and expectations will be able to defend their position. Or to put it more simply: In the future we must change our perspective and start with the customer, then going back towards power stations.

› A nice image. But where is EnBW in all of this? You have been in office since October 2012, what impressions have you gathered so far at EnBW?

Frank Mastiaux: EnBW is a company with many strengths and competencies of a traditional major utility. Particularly worthy of mention in my opinion are the technical competences and experience in all areas. EnBW understands energy. Furthermore, the operation of technical facilities and planning of activities are done "conservatively" in the positive sense of the word and with a focus on safety. The company also keeps clear focus on forward-looking issues. Employees' identification with their tasks is high, as is the mutual loyalty of company and employees. The social partnership in our company works traditionally well. EnBW's regional roots and presence are strong.

› That was the positive. Where does action need to be taken?

Frank Mastiaux: We need to review EnBW's current value added chain. Its income from conventional and nuclear energy generation is falling rapidly – this was the case in 2012 and will also pose a problem in 2013 and subsequent years. The gas segment still needs to reach its potential. With regard to our generation capacities from renewable energies, we need to reach a critical mass in the short to medium term. Distribution grids are under pressure as a result of tendencies towards moving back to municipal ownership. Our investment portfolio could also be improved further. We are working intensely on sharpening our corporate strategy, which will

give EnBW a distinctive profile. As competition becomes more and more intense, we must of course also reduce complexity at the company and streamline our processes considerably and make them more efficient. On this basis, it is essential that we foster a corporate culture to strengthen EnBW as a team. A modern corporate culture and a culture of trust that promote innovation and demand performance on the one hand, and empathy on the



"In the medium to long term, EnBW aims to emerge as the first energy company on the market with a consistent focus on the customer."

other, form the main cornerstones in this regard. We must also work considerably on our perception by outsiders. Our customers see us as large and powerful. We need to change this and be seen as a partner at eye level by increasing our openness to dialogue.



- › How will you approach these issues?

Frank Mastiaux: Four success factors are key: Efficiency in organisation and in processes, consistent customer orientation, high innovation and an affinity for partnerships and dialogue. In the medium to long term, EnBW aims to emerge as the first energy company with a consistent focus on the customer.

This requires changes and these won't happen overnight. But we have already made the first steps and set up an overall programme which will systematically help bring us to our goal in clearly structured steps. This programme is called "EnBW 2020".

- › Sounds promising. What does it involve exactly?

Frank Mastiaux: "EnBW 2020" is divided into three clearly defined phases. In a first step, which will take up the next two years or so, we will set up the right platform. We will develop a new forward-looking business model with customer orientation and innovation at its core. We will review our business portfolio based on demanding performance criteria. We will also adjust our processes, structures and organisation accordingly.

In the second phase – towards the middle of the decade – we aim to achieve our full potential, with the growth areas generating increasing contributions to earnings, the entire EnBW team operating in high-performance mode and EnBW being seen as an ideal partner for all energy issues.

In the years running up to 2020, we aim to become one of the leading providers on the market for targeted customer segments and special energy ecosystems with our whole range of products and services. The result will be an EnBW that is successful due to its fresh approach to energy and its focus on the customer.

- › You talk of developing the "right platform". Could you be more specific?

Frank Mastiaux: In addition to increasing our efficiency and establishing a strict performance management system, we will ask

→ Dr. Frank Mastiaux, CEO

"We will develop a new forward-looking business model with customer orientation and innovation at its core."

ourselves and find the answers to three questions as part of our strategy development: Where do we operate? What can we do better than others? How do we prepare for this?

We are currently preparing a detailed profile of our strengths and weaknesses for each field and linking it to market requirements. As our limited resources mean we cannot offer everything for anyone anywhere, we will have to make decisions as to which markets and fields we want EnBW to operate in in future. Building on our knowledge of technology and the energy industry, we will concentrate on the areas where we can present our customers with attractive and unique offers to stand out from the competition in Germany as well as Europe. In this regard we also see some growth opportunities beyond Germany – after all a holistic approach geared to climate-compatible and sustainable energy supply knows no bounds. We will achieve all of this with an organisation that is optimally fitted to the business model.

› So EnBW can expect some wide-sweeping changes. What does this means for its employees?

Frank Mastiaux: Anyone who has been following the development of our industry with open eyes over the past few years clearly understands that things cannot carry on as they are. This relates to the company as a whole as well as each and every employee. Based on a general willingness to change, we need and demand active participation, commitment

– even passion – and the will to succeed. Our corporate culture must also change. EnBW needs to think and act as a team, not as a collection of separate entities. We will measure this against our performance, and we will be doing this even more intensely in future on the basis of objective criteria.

› Dr. Mastiaux, thank you for the informative chat.



"EnBW needs to think and act as a team, not as a collection of separate entities."

Board of Management



Dr. Dirk Mausbeck

born 1962 in Bensberg
Member of the Board of Management
Chief Commercial Officer since 1 October 2011
Appointed until 30 September 2014
Karlsruhe

Thomas Kusterer

born 1968 in Pforzheim
Member of the Board of Management
Chief Financial Officer since 1 April 2011
Appointed until 31 March 2014
Ettlingen

Hans-Peter Villis, born 1958 in Castrop-Rauxel, Chief Executive Officer,
1 October 2007 until 30 September 2012 (no longer member, without photo)



Dr. Frank Mastiaux

born 1964 in Essen
Chief Executive Officer
since 1 October 2012
Appointed until 30 September 2017
Düsseldorf

Dr. Bernhard Beck, LL.M.

born 1954 in Tuttlingen
Member of the Board of Management
Chief Personnel Officer since 1 October 2002
Appointed until 30 September 2017
Stuttgart

Dr. Hans-Josef Zimmer

born 1958 in Merzig
Member of the Board of Management
Chief Technical Officer since 1 January 2012
Appointed until 31 December 2016
Steinfeld

As of 12 February 2013

Report of the Supervisory Board (condensed)

The Supervisory Board performed all the tasks required of it by law and the articles of incorporation and bylaws in the reporting year 2012 both comprehensively and dutifully. It regularly advised the Board of Management on corporate management and accompanied and supervised management activities of great significance for the group on an ongoing basis. The Supervisory Board was involved in all decisions of fundamental importance for the company and the group. The Board of Management kept the Supervisory Board informed regularly, without delay and comprehensively of all significant aspects of business development and policy, corporate strategy and planning, the economic position of the company and the group as well as of the risk situation, risk management, the internal control system and compliance. Variances between the actual business development and previously formulated plans and targets were described and explained to the Supervisory Board in detail in each case.

Key topics of the board meetings

At six ordinary meetings held on 6 March 2012, 25 April 2012, 14 June 2012, 21 September 2012, 8 November 2012 and 6 December 2012, one extraordinary meeting on 30 March 2012 as well as one circular resolution, the Supervisory Board dealt in depth with oral and written reports and draft resolutions of the Board of Management. In addition, it requested reports and details from the Board of Management on specific topics. These were provided immediately and comprehensively in each case. Discussions and the resolutions focused on the following issues:

- Regular in-depth reports by the Board of Management on the development of business and the profitability of the company and the group, including in particular the development of revenue and earnings and the net assets and financial position, as well as reports on personnel development and significant risks for the group and individual divisions
- Intense consultations and discussions with the Board of Management on EnBW's strategic alignment
- Intense examination on several occasions of the past effects as well as the opportunities and risks of the new energy concept in Germany
- Detailed examination of the financial burdens caused by changes in the economic situation in the energy sector as well as the package of measures prepared by the Board of Management to improve the company's results of operations and ability to invest, in particular by means of the "Fokus" efficiency programme, divestitures and capital measures
- Approval to perform a capital increase using the authorised capital created at the annual general meeting on 26 April 2012 by issuing 26,598,504 new ordinary shares on 5 July 2012 at an issue volume of some € 822 million
- Approval to conclude a gas procurement contract with Novatek Gas & Power GmbH with a minimum term of ten years and an annual supply volume of 21.024 TWh, or an annual contractual volume of approximately € 600 million
- Intense examination of the construction of a highly efficient gas and steam turbine plant enabling Stadtwerke Düsseldorf AG to generate electricity and heating by means of combined heat and power generation at the Lausward location as well as the approval of financing and investment funding
- Extensive and regular reporting on and discussion of the issues surrounding EWE Aktiengesellschaft/VNG-Verbundnetz Gas Aktiengesellschaft

- Frequent examination of projects in the area of renewable energies, in particular
 - Examination of the investment and projects in Turkey (Borusan EnBW Enerji A.Ş. joint venture)
 - Development of the EnBW Baltic 2 project
 - Offshore projects in the North Sea
 - Several onshore wind projects
 - Other projects
- Examination of the situation concerning transmission grids, in particular the issues of system security and grid expansion
- Intense examination of the issue of franchises in Baden-Württemberg as well as further potential for cooperation with municipal partners



**Dr. Claus Dieter Hoffmann,
chairman of the Supervisory Board**

- Extensive consultations and discussions on current sales issues
- Regular reports on the progress made in the construction of the RDK 8 hard coal power station in Karlsruhe
- Examination of the decommissioning strategy for the nuclear power plants in the EnBW group as well as interim and ultimate storage issues
- Regular reporting on pending litigation against companies in the Bykov group
- Proposals made to the annual general meeting on 26 April 2012 and those to be made to the annual general meeting on 25 April 2013, in particular for adjusting the remuneration of members of the Supervisory Board
- Approval of the budget for the 2013 fiscal year and acknowledgement of the mid-term planning for the period from 2013 to 2015 consisting of the income statement, balance sheet and cash flow statement

Furthermore, at its meeting on 30 March 2012, the Supervisory Board appointed Dr. Frank Mastiaux member and chairman of the Board of Management, at the recommendation of the personnel committee, for a five-year term effective 1 October 2012. Dr. Frank Mastiaux thus took the place of Hans-Peter Villis who declared he would not be available for reappointment and left the company at the close of 30 September 2012.

Between the meetings, the Supervisory Board was informed in writing by the Board of Management about all business events of particular importance for the company or the group. In addition, there was constant communication between the Supervisory Board chairman and the Board of Management, in particular the CEO, to discuss issues relating to the strategic orientation, planning, business development, risk situation, risk management, compliance and important individual transactions.

Attendance at all Supervisory Board meetings was very high. All members of the Supervisory Board attended far more than half of the meetings.

Corporate governance

The Supervisory Board once again scrutinised corporate governance issues in the fiscal year 2012. The corporate governance report is part of the declaration of compliance the company has published in accordance with Sec. 289a (1) Sentence 2 German Commercial Code (HGB) on its website ([> www.enbw.com/report2012](http://www.enbw.com/report2012)).

Audit of the separate and consolidated financial statements

Following thorough examination by the audit committee, the Supervisory Board reviewed in depth the separate and consolidated financial statements as of 31 December 2012 audited by KPMG AG Wirtschaftsprüfungsgesellschaft and issued with an unqualified audit opinion, the combined management report for the fiscal year 2012 and the Board of Management's proposal for the appropriation of profits for the fiscal year 2012. The Supervisory Board did not have any reservations following its own review. It agreed with the audit results presented by the independent auditor, approved the separate financial statements prepared by the Board of Management as of 31 December 2012 – which have thus been ratified – and the consolidated financial statements as of 31 December 2012 and the combined management report for the fiscal year 2012 and agreed with the Board of Management's proposal for the appropriation of profits for the fiscal year 2012.

Reference to the complete version of the report of the Supervisory Board

Further details on the topics "Work of the committees", "Corporate governance", "Audit of the separate and consolidated financial statements" as well as "Personnel changes on the Board of Management and the Supervisory Board" can be found in the complete version of the report of the Supervisory Board published by the company at [> www.enbw.com/report2012](http://www.enbw.com/report2012).

Karlsruhe, 28 February 2013
The Supervisory Board



Dr. Claus Dieter Hoffmann
Chairman

Creating value together – and sustainably

Corporate and sustainability strategy

- 14 Creating value: step by step
- 15 Proactive and based on partnership: our course for the future of energy
- 16 Low-carbon and climate-compatible energy
- 18 A one-stop shop: We provide local energy solutions
- 20 Sustainability strategy

Key topics of the fiscal year

- 22 Harnessing wind onshore
- 26 Rheinhafen power station, Karlsruhe:
Upholding reliability in the future
- 30 Smart grid technology for the new energy concept
in Germany
- 34 Less is more: Never losing sight of energy efficiency
- 38 Heat supply for the winter: EnBW's new gas storage
facility

Our actions are geared towards strategic principles



Safeguarding low-carbon
generation capacity



Establishing local energy solutions



Creating innovation and growth



Designing sustainable processes



Taking employees and corporate
social responsibility into account

Creating value: step by step



- 01 Michael Wollny, specialist from EnBW for location assessments, verifies his wind forecast for the turbine located near Schopfloch. It is the first turbine erected by EnBW in the northern part of the Black Forest.
- 02 Stuttgart and the surrounding region embrace electromobility: Minister Winfried Hermann and Dr. Dirk Mausbeck, member of EnBW's Board of Management, put into operation the first charging station of the planned charging infrastructure.
- 03 EnBW affirms its commitment in Turkey with the start of construction of the new 50 MW Balabanli wind farm.
- 04 The upper part of the runner is placed by experts on the ring of the new building for the fifth turbine in Iffezheim.

Proactive and based on partnership: Our course for the future of energy

EnBW has set itself clear targets of actively shaping the new energy concept and meeting the requirements arising from the market, politics and society. To this end, we are focusing on two key strategic moves: We will secure our position as a low-carbon generator and expand the range of local energy solutions for our customers.

Actively shaping the new energy concept

The energy industry in Germany is currently changing at a fast pace. EnBW will not just follow developments, but actively and responsibly shape these changes. We are therefore focusing even more than before on the expansion of renewable energies and aim to keep the carbon emissions of our electricity generation capacity below the national average in

Germany. Over the period until 2020 we have budgeted €8 to 10 billion for investment in the new energy concept. We will invest a major portion thereof in renewable energies in order to add some 3,000 MW in Germany alone, thereby more than doubling the related installed capacity. In addition, we will optimise our existing power stations, invest in energy storage facilities and smart grids, and considerably expand our electricity grid. In addition, we will bring further local solution offers to our customers,

develop new public participation models and reinforce partnerships with municipalities and municipal utilities. We will involve customers and partners directly in our processes on site and implement projects while maintaining dialogue with the various stakeholders. We face these present challenges with a sharpened profile and clear strategy, thereby securing the company's future sustainability in the long term.

EnBW and its stakeholders





Low-carbon and climate-compatible energy

We are gradually converting our generation portfolio to maintain supply reliability. The objective is to manage our company in both a viable and a sustainable manner. Through the expansion of renewable energies we want to further reinforce our leading position as low-carbon generator and thereby keep emissions to a low level.

We are focusing on the expansion of wind and hydro-electric power, but we will also continue to invest in photovoltaic generation and bioenergy. Hydro-electric power already accounts for over 10% of our electricity generation today. We are expanding capacity at existing power stations, as in Iffezheim for example, and plan to develop further sites for wind and hydro-electric power in Germany and Turkey, for instance.

We are continuously expanding our wind energy capacities. Baden-Württemberg in particular is set to become host to a considerable number of the new onshore wind turbines being built, which is why more than 160 locations with potential for 500 turbines are currently being examined. We have already secured plots of land for 18 new wind farms. Offshore, our EnBW Baltic 1 wind farm has been producing CO₂-free electricity since 2011, and construction has started on our next offshore project in the Baltic Sea, EnBW Baltic 2.

In order to supplement the growing share of renewable energies in our portfolio, we are planning large-scale pumped storage power stations: We started construction work on the Obervermunt II pumped storage power station in cooperation with Vorarlberger Illwerke in 2013. Great progress is being made on new pumped storage power stations in Baden-Württemberg through our Forbach project and our participation via Schluchseewerke in the Atdorf project.

Despite this addition of capacity, climate-compatible and flexible gas-fired power stations will continue to play an important



role in our portfolio for the purpose of securing the base load. Via our majority shareholding in Stadtwerke Düsseldorf AG, we are committed to construction of a highly efficient gas and steam turbine power station, which will generate electricity and district heating in an environmentally compatible manner in future. 2012 saw the achievement of significant milestones in our gas strategy. Since the Etzel gas storage facility went into operation, we now have flexible gas reserves at our disposal; at the same time, we have secured gas supply reliability through a long-term gas supply agreement with the Russian gas producer Novatek.

Targets for 2030

>50

% of EnBW's electricity from
renewable energies

250–350

g/kWh CO₂; considerably below
the present national average

02



03

- 01 EnBW adds a fifth machine to the existing facility at Rheinkraftwerk Iffeheim. Once commissioned, this power station on the river Rhine will be the largest run-of-the-river power station in Germany.
- 02 Commercial operation of the Etzel gas storage facilities commenced in September 2012. This is another major step forward in implementing our gas strategy.
- 03 The Balabanli wind farm is the next wind power project in Turkey to be realised. EnBW is thereby continuing its course for growth in Turkey.





A one-stop shop: We provide local energy solutions

The energy landscape is becoming ever more complex. We provide our customers with advice and support them with end-to-end local energy solutions. At the same time, we develop new participation models for municipalities and municipal utilities and are intensifying communication with all the various stakeholders.

In order to put the new energy concept into practice at local level, we are concentrating on providing a one-stop shop for solutions to expand local energy generation facilities and concepts. In this respect, we focus mainly on photovoltaics, electromobility and energy services for various target groups and on user-friendly smart home solutions. We want to increase revenue from local solutions to around €1 billion by 2020 and become the first point of contact for energy issues.

A prime example of our local and sustainable energy concepts is the "sustainable town" project, which we first initiated in Leutkirch and have since 2012 also carried out in Ehingen. Over the next few years, we want to win a further ten municipalities in Baden-Württemberg for the project and supply them with low-carbon energy, thereby supporting their self-sufficiency.

We involve the general public and residents in our projects at an early stage and then consistently implement this new low-carbon energy supply concept together. In addition, we also develop new partnership models for municipalities and municipal utilities. Already today they have the possibility of participating in our major offshore projects. We strongly encourage the foundation of local and regional community energy cooperatives that give citizens the possibility of participating in our

generating facilities and can generate a sustainable return on investment. Various participation models in the area of grids also allow us to intensify relations with municipalities and municipal utilities.

Our activities also extend to another focus area for energy solutions. In the field of invoicing and settlement systems, we support other energy companies with their operating processes. We are planning to expand these activities considerably and become the leading provider of back office solutions for the energy industry in the long term.

Success in figures

approx. 60

community energy
cooperatives since 2008

>7,400

members





01 With a total of 300 battery-powered Smarts, car2go in Stuttgart has the largest electric fleet in Germany. By setting up 500 charging stations in the Stuttgart region EnBW has created a closely meshed charging infrastructure for electric vehicles.

02 The state-of-the-art biomass CHP plant in Ulm is one of more than a dozen biomass CHP plants operated by EnBW.

03 With an installed output of around 5 MW, the solar farm in Leutkirch is one of the largest in the federal state. It was built as part of the "sustainable town of Leutkirch project".



02



03

Sustainability strategy

EnBW is well positioned to further intensify its social responsibility and commitment to sustainability beyond what is required by law and thereby assume responsibility for people and the environment.

Doing business sustainably

To remain successful in the long term, we must safeguard our economic viability and also assume social and environmental responsibility. In addition, it is our objective to continue to ensure supply reliability for our customers in the future.

That is why we have consciously chosen to link our sustainability strategy with our corporate strategy. We place great emphasis on doing business in a sustainable manner, guided by the principles of making responsible use of limited resources, conserving the environment, protecting and supporting our own employees, and promoting the sustainable development of society.

We have three focus areas: We want to open up new revenue areas through sustainable business models. We will place greater emphasis on sustainability in our business and procurement processes. We will demonstrate commitment to our employees and corporate social responsibility through dialogue with our stakeholders.

- 01 EnBW's smart energy management system makes it possible to link up a photovoltaic system in the home with an electricity storage facility and electricity consumption points.
- 02 On-site visits to potential suppliers are part of the purchasing process for plant components.
- 03 EnBW's competency management system offers employees targeted development opportunities.



Focus area 1 Innovation and growth

By expanding renewable energies, offering innovative local energy solutions and forms of participation based on partnership, we will establish new business fields and reinforce our position on the capital market. We develop, set up or operate facilities to exploit renewable energies – ourselves or as a reliable cooperation partner. By building new storage facilities and gas-fired power stations, we want to increase the flexibility of our generation portfolio. We offer municipalities, members of the general public and municipal utilities individual energy solutions from a single source, combining local energy generation, energy efficiency and smart energy management. At the same time, we work intensively on research into smart grids, developing offers tailored to an ever more complex energy market.



➤ For more information, please turn to management report sections > "Goals, strategy and corporate management" and "Research and development".



Focus area 2 Processes

From central procurement, raw materials purchasing for our power stations and environmentally compatible operation of generation facilities to waste disposal – our internal processes are continuously becoming more efficient and being geared to environmental and social considerations. To help our employees to adhere to all rules and legislation, we systematically give them comprehensive and clear compliance instructions on binding legal requirements and internal group policies.

Environmental protection is firmly anchored in our corporate goals and is pursued group-wide. We use environmental performance indicators as a measure of our success in this respect.

Our sustainability standards also extend to our suppliers and service providers. They are selected by reference to environmental protection and sustainability criteria and are reviewed by us regularly to ensure a sustainable and transparent supply chain in the long term.



For more information, please turn to management report sections
> "Procurement" and "Environmental protection".



Focus area 3 Employees and corporate social responsibility

The new energy concept and the related changes present our company with great challenges. For our employees, this means that they need to be able to adapt to change much more than ever before. But we do not want to just place demands on them, we also want to support them. We have won multiple Top Employer awards, and offer our employees attractive working conditions and help them to develop their specific skills.

We have sponsored art and culture in the region for many years, support sports events and a large range of welfare projects for society. One key aspect of our commitment is support for children, adolescents and young people – whether at school, in leisure activities, studies or training.

03



For more information, please turn to management report sections
> "Employees" and "Corporate social responsibility".





Harnessing wind onshore

Even from far away, the large crane standing at the edge of the field in Berghülen in the Alb-Danube district can be made out. Full of curiosity, people taking a walk or out on their bikes stop at a safe distance and all look in the air in anticipation – for today is the day the local wind farm, with its three wind turbines in total, is to come into being. At the break of dawn the nacelle had already been put into position on top of the 137-metre-high tower, and now the powerful machine is lifting the gigantic rotor into the air metre by metre, bit by bit. With his gaze also fixed firmly upwards, Stefan Lederer carefully follows each and every step. The technical project manager has been overseeing construction of the wind farm from the very beginning, the so-called "star lift" being one of the most exciting moments for the engineer.

The star lift and assembly of the nacelle have been meticulously prepared. With the nacelle finally atop the tower, the turbine has a hub height of 138 metres,

making it one of the tallest on the market. The tower alone comprises 1,700 metric tons of steel and concrete with a base diameter of 13 metres and 1,300 metric tons foundation. "The combined weight of the generator, the nacelle and rotor blades, each coming in at 39 metres in length, means that some 135 metric tons are weighing down on the tower," says Stefan Lederer. He continues: "The interactive forces we are talking about here are enormous."

As already tested in Schopfloch in the northern Black Forest, EnBW is also focusing on a type of turbine in Berghülen that is ideally suited to the wind conditions in Baden-Württemberg. With a total output of 6 MW, the three Enercon turbines can theoretically provide some 3,400 homes with electricity per year and reduce annual CO₂ emissions by more than 9,000 metric tons.

→ Stefan Lederer, technical project manager

"Thanks to new technology, onshore wind turbines are becoming more and more powerful and increasingly efficient to operate even in Baden-Württemberg."

EnBW now operates a total of 100 onshore turbines across Germany and has seen its portfolio in this field increase almost six-fold since 2009. Baden-Württemberg in particular is set to become host to a considerable number of the new turbines being built, which is why more than 160 locations in the German state with potential for 500 turbines are currently being examined. Locations for 18 wind farms have already been secured. We are also continuing to expand our onshore portfolio beyond the borders of Baden-Württemberg, for example by purchasing wind farms in Saxony-Anhalt and Brandenburg and expanding our largest onshore wind farm in Buchholz (Lower Saxony) in 2012. By 2020, EnBW aims to have increased its renewable energy capacity to around 3,000 MW in Germany alone, thereby more than doubling its current installed output in this area.

The construction of the wind farm in Berghülen took a mere six months. Securing the sites and going through the whole planning and approval process for onshore wind turbines, however, can often take several years. Entering into dialogue with municipality representatives and local

EnBW in figures

170

MW of onshore wind power harnessed by EnBW

approx. 500

turbines under review in Baden-Württemberg

12.2

% share of renewable energies in EnBW's generation portfolio

residents is absolutely essential for us to share our vision with citizens and boost their acceptance of additional wind farms, thereby making the site selection and

01



02





construction process easier for us. In this regard, EnBW is focusing on new forms of public participation as well as numerous information and dialogue events. "However, it is extremely important for us that all of our wind turbines and further plans also focus on nature conservation and have the lowest possible impact on the environment," adds Lederer.

Together with experts, we are therefore carefully examining the potential impact of noise emissions and shadows being cast on residential areas. A year is also being taken to investigate the migratory and nesting behaviour and flying activity of resident birds and bats. It is also important to create measures aimed at restoring the ecological balance. In Berghülen, for example, fruit trees and bushes as well as butterfly and wild bee patches are being planted. "Our aim is to keep the potential for disruption as low as possible," says Lederer. It is also for these reasons that the engineer sees a trend towards wind farms being erected in forests, with turbines similar in size to those in Berghülen rising far above the treetops. "Even in areas with low wind conditions, this would make a wind yield possible that a few years ago would only have been conceivable on the coast," says Lederer, again turning his gaze upwards in concentration. The gigantic rotor blades now sit majestically in their correct position, waiting to feed electricity into the grid in just a few days' time. However, for the time being, Stefan Lederer can look back on an eventful day as it draws to a close. Job done, the next wind farm awaits.

- 01 The tower standing tall, the nacelle is lifted into position; only then can the rotor be assembled.
- 02 Bernhard Kröger (left), Stefan Lederer from EnBW and Sebastian Oesen from manufacturing company Enercon oversee the assembly of the turbine.
- 03 Following the foundation of a community energy cooperative, the citizens of Berghülen can participate in the wind farm.



A model for success: Participation of the public

EnBW has already initiated just under 60 community energy cooperatives or seen them to the start-up phase. A community energy cooperative is founded by active citizens and companies. The minimum investment amount is € 100. Participation in project companies, in which municipal utilities, municipalities or banks also participate for example, allows projects relating to the new energy concept in Germany to be supported and realised directly on site. The members of the community energy cooperative are therefore able to generate sustainable returns. Dialogue is a key element in this model. Citizens can also take on responsibility, seize oppor-

tunities and take an active part in shaping the new energy concept in Germany. Participation can take on many different forms: For example, members can use their energy cooperatives to help finance a wind power project, build a photovoltaic system, renovate a hydro-electric power station or take renovation measures from an energy perspective. As a result, they can identify particularly strongly with "their" project. In December 2012, the community energy cooperatives in Baden-Württemberg recorded more than 7,400 members with over 93,000 subscribed shares.

➤ For more information on the "Employees and corporate social responsibility" focus area, please turn to section > "Sustainability strategy", page 21.





Rheinhafen power station, Karlsruhe: Upholding reliability in the future

The building site of the RDK 8 hard coal power station at Karlsruhe Rheinhafen port is absolutely bustling with activity. Hundreds of workers are either hammering, screwing or soldering parts into place in the 120-metre-high boiler house to complete and prepare heating surfaces, burners and the miles of piping for commissioning. As of 2013, this boiler house will generate the steam needed to drive the turbine in the 912 MW power station. With an efficiency of over 46%, it will become one of the most environmentally friendly and efficient coal-fired power stations in the world. Project managers Konrad Ebert and Andreas Hockun stand at the base of the boiler house and take stock of how construction is progressing. The main focus of the engineers is currently on the preparations for lighting the first boiler fire, and therefore on the unit's transition to hot operations and the trial operation.

For many areas of the plant, such as the neighbouring cooling water supply or the flue gas dust collection plants, operations are already in full swing. Here, tests are already underway to check how all components of the power station interact with each other. Hundreds of measuring points, control units and assemblies must be examined and brought into line.

Supply reliability, economic viability and efficiency will play a decisive role at EnBW's state-of-the-art power station. In this way, in addition to generating electricity, RDK 8 will in future feed 220 MW of thermal energy into the Karlsruhe municipal utilities' district heating grid. The 58% utilisation rate is proof of the high energy efficiency of the new construction. By combining this high level of efficiency with flexible utilisation, RDK 8 will help fully cover the demand for electricity, even in a port-

→ Project managers Konrad Ebert and Andreas Hockun

“Flexible and highly efficient coal-fired power stations, such as the high-tech power plant RDK 8, will continue to be an essential element of our future generation portfolio.”

EnBW in figures

6.5

reportable accidents per
one million hours worked

4.3

% low sick rate

folio of power stations with a growing share of renewable energies in generation capacity. "When planning the power station, we also paid close attention to climate and environmental protection," says Konrad Ebert. For the combustion plant, for example, EnBW looked from the very outset to reduce the formation of nitrogen oxides. A large denitrification catalyser, a highly efficient electrostatic precipitator and the wet scrubbing process for desulphurisation also ensure that the flue gases are cleaned before rising from the 230-metre-high chimney.

Be it the boiler house or flue gas purification plant – it is primarily the coordination of the many different interfaces and deadlines as well as the sheer size of the construction site that present the project managers with new challenges every day. Up to 1,600 workers were busy on the construction site for long periods



of time. "With a number of workers this big as well as some 80 contractors, the timing and logistics must be coordinated in such a way that each individual company can perform their work at the same time without preventing the other from working. Industrial health and safety always takes top priority – an everyday topic for every single person on the construction site," says Andreas Hockun. The measures and processes are largely determined by his colleague Jens Beller and his team of industrial safety experts. They are not just the contact persons for all questions relating to industrial safety, they are also responsible for ensuring every day that all rules and regulations are complied with. Any possible risk scenarios, for example working at height, are prevented from the outset by taking suitable measures. "Prevention plays a key role in industrial safety here on the construction site, and we attach great





- 01 The project managers and industrial safety expert Jens Beller (top left) inspect the construction site regularly.
- 02 Safety first: A safety harness is mandatory when working at height.
- 03 The rotary drum screen forms part of the multi-stage fish protection system.

value to a culture of high safety standards," adds Beller.

In addition to the obligatory technical, organisational and personal industrial safety measures coming into force, such as protective clothing and equipment, EnBW has also developed a new electronic orientation system especially for RDK 8 for the purpose of increasing employees' awareness of existing hazards and familiarising them with health and safety regulations. To be allowed on the construction site, each worker must complete an electronic orientation course, comprising a 20-minute film and computer test with randomly selected questions relating to on-site safety. The permit granting access to the construction site for a period of twelve months is only obtained upon successful completion of the test. The measures are proving their worth: In 2012, one million working hours were clocked up without a single accident reported. According to Jens Beller: "Such a result can only be achieved by each and every worker having an acute awareness of safety. It must be our objective to continue to develop our industrial safety model and structures for any construction projects EnBW undertakes now or in the future."



Innovative fish protection

In order to have as little impact on the Rhine as possible when it comes to cooling the RDK 8, EnBW has come up with a technical concept combining once-through and open-circuit cooling. When the Rhine reaches a higher temperature, the cooling water is cooled back down in a cooling tower before it is returned to the Rhine.

EnBW has also taken an innovative approach with regard to fish protection, implementing a multi-stage process to prevent fish from swimming into the cooling water intake channel. This is ensured by having a rotary drum screen in place with tight rod spacing and slow-turning drums which gently stop any larger fish from swimming in as well

as a threshold keeping back any bottom feeders. Any fish that make it into the channel despite these precautions (for example during high water levels) will be protected thanks to a new system in place designed to get them back out again: By means of collectors connected to a filter band system, they are carefully removed from the cooling water current and directed into a return line. A downstream fish ladder helps offset the height difference, allowing the fish to find their own way back to the Rhine. The model was developed in cooperation with fish protection experts from Baden-Württemberg. Other companies have already shown great interest in RDK 8's fish protection measures.

- For more information on the "Processes" focus area, please turn to section
► "Sustainability strategy", page 21.



03

Smart grid technology for the new energy concept in Germany

Aike Hartig blows into her hands, it's a chilly morning. Autumn has arrived, and with it the start of the concrete planning phase of the "GriPS" project (Grid Parity Storage). Now the real excitement begins for Aike Hartig: The engineer will now be travelling around the grid territory a lot, as she is managing the project which will begin in spring 2013 and will examine the impact of storage on the low-voltage grid over one year. Preparation work is in full swing to ensure the project can begin on time. Over the next few weeks, for example, ten families that have installed photovoltaic systems on their roofs will each have a lead gel accumulator installed in their homes. For twelve months, the homes will not be feeding all the electricity they generate into the local grid

as they usually would, but rather they will be using the majority of it for themselves. "Given the changes to the cost allocations under the German Renewable Energies Act (EEG), in the future it will be worth it financially speaking for customers to store the energy they generate for their own consumption and not to feed it into the grid," says Aike Hartig. Own home storage facilities could therefore become increasingly more commonplace – for EnBW as grid operator one cornerstone of many that will have to be taken into account as part of grid expansion. Hartig continues: "For us it's extremely interesting to see what effect such a development has on the distribution grid. It is therefore important to select several different households within a single network

→ Aike Hartig, engineer

"Expanding the grid towards smart grids presents us with great challenges. At the same time, our work has never been so exciting – after all, we now have the opportunity to play an active role in shaping the new energy concept in Germany."





territory." The results and potential effects of GriPS are of relevance in practice even today. In this regard, the share of solar power plants in Baden-Württemberg is also steadily rising. However, this is not without consequences: For example, should the sun shine particularly brightly and the photovoltaic systems feed more electricity into the local grid than is consumed there, this could cause the voltage to increase beyond an acceptable level. This would cause the systems to then shut down automatically and, despite the sunshine, no more electricity would be fed into the grid. An essential requirement of the grid is that generation and consumption are kept in balance, thereby maintaining an acceptable voltage. However, the increasingly volatile nature of electricity from renewable energies fed into the grid makes this task considerably more difficult. EnBW

is therefore pushing ahead with expanding its distribution grids and also testing new smart local grid substations as part of the "RiesLing" and "NetzLabor" pilot projects. To this end, Germany's first smart kiosk substation with infinitely variable voltage control was put into operation in Wechingen in autumn 2012. This substation can adjust the voltage within the local grid to the volume of electricity generated from renewable energies and integrate this far better into the electricity distribution grid. With the help of smart local grid substations, any volumes fed in from local generation and the power flow into the medium-voltage network are monitored online. Unlike the previous standard substations, these innovative local grid substations can regulate the voltage and automatically be switched from afar.



Promoting young talent

Students look with great interest at the large monitors at the grid control centre in Wendlingen. The control centre, which controls and monitors the extra-high voltage network of the EnBW group, offers an exciting glimpse into the work that goes on at transmission system operator TransnetBW, a subsidiary of EnBW – and for this reason is an integral part of its research and grant programme "Network²". Every year, 15 students from ten German universities have the opportunity to participate in the EnBW Regional AG and TransnetBW GmbH programme. Be they training seminars, events or visits to EnBW locations: Over a period of 18 months, the students gain a practical insight into the company and also get to

make their first professional contacts. They get a comprehensive overview of EnBW and can present themselves as a potential future employee. The programme, which has been successfully run for the past six years, is primarily aimed at those studying technical courses and in the last three semesters of their studies. In addition to a monthly allowance, each participant receives their own personal mentor. The students also have the opportunity to contact Aike Hartig, Matthias Seel and Marc Dieterich directly, who manage the talent programme together. Aike Hartig can also share her own experiences, as the engineer ultimately came to EnBW through "Network²".

➤ For more information on the "Employees and corporate social responsibility" focus area, please turn to section > "Sustainability strategy", page 21.



01 As part of GriPS, all participating families get lead gel accumulators installed in their homes.

02 Aike Hartig is interested to see the results from the project and its impact on the distribution grid.

03 As part of the "Network²" project, the students get to see the grid control centre in Wendlingen.



These examples show that the reorganisation and expansion of the distribution grids will be of great importance for the new energy concept in Germany. This development is also playing an important role for new wind turbines in Baden-Württemberg. In some rural areas, medium-voltage levels are currently overloaded as a result of the increasing volume of energy being fed in from photovoltaic generation – and additional wind turbines can no longer be connected to the grid in many locations. With what is known as the "wind power socket", EnBW has now developed a system for combining, from a technical standpoint, several turbines in one area into one local feed-in grid and connecting it directly to the high-voltage grid via its own transformer substation. "In this way, we can guarantee a high supply reliability in the electricity grid and can immediately start planning more turbines," says Richard Huber, head of grid planning.

Be it GriPS, RiesLing, NetzLabor or the wind power sockets – the search for solutions for the grids of the future is being stepped up, with EnBW testing innovative approaches for up-and-coming areas. Hardly anywhere else are the tasks as challenging at the moment as in the energy industry. However, Aike Hartig and Richard Huber see these challenges as an opportunity: "The entire energy industry in Germany needs to reinvent itself. For us engineers, it's an exciting opportunity to contribute our knowledge and help develop innovative solutions for EnBW."

EnBW in figures

126,104

photovoltaic systems connected to the EnBW Regional AG grid (as of 31 December 2012)

154,800

km of long-distance transmission and distribution grids

10.6

% women in managerial positions

Less is more: Never losing sight of energy efficiency

Even today, the question Marco Glunz is posed time and time again during his daily work makes him smile: Why does EnBW, as an energy company, want to reduce energy consumption and is even working on developing innovative energy-saving models?

"For me there is no question," says Glunz and shakes his head in bewilderment. "It's a matter of genuine concern for me that we try to save energy wherever we possibly can. This is why I am very glad that my employer, EnBW, attaches great importance to this issue and understands that efficient energy usage is one of the most important components for achieving a sustainable energy supply." Marco Glunz has therefore taken it upon himself to save electricity and to get others to do the same. Together with his colleagues, the heating engineer advises municipalities on how they can take advantage of existing energy-saving potential. Public buildings in particular can be vastly improved in terms of their energy con-

sumption. "On average, it is possible for existing schools, universities, hospitals and even multi-purpose halls to make energy savings of between 20% and 30%. Not only does this reduce energy costs, it also slashes CO₂ consumption," explains Glunz.

Cooperation with partners enables EnBW to forge ahead in the area of energy efficiency in buildings, provide municipalities and private contractors with even more targeted support and also offer them a greater selection of possibilities for funding such measures. "With our energy savings contracting services, municipalities receive one-stop solutions and can implement extensive energy efficiency projects with no capital expenditures required on their part," adds Marco Glunz. While energy savings contracting services originally focused on modernising heating systems, EnBW now offers additional measures such as lighting or installing photovoltaic systems.

→ Marco Glunz, heating engineer

"The cheapest and cleanest energy is the energy that is not even consumed at all."





The most recent example of how actual energy efficiency can also increase the overall efficiency of buildings is the Wenckebach hospital in Berlin Tempelhof, where EnBW performed extensive work in 2012 to increase the building's energy efficiency. Whether it was a new combined heat and power unit, new cooling systems for operating theatres or new heating systems – the savings potential for this project was immense. "These measures will have paid for themselves in just a few years," Glunz says with conviction. However, also important is the leading role a municipality or public owner can take thanks to these steps. Glunz continues: "The government in particular should set a good example by taking such energy efficiency measures in order to make a valuable contribution to environmental protection."

This Berlin hospital is not the only project showing how it can be done, three schools in Baden-Württemberg are also setting an example: In 2012, the schools, together with EnBW Vertrieb GmbH, were awarded the "Good Practice" label by the German Energy Agency (dena) for their successful implementation of energy-saving measures. The Rheinstetten-Mörsch school centre, Messstetten-Bueloch elementary school as well as the Stutensee-Blankenloch school centre each had EnBW perform at least 50 measures relating to heating, lighting and ventilation – and the results speak for themselves: With CO₂ savings of between 38% and 93%, the targets set in each case were not only met at all three schools, but in some cases exceeded by a long way. In addition, the town of Leonberg, as part of a contracting project performed by EnBW Energy Solutions GmbH, recently saw the installation of a modern, efficient pellet boiler, which, among other things, supplies a



01 hospital and vocational training centre with heating.

Working together towards success – this can also be witnessed in other areas. EnBW sees itself as an important cooperation partner and is working in a number of different ways with municipalities and municipal utilities to come up with innovative energy solutions. For example, in 2012 EnBW signed a cooperation agreement with five municipal utilities under the name of espot, allowing them to draw on EnBW's knowledge on combining gas purchasing activities to achieve better prices on the wholesale market. EnBW is also forging ahead together with the municipal utilities of Esslingen. They will in future market products with green electricity generated from 100% certified hydro-electric power and bio natural gas under the "grünES" brand – also an example of a true partnership.



Energy efficiency in figures

27,464

customer consultations



- 01 Marco Glunz (left) and Stefan Lemke from EnBW are looking to develop innovative energy-saving models.
- 02 The new pellet boiler will in future provide Leonberg's hospital and vocational training centre with heating.
- 03 The solar farm in Leutkirch provides enough electricity for some 1,500 households.



03



Sustainable towns of Leutkirch and Ehingen

Successfully shaping the future of energy and supporting residents in independently producing low-carbon energy without endangering supply reliability and the local value chain – this is the aim of the “Sustainable town” model project. The project kicked off in 2011 in Leutkirch. Together with its partners, EnBW is implementing a multi-stage concept, getting as many groups of society involved as possible. Through public participation and future-oriented workshops, the residents are actively helping shape their energy future – and with success: For example, one of Baden-Württemberg’s largest solar farms has

been realised with the involvement of the community energy cooperative. In 2012, Ehingen followed as an additional sustainable model town. By taking a holistic approach and also thanks to broad consensus among the public, measures here include expanding energy generation from renewable sources, increasing energy efficiency and promoting environmentally friendly mobility. Both municipalities benefited from scientific support, allowing EnBW to gain important insights into the designing and implementing of local sustainable energy supply. By 2015, EnBW aims to assist further municipalities in becoming sustainable towns.

➤ For more information on the “Innovation and growth” focus area, please turn to section
➤ “Sustainability strategy”, page 20.

Leutkirch – the targets

-20

% greenhouse gas emissions

94

% of households self-sufficient
in terms of energy





Heat supply for the winter: EnBW's new gas storage facility

With purposeful steps, Dr.-Ing. Thomas Schrey makes his way through the large hall of the above-ground plant "Crystal" at the storage cavern in Etzel. The machine located in the hall emits a low monotonous hum. "This is where the gas is processed," explains Schrey pointing to the dryer, which looks like some kind of extra large heater. The mining engineer is often on site at Speicherbetriebsgesellschaft "Crystal" mbH, jointly founded by EnBW and Électricité de France (EDF). "Crystal" operates a total of four storage caverns in the Friesian town of Etzel. Commercial operations at the gas storage facility and above-ground plant commenced in September 2012. In parallel to this, EnBW concluded a long-term gas supply agreement with the Russian gas producer Novatek in 2012. In this way, EnBW will be able to act more independently on the gas market and expand its market position in the gas midstream area. Together with the gas supply agree-

ment, the storage capacities in Etzel will allow for optimised management of EnBW's gas portfolio.

Gas storage facilities like the one in Etzel play a central buffering role to protect the gas market and its customers from major fluctuations and avoid shortfalls. Using a highly complex and elaborate system, "Crystal" pumps gas into and out of the caverns several times a day. To store the gas, it is compressed from its pipeline pressure (60 to 80 bar) to up to 200 bar using a compressor located in the above-ground plant before it reaches the caverns. When removing the gas, it must again be adjusted to match the pipeline pressure. During the latter procedure, the gas is first preheated as it cools considerably upon decompression. As a final step, the gas is dried before being transported to the natural gas transmission grid.

→ Dr.-Ing. Thomas Schrey, managing director of EnBW Etzel Speicher GmbH

"For us the natural gas storage facility in Etzel is an important step towards even greater supply reliability for our customers in the future."



01 Thomas Schrey and technical manager Dieter Dickebohm at the control centre.

02 In the heat exchanger, gas is prepared for transportation into the natural gas grid.

03 Fresh from the field to the natural gas grid: In Laupheim too, natural gas is produced all year long.



Here a pipe, there a pipe, somewhere in between halls with compressors and other technical equipment – for the layman, the state-of-the-art above-ground plant at the new gas storage facility is a gigantic maze. The plant acts as the central hub transporting the gas into and out of the storage caverns, controlling and processing the natural gas for transportation to the transmission grid or into the salt caverns. For the former, the above-ground plant is connected to the Dutch gas trading point TTF via a 60-kilometre pipeline – for the latter, the natural gas is piped approximately one kilometre further north to the subterranean cavities of the salt caverns, where it is ultimately stored. The four salt caverns lie at a depth of between 1,000 and 1,600 metres and can hold up to 400 million standard cubic metres of natural gas. Two of the four storage caverns are at EnBW's disposal.

"With this volume, we can supply around 300,000 homes with natural gas for one year," says Thomas Schrey. The storage caverns help compensate for gas supply stoppages and are used to meet peak demand and to offset seasonal fluctuations in consumption – for example in winter when customer demand for additional natural gas is particularly

high. Whether gas is fed into or out of the storage caverns is decided by dealers at EnBW and EDF on the respective gas exchanges. This is where orders are made and sent to the above-ground plant, where they are processed at the control centre and the facilities are controlled accordingly. Whenever there is a shortage of natural gas on the market, the storage

EnBW in figures

31,073

metric tons of CO₂ were saved in 2012 thanks to bio natural gas

73.1

billion kWh of gas were sold in 2012

03



cavern facility can at short notice supply up to one million homes simultaneously with natural gas. However, the facility in Etzel is also important for ensuring grid stability. "Thanks to its flexibility, it differs from other storage facilities in that it can quickly change direction from putting gas in storage or removing it again. In this way, we can compensate for pressure variations in the grid that may also arise from the increased share of local renewable energies," says the managing director.

Natural gas is the fossil fuel that produces the least amount of emissions and is used in a variety of different ways. One in two German homes is heated using natural gas, gas turbine power stations generate electricity at peak load periods and cars are being increasingly powered by natural gas. "In connection with the phase-out of nuclear power, the demand for gas is likely to continue to increase," says Thomas Schrey and pauses – from the hall a low monotonous hum can be heard again. Demand is high today – and so once again natural gas will be processed for its long journey from the Friesian town of Etzel through the gas grids.



"Green" gas from regional biogas plants

Producing bio natural gas from the contents of your organic waste bin to generate electricity and heat? In Geislingen this is becoming a reality: At its newest of four bio natural gas plants in total, EnBW will in future produce bio natural gas from 100% kitchen waste and leftovers for around 2,000 homes. This know-how did not come about without reason. Early on, EnBW was one of the pioneers of refining biogas to bio natural gas and in 2008 established one of Baden-Württemberg's first plants in Laupheim for feeding biogas into the natural gas grid. EnBW also took an innovative approach in Blaufelden-Emmertsbühl. The bio natural gas there is not fed into the high-pressure transmission grid as used to be the case, but instead into the local dis-

tribution grid. This procedure, for which EnBW has submitted a patent application, reduces the need for pipeline construction considerably – and therefore also the impact on the environment. This also saves cost and energy. In terms of the composition of biomass, EnBW is currently conducting research projects to look into alternatives to planting maize crops, and has already identified several crossbreeds that could be converted into biogas commercially. EnBW has also developed innovative procedures for using more and more residual waste in generating biogas. The company is also forging ahead with this in Geislingen, making a contribution to the substitution of fossil natural gas.

> For more information on the "Innovation and growth" focus area, please turn to section > "Sustainability strategy", page 20.

Combined management report

of the EnBW group and EnBW AG

43	Summary	113	Risk and opportunities report
45	Group structure and business activity	113	Principles of risk management
57	Goals, strategy and corporate management	113	Structure and process of risk management
61	Economic and political environment	114	Environment and industry risks
68	The EnBW group	118	Strategic risks
68	Overall assessment of the business development	119	Operating risks
69	Results of operations	120	Financial risks
74	Financial position	120	Legal risks
81	Net assets	121	Other risks
86	Unrecognised intangible assets	122	Overall assessment
88	EnBW AG	123	Risk management system
88	EnBW AG	123	Principles of opportunity management
88	Net assets of EnBW AG	124	Company-specific opportunities
89	Net profit of EnBW AG and dividend	125	Overall assessment of the economic situation of the group
90	Comments on reporting	126	Remuneration report
90	Dependent company declaration	132	Disclosures pursuant to Secs. 289 (4), 315 (4) German Commercial Code (HGB) and explanatory report of the Board of Management
90	The EnBW share	135	Forecast
91	Dividend policy	135	Anticipated economic environment
92	Employees	136	Future political and regulatory environment
98	Environmental protection	137	Future industry development
103	Corporate social responsibility	137	Corporate strategy and future development of the company
105	Procurement	138	Anticipated business development
107	Research and development	140	Significant opportunities and risks of the next two years
111	Subsequent events	141	Developments in human resources
112	Key features of the financial reporting internal control system	142	Developments in environmental protection
		142	Research and development
		142	Management's overall assessment of the anticipated development
		142	Future-oriented statements

The cross-references in bold marked with orange arrows in brackets and
the orange separator sheets are not part of the audited management report.

Summary

The EnBW group held its own on the market in the fiscal year 2012 and generated an overall satisfactory result amidst difficult conditions. The company's financial position remains sound, and the dividend proposal for 2012 is € 0.85 per share.

Strategy and economic environment

Strategic moves

- › Securing position as low-carbon generator
- › Expanding local solution offers in the field of energy

Measures to create financial headroom

- › "Fokus" efficiency programme brings results quickly
- › Some of the divestitures have already been realised
- › Capital measures successfully concluded

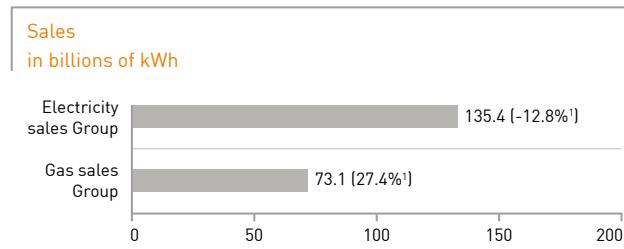


- › Colder weather
- › Good year in terms of water for run-of-the-river power stations



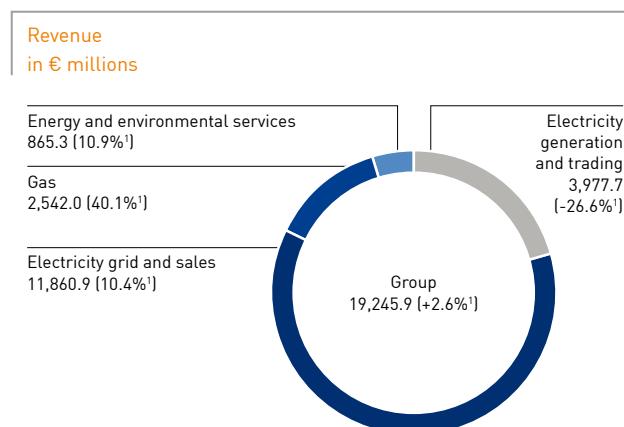
- › Economic downturn
- › Falling electricity prices on wholesale markets
- › Nuclear fuel rod tax
- › Permanent shutdown of two of our nuclear power plants
- › Preferential feed-in of renewable energies reduces operating times of conventional power stations
- › Continuing low interest level requires adjustment of the pension and nuclear power provisions
- › Intense competition in the retail and business customers sectors

Results of operations



- › Decrease in electricity sales due to lower trading activities (among other factors, due to the shutdown of two nuclear power plants) and intense competition in the B2C and B2B business
- › Increase in gas sales due above all to colder weather and expansion of the gas midstream business

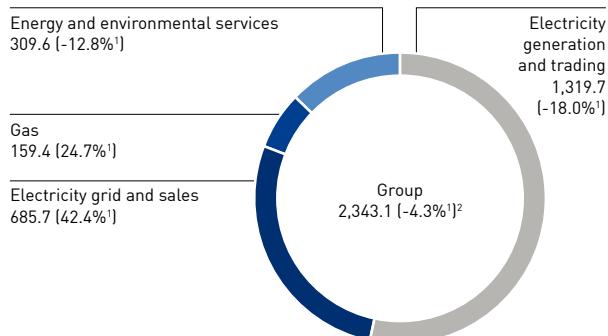
¹ Change compared to the prior year.



- › Electricity generation and trading: Decrease in sales, lower prices on the wholesale markets
- › Electricity grid and sales: Above all higher revenue under the German Renewable Energies Act (EEG)
- › Gas: Colder weather, expansion of trading activities
- › Energy and environmental services: Expansion of local energy solutions, in particular contracting

¹ Change compared to the prior year.

Adjusted EBITDA in € millions

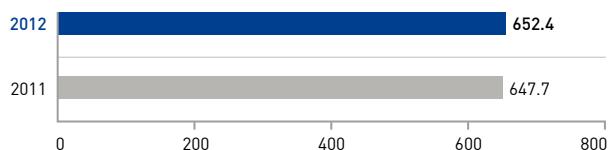


- Electricity generation and trading: Decrease due to the shutdown of nuclear power plants and falling wholesale market prices overshadows increase in revenue from electricity generated from wind energy
- Electricity grid and sales: Increased network user charges, lower overhead costs, improved sales margins
- Gas: Increased sales, higher quantities transmitted, lower overhead costs
- Energy and environmental services: Negative special effects in the prior year

¹ Change compared to the prior year.

² Holding/consolidation: € -131.3 million / -5.6%.

Adjusted group net profit in € millions¹

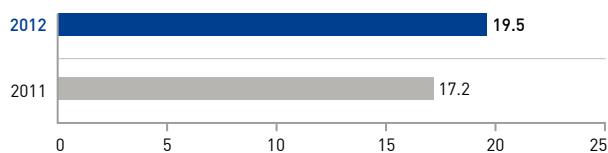


The Board of Management and Supervisory Board propose that a dividend of € 0.85 per share be distributed.

¹ In relation to the profit/loss shares attributable to the equity holders of EnBW AG; prior-year figures restated.

Net assets

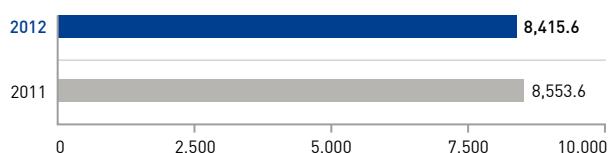
Equity ratio (%)¹



The increase in equity is primarily attributable to the capital increase performed in July 2012.

¹ Prior-year figures restated.

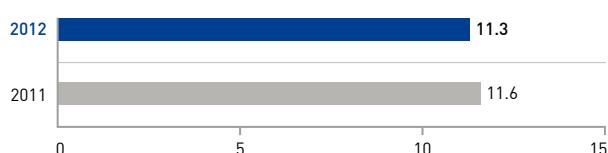
Adjusted net debt in € millions¹



The dynamic leverage ratio (adjusted net debt/adjusted EBITDA) increased from 3.49 to 3.59 on account of the decrease in the operating result.

¹ Prior-year figures restated.

ROCE (%)¹



ROCE dropped slightly from 11.6% to 11.3% due to the decrease in adjusted EBIT including investment result.

¹ Prior-year figures restated.

Group structure and business activity

EnBW is one of the largest energy supply companies and service providers in Germany and Europe. With our vertically integrated business portfolio, we ensure that our customers are supplied with energy. We have defended our position in a market characterised by fierce competition and our customers see us as a reliable partner for energy-related questions – with demand-based and efficiency-enhancing holistic solutions, green energy offerings and award-winning customer service.

Structure and key business processes

The EnBW group

As a vertically integrated energy company, the EnBW group has activities along the entire value added chain. In the area of electricity, the company operates in the two segments of electricity generation and trading as well as electricity grid and sales, covering all stages of the value added chain. These two segments make the most significant contribution to group net profit. The gas segment comprises activities in the midstream and downstream areas. The midstream business includes import agreements, import infrastructure, gas storage, and trading and portfolio management. The downstream business covers gas transmission, distribution and sales. In addition, EnBW operates in the energy and environmental services segment. This segment comprises energy supply and energy-saving contracting services as well as network and energy-related services, thermal and non-thermal waste disposal and water supply services ([> www.enbw.com/report2012 > Financial report 2012](#)). The reporting period 2012 is the last year in which we will report on the group's segments in this form. On account of the realignment and restructuring of the group our segment reporting will be changed in the current fiscal year – starting with the quarterly financial report for January to March 2013 – to the segments of generation and trading, renewable energies, grids, sales, and other/consolidation.

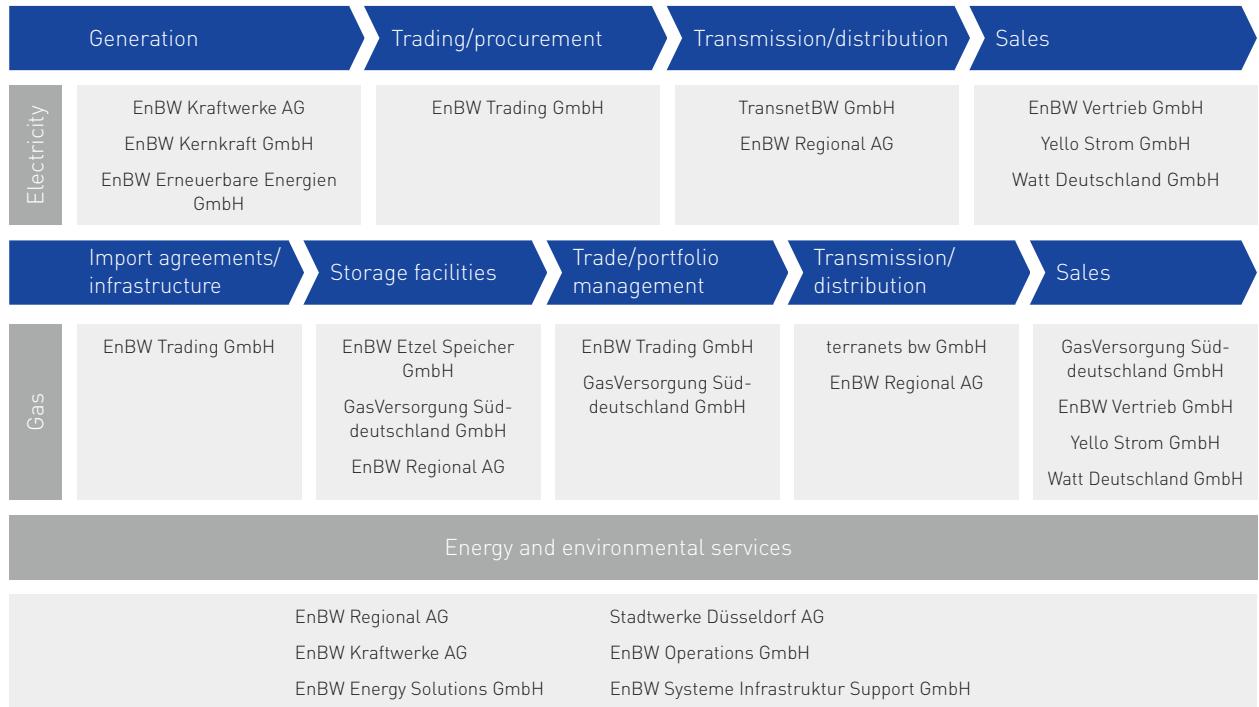
With its strong roots in Baden-Württemberg, EnBW is one the largest energy providers in Germany. In total, EnBW supplies and advises close to 5.5 million customers. The group has around 20,000 employees. In the fiscal year of 2012, unit sales of energy came to 208.5 billion kWh. About 89% of group revenue was generated by EnBW in Germany in 2012, and the international share came to around 11%.

In North Rhine-Westphalia, EnBW has a majority shareholding in Stadtwerke Düsseldorf and holds an equity investment of 26% in EWE Aktiengesellschaft – the fifth largest energy company in Germany. The group also holds some other equity investments in Germany. Within the European region, EnBW has invested in carefully chosen countries, primarily in the field of electricity. It holds equity investments in Switzerland and Austria as well as in some eastern European countries such as the Czech Republic and Hungary. On the Czech market, EnBW acquired the majority shareholding in the energy supply company Pražská energetika a.s. (PRE) in 2010, thus assuming economic and industrial control. The EnBW group is active on the Turkish market via a joint venture with the industrial conglomerate Borusan. Here, we are investing mainly in the establishment and expansion of generation capacities in the field of renewable energies ([> www.enbw.com/report2012 > Financial report 2012](#)).

The EnBW group is headquartered in Karlsruhe. Other major offices are located in Stuttgart, Biberach and Esslingen. The company's various regional and sales centres are spread across Baden-Württemberg and there are further sales offices throughout Germany. EnBW's main assets include a large number of power stations and other energy generation facilities, electricity and gas grids, distribution plants and gas storage facilities, most of which are located in Germany.

As holding company, EnBW Energie Baden-Württemberg AG (EnBW AG) exercises the management function in the EnBW group. It is responsible for the strategic management and control of the group at all key stages of the value added chain in the segments. In addition, the holding company assumes the corporate functions of finance and liquidity management, HR management, corporate communications and group development. The compliance, corporate governance and risk management functions are likewise located at the holding company. EnBW AG has concluded domination and profit and loss transfer agreements with some major subsidiaries.

Key entities and equity investments of the EnBW group along the value added chain



As of 31 December 2012

Major entities in the EnBW group

EnBW Kraftwerke AG operates most of EnBW's portfolio of power stations. Electricity and district heating are generated from facilities using a range of energy sources. Most conventional plants are environmentally compatible combined heat and power facilities. The entity is also active in the field of environmental and energy services.

EnBW Kernkraft GmbH is responsible for operating Philippsburg nuclear power plant 2 (KKP 2) and Neckarwestheim nuclear power plant II (GKN II), managing the post-operation phase of the units KKP 1 and GKN I, which have been shut down since March 2011, and decommissioning Obrigheim nuclear power plant.

EnBW Erneuerbare Energien GmbH is mainly responsible for expanding and operating generation capacity on the basis of renewable energies. The use of hydro-electric power to generate energy is managed by **EnBW Kraftwerke AG**.

As of 31 December 2012, EnBW's generation portfolio, which includes partly owned power stations and long-term procurement agreements, totalled 13,400 MW (prior year: 13,350 MW). The generation capacities are composed of nuclear power plants, coal, oil, gas and pumped storage power stations that do not use the natural flow of water as well as facilities designed to generate electricity from renewable energies. These include run-of-the-river power stations, storage power stations and pumped storage power stations that use the natural flow of water, photovoltaic plants, wind turbines, biomass plants and geothermal facilities. EnBW's generation portfolio is well-balanced as regards the mix of fuels and the age structure of the facilities.

Breakdown of the generation portfolio of the EnBW group ^{1,2} Electrical output ³ in MW (as of 31 December)	2012	2011	Generation in the EnBW group ^{1,2} according to primary energy source in GWh	2012	2011
Nuclear power plants	3,333	3,333	Nuclear power plants	25,799	28,382
Conventional power stations	6,995	7,010	Conventional power stations	24,443	22,901
Brown coal	1,034	1,034	Brown coal	6,754	6,897
Hard coal	3,987	3,953	Hard coal	16,230	13,466
Gas	1,154	1,210	Gas	1,178	2,130
Other conventional power stations	820	813	Other conventional power stations	281	408
Pumped storage power stations that do not use the natural flow of water³	545	545	Pumped storage power stations during pumping operation	1,579	1,764
Renewable energies	2,527	2,461	Renewable energies	7,230	5,982
Storage/pumped storage power stations using the natural flow of water ³	1,311	1,299	of which subsidised under the German Renewable Energies Act (EEG)	574	802
Run-of-the-river power stations	882	860	Storage power stations/pumped storage power stations using the natural flow of water	955	1,063
Wind power stations	218	194	Run-of-the-river powerstations	5,442	4,388
Other renewable energies	116	109	Wind power stations	482	354
Installed capacity of EnBW group (without standby reserve)	13,400	13,350	Other renewable energies	351	177
of which renewable [%]	18.9	18.4	EnBW group's own generation	59,051	59,029
of which low-carbon [%] ⁴	12.7	13.1	of which renewable [%]	12.2	10.1
			of which low-carbon [%] ³	4.7	6.6

¹ Own generation includes long-term procurement agreements and generation from partly owned power stations.

² Prior-year figures restated.

³ Capacity values irrespective of marketing channel, for storage: generation capacity.

⁴ Gas-fired power stations, pumped storage power stations that do not use the natural flow of water.

¹ Own generation includes long-term procurement agreements and generation from partly owned power stations.

² Prior-year figures restated.

³ Gas-fired power stations, pumped storage power stations during pumping operation.

The composition of generation capacity will continue to change on account of the new energy concept introduced in Germany and the changed energy policy environment as well as the increased use of renewable energy sources. EnBW further expanded its generation capacity based on renewable energy sources.

The share of nuclear power in electricity generation decreased from 48.1% in 2011 to 43.7% in 2012, while the share of renewable energies increased further from 10.1% to 12.2%. Generation capacity stemming from nuclear power plants was reduced through the shutdown of the two nuclear power plants units KKP1 and GKN1 in spring 2011. In contrast, more electricity was generated by hard coal power stations. The increase in generation from renewable energies is mostly attributable to run-of-the-river power stations, which benefited from good water levels in rivers in 2012. The increase in the volume of wind power was primarily thanks to the EnBW Baltic 1 offshore wind farm commissioned in May 2011. The CO₂ emissions from EnBW's own generation portfolio stand at 369 g CO₂/kWh (prior year: 328 g CO₂/kWh), which still is significantly below the German national average for 2011 of 503 g CO₂/kWh.

EnBW Kraftwerke AG is active in the field of waste disposal, as is Stadtwerke Düsseldorf AG. The EnBW group's thermal waste treatment plants process a total of around 1.3 million t of waste per year. The residual waste CHP station in Stuttgart-Münster plays a key role here. It is also a cornerstone of the environmentally and climate-compatible district heating supply for the state capital of Stuttgart. Zurich's Josefstrasse domestic waste CHP, which has been operated by Fernwärme Zürich AG (in which EnBW Kraftwerke AG has a 40% shareholding) since 2011, also generates district heating with waste from Baden-Württemberg.

Back in 2007, EnBW secured long-term rights to use salt caverns in the region of Etzel. Commercial operation of the gas storage facilities in Etzel by EnBW Etzel Speicher GmbH, a wholly owned subsidiary of EnBW Kraftwerke AG, commenced at the end of September 2012. In order to exploit synergies, EnBW and Electricité de France (EDF), which also controls storage caverns in the Etzel region, have formed a 50:50 joint venture. The entity is tasked with the construction and commercial operation of the above-ground facility.

EnBW Trading GmbH (ETG) operates in the field of trading and procurement and forms the interface between generation sales as well as the wholesale market. This entity is responsible for trading with physical and financial products for electricity, primary energy sources (coal, gas, oil) as well as CO₂ allowances and guarantees of origin. This means that ETG is responsible for the fuel procurement and logistics, emission allowance management, electricity marketing as well as power station deployment planning and management with regard to EnBW's generation portfolio. As one of the suppliers of balancing energy in Germany, it supports the transmission system operators in terms of system security. In addition, ETG is tasked with the commercial optimisation of EnBW's gas assets and agreements. Following the merger of EnBW Gas Midstream GmbH in the past fiscal year, ETG is also responsible for securing medium- and long-term gas procurement volumes for EnBW via its own import agreements and investments in the requisite infrastructure. For the sales function, it ensures that energy needs are covered.

ETG is playing an active part in shaping the new energy concept in Germany. Via its direct marketing activities, it introduces facilities for renewable energies (wind, hydroelectric power, solar energy and biomass) to the market by fully integrating them into the value added chain. Sustainability aspects, for example with respect to the procurement of coal, are also taken into account in its activities.

ETG trades at the most important energy exchanges across Europe, such as the European Energy Exchange (EEX) in Leipzig, the European Power Exchange (EPEX Spot) in Paris, the NordPool Spot (Elbas) in Oslo, the Energy Exchange Austria (EXAA) in Vienna, or the International Commodity Exchange (ICE) in London. In addition, ETG is active in OTC (over-the-counter) trading with some 170 German and international partners.

As part of its activities, it also assumes the function of risk manager for market-related risks along the value added chain. These are, in particular, price and quantity risks relating to procurement and sales. In addition to supporting the operating business, ETG also trades on its own account, subject to strict regulations and limits.

In March 2012 EnBW Transportnetze AG was renamed **TransnetBW GmbH (TNG)**. EnBW's transmission system operator changed its name to comply with a European requirement for the further liberalisation of the electricity and natural gas market (third energy liberalisation package). There are three unbundling models applicable for transmission system operators. EnBW has chosen the independent transmission operator (ITO) model for TNG ([">> www.enbw.com/report2012](http://www.enbw.com/report2012) > Financial report 2012). With this model, the transmission grid (380 kV and 220 kV) remains within the group, but stricter unbundling

provisions apply between TNG as ITO and EnBW. EnBW is prohibited from rendering the group services it used to provide, for instance in the areas of data processing, human resources or grid maintenance. These requirements mean that TNG will in future employ considerably more staff of its own to be able to render all of these group services. A draft version of the Federal Network Agency's certification notice has been pending decision by the European Commission since 12 December 2012.

TNG operates the transmission network in Baden-Württemberg. It is its statutory duty to permanently guarantee system security. In addition, it continuously controls and manages the electricity flows within Baden-Württemberg. It also regulates the electricity exchange between neighbouring transmission system operators within and outside Germany, and is the owner of the transmission grid infrastructure. TNG is thus responsible for the maintenance and demand-driven expansion of the transmission grid. The transmission system is available to all players on the electricity market based on non-discriminatory access at transparent market conditions. The entity currently has business relations with some 400 balancing group managers.

In March 2012 GVS Netz GmbH was renamed **terranets bw GmbH (terranets bw)**. The shareholders of terranets bw are EnBW and the Italian energy group Eni. Under the umbrella of the parent company EnBW Eni Verwaltungsgesellschaft mbH, the entity acts as a separate entity, meeting its duties as operator of a long-distance transmission system for natural gas. Since 9 November 2012, terranets bw has been certified as ITO by the Federal Network Agency and the European Commission.

In addition to the secure, economically viable and non-discriminatory transmission of natural gas, the main tasks of terranets bw include the provision of technology, telecommunications and administrative services. It also supports energy suppliers and industrial plants with a large number of technical services ranging from planning and construction, operations and maintenance through to the monitoring and control of grids. terranets bw is the market leader in Baden-Württemberg in the maintenance of natural gas filling stations.

EnBW Regional AG (REG) is the largest distribution network operator in Baden-Württemberg where it distributes electricity through its own distribution grids. It is responsible for granting transparent and non-discriminatory access to EnBW's electricity grid and for reliable distribution of electricity to suppliers within and outside the group alike. Its market partners are municipal authorities that grant franchises and grid users in their role as energy suppliers and parties feeding energy into the grid. As the regulatory authority, the Federal Network Agency is another important player with respect to operation of the distribution grid. The

technical expertise and structures are managed across divisions with a focus on electricity, gas and water supplies.

With retroactive effect as of 1 January 2012, REG acquired the assets and activities of EnBW Gas GmbH (GAS) and EnBW Gasnetz GmbH (GNG). Both entities were merged with REG with legal effect as of 30 July 2012 by filing with the register court. Through integration of the gas-related segments of planning construction and operation, we have bundled our competencies in the grid business and increased efficiency. As the legal successor, REG has also assumed gas franchise agreements with towns and municipalities. As such it is responsible for the security of natural gas volumes transmitted through the network of pipelines spanning almost 4,500 km.

In total, EnBW's electricity transmission and distribution grids are around 155,000 km in length. Municipal utilities and industrial plants are supplied using 110 kV lines in the distribution grid, and the 30, 20 and 10 kV lines in the regional distribution grid are available to medium-sized customers. Domestic households, agricultural and commercial customers are supplied through the 0.4 kV network.

Electricity grid lengths of the EnBW group incl. service connections ¹ in km	2012	2011
Transmission grid		
Extra-high voltage 380 kV	2,000	2,000
Extra-high voltage 220 kV	1,700	1,700
Distribution grid		
High voltage 110 kV	8,600	8,600
Medium voltage 30/20/10 kV	46,200	45,900
Low voltage 0.4 kV	96,300	95,000

¹ Figures rounded; prior-year figures restated.

Gas network lengths of the EnBW group incl. service connections ¹ in km	2012	2011
Long-distance transmission network		
High pressure	2,000	2,000
Distribution grid		
High pressure	2,200	2,100
Medium pressure	7,200	6,900
Low pressure	4,900	5,000

¹ Figures rounded; prior-year figures restated.

Cooperation with municipalities is designed as a long-term, direct relationship on the basis of franchise agreements. In this context, REG is responsible for contract management and managing business relationships with municipal utilities in Baden-Württemberg. REG and towns and municipalities are jointly tasked with maintaining a reliable, economically viable and environmentally compatible infrastructure.

Within the energy and environmental services segment, REG is responsible for water. In Stuttgart, it is in charge of drinking water supplies. In addition to water and waste water operations, it offers water loss monitoring services with the "EnBW LeakControl" product throughout Baden-Württemberg. In the fields of electricity and gas, REG covers grid-related and other services, for example, maintenance work, renewal measures and the installation of new operating resources of all kinds and at all voltage and pressure levels. REG further provides all services relating to proper street lighting. The product portfolio is rounded off by holistic solutions for the installation and operation of photovoltaic facilities in municipalities and offers relating to telecommunications, media and safety technology as well as radio transmission.

EnBW Vertrieb GmbH sells electricity, gas, district heating, water and, increasingly, energy services for industrial, commercial and retail customers, municipal utilities and municipalities under the EnBW brand. The services offered to retail and business customers as well as municipalities concentrate on Baden-Württemberg. In addition to EnBW Vertrieb GmbH, there are further local sales units within the EnBW group.

Under the Yello Strom brand, **Yello Strom GmbH** is responsible for national sales of electricity, gas and other products to retail and business customers.

Watt Deutschland GmbH specialises in sales of electricity and gas to the customer groups of SMEs and chains throughout Germany under the Watt brand. Its range of services also extends to energy and system services.

Energiedienst Holding AG (ED), with its subsidiaries EnAlpin AG (Switzerland), NaturEnergie AG and Energiedienst AG, is responsible for electricity sales in south Baden and Switzerland. As an energy service provider with an ecological profile, ED has for more than ten years been supplying all of its retail and business customers in its home market of south Baden with green electricity generated 100% from hydro-electric power. It is also one of the first providers of climate-neutral gas.

With the NaturEnergiePlus brand, **NaturEnergie+ Deutschland GmbH** targets ecologically minded customers throughout Germany.

In the eastern Württemberg region and Donau-Ries in Bavaria, **EnBW Ostwürttemberg DonauRies AG (ODR)** supplies its customers with electricity and gas. In addition, ODR offers its customers a large number of energy-related services. With its subsidiary ODR Technologie Services GmbH, it successfully continued expanding the telecommunications growth segment (added-value services and network marketing). Within its own investment portfolio and the municipal utilities business, the entity expanded its range of IT services and smart meter applications in 2012. In its distribution grid business, Netzesellschaft Ostwürttemberg GmbH (NGO) – likewise a wholly owned subsidiary of ODR – operates an extensive electricity and gas distribution network. With more than 24,000 local generation facilities based on renewable energies, the NGO network has one of the highest feed-in densities in Germany.

As a vertically integrated energy company, **ZEAG Energie AG (ZEAG)** mostly operates in the Heilbronn area. Besides electricity generation and sales, customers in this region are also supplied with natural gas via Gasversorgung Unterland GmbH. Electricity and gas distribution grids are managed via NHF Netzesellschaft Heilbronn-Franken mbH, a wholly owned subsidiary of ZEAG.

EnBW also sells electricity throughout North Rhine-Westphalia via its shareholding in **Stadtwerke Düsseldorf AG (SWD)**. The most powerful and most efficient gas and steam turbine power station in the world with a degree of efficiency of over 61% is currently being built at Lausward in the Düsseldorf port. Its CO₂ emissions will be 50% below those of average German power stations. It is scheduled to go into operation in 2016. The SWD group's gas division comprises gas trading, gas sales and gas distribution. The entity also offers waste disposal services. As one of the leading companies, it provides reliable residual waste disposal services in the long term for its municipal partners in the Düsseldorf region. The residual waste CHP station in Düsseldorf plays a key role here. It is equipped with state-of-the-art boiler and furnace technology and offers effective and efficient flue gas cleaning. The combined heat and power generation thus realised is essential to an environmentally and climate-compatible district heating supply for the state capital of Düsseldorf.

GasVersorgung Süddeutschland GmbH (GVS) supplies natural gas to municipal utilities, regional gas suppliers, industrial customers and power stations both in Germany and abroad. GVS' customer base is increasingly extending beyond the borders of Baden-Württemberg to neighbouring German-speaking countries. Its range of services is rounded off by additional services in the area of consulting, support and gas systems management as well as marketing support, pooling of settlement balancing groups and portfolio optimisation. EnBW and the Italian energy group Eni hold investments in GVS via their joint venture EnBW Eni Verwaltungsgesellschaft mbH.

EnBW Energy Solutions GmbH (ESG) provides energy efficiency solutions as contracting services along the entire value added chain: from the initial needs analysis, through planning, financing and implementation to the operation, servicing and maintenance of facilities at the customer. In addition to energy plants and (combined power and) heating plants, the media infrastructure for supplying various usable energies such as heat, steam, cooling and compressed air are employed for this purpose. ESG's range of services includes modular plants such as combined heat and power plants or cooling and compressed air systems and extends to complex systems for combined heat and power generation and overall solutions for industrial locations. With technically and economically optimised as well as needs-oriented solutions, ESG safeguards the long-term energy supplies to its industrial, business, municipal and housing industry customers. The overarching aim is to optimise the overall energy situation. Its portfolio of services extends to a wide range of different technologies, fuels and facility sizes. ESG's contracting solutions contribute to its customers' competitiveness and a reduction in CO₂ emissions by means of efficient generation technology.

As a shared service centre, **EnBW Systeme Infrastruktur Support GmbH** performs extensive consulting and support services within the EnBW group. This includes for example data processing, procurement, HR, accounting and taxes as well as legal counsel and facility management.

EnBW Operations GmbH (EOG) is EnBW's service provider for process services and system solutions and the operation of information and settlement platforms. EOG assumes the operational side of customer relationships on behalf of its clients with respect to energy supply, settlement of network usage, energy data management as well as settlement and other services. In addition, EOG is the service provider responsible for the settlement of energy-related services and local generating facilities in private households. The entity has offices in Biberach, Esslingen and Karlsruhe. Its headquarters are located in Karlsruhe. Apart from the group entities, EOG's customers include the city of Stuttgart and other external entities.

EnBW AG

EnBW AG's shares are listed on the General Standard segment of the Deutsche Börse stock exchange. The shareholder composition of EnBW AG has changed marginally compared to the prior year since the capital increase in July 2012. The federal state of Baden-Württemberg (via NECKARPRI-Beteiligungsgesellschaft mbH) and Zweckverband Oberschwäbische Elektrizitätswerke (OEW) (via OEW Energie-Beteiligungs GmbH) each hold 46.75% of EnBW AG's share capital.

Both major shareholders had fully exercised their subscription rights. Following the capital increase, the overall shareholder composition is as follows as of 31 December 2012:

Shareholder composition¹
[%]

OEW Energie-Beteiligungs GmbH	46.75
NECKARPRI-Beteiligungsgesellschaft mbH	46.75
Badische Energieaktionärs-Vereinigung	2.45
Gemeindeelektrizitätsverband Schwarzwald-Donau	0.87
Neckar-Elektrizitätsverband	0.63
Landeselektrizitätsverband Württemberg	0.11
EnBW Energie Baden-Württemberg AG	2.08
Free float	0.37

¹ The figures do not add up to 100% due to rounding differences.

As the business development, the economic situation and the opportunities and risks relating to the future development of EnBW AG do not differ from the business development, economic situation and the opportunities and risks relating to the future development of the EnBW group, the management report of EnBW AG is combined with that of the EnBW group.

Management and supervision

Board of Management

As of 31 December 2012, EnBW AG's Board of Management has five members. The Board of Management conducts the business of the group with joint responsibility. Besides the responsibilities of the CEO, the tasks of the Board of Management are structured into the personnel, law and IT portfolio, finance portfolio, sales and grids portfolio and technology portfolio. Effective as of 1 January 2012, Dr. Hans-Josef Zimmer was reappointed Chief Technical Officer. Effective as of 1 October 2012, Dr. Frank Mastiaux was appointed member of the Board of Management for a five-year term and chairman; he succeeds Hans-Peter Villis in this position.

Allocation of portfolios to the Board of Management

CEO Dr. Frank Mastiaux	Personnel/law/IT Dr. Bernhard Beck LL.M. (Chief Personnel Officer)	Finance Thomas Kusterer	Sales/grids Dr. Dirk Mausbeck	Technology Dr. Hans-Josef Zimmer
Group management/development	Personnel management	Group controlling/investment management	Brand introduction/marketing	Energy generation/construction of new power stations
Top management	Organisational/knowledge management	Corporate finance	Sales/contracting	Environmental protection
Gas	Law	Investor relations	Operations	Transmission grid
Internal audit	IT	Accounting/tax	Grids/regulation	Research/innovation
Corporate communications	Industrial health and safety	Group risk management/ICS	Product innovation	Crisis management
Corporate responsibility/sustainability	Materials management/real estate	Management/optimisation of the energy value added chain		Waste disposal
Representation of interests in industry, technology and energy policy	Compliance/data protection	Energy trade		

Supervisory Board

The Supervisory Board of EnBW AG has 20 members. In accordance with the German Co-determination Act (MitbestG), an equal number of members represent shareholders and employees. Three employee representatives are nominated by the ver.di trade union.

The Supervisory Board appoints the members of the Board of Management, and also advises them in their managerial activities. It analyses the business development and planning as well as the strategy of the company with the Board of Management at regular intervals and is

responsible for approving the financial statements. The Supervisory Board is always involved in all decisions of fundamental importance for the company. Transactions and measures subject to the approval of the Supervisory Board are defined in its rules of procedure. To be able to assume its function in the best possible way, the Supervisory Board has formed the following standing committees: a personnel committee, a finance and investment committee, an audit committee, a nomination committee, a mediation committee in accordance with Sec. 27 (3) German Co-determination Act (MitbestG) and an ad hoc committee.

Further details can be found in the declaration of compliance and corporate governance report which are available in the Investors section of our homepage (www.enbw.com/content/de/investoren/corporate_governance/cg-bericht/index.jsp).

Compliance

Compliance, i.e., ensuring that the law and corporate guidelines are observed, is an essential management and supervisory task. In 2009, the Board of Management created the corporate compliance function, thereby establishing a group-wide compliance organisation and defining the necessary guidelines and processes. The main focus of compliance activities is on corruption prevention and anti-trust law. In addition, the corporate compliance function took on responsibility for data protection in summer 2012. Compliance measures are decided and implemented throughout the group via the compliance committee and local compliance officers at the group entities.

EnBW's annual compliance programme is the result of a thorough risk analysis and establishes the necessary preventative compliance measures. The head of corporate compliance and data protection regularly reports to the Board of Management, Supervisory Board and audit committee on how the implementation of measures is progressing.

EnBW has an effective internal system for reporting any compliance infringements or suspicions thereof. 30 cases were received in the reporting period. The compliance committee's task force processes these reports using a standardised process, which ensures that all relevant specialist departments are included and that appropriate sanctions are imposed in each individual case ([Management report](#) [Employees](#) [p. 96](#)).

Products, market and competition

The market and structure of competition

The competitive situation in the energy sector is currently changing significantly. New competitors are entering submarkets, for instance owners of local generation units. Otherwise energy suppliers in Europe can be divided roughly into three groups. The companies in the first group have business operations throughout Europe and in some cases operate globally. These include companies such as EDF, Enel, E.ON or RWE, whose operations are extremely diversified in a number of markets. Alongside EnBW, the companies in the second group include ČEZ, DONG Energy, Vattenfall or Verbund Österreich. Building on a strong position in their home markets, these companies aim to achieve growth in selected European markets. The third group consists of a large number of regional and local companies that have a strong position on their limited markets (for example, EVN, MVV and Thüga).

Market position of EnBW

Electricity generation: With an installed output of 13,400 MW EnBW is one of the ten largest electricity generators in Europe. In Germany, EnBW ranks fourth after RWE, E.ON and Vattenfall. Our aim is to expand our generation capacities in accordance with our corporate strategy and safeguard low-carbon generation ([Management report](#) [Goals, strategy and corporate management](#) [p. 58](#)). The Rheinfelden hydro-electric power station of our subsidiary, Energiedienst Holding AG, which was officially put into operation in 2011, and the EnBW Baltic 1 wind farm with a generation capacity of 48 MW are the first milestones in the conversion of electricity generation to renewable energies. The upcoming commissioning of the fifth machine (38 MW) at Rheinkraftwerk Iffezheim, which will then have a total capacity of 148 MW, will make it possible to generate another around 120 million kWh from hydro-electric power in future. Two highly efficient hard coal units that are under construction with a capacity of about 900 MW each (Karlsruhe and Mannheim) will substitute the output from the decommissioned nuclear power plants KKP 1 and GKN I and will make generation capacity from less efficient old facilities dispensable. Three municipal utilities signed electricity procurement agreements with EnBW Kraftwerke AG in November 2012 for electricity generated from the fifth machine planned at Rheinkraftwerk Gärtringen. The Iffezheim and Gärtringen power stations on the Rhine are each owned by Electricité de France S. A. (EDF) (50%) and EnBW Kraftwerke AG (50%).

Since 2009, EnBW has been pursuing its objective of expanding its generation capacity in the area of renewable energies in Turkey as part of a joint venture. At the end of 2012, the generation portfolio, comprising wind and hydro-electric projects in operation, under construction or at the project development stage, came to a total of 700 MW. The Bandırma wind farm that has been in operation since 2009 and was awarded the Energy Oscar by the Turkish Energy Minister in September 2012 as best wind facility in Turkey. Since the second stage of the Yedigöl/Aksu hydro-electric power station has been commissioned, the joint venture now has operational power stations with a total capacity of 111 MW. The go-ahead for construction of the next wind farm, Balabanlı (50 MW), was given in October 2012 in Istanbul.

Trading: EnBW Trading GmbH is one of the leading energy trading companies in Germany. It secures market access to the most important trading places in Europe for electricity, gas, coal, oil and emission allowances.

Grids: With TransnetBW GmbH, EnBW owns one of the four transmission system operators in Germany. It also has various distribution networks in Baden-Württemberg. Around two thirds of the towns and municipalities in Baden-Württemberg are supplied with natural gas through terranets bw GmbH's high-pressure grid.

Sales: The EnBW group is one of the largest electricity supply companies within Germany. In its home market of Baden-Württemberg, EnBW is the market leader in the B2B and B2C customer groups. Stadtwerke Düsseldorf, in which EnBW has an equity investment, has a large share of the market in the Düsseldorf region. With an average brand awareness of 96% for the year, our sales brand Yello has taken the lead in the field among energy suppliers on the German electricity market. On the Czech market, PRE – in which EnBW holds an overall equity interest of just under 70% – is the third largest electricity supply company. Energiedienst Holding, in which EnBW has a shareholding of around 67%, supplies people in Switzerland and south Baden with electricity and grid-related services.

The extension of the value added chain is intended to continuously reinforce the group's market position in the gas segment. In the area of gas sales, EnBW operates throughout Germany. The company has a well-established position in its home market of Baden-Württemberg. Stadtwerke Düsseldorf likewise achieves a large market share in the Düsseldorf region with its gas sales. Yello Strom GmbH launched a nationwide gas offering in autumn 2012. It addresses retail and business customers and is a valuable addition to the Yello product portfolio in the commodity area. Watt Deutschland GmbH continues to focus its market activities for gas sales on nationwide sales to the customer groups of SMEs and chains. Following its successful launch on the gas market in 2010, Watt Deutschland GmbH significantly increased its gas sales also for the next few supply years.

Services: In terms of installed thermal output, EnBW is one of the largest companies operating in the area of energy and environmental services in Germany and is one of the leading providers of contracting services. EnBW Kraftwerke AG is one of the most important companies in Baden-Württemberg in the field of thermal waste disposal. Stadtwerke Düsseldorf is one of the market leaders in this segment in the Düsseldorf region. With a market share of 6.7%, REG is the largest water supplier in the federal state of Baden-Württemberg. It supplies some 600,000 households, industry and commercial customers with drinking water in the state capital, Stuttgart. In addition, it is one of the leading providers of grid-related services in this federal state, with a focus on the electricity sector.

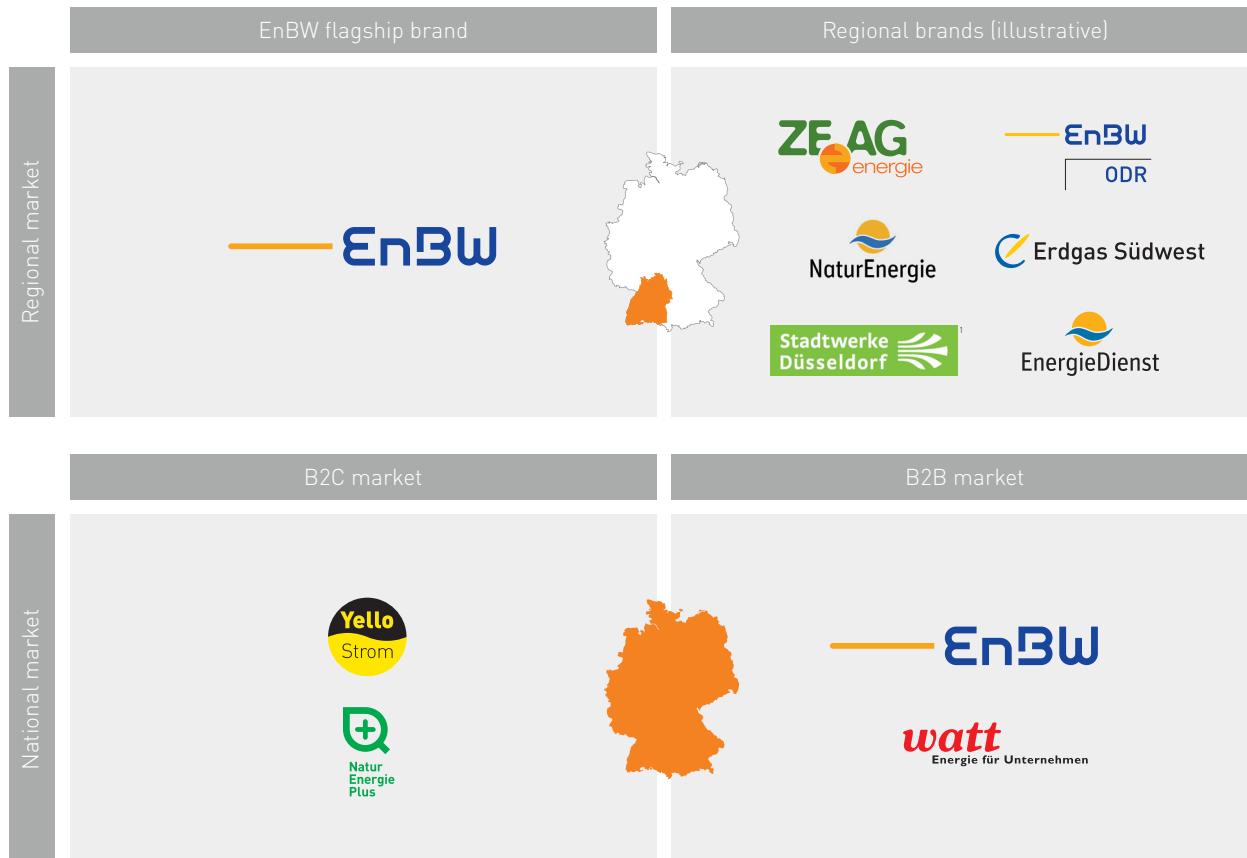
Products and competition

With regard to the sale of its products and services EnBW pursues a multi-brand strategy. In this respect, the central sales company, EnBW Vertrieb GmbH, manages the market activities for all brands.

In the past fiscal year the electricity market for retail customers was less dynamic than in the prior year, which had been significantly impacted by the events in Japan. According to calculations by the German Energy and Water Association (BDEW), the number of retail customers who changed their electricity supplier at least once (cumulative switch rate) reached 28.8% in September 2012 and was thus 3 percentage points higher than in October 2011. Most of this increase had already taken place by spring 2012. EnBW was largely able to hold its good market position in Baden-Württemberg. Successful new customer wins thanks to individually and regionally tailored offers were a key positive factor in this respect.

It is very important to EnBW to safeguard and expand the franchise levels in the electricity, gas and water networks. We want to offer our customers a high supply reliability and excellent service quality at a competitive price. We will uphold this standard through extensive investment in our networks. Over the past five years, REG has invested around €1 billion in the electricity network alone. About 90% of the franchises that have expired since 2005 have been secured through extensions of the franchise, joint network companies or integrated energy supply companies. For example, we have formed Neckar Netze GmbH und Co. KG with municipal authorities in the Stuttgart region, combining participation and influence by the municipalities with economically viable network operations for the entire region. An investment network meanwhile comprising close to 60 public utilities and regional providers is also evidence that EnBW's expertise and professionalism are widely appreciated and in demand on the market. In addition, EnBW has joint sales and settlement alliances with municipal utilities in Baden-Württemberg. At the end of 2011, the common gas platform "espot" was established with several municipal utilities. The aim is to give the municipal utilities advantages in gas purchasing and support them with balancing group management and settlement of gas purchases.

Regional and national marketing efforts/multiple-brand strategy



¹ Active in the Düsseldorf region.

The high standard of customer service under the EnBW brands was once again confirmed by neutral third parties in 2012. TÜV Süd, for example, certified EnBW's customer service for the seventh time with the "Servicequalität" quality seal. Amidst the fierce competition, EnBW is seeking to increase its range of consumer-oriented products and services. One of the focal points are products relating to energy efficiency in buildings. The offers target retail customers, municipalities and industry alike. We have also taken a new approach in our cooperation with municipalities such as with Stadtwerke Esslingen. We launched the joint "grünES" brand on the market in autumn 2012, which offers households in the region green electricity and bio natural gas products. The Yello brand expanded its sales activities in 2012. In addition, a partnership with the Czech group equity investment PRE introduced the Yello Energy brand to the Czech market. NaturEnergie+Deutschland GmbH defended its position despite intense competition on the market for green electricity. We were also able to strengthen our position as a sustainability brand. It qualified as "excellent" in the "fairest electricity provider" test by the Focus Money journal and was the winner in the electricity switch survey conducted by CHECK24, demonstrating its good market position.

Competition for electricity customers in industry became even fiercer in the course of the fiscal year 2012. In this environment, it was unavoidable that EnBW would lose customers in Baden-Württemberg and Germany. Within this fierce pricing competition, we continue to focus on the quality of our advice and services. In addition, we are expanding the range of efficient and sustainable solutions and services that we offer. One significant competitive advantage is our ability to offer electricity, gas, usable energies and energy management services as a one-stop shop.

New forms of cooperation with our partners give EnBW the opportunity to support municipalities with the renovation of their buildings. Energy-saving contracting offers municipalities solutions from a single source – including financing options. One highly pleasing sales success was the contract that we won to supply the city of Stuttgart with a total of 540 GWh of green electricity. This is to provide the plant and buildings of the state capital with electricity for the years 2013 to 2015.

The competition for retail and industrial customers in the gas segment is still highly dynamic. According to the German Energy and Water Association (BDEW) the

percentage of private households changing provider rose by 3.7 percentage points between October 2011 and September 2012 to 17.8%. Between October 2010 and September 2011 the increase had been just 1.8 percentage points. EnBW has, however, been able to defend its position despite the competition. It virtually held its good market position with retail customers, in particular in the Stuttgart region, and was even able to expand its position for the whole of Baden-Württemberg. In terms of sales to industrial customers, however, it is becoming increasingly difficult to maintain our position on the market in the face of competition.

The revenue from network user charges available to network operators is to a great extent predetermined by the German Incentive Regulation Ordinance (ARegV). The objective of ARegV is to give system operators such as TransnetBW incentives for more efficient grid operations and thus falling network user charges, based on a structurally stable grid. The new energy concept has however significantly changed both the duties imposed on and requirements made of electricity networks in general and electricity distribution grids in particular. Within the existing legal framework, it is often not possible to cover the additional costs of the network restructuring. Market economy considerations are increasingly taking second place to regulatory approaches. The constant adjustments to laws are the cause of considerable costs with respect to IT systems and the process landscape. REG is currently trying to find a balance between regulation of the network business covering all areas, maintenance of the network substance and the requisite expansion of the network to integrate renewable energies.

The business activities of terranets bw in the regulated natural gas transmission business are governed to a large extent by the requirements of the national regulatory authorities (Federal Network Agency). Significant challenges thus arise from the increasingly regulated transmission business on the one hand and on the other from the statutory duty to ensure supply reliability and make any associated investment required. In the unregulated telecommunications and technical services divisions, terranets bw's business is primarily characterised by intense competition.

The bio natural gas offering is meeting with a pleasing level of interest on the part of consumers. Over a year after the corresponding products were launched, we were able to welcome the ten thousandth customer in January 2012. This makes EnBW one of the largest providers of bio natural gas in Germany. In order to expand the offering, a contract was signed in September 2012 to build another bio natural gas processing plant in Geislingen (Göppingen district). EnBW continued its progress with activities relating to the introduction of local generation technologies in the reporting year with the commissioning of the 100th fuel cell heating device in November 2012. Yello launched its first

nationwide gas offering for retail and commercial customers in autumn 2012.

The market environment in which GasVersorgung Süddeutschland GmbH (GVS) operates is currently characterised by intense price competition in conjunction with palpable pressure on margins. The high level of liquidity on wholesale markets seen in prior years continued throughout 2012. This was accompanied by continuing high dynamism in terms of products. GVS consistently optimises its procurement portfolio to improve the competitiveness of its offers to supply customers. Coupled with the development of further innovative products and services, which offer customers opportunities in gas purchasing with limited risks, this entity was able to continue its sales success of past years. GVS has positioned itself on the market and sets itself apart as a reliable and high-performing supplier of natural gas with flexible supply models. The use of a wide range of procurement options, innovative product packaging and active portfolio management as well as good customer relations provide a competitive edge. In the field of renewable energies, GVS has successfully established itself in the field of bio natural gas throughout Germany.

The Verivox comparison site tested service quality for gas customers in October 2011, awarding EnBW four out of five possible stars or "gas flames". Deutsches Institut für Service-Qualität (DISQ) rated EnBW's service as "good" in its 2012 gas companies study.

The market for services continued to evolve over the past fiscal year. The sector for energy settlement services, for instance, is increasingly opening up for new service providers. The technological requirements placed on such settlement services, arising among other things from the new energy concept, are driving digitalisation of the settlement industry. This challenge requires considerable technical expertise and resources, and not all providers are able to provide these on an economically viable scale. EOG is pursuing a growth strategy based on partnership and offering to act as service provider for industry customers and municipal utilities in order to meet the upcoming technological challenges posed by the new energy concept and the associated need to reduce costs and improve the system together. The primary aim in this respect is to realise long-term cost savings thanks to economies of scale achieved jointly.

The market for contracting services showed a less dynamic development in the fiscal year 2012 than in 2011. Energy efficiency and local energy generation remained the predominant topics on the market. Energy efficiency is seen as a key component for the new energy concept to succeed in Germany, and the state of Baden Württemberg is therefore supporting ambitious energy efficiency targets. EnBW's product portfolio will be tailored even more to these in future. Various products are already at the market testing

stage. There is a trend towards market consolidation that is evident from intensifying cooperation efforts of established competitors with entities from outside the industry.

The area of disposal is focusing on the disposal of waste in thermal waste treatment plants with a high rate of fixed assets to total assets and the related materials flow management (waste to energy). In this way, EnBW offers its municipal partners reliable waste disposal services. The activities relating to thermal waste management are based on long-term contracts with districts and towns in Baden-Württemberg and North Rhine-Westphalia. The market position remained stable in both regions over 2012.

With REG, EnBW succeeded in further strengthening its position on the market for water and waste water operations in Baden-Württemberg in 2012. Sales of drinking water in the Stuttgart network territory reached more than 39 million cubic metres. Providing a virtually interruption-free supply and a high level of operating expenses as well as investments in excess of €10 million into the network and facilities, we once again demonstrated that we are a strong partner for supplying water to the capital of Baden-Württemberg. For example, in the reporting year, EnBW completed the construction of several new water mains in Stuttgart. The ductile iron pipes for water transport in the area of the Berg waterworks were renewed for more than €2 million on a new and operationally more favourable route with a Neckar crossing to Cannstatter Wasen. REG is also a reliable service partner for municipalities and special purpose associations outside of Stuttgart. It is associated with close to 60 public

utilities of towns and municipalities and regional providers. Together with its partners, REG constantly strives to optimise its service offering with a high level of supply reliability and excellent quality of service and to implement it at competitive prices. The main focus of our research and development activities is on increasing energy efficiency in local water supplies. From this, we derive measures to reduce CO₂ emissions and to lower operating costs.

REG is also a renowned partner on the market for grid-related services and is firmly established on the market for grid services for all voltage levels. The business saw positive developments in 2012 as in prior years. REG is continually refining its portfolio of grid-related services with a view to current market requirements. In the reporting year, it recorded growth in street lighting in particular. In addition, the "EnBW Trafoservice" showed a positive development with a rising number of parties feeding in energy. REG is also active in the fields of grid restructuring and integration of photovoltaic facilities. Together with its partners, REG additionally develops innovative concepts and products in the fields of energy management and climate protection. It has an extensive range of associated products and services and a wealth of experience as leading energy supply company. In 2012 we introduced energy-specific performance indicators for pumped storage plants, energy recovery plants and transmission lines. The data collected form the basis for measures to sustainably raise energy efficiency during operation and at the planning and project management stage.

Goals, strategy and corporate management

EnBW is in the process of considerably sharpening its corporate strategy. Sustainability targets will be an important aspect in this regard and corporate management will in future reflect this realignment.

Goals

EnBW stands for progress and competition on the energy market to the benefit of the customer. With its deep roots in Baden-Württemberg, our company is one of the most important energy supply companies and energy service providers in Germany and Europe. We intend to reinforce and expand this position. Our overarching, long-term financial goals are to consistently develop the operating result, increase the company value in a sustainable manner and guarantee the EnBW group's financial stability. For the shareholders of EnBW AG, we want to generate a return on their investment that is competitive in the capital market environment and share our economic success with them through an appropriate dividend.

We are convinced that long-term economic success involves reaching ecological and social goals. Acting responsibly in a sustainable manner is a core principle at EnBW. We are therefore gradually linking our corporate strategy with our sustainability strategy. We made good progress with this in 2012, but still have a way to go. With the interlinking, we are pursuing a number of objectives that benefit the company and its stakeholders and generate value added that is measurable not only in terms of finance. EnBW is restructuring its generation capacities from being heavily dependent on nuclear power to energy generation from renewable energy sources. We are tapping new business fields with the local energy solutions that we offer and are responding to the request of municipalities, municipal utilities and the general public for greater involvement in energy matters. One clear goal – both for our corporate strategy and our sustainability strategy – is to make energy generation CO₂ efficient. We also aim to achieve a constant reduction of the hazardous emission of NO_x and SO₂ per kWh, remaining below the average for energy generation in Germany at all times.

EnBW values its employees. We see each individual with their links to family and society and seek to take these various aspects into consideration. The current fundamental changes in the energy industry also pose a great challenge for our employees. We want our employees to understand these changes as an opportunity and see EnBW as an attractive employer. In addition, EnBW is highly committed to social matters. This is due to our history, the responsibility for key infrastructure elements in our home

state and our self-image as a corporate citizen. We will expand this commitment further. Intensive dialogue with all stakeholders provides EnBW with important impetus and strengthens the acceptance in society of energy industry activities.

Strategy

The energy landscape in Germany is undergoing far-reaching changes. The phase-out of nuclear power is progressing. The massive expansion of renewable energies is reducing the operating times and thus the profitability of conventional power stations. New technological developments are the catalysts, increasing the interlinkage and complexity of the system infrastructure. Political and regulatory interventions will increase. Competition is changing considerably with new competitors entering all submarkets and seeking to win market share through price and performance. This is leading to greater fragmentation of the traditional value added chains in the energy industry. The role of all other market participants – customers, municipal utilities, energy supply companies – is set to change substantially.

Changed environment calls for sharper strategy

In this environment we need to considerably sharpen the EnBW group's corporate strategy. The focus of our realignment efforts will be on consistently orienting our strategy towards customers and their needs and wishes. All our activities, transactions and equity investments are being reviewed from this perspective. At the same time, we will modernise our organisation and increase the efficiency and sustainability of structures and processes. We will draw above all on EnBW's many years of system competence to develop new business fields, particularly taking into consideration sustainable concepts such as the "sustainable town". Openness for new and far-reaching partnerships – in particular with municipalities and municipal utilities – is another core element of our corporate strategy. EnBW offers cooperation arrangements at all stages of the value added chain. Putting the new energy concept into practice in Germany requires concerted effort on the part of all parties involved. Pooling their various strengths will accelerate the projects and ensure broad acceptance in society through cost efficiency. In addition, EnBW has pioneered community energy cooperatives, initiating or promoting the foundation of close to 60 such cooperatives.

Safeguarding low-carbon generation capacity

Energy generation is of great importance to EnBW's business portfolio. It is characterised by relatively low CO₂ emissions. In 2012, the CO₂ emissions of EnBW's electricity generation facilities averaged 369 g/kWh in comparison to a mean value of 503 g/kWh in 2011 for the German energy sector seen as a whole. While in the past this favourable comparison for EnBW was the result of a large share of energy generated from nuclear power, we have been expanding renewable energies for some time now. Securing our position as a low-carbon generator is one of the key strategic moves of EnBW. To this end, we will invest in central and local facilities in the area of renewable energies – primarily in the field of wind and hydro-electric power stations. The planned investment volume in the new energy concept will range between €8 and 10 billion over the period until 2020. A large portion thereof will go towards renewable energies. It is planned to raise the share of renewable energies in our own generation portfolio to 35% over the same period. By 2030, we intend more than half of our electricity generation volume to be from facilities that use renewable energies. The associated CO₂ emissions are expected to total somewhere between 250 and 350 g/kWh. In 2012 some 18% of EnBW's total investment related to expanding renewable energies ([> Management report > Investment analysis > p. 78f](#)). In parallel, we are expanding electricity generation from gas and storage systems. This way, we will increase the flexibility of our generation portfolio and promote the integration of the renewable energies. As a supplementary measure, we are optimising the existing power station portfolio. In the field of nuclear power, we ensure safe operations over the remaining life of the plants as well as safe decommissioning of the facilities by observing highest safety standards ([> Management report > Generation portfolio > p. 47](#)).

Focus on renewable energies

One of the focal points of our activities in the area of renewable energies is on onshore wind turbines in Germany and through our joint venture with Borusan in Turkey. We currently have more than 160 sites for over 500 wind turbines under review in Baden-Württemberg. In October 2012 we signed the contracts for a 50 MW wind farm in Balabanli in Turkey, some 120 km to the west of Istanbul. This is planned to go online towards the end of 2014. The EnBW Baltic 1 offshore wind farm already started operations in 2011 and manufacture of the components for the EnBW Baltic 2 project (generation capacity of 288 MW) has begun. It should be possible to realise further projects in the North Sea with a total planned capacity of 1,200 MW once the requisite legal framework has been created. With respect to electricity generation from run-of-the-river plants in Baden-Württemberg, the possibilities for expansion are limited on account of physical geography. At Iffezheim power station, we are in the process of expanding capacity – the fifth

turbine is planned to be commissioned in 2013. Further projects in Turkey and Switzerland are under review. With regard to pumped storage, we are developing projects in Germany and Austria. Our partnership with Vorarlberger Illwerke has been extended until 2041. Among other things, it comprises construction of the Obervermunt II pumped storage project with an installed output of 360 MW, which is to start in 2014. In the gas segment, EnBW concluded a long-term gas procurement agreement with the Russian company Novatek in 2012. The agreement has a minimum term of ten years with an annual volume of around 21 billion kWh. This is a considerable expansion of our position in the gas midstream business. The Etzel natural gas storage facility started operation in 2012. Stadtwerke Düsseldorf has plans to build a new combined gas and steam power station at the Lausward site. Here, a combined heat and power plant is planned to generate electricity and heat as of 2016, with an output of up to 600 MW and a maximum of 270 MW of district heating.

Expansion of local solution offers

Municipalities, industry and business customers as well as the general public want to have a greater say in energy-related decisions in their localities than has been the case in the past. EnBW is responding to the efforts to achieve a greater level of decentralisation and participation in supplies. We are developing and establishing local energy solution offers and intend to become the first point of contact for energy issues. In pursuit of these strategic moves, EnBW draws on its extensive systems know-how in energy issues. We plan to increase the revenue we generate from local solutions from around €200 million in 2012 to approximately €1 billion by 2020. In many cases, local energy services relate to complex concepts for sustainable energy supplies. They bring together local energy generation – frequently from renewable energies – with measures to boost energy efficiency and create flexibility in demand, measures relating to the expansion of private energy management systems and increased comfort. In the case of EnBW's "sustainable town" concept, our range of services extends, for example, to identifying viable locations for wind turbines, the construction and operation of generation facilities, the development of customer-specific e-mobility concepts or energy efficiency services. By the end of 2012 EnBW had won the towns of Leutkirch and Ehingen for its "sustainable town" concept. We have set ourselves the target of winning a total of twelve towns as partners for this concept by 2020. Generally, EnBW is seeking to further intensify its relations with municipalities and municipal utilities. The expansion of the range of products offered by EnBW's sales function for municipalities is strengthening unit sales in the regions. Participation of partners in large-scale projects such as EnBW Baltic 1 and 2 and Gamsheim or in regional distribution grids opens up new investment

possibilities. Some 20 municipal utilities have invested in EnBW Baltic 1 and well over 150 municipal utilities have expressed interest in investing in EnBW Baltic 2. Another service area for energy solutions are EnBW's operating functions such as invoicing and settlement systems. Opening up these scalable functions to third parties can lead to considerable synergy effects. We want to increase our activities from currently around four million metering points to around ten million metering points by 2020. It is our long-term goal to become the leading provider of energy industry back-office solutions in Germany.

Group project "P³"



A significant part of EnBW's strategic realignment is realised by means of projects. The group project "P³" is intended to anchor professional project management and project portfolio management sustainably in the company. The aim is to achieve better performance in the individual projects on the one hand and, on the other, to effectively manage significant projects in a group-wide project portfolio. In the reporting year, we developed and piloted consistent group-wide standards that are to be rolled out at the beginning of 2013. These include in particular appropriate qualification components to familiarise our employees with the new standards. "P³" serves to improve processes and increase efficiency, thereby also making a contribution towards EnBW's savings targets.

To promote electromobility, EnBW has cooperation arrangements with Stadtwerke Karlsruhe, Elektrizitätswerk Mittelbaden, Stadtwerke Baden-Baden and star.Energiewerke Rastatt. The invoicing and settlement of all relevant charging processes is ensured via EnBW's IT systems. Within the framework of the CROME project, 24 charging stations were installed on either side of the German-French border and cross-border roaming tested with French partners.

Targeted international activities

In order to reduce dependency on the energy policy environment in Germany and to make targeted use of opportunities for growth and returns, we want to increase the portion of value added generated outside of Germany in the long term. Currently, around 10% of EnBW's income is generated from business outside of Germany. In this context, our activities focus on the Czech Republic, Switzerland and Turkey. In Turkey, for example, the objective of the joint venture with Borusan is to have an installed output of 2,000 MW as of 2020 comprising mainly renewable energy sources. On the other hand, we are preparing to divest our non-controlling interests in Hungary and Austria.

Securing financial stability

EnBW's realignment requires significant investment. At the same time, the financial headroom of the company will be restricted considerably over the next few years – by energy policy decisions, delays in the completion of large-scale projects, falling margins on the wholesale market and the full auctioning of CO₂ allowances as of 2013. EnBW has therefore reviewed its investment projects based on strict criteria and set the gross investment volume for the planning period from 2013 to 2015 to € 5.2 billion. In order to be able to realise this investment volume without impacting our credit standing, EnBW launched a package of measures at an early stage, comprising the pillars of efficiency enhancement, divestitures and capital measures.

- The "Fokus" efficiency programme provides for a sustainable target improvement in EBIT of €750 million p.a. (➤ **Management report** > **Employees** > p. 94). The full impact of improvement measures will be felt as of 2014, one year earlier than originally planned. We anticipate great potential for boosting efficiency from reducing the complexity of the group. The efficiency programme is taking effect as planned with an improvement of over €300 million achieved in 2012.
- To enable it to carry out the investment programme as planned, EnBW has expanded its divestiture programme to a total of €2.6 billion for the period from 2013 to 2015 (including participation models). Some €500 million was already realised through the sale of shares in Energiedienst Holding AG at the end of 2011 and in the Polish investment Rybnik in February 2012 (➤ **Management report** > **Investment analysis** > p. 78f).
- EnBW successfully completed its planned capital measures in 2012. At the beginning of April 2012, the hybrid bond issued with a volume of €750 million in October 2011 was increased by a further €250 million. Until the first maturity date in April 2017 the rating agencies will recognise half of this amount as equity. EnBW additionally performed a capital increase of around €822 million at the start of July 2012 (➤ **Management report** > **Financial management** > p. 74f).

Corporate management

EnBW's corporate management is currently geared above all to our financial goals. As the corporate strategy and the sustainability strategy become more and more interlinked, the instruments and performance indicator systems used by corporate management will be expanded and integrated. The development of the operating result is measured using the compound annual growth rate (CAGR) of adjusted EBITDA. In order to calculate the change in the company value in the reporting year, we currently use the value added concept. The EnBW group's financial stability is determined primarily by the dynamic leverage ratio ([Management report](#) [Financial management](#) [p. 74ff.](#)).

The company's value-based management is embedded in the performance management system (PMS). The PMS comprises a target system for the group with financial and non-financial elements as orientation for strategic and operational management purposes. To supplement, targets are agreed upon each year and performance reviews are performed on a quarterly basis to provide an analysis of the current status and measures to reach the financial and non-financial goals. The PMS will form the basis for the future integrated reporting, which is based on the framework issued by the International Integrated Reporting Council (IIRC) and is to provide a concise and transparent presentation of the financial and non-financial performance of the company, taking into account the information required by EnBW's stakeholders.

EnBW's value-based management system revolves around the concept of value added. This shows how the company's value develops from a financial perspective. The company's value increases when the return on capital employed (ROCE) is greater than the interest required for this capital. This difference is multiplied by the capital employed, which includes all assets from the operating business, to give the value added. A ROCE that is higher than the weighted average cost of capital (WACC) means that the value added is positive.

$$\text{Value added} = (\text{ROCE} - \text{WACC}) \times \text{Capital employed}$$

$$\text{and ROCE} = \frac{\text{Adjusted EBIT including investment result}}{\text{Capital employed}}$$

Value added acts as the basis for EnBW's strategic decision-making and operational measures. A positive value added contribution by the respective project to implementing the strategy over the entire period under review is the key factor in investment and business decisions. The various business

activities of the EnBW group have different risk profiles. Each project is correspondingly based on risk-adjusted costs of capital.

Financial performance indicators

ROCE is calculated from the ratio of adjusted EBIT, including investment result, to the capital employed. Adjusted EBIT is a measure of operating and sustainable performance and is adjusted for non-operating effects. We take the investment result into consideration as strategic equity investments are an integral part of the business model. Since adjusted EBIT is a pre-tax figure, the investment result is likewise converted to a pre-tax figure. All assets from the operating business are classified as capital employed. Non-interest-bearing capital such as trade payables are deducted from capital employed. While adjusted EBIT including investment result is a figure that relates to a period of time, capital employed is calculated as of a specific cut-off date. Capital employed is calculated as the average of the opening value and closing value for the year as well as the three quarters.

There are various factors that influence value added. The level of ROCE and value added depends not only on the development of the operating business but above all on the volume of investment. Large-scale investments tend to significantly increase the capital employed in the early years, while the effect on income that boosts value, however, only arises over a protracted period of time, often long after the investments are initially made. This is especially true of investments in property, plant and equipment relating to the construction of new power stations which do not have any positive effect on the group's operating results until after they are put into operation. Investments in generation facilities, on the other hand, are taken into account in the capital employed already in the construction phase. In a comparison of individual years, the development of ROCE and value added is to a certain extent of a cyclical nature, depending on investment volume. This effect is therefore inherent in the system and leads to a decrease in ROCE in phases of strong growth. EnBW has not changed the method used to establish the value added; investments are immediately allocated to capital employed. We pursue the objective of sustainably increasing the value of the company in the long term. Annual fluctuations within the investment cycle are of secondary importance.

Economic and political environment

In 2012, the price level of most primary energy sources was significantly lower than in the prior year. By contrast, the price of electricity increased for end consumers on 2011 as a consequence of political and regulatory influences. The new energy concept in Germany continues to present major challenges for EnBW, which we counter with flexible and long-term concepts.

General conditions

There are various external factors that will influence the development of EnBW's business. The most important variables include developments in the general economic, political and regulatory environment in addition to the price situation on the markets for electricity, fuels and CO₂ allowances.

Periods of strong expansion or contraction of the economy as a whole have a great influence on industrial demand for electricity and gas, while energy consumption by private households is generally independent of the economic cycle. Gas sales are additionally highly dependent on prevailing weather conditions.

Political decisions at European and national level – in particular market- and competition-related regulations – impact the energy industry. One of the main factors for the speed of change at political and regulatory level and the extensive government action in the field of energy is the socio-political will, for example, to improve climate protection or encourage the sparing use of natural resources. This means new challenges for EnBW on a constant basis, which it counters with flexible and long-term concepts.

The prices on the markets for electricity, fuels and CO₂ allowances determine the course of business at EnBW both on the cost and revenue side: The prices for primary energy sources and the CO₂ emission allowances determine the variable costs of electricity generation by EnBW's power stations. They also determine the development of electricity prices on the wholesale market. The required quantity of CO₂ allowances is one of the main factors in electricity production. They have to be tracked under the European emissions trading system to ensure that they match the actual volume of emissions. Alongside the price of fuel and CO₂ allowances, the constantly increasing supply of renewable energies is a factor exerting an ever greater influence on electricity prices on the wholesale market. The price level on the wholesale market is decisive for the profitability of EnBW's individual power stations.

EnBW constantly strives to reduce the uncertainties for the generation margin arising from developments in the price of primary energy sources, CO₂ allowances and electricity on the wholesale markets. We consequently procure the quantities of primary energy sources and CO₂ allowances required for electricity generation in advance on the forward market. We sell the planned electricity production on the forward market and through EnBW's sales channels. Consequently, the terms of the supply contracts concluded in the previous years formed the basis for costs and revenue in 2012. On the other hand, the development of prices on the forward market in the fiscal year 2012 will impact earnings in following periods. The same correlation applies to the quantities of electricity procured by the sales function on the forward market ([Management report](#) [Future development of the markets](#) [p. 136](#)).

General economic framework

Economic environment

The global economy lost momentum in 2012. After recording growth of 3.8% in 2011, the global economy only expanded at a rate of 3.3% in 2012 according to the most recent estimates of the German Council of Economic Experts and the International Monetary Fund (IMF), with downward risks increasing significantly. This is primarily attributable to the sovereign debt crisis, the banking crisis and the macroeconomic crisis in the euro area which continued to escalate over the course of the year and were the cause of uncertainties on the markets. In addition to hitting foreign trade, the weak demand of the industrial countries – whose economic growth is estimated at 1.3% for 2012 (IMF) – also had a dampening effect on the economy in the emerging countries. The IMF assumes expansion in this group of countries to be more reserved than in prior years and estimates economic growth here at 5.3% on average in 2012.

Development of gross domestic product (GDP) in %	2012	2011
World	3.3	3.8
Euro area	-0.4	1.4
Germany	0.8	3.0
Czech Republic	-1.3	1.9
Turkey	3.0	8.5

The economy lost a considerable amount of impetus in the euro area. According to the European Union, GDP fell by 0.4% in 2012 after having recorded growth of 1.4% in 2011. According to preliminary estimates from Eurostat, the annual inflation rate in the euro area reached 2.2% in November 2012, compared to 3.0% in the prior year. Despite the Czech economy growing by 1.9% in 2011, economic output there fell by 1.3% in 2012. Economic growth in Turkey also dropped considerably in 2012. In 2011, the Turkish economy recorded strong growth of 8.5%, whereas Eurostat has put growth at only 3.0% for 2012.

Economic development in Germany has slowed as a result of the crisis in the euro area. According to the German Institute for Economic Research (DIW), economic output fell marginally by 0.2% in the fourth quarter of 2012 in comparison to the prior quarter. For the full fiscal year 2012, the DIW expects the growth in the German economy to have slowed considerably. After posting growth of 3.0% in 2011, economic output increased by a mere 0.8% in 2012. The drop in demand from the euro area is primarily hitting the industrial sector, while the services segment continues to benefit from a sound domestic economy on the whole. According to estimates by the DIW, the annual rate of inflation stood at 2.0% in 2012.

Energy consumption

According to the working group on energy balances, AG Energiebilanzen (AGEB), energy consumption in Germany in 2012 was only down by a mere 0.8% on the prior-year figure. The temporary cold spell and leap day caused consumption levels to rise in 2012, with the rise in energy efficiency having an dampening effect. According to preliminary figures from the German Energy and Water Association (BDEW), domestic electricity consumption fell by 1.4% from 560.0 billion kWh in 2011 to 552.3 billion kWh in 2012. According to preliminary estimates by the AGE, the consumption of natural gas increased by some 1% in 2012, attributable to the colder weather. By contrast, use for electricity generation in power stations dropped considerably. In 2012, mineral oil consumption was 0.5% down on the prior-year figure. Consumption of hard coal increased by 3.1%, brown coal by 5.1%, primarily as a result of commissioning three new power plant units. While the contribution of nuclear energy to the energy balance fell by 8.3%, renewable energies recorded growth of 7.8%, thereby

increasing their share of total consumption from 10.9% to 11.7%. Photovoltaics also continued its dynamic expansion with growth of almost 50%, hydro-electric power (excluding pump storage) increased by 16% and wind power recorded a fall of 8%.

Electricity generation and exports

According to the BDEW, electricity consumption in Germany for 2012 (617.0 billion kWh) was up by 1.3% on the 2011 level (608.8 billion kWh). Key energy sources were brown coal with a share of 25.6% used to generate electricity (prior year: 24.6%), renewable energies with a share of 21.9% (prior year: 20.3%) as well as hard coal with 19.1% (prior year: 19.5%). The share of nuclear energy fell from 17.7% to 16.0%. In the first ten months of 2012, German electricity exports exceeded imports by 16.8 billion kWh. The largest net electricity suppliers are France, Denmark and the Czech Republic; the highest export surpluses are with the Netherlands, Switzerland and Austria.

Gas procurement

Long-term procurement agreements form the basis of gas imports to Germany. According to preliminary figures from the BDEW, 31% of Germany's natural gas supplies originated from Russia in 2011 (prior year: 33%), 28% from Norway (prior year: 29%) and 21% from the Netherlands (prior year: 22%). The share of domestic production in relation to total supply amounted to 13% in 2011 following 11% in the prior year. As an alternative to transmission via pipelines, importing liquefied natural gas (LNG) will open up access to producing countries that are not linked by pipeline to the European market. This alternative means of procurement is increasingly gaining in importance as new import terminals go into operation.

Development of the price of primary energy sources, CO₂ allowances and electricity

In 2012, the spot market prices of coal, natural gas and electricity were for the most part below the prior-year level. The slowing of the international economy and increase in value of the euro in the second half of the year pushed prices downwards. In Germany, the effects of the new energy concept, the expansion of renewable energies and associated increase in energy feed-in volumes had an impact on price development. Prices developed in a similar way on the forward market for deliveries in 2013. The prices for CO₂ allowances in 2012 were down on the prior-year level.

Oil market: The average price for one barrel (159 l) of Brent oil for short-term deliveries (front month) stood at US\$ 111.68 in 2012, 1% up on the comparable prior-year figure of US\$ 110.91. From the beginning of the year to the start of February, oil prices saw a sideways movement. The political escalation of the conflict surrounding Iran's nuclear programme and the resulting oil embargo imposed by the EU as well as additional US sanctions against Iran forced prices upwards until the beginning of April. Furthermore,

under the influence of the EU and the US, further countries also reduced their oil imports from Iran. Positive economic indicators for the US as well as Greece's debt haircut and the implementation of an austerity package there caused prices to rise further at the beginning of March, when the front month price stood at US\$ 126.20/bbl. The prices subsequently fell until the end of June 2012. In addition to the announcement made by the US president of potentially releasing strategic US oil reserves, bleaker macro data for China, the US and various EU countries was also a key factor in causing prices to fall. After reaching their lowest price for the year of around US\$ 89/bbl on 21 June 2012, Brent prices went on to recover, rising to just under US\$ 117/bbl by mid-August. This development was primarily attributable to Norwegian oil workers going on strike, production stoppages as a result of maintenance work in the North Sea as well as measures taken by the Chinese government to stimulate the economy. This was followed by a volatile sideways movement of prices. As of the end of 2012, oil prices closed at US\$ 111.11/bbl (front month) and US\$ 107.53/bbl (front year).

Coal market: The average price level on the forward markets for coal deliveries to the ARA ports (Amsterdam, Rotterdam, Antwerp) in 2013 stood at US\$ 103.18/t in 2012, 16.6% above the average price in 2011 (US\$ 123.64/t). From the beginning of the year to mid-July 2012, prices fell to marginal cost level. This considerable drop in prices was attributable to the mild European winter as well as excess capacities on European markets as a result of the increase in export volumes of US coal, ousted on the domestic US market in favour of cheaper shale gas. Prices in the ARA area were also pushed downwards as a result of the increase in feed-in volumes of renewable energies as well as uncertainties surrounding the continuation of the debt crisis in some European countries. Coal prices stabilised at the end of July 2012, buoyed by cutbacks initiated by coal producers in response to the low prices at a time of continued high demand from China – up on the prior-year level. A strike by Colombian rail workers also caused a temporary rise in coal prices. An increase in coal demand in Europe due to the cost advantage of coal over gas also aided stabilisation. Towards the end of 2012, front-year contracts stood at US\$ 94.05/t, down 23.9% on the prior-year average.

Price development on the oil and coal markets	Average 2012	Average 2011
Crude oil (Brent) front month (daily quotes in US\$/bbl)	111.68	110.91
Crude oil (Brent) annual price front year (daily quotes in US\$/bbl)	106.78	108.37
Coal – API #2 annual price front year in US\$/t	103.18	123.64

Gas market: Long-term gas import agreements form the basis of gas supplies in Germany. Prices essentially track the oil price with a time lapse of around six months. The border price index of the Federal Office of Economics and Export Control (BAFA) for natural gas, which is published on a monthly basis, also went up on account of oil prices rising in 2011 and this trend continuing in spring 2012. In November 2012, the border price index averaged € 29.28/MWh.

Another important source of natural gas are the wholesale markets such as the Dutch Title Transfer Facility (TTF) and the trading point of the NetConnect Germany (NCG) market territory. The prices on the spot market of the TTF stood at € 25.01/MWh in 2012, up around 9.9% on average compared to 2011. The mild winter resulted in moderate price levels at the beginning of 2012. The cold spell which set in at the end of January as well as limited gas supplies from Russia meant that the spot price level had increased significantly by mid-February. This was followed by a volatile sideways movement at a higher level driven by the rise in oil prices stemming from political uncertainty in the Middle East and production outages. Concerns regarding a sufficient supply of LNG for Europe as a result of the increased demand for LNG in Japan to generate electricity also ensured prices remained high. At the end of August, maintenance work at various gas infrastructure facilities in Europe pushed prices up further, after which they experienced a volatile sideways movement until the end of 2012. At the end of 2012, the spot market price stood at € 25.98/MWh. The prices for deliveries in 2013 developed in line with the price level on the spot market. At the end of December 2012, forward prices stood at € 26.33/MWh.

Development of prices for natural gas on the TTF (Dutch wholesale market) in €/MWh	Average 2012	Average 2011
Spot	25.01	22.65
Front year	26.74	26.03

CO₂ allowances: Under the European emissions trading system, the requisite number of emission allowances have to be evidenced for the amount of CO₂ emissions from power stations. The prices of emission allowances (EU Allowances – EUA) for delivery in December 2012 (EUA-12) showed slight growth at the beginning of 2012 as the proposals by the environmental committee of the European Parliament found great support in EU circles. The environmental committee aims to set up a strategic reserve for emission allowances in the third trading period. This was accompanied by renewed discussions on raising targets for reducing CO₂ emissions by 10 percentage points for 2020. The cold spell which hit Europe caused prices to rise sharply at the beginning of February 2012, with the resulting increase in energy generation leading to a rise in emissions. The warmer weather that followed caused prices to fall to around €6/t CO₂ by the beginning of April, after which the price curve was characterised by a volatile sideways movement until the end of 2012. In 2012, the price of EUA-12 allowances averaged at €7.51/t CO₂, which was around 45% below the average price for the fiscal year 2011. The price curve for certified emission reduction (CER) allowances usually parallels the development of EUA-12 allowances. However, the prices of CER allowances tend to be lower due to the limited trading possibilities in the EU emissions trading system. After having increased slightly up to the beginning of March, prices were characterised by a volatile sideways movement until the beginning of July 2012. Prices fell thereafter as a result of a surplus offer of CER allowances, which could only be used until the end of 2012. As a result,

the spread between the price curves for EUA-12 and CER-12 allowances ceased shrinking and broadened instead. The average price of CER-12 allowances in 2012 was €2.96/t CO₂, down 70% on 2011.

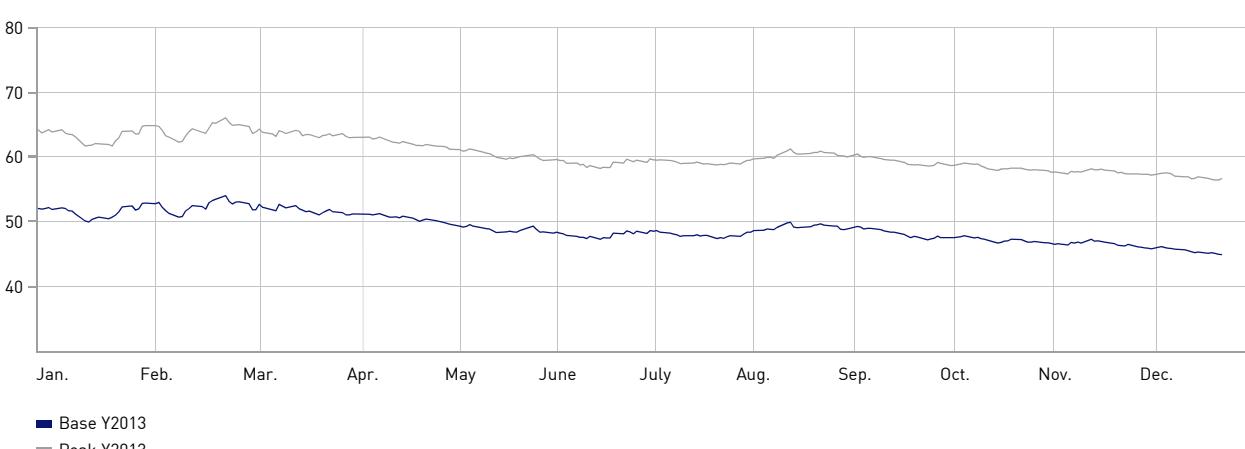
Development of prices for emission allowances/ daily quotes in €/t CO ₂	Average 2012	Average 2011
EUA front year	7.51	13.40
CER front year	2.96	9.98

Electricity market: At €42.60/MWh, the average price for immediate delivery of electricity on the spot market of the European Energy Exchange (EEX) in 2012 was around €9/MWh or 17% lower than the prior-year figure. In addition to a higher volume of photovoltaic energy being fed into the grids in comparison to the prior year, lower fuel prices also kept prices down. In the third quarter, prices were buoyed by the fall in power station capacity in France.

The price curve on the forward market of the EEX exhibited a downward trend in 2012 due to the lower fuel prices in comparison to the prior year as well as the decline in the prices of CO₂ allowances. The expansion of renewable energies had also pushed prices downwards. The average price for the forward market product base 2013 fell by 13% on the prior-year level (€56.38/MWh) to €49.30/MWh.

Development of electricity prices on the forward market (EEX)
Daily quotes in €/MWh

Source: EEX



Electricity and gas prices for retail and industrial customers

According to the most recent BDEW estimates (as of October 2012), the monthly electricity bill for an average household with an annual consumption of 3,500 kWh came to €75.51 in 2012 in comparison to an average of €73.59 in 2011. The price increase was attributable to the cost allocations introduced

by the federal government under Sec. 19 German Electricity Network User Charges Ordinance (StromNEV), the general increase in network user charges as well as the increase in cost allocations in connection with the German Renewable Energies Act (EEG). EnBW was also forced to adjust its prices slightly as of 1 August 2012 by 2.6% on average. As of the end of 2012/start of 2013, there was a renewed sharp increase in

these factors that drove prices upwards. As a result, EnBW announced that it was making an additional price adjustment to household electricity as of 1 February 2013, with prices rising by 10.3% on average. Additional burdens from statutory allocations and network user charges for customers were able to be offset to a certain extent through advantages relating to procurement costs. Prices for heating electricity applications are also being increased by 16% on average as of 1 January 2013. Here, EnBW will only pass on the increase in allocations and network user charges to customers.

For industrial customers, the BDEW calculated an average price of 14.02 ct/kWh (medium-voltage supply including electricity tax) in October 2012, which is virtually unchanged in comparison to the prior year (14.04 ct/kWh).

According to figures from the Federal Statistical Office, gas prices in the reporting year 2012 (as of December 2012) were up 10.1% on the corresponding prior-year period. For household customers, gas was around 5.6% more expensive in 2012 than one year previously. The price increase for the industry stood at 13.8%.

Political and regulatory environment

European energy policy

Energy efficiency: In September 2012, the European Union enacted a directive on energy efficiency, which must now be implemented by the member states. In accordance with the directive, all members states must, among other things, ensure that they reduce energy consumption by end customers by 1.5% a year as of 2014.

Emissions trading: In order to combat the intermittent fall in emission allowances prices, the EU Commission recommended in the autumn that 900 million allowances be temporarily removed from the market for the years 2013 to 2015. Towards the end of the third trading period, these are to be returned to the market in 2019 and 2020. The shortage is expected to create incentives to invest in climate-friendly technologies. As these measures are only likely to have a temporary effect, the Commission, in its report on the status of the emissions trading market presented mid-November, put forward options for additional structural changes including making the removal of allowances permanent, raising saving targets for 2020 or the possibility of more regular controlling interventions.

Infrastructure and single market: In December 2012, a political agreement was reached with regard to the regulation on guidelines for trans-European energy infrastructures. Provided it is formally adopted, the pending regulation is to provide a set methodology for determining projects of joint European interest regarding transmission and long-distance grids, storage facilities and smart grids. Among other things, these projects are to have their

approval deadlines limited to three and a half years and financial support is also to be provided to a certain extent.

In the past fiscal year, work also began on the implementation and evaluation of the third energy liberalisation package concluded in 2011, primarily with regard to the development of the network codes. In its report on the status of the single energy market presented at the end of 2012, the Commission evaluated the progress made and listed any remaining open points, in particular the rejection of introducing any more national capacity mechanisms. To this end, a period of open consultation begun in November is to investigate measures that need to be taken at a European level.

Nuclear safety: On 4 October 2012, the Commission presented its final report on the stress tests performed following the incident at the nuclear power plant in Fukushima. In its report, it comes to the conclusion that the safety standards in Europe are generally high; however, it also makes recommendations on how to further improve technical safety features. As a next step, the member states' national supervisory authorities are now establishing national plans of actions for implementing these recommendations. The Commission aims to report on the implementation of the stress test recommendations in June 2014. Furthermore, the results of the stress tests are to make their way into the currently applicable guideline on nuclear safety. A first draft of this amended version will also contain suggestions relating to insurance and liability in the field of nuclear power and is set to be presented in spring 2013.

Renewable energies: In June 2012, the Commission published a notice on its further strategy in this area, primarily announcing guidelines on the greater convergence of national incentive systems as well as the increased use of the cooperation mechanisms set out in the renewable energies directive for the coming year. With regard to continuing the renewable energies strategy beyond 2020, the main issue raised is the necessity of a savings target for 2030.

Energy policy in Germany

The implementation of the new energy concept in Germany remained a focal point of the federal government in 2012, with the Federal Minister for the Environment, for example, presenting a ten-point plan in August 2012 in which he outlined his roadmap in the run-up to the 2013 general elections. The compensation rates for new plants contained in the German Combined Heat and Power Act (KWKG) were raised by 0.3 ct/kWh for all plants and by a further 0.3 ct/kWh for those plants subject to emissions trading as of 2013. In order to limit cost increases in the German Renewable Energies Act (EEG), the government resolved to make one-off decreases as well as to lower the compensation rates for photovoltaic plants each month in the future. Should additional generation capacities added per year

exceed the threshold of 3.5 GW, monthly degression will increase for the subsequent year. Government incentives for photovoltaics through the EEG will no longer apply upon reaching the threshold of 52 GW. To facilitate the technical incorporation of photovoltaics into the overall system, a system stability ordinance was adopted stipulating that inverters in photovoltaic systems be upgraded in order to prevent all systems from simultaneously cutting out in the event that a certain voltage is exceeded.

German Energy Industry Act: At the end of 2012, an amendment to the German Energy Industry Act (EnWG) resolved to limit the liability of grid operators for any delays in connecting offshore wind farms to the grid and, in return, to introduce a compensation allocation model for grid users. This regulation came into force on 1 January 2013. At the same time, the new EnWG provides for a ban on shutting down power stations declared to be of systemic importance by the transmission operator responsible after approval by the Federal Network Agency. Cost refund mechanisms, with the exact details of how these are going to be structured due to be clarified in an ordinance yet to be passed, are to compensate power station operators for not being able to shut down their unprofitable power stations. The third new regulation pertains to the promotion of storage facilities. In future, existing pumped storage power stations will be exempt from network user charges if they increase the performance of their pumps or generators by 7.5% or their storage capacities by 5%. The suggestion of taking into account the system performances of the storage facilities in the exemption from network user charges was not included. Newly constructed storage facilities will continue to be exempt from network user charges for 20 years if they go into operation before 2027.

As a final point, the federal cabinet and lower house of the German parliament passed an ordinance on interruptible loads, stipulating that transmission system operators, by way of tender, can offer major electricity consumers compensation if they undertake to lower their consumption at times of demand bottlenecks.

By contrast, the German energy refurbishment programme ultimately failed.

Onshore wind power: In 2012, the state of Baden-Württemberg enacted a wind energy decree, which is set to accelerate the expansion of wind energy in the state and establish the planning framework.

Regulation of the electricity and gas markets

Three unbundling models

Ownership unbundling

The German Energy Industry Act requires full ownership unbundling of grid and market-related activities of vertically integrated power companies. This means, for example, separating transmission grids as well as generation and sales into separate entities.

Independent system operator (ISO)

The power company remains owner of the transmission grid, however delegates the task of grid operator to an independent trustee, responsible for the granting of grid access, network user charges as well as planning, construction and commissioning of new infrastructures.

Independent transmission operator (ITO)

Vertically integrated power companies such as EnBW may keep their former structure, however they must comply with certain rules ensuring that the transmission grid operators are independent of generation and supply.

German Energy Industry Act: In August 2011, the requirements of the third energy liberalisation package for the electricity and natural gas markets were transposed in the German Energy Industry Act. The aim of the European Commission is to continue to strengthen competition on the European electricity and gas markets, calling for stricter unbundling of the long-distance transmission networks from the vertically integrated energy supply companies.

Market participants have three options: ownership unbundling, the independent system operator (ISO) model or the independent transmission operator (ITO) model. EnBW decided on the ITO model. In accordance with the EnWG, independence in fact and in appearance are unbundling requirements for certification as an independent transmission operator. With GVS Netz GmbH renamed terranets bw GmbH as of 1 March 2012 and EnBW Transportnetze AG becoming TransnetBW GmbH as of 2 March 2012, EnBW fulfilled another condition for unbundling from the group.

Since 9 November 2012, terranets bw GmbH has been certified as an ITO by the Federal Network Agency and the European Commission. Due to delays, the accreditation process for TransnetBW GmbH will most likely not be concluded until the beginning of 2013. We expect both certifications to be granted containing terms and conditions.

Network development plan: Over the course of an eight-week consultation period, the Federal Network Agency gave the general public the opportunity to comment on the revised draft of the 2012 electricity network development plan published by the transmission system operators on 15 August 2012. The plan will see the network require considerable expansion and optimisation work across Germany. The Federal Network Agency reviewed and revised the network development plan using the comments received up until 2 November 2012. On 19 December 2012, the federal cabinet passed the Federal Requirements Plan Act. The federal government plans to enact the law in the first half of 2013.

The 14 German long-distance network operators presented the national gas network development plan on 1 April 2012. Based on the scenario framework confirmed by the Federal Network Agency, the plan reveals – assuming medium gas requirements in the future – the binding measures to develop the long-distance networks as required over the next three years. The plan states that line construction measures that provide for a total length of just under 200 km and an additional compressor capacity of 90 MW must be completed by 2015. Investment requirements amount to approximately €600 million. By 2022, line construction measures will have provided for a total length of some 730 km and an additional compressor capacity of around 360 MW. This corresponds to an overall investment volume of €2.2 billion. The national gas network development plan 2012 was approved by the Federal Network Agency in December 2012. Prior to this, in mid-October 2012 it determined the scenario framework for the network development plan 2013, which has to be presented by the long-distance network operators by 1 April 2013.

Network user charges: In 2012, the electricity network operators had to submit their network user charge applications based on 2011 to the regulatory authorities. As the second electricity incentive regulatory period does not begin until 2014 (ending in 2018), the appropriate network user charge notices are expected over the course of 2013.

Up until 30 June 2011, the gas network operators submitted their network user charge applications to the regulatory authorities completed on the basis of the past fiscal year 2010 for the second gas incentive regulatory period (2013 – 2017). Based on the feedback from the regulatory authorities, EnBW Regional AG and terranets bw GmbH published the 2013 prices for invoicing purposes at the end of December.

New version of the gas cooperation agreement: The gas cooperation agreement (KoV) is an instrument used to form details of the gas network access and is drafted by the associations BDEW, VKU (Verband kommunaler Unternehmen e. V.) and GEODE (European Association of Independent Distribution Companies of Gas and Electricity) using market feedback. In addition to containing regulations of the grid operators and market area coordinators among each other, the cooperation agreement comprises standardised grid access and balancing agreements as well as detailed guidelines on preparing the corresponding processes. The fifth version of the cooperation agreement (KoV V) came into force on 1 October 2012. KoV V contains formal adjustments as a result of the amendment of the German Energy Industry Act which came into force in 2011 as well as changes in key areas, such as the introduction of a monthly grid account invoicing system by the market grid coordinators, the further standardisation of terms and conditions and the implementation of capacity management measures in accordance with the corresponding definition (KARLA-Gas) of the Federal Network Agency.

The EnBW group

In 2012, the EnBW group's adjusted EBITDA fell by 4.3% on the prior year to €2,343.1 million. Despite the continuing difficult environment, there was a significant decrease in negative non-operating effects compared to 2011. Overall, the EnBW group recorded a net profit of €473.5 million in 2012 compared to a group net loss of €842.3 million in the prior year.

Overall assessment of the business development

The EnBW group's operating result was close to the prior-year level in 2012. In view of the still difficult conditions for the entire industry and the ongoing changes required as a result within the company, we consider this a satisfactory result for the fiscal year 2012. There were far fewer negative non-operating effects in 2012 than in the prior year. In total, the group reports a net profit attributable to the equity holders of EnBW AG of €473.5 million in 2012.

To secure the company's ability to act and its future sustainability, EnBW adopted a package of measures at an early stage. The planned capital measures were successfully completed in 2012. The "Fokus" efficiency programme is taking effect more quickly than initially planned. The first few divestitures have been made. EnBW created the

necessary financial headroom in 2012 to realign its business model while maintaining its sound financial position.

The contributions to earnings by the group's segments were more balanced in 2012 than in prior years. The electricity generation and trading segment had to face a loss in earnings on account of declining electricity prices on wholesale markets and the permanent shutdown of two of our nuclear power plants. In contrast, the electricity grid and sales segment and the gas segment were both able to increase their earnings.

At €388.3 million, the value added of the EnBW group for 2012 fell short of the prior-year figure. The average capital employed decreased by €498.6 million to €14,935.5 million. Adjusted EBIT including the investment result dropped marginally to €1,687.8 million. ROCE amounted to 11.3% for fiscal year 2012.

Forecast variances

Development of forecast key indicators of the EnBW group	Forecast in the 2011 annual report for 2012	Amended forecast for 2012 acc. to Q2/Q3 2012	Development 2012
Unit sales of the electricity grid and sales segment (excluding trading)	stable	-	-9.8%
Unit sales of gas (excluding trading)	rising slightly	-	5.3%
Energy and environmental services revenue	rising slightly	-	10.9%
Adjusted EBITDA, electricity generation and trading	falling strongly	-	-18.0%
Adjusted EBITDA, electricity grid and sales	rising strongly	-	42.4%
Adjusted EBITDA, gas	rising	rising strongly	24.7%
Adjusted EBITDA, energy and environmental services	falling	-	-12.8%
Adjusted EBITDA, group	-10% to -15%	approx. -5%	-4.3%
Adjusted group net profit ¹	-10% to -15%	-	0.7%
Distribution rate	40% to 60%	-	35.3%
Adjusted net debt	falling strongly	approx. €8 billion	€8.4 billion

¹ In relation to the loss/profit shares attributable to the equity holders of EnBW AG.

Contrary to our original expectations, in 2012 unit sales in the electricity grid and sales segment (excluding trading) fell by 9.8% compared to the prior year. This development was due to intense competition for retail and industrial customers. At the beginning of 2012, we assumed that we would be able to considerably reduce adjusted net debt by year-end. However, it was not possible to achieve this, above

all because we had to reduce the discount rate for pension provisions in line with market conditions. In the course of the year, we were able to raise the group's adjusted EBITDA as our "Fokus" efficiency programme took effect, rapidly producing savings, and the improved optimisation of our power stations compared to plan led to additional income.

Results of operations

Unit sales and revenue

Electricity sales of the EnBW group in billions of kWh ¹	Generation and trading		Grid and sales		Total	
	2012	2011	2012	2011	2012	2011
Retail customers (B2C)	0.0	0.0	18.1	18.8	18.1	18.8
Industry and redistributors (B2B)	2.5	4.3	40.1	45.7	42.6	50.0
Trade	57.5	72.4	17.2	14.1	74.7	86.5
Total	60.0	76.7	75.4	78.6	135.4	155.3

¹ Prior-year figures restated.

At 135.4 billion kWh, unit sales of electricity of the EnBW group were down 12.8% on the prior-year figure in 2012. The decrease was primarily attributable to the fall in trading activities, among other things due to the shutdown of two nuclear power plants in spring 2011.

Unit sales to retail customers as well as industry and redistributors fell above all due to the continuing intense competition. Unit sales of the B2C business fell by 3.7% to 18.1 billion kWh. In the B2B business, unit sales dropped by 14.8% to 42.6 billion kWh.

Gas sales of the EnBW group in billions of kWh	2012		Variance %
	2012	2011	
Retail customers (B2C)	9.2	8.5	8.2
Industry and redistributors (B2B)	48.6	46.4	4.7
Trade	15.3	2.5	-
Total	73.1	57.4	27.4

The EnBW group's gas sales came to 73.1 billion kWh in 2012, up 27.4% on the prior-year level. The lower temperatures in a year-on-year comparison caused unit sales to retail customers to increase by 0.7 billion kWh or 8.2%. Unit sales to industrial customers and redistributors increased by

2.2 billion kWh, or 4.7%, in comparison to the prior year. Trading activities saw a large 12.8 billion kWh increase in unit sales to 15.3 billion kWh in 2012 on account of the expansion of the gas midstream business.

External revenue of the EnBW group by segment in € millions ^{1,2}	2012	2011	Variance %
Electricity generation and trading	3,977.7	5,418.7	-26.6
Electricity grid and sales	11,860.9	10,742.6	10.4
Gas	2,542.0	1,814.6	40.1
Energy and environmental services	865.3	780.4	10.9
Total	19,245.9	18,756.3	2.6

¹ Prior-year figures restated.

² After deducting electricity and energy taxes.

In the fiscal year 2012, the EnBW group generated external revenue including electricity and energy taxes of €20,131.1 million. After deduction of electricity and energy taxes, revenue came to €19,245.9 million, 2.6% above the 2011 level.

Electricity generation and trading: Revenue in the electricity generation and trading segment fell by 26.6% in comparison to the prior year to €3,977.7 million. The fall was due to lower unit sales of the segment as well as a drop in prices. The segment's share of total group revenue decreased from 28.9% in the prior year to 20.7% in 2012.

Electricity grid and sales: Revenue levels increased in the electricity grid and sales segment by 10.4% to €11,860.9 million above all due to higher EEG revenue. This increased the segment's share of total group revenue by 4.3 percentage points to 61.6% in 2012.

Gas: Revenue in the gas segment increased by 40.1% in 2012 to €2,542.0 million on account of weather conditions and an increase in trading activities. The segment's share of total group revenue increased compared to the prior-year figure from 9.7% to 13.2% in 2012.

Energy and environmental services: Revenue in the energy and environmental services segment increased by 10.9% compared to the prior-year period to €865.3 million in 2012. The increase in revenue is principally attributable to the volume growth seen in local energy solutions, above all in the contracting business. This segment's share of total group revenue increased by 0.3 percentage points on the prior year to 4.5%.

Material developments in the income statement

In the fiscal year 2012, other operating income stood at €1,072.4 million; this increase of €138.3 million on the prior-year figure of €934.1 million was mainly caused by positive fair value adjustments on derivatives. In the reporting year, cost of materials increased marginally by 1.3% on 2011 to €15,288.6 million. The lower increase recorded in cost of

materials compared to revenue is due to the higher additions to nuclear power provisions made in the prior year, increasing cost of materials by a disproportionately high rate. Personnel expenses fell slightly by 0.6% compared to 2011 to €1,599.3 million in the reporting period. Other operating expenses decreased by 7.7% to €1,170.5 million in 2012. The decrease is first and foremost due to the absence of non-operating expenses from restructuring, which had been included in other operating expenses in the prior year. The investment result, recorded at a negative value of €632.2 million in 2011 as a result of recognising impairment losses on equity investments, increased to a positive figure of €144.3 million in the reporting period. The financial result improved by €91.6 million to € -712.1 million in the reporting year. Overall, earnings before tax (EBT) rose from a negative figure of €758.1 million in the prior year to positive earnings €707.4 million in the fiscal year 2012. Income taxes rose to €172.6 million compared to €32.8 million in the prior year ([► www.enbw.com/report2012](http://www.enbw.com/report2012) [► Financial report 2012](#)).

Earnings

The group net profit attributable to the equity holders of EnBW AG improved considerably in the reporting year by €1,315.8 million to €473.5 million, after a group net loss of €842.3 million in the prior year. Earnings per share stood at €1.84 for 2012 (prior year restated: € -3.45).

Adjusted earnings and non-operating result

The sustainable earnings power of operating activities is of particular importance for the internal management and external communication of EnBW's current and future development of earnings. For this reason, we have been using adjusted EBITDA – earnings before interest, taxes, depreciation and amortisation adjusted for non-operating effects – since the beginning of 2012 as a key reporting indicator. In comparison to adjusted EBIT, adjusted EBITDA is used by many analysts as a way of analysing development relating to cash. This is also manifested in the key performance indicator we use for the dynamic leverage ratio (adjusted net debt/adjusted EBITDA). Comparability with other companies in the industry is also improved.

Adjusted earnings

Adjusted EBITDA of the EnBW group by segment in € millions ¹	2012	2011	Variance %
Electricity generation and trading	1,319.7	1,609.2	-18.0
Electricity grid and sales	685.7	481.4	42.4
Gas	159.4	127.8	24.7
Energy and environmental services	309.6	354.9	-12.8
Holding/consolidation	-131.3	-124.3	-5.6
Total	2,343.1	2,449.0	-4.3

¹ Prior-year figures restated.

The EnBW group's adjusted EBITDA amounted to €2,343.1 million in the reporting year, down 4.3% on the prior-year level. This decrease was essentially due to the sharp fall in earnings in the electricity generation and trading segment.

Adjusted EBITDA in the electricity generation and trading segment decreased by a significant 18.0% on the prior year to €1,319.7 million. The lower level of earnings was caused primarily by falling electricity prices on wholesale markets and the loss of earnings due to the permanent shutdown of two of our nuclear power plants. By contrast, we recorded an increase in income from renewable energies as a result of higher output of energy generated from wind power.

Earnings in the electricity grid and sales segment improved significantly in 2012 by 42.4% to €685.7 million. This increase in earnings was above all thanks to higher network user charges. In addition, lower overheads and improved sales margins had a positive effect on earnings in the reporting year.

The gas segment saw an improvement in earnings of 24.7% to €159.4 million in the fiscal year 2012. The improvement is attributable to the rise in unit sales, greater quantities being transmitted via EnBW's grids and lower overheads.

Adjusted EBITDA in the energy and environmental services segment dropped by 12.8% to €309.6 million in the reporting year. This decrease is mostly due to non-recurring effects from the prior year. In the fiscal year 2011, positive effects on earnings generated at the internal service companies from our efficiency programme could no longer be passed on in full to the companies operating in other segments.

At the level of the holding company, this led to a 5.6% higher negative adjusted EBITDA of €131.3 million in the reporting year (prior year: €-124.3 million).

Adjusted earnings indicators

Adjusted earnings indicators of the EnBW group in € millions ¹	2012	2011	Variance %
Adjusted EBITDA	2,343.1	2,449.0	-4.3
Amortisation and depreciation	-888.3	-848.9	4.6
Adjusted EBIT	1,454.8	1,600.1	-9.1
Adjusted investment result	186.8	167.9	11.3
Adjusted financial result	-665.4	-732.3	9.1
Adjusted income taxes	-232.8	-309.1	24.7
Adjusted group net profit	743.4	726.6	2.3
of which profit/loss shares attributable to non-controlling interests	[91.0]	[78.9]	15.3
of which profit/loss shares attributable to the equity holders of EnBW AG	(652.4)	(647.7)	0.7

¹ Prior-year figures restated.

The 11.3% higher adjusted investment result of €186.8 million is primarily due to the higher share of profit/loss from associates. The adjusted financial result improved by €66.9 million to €-665.4 million, principally on account of lower losses on the sale of financial instruments in the reporting year.

At €232.8 million, the adjusted income taxes in the reporting year were 24.7% below the prior-year level of €309.1 million. The adjusted tax rate in the prior year was 29.8% due to expenses relating to other periods. It fell to 23.8% in the current year due to income relating to other periods. Overall, the adjusted group net profit attributable to the equity holders of EnBW AG improved slightly by 0.7% to €652.4 million in the fiscal year 2012 after €647.7 million in the prior year.

Non-operating result

Non-operating result of the EnBW group in € millions ¹	2012	2011	Variance %
Income/expenses relating to nuclear power	-38.5	-487.3	92.1
Income from the reversal of other provisions	71.6	94.5	-24.2
Gain on sale	29.9	26.8	11.6
Restructuring	-50.0	-155.8	67.9
Other non-operating result	-63.0	-117.6	46.4
Non-operating EBITDA	-50.0	-639.4	92.2
Impairment losses	-129.6	-282.9	54.2
Non-operating EBIT	-179.6	-922.3	80.5
Non-operating investment result	-42.5	-800.1	94.7
Non-operating financial result	-46.7	-71.4	34.6
Non-operating income taxes	60.2	276.3	-78.2
Non-operating group net loss	-208.6	-1,517.5	86.3
of which profit/loss shares attributable to non-controlling interests	[-29.7]	[-27.5]	8.0
of which profit/loss shares attributable to the equity holders of EnBW AG	(-178.9)	(-1,490.0)	88.0

¹ Prior-year figures restated.

Non-operating EBITDA improved by €589.4 million to €-50.0 million in the reporting year. The positive earnings development was attributable above all to the extraordinary expenses relating to nuclear power from the decommissioning of two nuclear power plant units in the

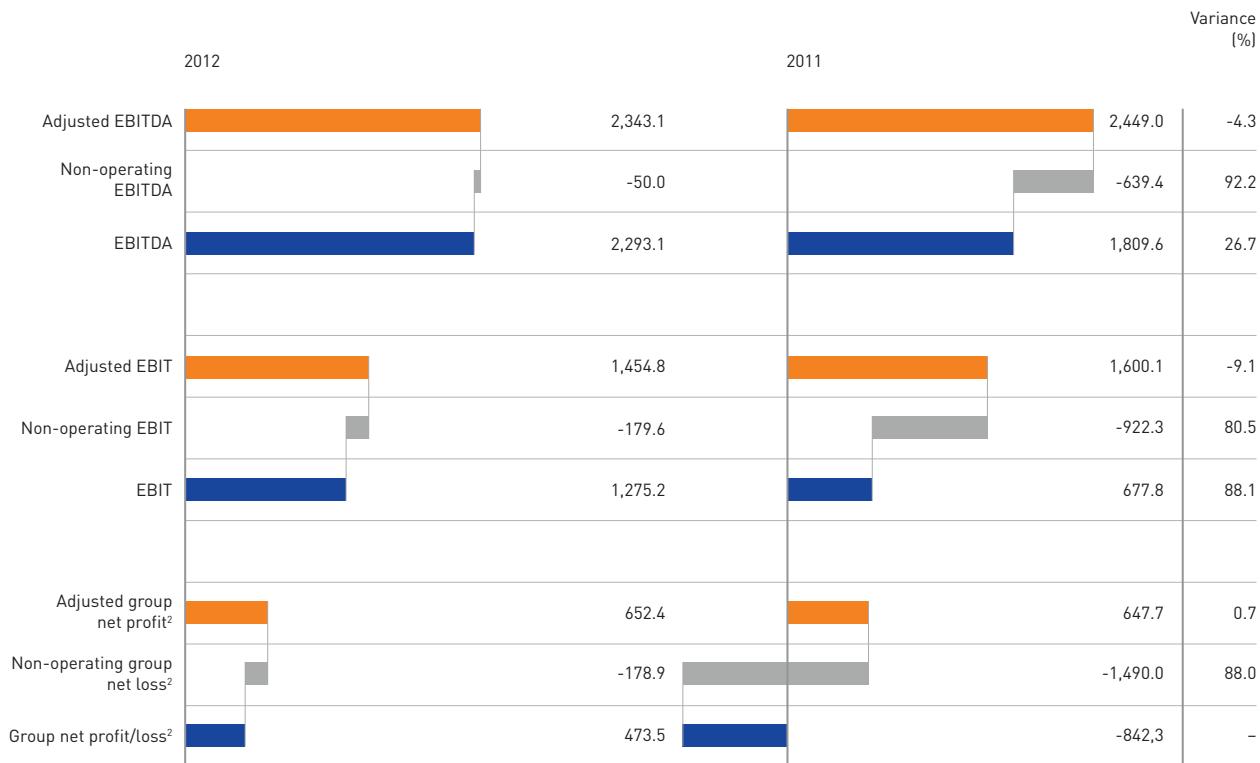
first quarter of 2011. In addition, restructuring expenses were lower in the reporting year than in the prior year which had centred on the measures of the "Fokus" efficiency programme. The other non-operating result for the fiscal year was influenced primarily by recognising a provision for

onerous contracts relating to an electricity procurement agreement. In the prior year, the other non-operating result also essentially comprised additions to provisions. The impairment losses were recognised principally on contracting facilities, whose carrying amount was adjusted due to a deterioration in economic conditions. In total, the impairment losses of €129.6 million recognised in 2012 were €153.3 million below the prior-year figure, which had been affected above all by the shutdown of two nuclear power plants and impairment losses recognised on the gas grids. Non-operating EBIT thus improved considerably by €742.7 million to €-179.6 million in the reporting year. The non-operating investment result of €-42.5 million essentially relates to impairment losses on our Hungarian equity investments due to the downturn in the economic

environment. Gains on sale from our divestiture programme had a positive effect here. Compared to the prior-year result (2011: €-800.1 million), which had included impairment losses on EWE Aktiengesellschaft (EWE) and EVN AG, the non-operating investment result improved by €757.6 million. The non-operating financial result of €-46.7 million of the reporting year mainly reflects the decrease in the discount rate for nuclear power provisions. Overall, the non-operating result was much less negative in the fiscal year 2012 than in the prior year. As a result, non-operating tax income fell to €60.2 million after €276.3 million in the prior year. The non-operating group net loss in terms of the profit/loss shares attributable to the equity holders of EnBW AG improved considerably by €1,311.1 million to €-178.9 million in the reporting year.

Reconciliation of earnings

Financial performance of the EnBW group
in € millions¹



¹ Prior-year figures restated.

² In relation to the profit/loss shares attributable to the equity holders of EnBW AG.

Financial position

Financial management of EnBW

Basis and objectives

The EnBW group's financial management is aimed at minimising the costs of capital for financing the corporate strategy, ensuring that there is sufficient liquidity for operations at all times and limiting the risk of changes in interest rates for the group. We also strive to maintain an A rating. EnBW optimises its capital structure with a view to these aims. Costs of capital are minimised while retaining the financial headroom to exercise strategic options. The debt level is kept within a reasonable range. The dynamic leverage ratio ([Management report > Rating and rating development > p. 76f](#)) and other key performance indicators of relevance for rating agencies are used to manage credit rating. As of the reporting date 2012, the dynamic leverage ratio came to 3.59.

The principles and objectives of our financing strategy are as follows:

- Establishing financing according to a multi-pillar strategy to provide a choice of various forms of financing that can be drawn on flexibly depending on the financial management objectives.
- Implementing long-term financing arrangements on the capital markets, with terms to maturity matching those of capital tied up in assets in the balance sheet. Financing via banks is used in exceptional cases only, usually for bridge financing purposes. This allows EnBW to obtain long-term financing at a favourable price.
- Winning a diversified base of investors on the markets for debt capital. EnBW attaches great importance to diversification according to geographical criteria as well as according to investors' motivation.
- Setting clearly defined limitations for the use of interest rate swaps in order to optimise financing terms and conditions.

In the operating business, derivatives are generally used for hedging purposes only, for example for forward contracts in electricity trading or trading with primary energy sources. This also applies for foreign currency and interest rate derivatives. Trading for own account is only permitted within narrow, clearly defined boundaries.

Another important task of financial management is to manage financial assets with reference to the appropriate requirements to recognise provisions. EnBW uses a cash-flow-based model to determine the effects on the balance sheet, income statement and cash flow statement of the next 30 years. This takes into account actuarial appraisals on pension provisions and external expert reports on provisions relating to nuclear power. This model also allows simulations of various alternative scenarios.

In addition, financial management is responsible for securing the existing financial assets of the EnBW group and their settlement and to guarantee a sufficient level of liquidity reserves. This ensures that the group is able to meet its payment obligations at all times without restriction. The EnBW group's treasury guidelines define the financial transactions permitted by EnBW's Board of Management and the framework within which they may be entered into. The guidelines are applicable at all entities that are consolidated in full or with which EnBW AG has a profit and loss transfer agreement. They can also be referred to at all other entities as a matter of principle. Central financial management serves to minimise risks, provide transparency and optimise costs.

Treasury

All processes at all entities that are consolidated in full or with which EnBW AG has a profit and loss transfer agreement are managed by the treasury function. Liquidity management is based on computerised rolling liquidity planning and extends to the pre-defined scope. Treasury is also responsible for the central management of credit lines and bank guarantees, the issuance of guarantees and letters of comfort as well as interest rate risk and currency management.

Interest rate risk and currency management

Interest rate risk and currency management involves the management and monitoring of interest-bearing and interest-sensitive assets and liabilities. The consolidated entities regularly report on existing risk items via the rolling liquidity planning. An interest rate risk strategy is devised based on an analysis conducted every quarter on an aggregated basis. The purpose is to limit the impact of fluctuation in interest rates and interest rate risks on results of operations and net assets ([➤ \[www.enbw.com/report2012\]\(http://www.enbw.com/report2012\) > Financial report 2012](#)).

The interest rates for the EnBW group's financial liabilities are contractually fixed for around 75% of the financial liabilities. A change in interest rates thus usually only affects the remaining approximately 25% of financial liabilities. This can have an effect on EnBW's interest result. The risk potential is determined on the basis of current interest rates and potential changes in these interest rates.

Generally, the currency items resulting from operations are closed by appropriate forward exchange contracts. The legal entities report net items of €1 million or more to the holding company for a risk period of twelve months. Overall, currency fluctuation from operating activities does not have any major effect on EnBW's profit or loss for the period. Any translation risks are monitored on a case-by-case basis in the framework of currency management.

Asset management

It is our aim to cover the group's non-current pension and nuclear power provisions within an economically reasonable period of time by means of investment in appropriate financial assets. We strive to reach the defined investment targets with minimum risk. We continued our efforts to optimise the risk/return profile of the financial assets throughout 2012. An investment volume totalling around €6.5 billion was managed in 2012 (prior year: €6 billion), spread over a total of nine asset classes. The financial assets are bundled in four master funds with the following investment targets:

- Achieve long-term target return on financial assets of 5.5%
- Minimise risks
- Minimise the effect on the balance sheet and income statement
- Broadly diversify asset classes
- Cut costs and simplify administration

Financing facilities

In addition to the group's internal financing power from a free cash flow of €205.8 million in 2012 (prior year restated: €827.0 million) and its own funds, the EnBW group has the following instruments at its disposal to cover its total financing needs:

- Commercial paper (CP) programme for a total of €2.0 billion (undrawn as of 31 December 2012)
- Syndicated line of credit for €2.0 billion with a term of five years (undrawn as of 31 December 2012)
- Bilateral short-term lines of credit (€539 million, undrawn as of 31 December 2012)
- Euro Medium Term Note (EMTN) programme with a line of €7.0 billion (€4.0 billion utilised as of 31 December 2012)
- Measures to strengthen equity and offering of special products

On the date of issue of 2 April 2012, EnBW increased the volume of the subordinated hybrid bond issued in October 2011 of €750 million by a further €250 million. The term to maturity is 60 years with repayment rights every five years after the first interest payment date. The bond was issued with a return of 6.53% as of the first termination date on 2 April 2017. Repayment will be made by 2 April 2072 at the latest.

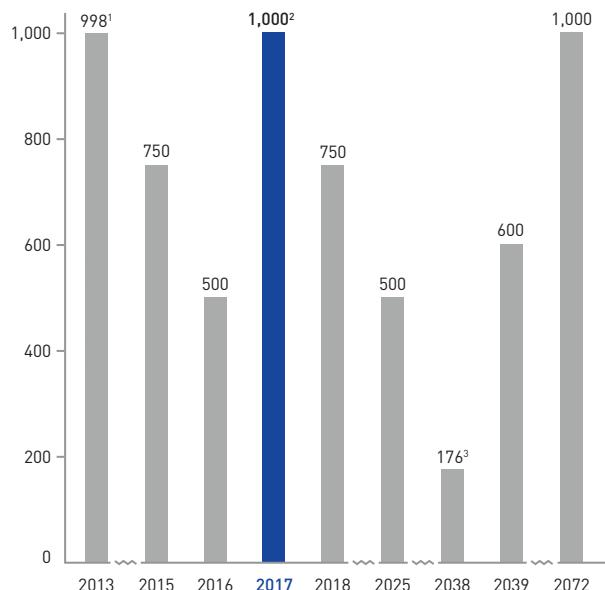
Based on the authorised capital created at the annual general meeting on 26 April 2012, EnBW's share capital was increased at the beginning of July 2012 by issuing 26,598,504 new ordinary bearer shares at a purchase price of €30.90 per share. As a result, gross issue proceeds amounted to approximately €822 million. The new shares were offered exclusively to the shareholders of EnBW in the form of indirect subscription rights at a ratio of 9:1 and entitle the holder to profit participation for the entire fiscal year 2012. EnBW's majority shareholders, NECKARPRI-Beteiligungs-gesellschaft mbH and OEW Energie-Beteiligungs GmbH, fully exercised their subscription rights. Badische Energie-aktionärs-Vereinigung, Landeselektrizitätsverband Württemberg and Gemeindeelektrizitätsverband Schwarzwald-Donau also exercised their subscription rights to a certain, in some cases significant, degree. The new shares were included in the already existing listing on 6 July 2012.

As of 31 December 2012, the special products included bonds throughout the group with a volume totalling CHF 300 million.

Documentation of short-term and long-term borrowings on the capital market under the established EMTN and CP programmes as well as all other credit documentation with banks (e.g. syndicated lines of credit) includes standard international clauses. One key element of EnBW's financing policy is the issuance of a negative report and a pari passu clause to all creditors.

In 2012, EnBW had access to the capital market as and when needed. A bond totalling €1.0 billion with a coupon of 5.875% matured in the reporting year. It was repaid as of 28 February 2012 using the company's liquidity. The bonds that mature in 2013 (CHF 300 million, €750 million) can be repaid without the need to borrow any additional financial liabilities. Since the CHF bond serves to secure EnBW's activities in Switzerland, we are considering refinancing it in CHF. EnBW's bonds have a well-balanced maturity profile. Thanks to our strong internal financing power, we expect to be able to finance the planned net investments from cash flow from operating activities, potentially with some bridge financing.

**Maturity profile of the EnBW bonds
in € millions**



¹ This includes CHF 300 million converted as of the reporting date 31 December 2012.

² First call date for the hybrid bond.

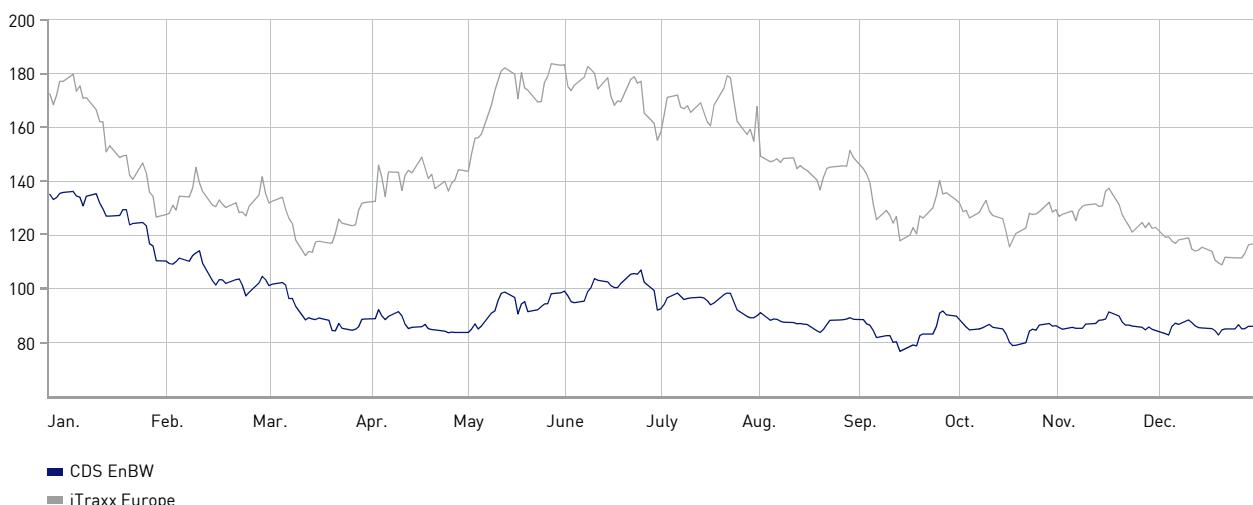
³ Nominal with conversion as of the reporting date 31 December 2012.

Details on liabilities are presented in note 24 of the notes to the consolidated financial statements (www.enbw.com/report2012 > Financial report 2012).

**Development of the five-year credit default swap
for EnBW**

The risk premiums for EnBW's credit products (five-year CDS) have shown positive development since the beginning of 2012. Strengthening EnBW's equity by increasing the hybrid bond and increasing the company's capital led to the CDS premiums falling by some 50 base points in a favourable market environment. The five-year CDS for EnBW showed a more stable development over the course of 2012 than the iTraxx Europe index, comprising the CDS prices of 125 major European companies. The volatility of the latter was to a great extent attributable to the deterioration of the European debt crisis.

**Development of the credit default swaps 2012
in base points**



Rating and rating development

The key objective of EnBW's financial strategy is to maintain an A rating. EnBW has satisfied the relevant criteria ever since the rating agencies Standard & Poor's (2000), Moody's (2002) and Fitch (2009) started issuing credit ratings for the

company. Since 2011, however, the rating agencies have been paying closer attention to German energy companies. The reasons for this are the energy policy decisions made in Germany and their consequences on the domestic energy industry.

Overview over EnBW's ratings – rating/outlook	2012	2011	2010	2009	2008
Moody's	A3/negative	A3/negative	A2/stable	A2/stable	A2/stable
Standard & Poor's	A-/stable	A-/stable	A-/negative	A-/negative	A-/stable
Fitch	A-/stable	A-/stable	A/stable	A/stable	

The rating agencies confirmed their ratings over the course of 2012. The current ratings reflect EnBW's sound financial profile and the consistent implementation of our package of

measures. For more information, please refer to the table below:

Assessment by the rating agencies	Strengths	Weaknesses
Moody's (18 June 2012)	Substantial package of measures	Reduced cash flows through nuclear fuel rod tax and lower wholesale market prices as well as higher CO ₂ emission costs as of 2017
	Strong position as one of the top 4 electricity generators in Germany	Increased pressure on financial risk profile
	Dividend policy calibrated according to profitability	Execution risk regarding the implementation of the package of measures
Standard & Poor's (21 November 2012)	Solid position as the third-largest German utility company	Reduced cash flows through weaker German electricity market and shutdown of two of EnBW's nuclear power plants
	Resilient and fairly predictable cash flows from regulated operations	Weakening profitability through lower capacity utilisation of power stations, lower wholesale market prices and a less favourable electricity generation mix
	Strong liquidity, financial flexibility and supportive financial risk profile	Moderate geographic diversity compared with larger European players
Fitch (12 June 2012)	Improved financial flexibility and lower leverage due to progress in enacting the package of measures	Further weakening of the operating cash flows in the medium term on account of the nuclear fuel rod tax, lower wholesale market prices and full auctioning of emission allowances as of 2013
	Strong business profile underpinned by vertically integrated operations and dominant position in Baden-Württemberg	Reduced generation margin through increasing merit order pressure from renewable sources on conventional capacity
	Predictable regulated grid operations	Shutdown of two nuclear power plants as a result of the amendment to the Atomic Power Act (AtG)

EnBW strives to maintain its A rating in the medium term in order to continue

- being a first-class address for financing partners without restricting its sources of financing
- being seen as a reliable business partner in its trading activities
- having the lowest possible costs of capital and
- realising an appropriate number of projects, thereby maintaining its future sustainability.

Our extensive package of measures that we put together back in 2010 serves to reinforce the financial strength of the company. In light of the serious changes in general energy policy conditions and the new energy concept introduced in Germany, we continuously updated individual steps. In the reporting year we were able to successfully implement the measures we had imposed on ourselves (➤ **Management report** ➤ **Goals, strategy and corporate management** ➤ p. 57ff).

Investment analysis

Net cash investments of the EnBW group in € millions ¹	2012	2011	Variance %
Electricity generation and trading	348.9	459.5	-24.1
Electricity grid and sales	308.7	379.1	-18.6
Gas	63.7	81.1	-21.5
Energy and environmental services	95.5	164.8	-42.1
Total capital expenditures on intangible assets and property, plant and equipment	816.8	1,084.5	-24.7
Cash paid for the acquisition of subsidiaries and entities accounted for using the equity method	38.8	168.5	-77.0
Cash paid for the acquisition of investments ²	20.7	42.1	-50.8
Cash paid for changes in ownership interest without loss of control	1.1	19.8	-94.4
Total investments	877.4	1,314.9	-33.3
Cash received from disposals of intangible assets and property, plant and equipment	-89.8	-33.8	-
Cash received from construction cost and investment subsidies	-66.2	-83.1	-20.3
Cash received from the sale of subsidiaries and entities accounted for using the equity method	-258.1	-6.3	-
Cash received from the sale of investments ²	-15.7	-13.9	12.9
Cash received from changes in ownership interest without loss of control	0.0	-245.6	-
Cash received from participation models	0.0	-25.2	-
Total divestitures	-429.8	-407.9	5.4
Net (cash) investments	447.6	907.0	-50.7

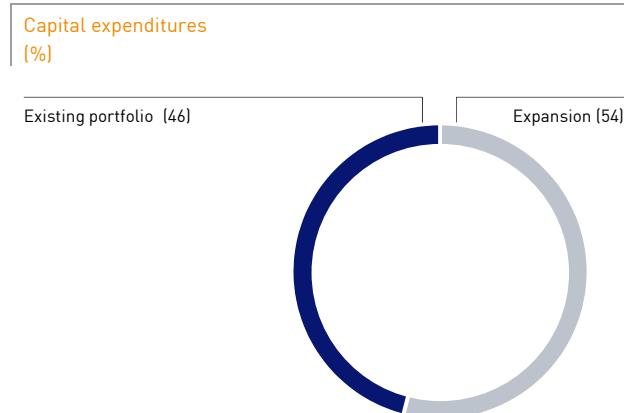
¹ Prior-year figures restated.

² Without investments held as financial assets.

In the reporting year 2012, the EnBW group invested a total of €877.4 million, a decrease of 33.3% on the prior year (€1,314.9 million). Capital expenditures on intangible assets and property, plant and equipment came to €816.8 million in 2012, down €267.7 million or 24.7% on the prior year. They accounted for 93.1% of total investment, after 82.5% previously. The fall in capital expenditures on intangible assets and property, plant and equipment in 2012 is in line with the investment programme which has been adjusted in light of the dramatic changes in industry conditions. In addition, the higher prior-year level of total investment was influenced by the subsequent purchase price payment relating to the acquisition of a shareholding in EWE Aktiengesellschaft of €83.9 million.

At around 46%, the majority of total expenditure was attributable to replacement and renewal measures in 2012. EnBW invested primarily in the expansion and maintenance of existing power stations as well as in grid infrastructure. Around 54% of total investment went towards growth projects, such as the realisation of the second offshore wind farm EnBW Baltic 2, the construction of RDK 8 hard coal power station, preparations for the construction of the Lausward gas and steam power station as well as for further expansion projects. Capital expenditures on renewable energies came to around 18% of total investment, relating primarily to the preparations for realising the second

offshore wind farm EnBW Baltic 2 and the expansion of our renewable energies activities in Turkey.



The electricity generation and trading segment accounted for around 40% of capital expenditures. The volume decreased by 24.1% to €348.9 million compared to 2011. Investment focused on the construction of RDK 8 hard coal power station in Karlsruhe as well as the realisation of the offshore wind farm EnBW Baltic 2. The investment total for the electricity grid and sales segment came to €308.7 million, which is 18.6% below the prior-year figure (€379.1 million). The funds mainly flowed into the ongoing

modernisation and expansion of our grids – in particular to permit the connection of facilities for the generation of renewable energies and to upgrade the grid. Capital expenditures in the gas segment fell by 21.5% compared to the prior year (€81.1 million) to €63.7 million. The lower level of investment is attributable above all to completion of the Etzel gas storage project at the end of 2011. Capital expenditures of €95.5 million were made in the energy and environmental services segment. The decrease of 42.1% compared to the prior year (€164.8 million) is principally due to the spending in the prior year on the construction of a substitute fuel power plant in Eisenhüttenstadt.

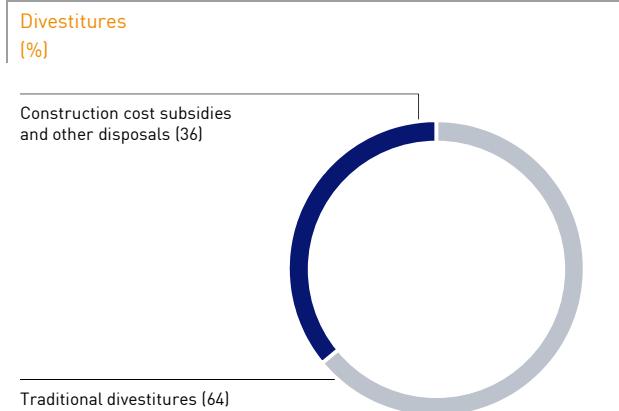
EnBW's acquisitions fell by 73.7% to €60.6 million in 2012 after €230.4 million in the prior year. The high prior-year figure was due first and foremost to a subsequent purchase price payment relating to the acquisition of a shareholding in EWE Aktiengesellschaft. Divestitures rose compared to the prior year (€407.9 million) to €429.8 million. This rise is due to the sale of our investment in Poland and other disposals. Cash received in 2011 from changes in ownership interest of entities without loss of control had the opposite effect. On balance, net investments came to €447.6 million in the fiscal year 2012 in comparison to €907.0 million in the prior reporting period.

Liquidity analysis

Free cash flow of the EnBW group in € millions ¹	2012	2011	Variance %
Cash flow from operating activities	856.3	1,747.4	-51.0
Change in assets and liabilities from operating activities	915.1	414.7	120.7
Interest and dividends received	346.2	394.1	-12.2
Interest paid for financing activities	-335.9	-346.9	-3.2
Funds from operations (FFO)	1,781.7	2,209.3	-19.4
Change in assets and liabilities from operating activities	-915.1	-414.7	120.7
Capital expenditures on intangible assets and property, plant and equipment	-816.8	-1,084.5	-24.7
Cash received from disposals of intangible assets and property, plant and equipment	89.8	33.8	-
Cash received from construction cost and investment subsidies	66.2	83.1	-20.3
Free cash flow	205.8	827.0	-75.1

¹ Prior-year figures restated.

In 2012, cash flow from operating activities stood at €856.3 million, significantly down by 51.0% on the prior-year figure of €1,747.4 million. Reasons here included higher utilisation of nuclear power provisions due to the shutdown of two of our nuclear power plants, a higher balance of assets and liabilities from operating activities, and cash received from income taxes paid in the prior year due to the sale of a corporate income tax credit. At €1,781.7 million, funds from operations (FFO) in the past fiscal year were 19.4% below the prior-year level of €2,209.3 million. The balance of assets and liabilities from operating activities increased substantially



Capital commitments for intangible assets and property, plant and equipment amounted to €975.6 million as of 31 December 2012 (prior year restated: €1,138.2 million). Commitments to acquire entities totalled €495.1 million (prior year restated: €449.5 million). The commitment is financed from current funds from operations (FFO).

by €500.4 million in a year-on-year comparison. This is largely attributable to the increase in the balance of trade receivables and payables due among other things to an insufficient level of cost allocations under the German Renewable Energies Act (EEG), which will not be offset until 2013 at the earliest. This was partly counterbalanced by high security deposits for derivatives in the prior year. Lower capital expenditures on intangible assets and property, plant and equipment compared to the prior year produced a free cash flow of €205.8 million in the reporting period, a fall of €621.2 million on the prior year.

Cash flow statement of the EnBW group in € millions ¹	2012	2011	Variance %
Cash flow from operating activities	856.3	1,747.4	-51.0
Cash flow from investing activities	-274.3	-658.3	-58.3
Cash flow from financing activities	-730.8	-188.2	-
Net change in cash and cash equivalents	-148.8	900.9	-
Net foreign exchange difference	-0.2	0.2	-
Change in cash and cash equivalents	-149.0	901.1	-

¹ Prior-year figures restated.

At € -274.3 million, the cash flow from investing activities in 2012 was significantly below the prior-year level of € -658.3 million. The main reasons here were the lower capital expenditures on intangible assets and property, plant and equipment compared to the prior year, a lower level of cash paid for subsequent purchase price payments and capital increases as well as a higher level of cash received from the sale of our equity investment in Poland in 2012. Cash flow from financing activities reported a significantly higher cash outflow of € 730.8 million in 2012 in comparison to the prior year (2011: € -188.2 million). This increase was attributable to the repayment of a bond liability of €1 billion, a lower level of cash received from financial liabilities taken out and cash received in 2011 from changes in ownership interest of entities without loss of control. The capital increase performed in July 2012 as well as lower dividend

payments had the opposite effect here. Cash and cash equivalents in the group fell by €149.0 million in the reporting period.

The EnBW group's solvency was ensured at all times throughout the fiscal year 2012 through the liquidity available, the positive free cash flow and the available external sources of financing. The company's solvency is secured for the future by its sound financial position. This is also supported, among other things, by its undrawn lines of credit of €2.539 billion which are not subject to any restrictions (www.enbw.com/report2012 > **Financial report 2012**).

Net assets

Condensed balance sheet of the EnBW group in € millions ¹	31/12/2012	31/12/2011	Variance %
Assets			
Non-current assets	25,140.8	25,261.7	-0.5
Intangible assets	(1,926.7)	(2,004.2)	-3.9
Property, plant and equipment	(13,782.5)	(13,791.5)	-0.1
Entities accounted for using the equity method	(2,355.9)	(3,042.4)	-22.6
Other financial assets	(6,058.7)	(5,442.8)	11.3
Deferred taxes	(46.4)	(38.3)	21.1
Current assets	10,948.0	10,217.1	7.2
Assets held for sale	681.1	209.9	-
	36,769.9	35,688.7	3.0
Equity and liabilities			
Equity	7,183.4	6,126.8	17.2
Non-current liabilities	20,313.5	20,695.2	-1.8
Provisions	(11,132.5)	(10,760.5)	3.5
Deferred taxes	(1,325.3)	(1,492.5)	-11.2
Financial liabilities	(5,560.1)	(6,219.1)	-10.6
Current liabilities	9,272.4	8,866.1	4.6
Liabilities directly associated with the assets classified as held for sale	0.6	0.6	-
	36,769.9	35,688.7	3.0

¹ Prior-year figures restated.

As of 31 December 2012, the EnBW group's total assets amounted to €36,769.9 million. As of year-end 2011, they had totalled €35,688.7 million. Non-current assets decreased by €120.9 million as of 31 December 2012. The decrease is due above all to reclassification of the Austrian 32.5% equity investment EVN AG to assets held for sale. An increase in securities, driven mainly by higher market values, had the opposite effect. Current assets increased by €730.9 million to €10,948.0 million. This is largely attributable to the temporary increase in current trade receivables due to an insufficient level of cost allocations under the German Renewable Energies Act (EEG), which will not be offset before 2013. The decrease in assets held for sale as a result of the sale of our Polish equity investment in the first quarter of 2012 was more than offset by reclassification of EVN AG in the fourth quarter of 2012. The increase in equity by 17.2% as of 31 December 2012 to €7,183.4 million is primarily attributable to the capital increase performed in July 2012. At 19.5%, the equity ratio as of the reporting date was therefore

far above the level of 17.2% as of the end of the prior year. The €372.0 million increase in non-current provisions to €11,132.5 million is mainly due to nuclear power provisions which increased as a result of reducing the discount rate in a year-on-year comparison. The 10.6% decrease in non-current financial liabilities was primarily caused by the reclassification of bond liabilities totalling about €1 billion that are due for repayment in 2013. This was partly offset by the increase in our hybrid bond. The upward trend caused by reclassification of the non-current bond liabilities to current financial liabilities was offset by repayment of a bond liability of €1 billion in February 2012. The €224.9 million decrease in current financial liabilities to €1,201.1 million is a result mainly of the lower level of liabilities to banks. Overall, current liabilities rose by 4.6% to €9,272.4 million, mostly on account of the increase in negative market values of derivative financial instruments due to market price developments.

Key indicators for the analysis of the composition of assets, equity and liabilities of the EnBW group ¹	2012	2011	Variance %
Equity ratio [%]	19.5	17.2	13.4
Average capital employed	14,935.5	15,434.1	-3.2
Adjusted net debt/equity	1.2	1.4	-14.3
Coverage ratio for non-current assets (non-current assets/equity)	3.5	4.1	-14.6

¹ Prior-year figures restated.

The average capital employed decreased by 3.2% to €14,935.5 million in the fiscal year 2012. The ratio of adjusted net debt to equity improved in 2012, falling from 1.4 to 1.2. The coverage ratio for non-current assets improved to 3.5 after 4.1 in the prior year. Both of these improvements are due chiefly to the capital increase performed in July 2012.

Adjusted net debt

Adjusted net debt fell by 1.6% compared to year-end 2011 to €8,415.6 million as of 31 December 2012. The level of recognised net debt decreased by €831.4 million from €9,457.9 million to €8,626.4 million. This was chiefly due to

the capital increase performed in July 2012 as well as divestitures. This was partly offset by a deficit on the EEG bank account as a result of the insufficient level of cost allocations under the German Renewable Energies Act (EEG). As part of a portfolio reallocation – stemming from the change in the capital market environment – cash and cash equivalents of the special funds were invested in non-current securities. At €138.0 million, the drop in adjusted net debt is significantly lower than the drop in the level of net debt. This is due to actuarial losses not yet offset, which increased by €1,051.4 million as a result of reducing the discount rate for pension provisions from 5.25% to 3.80%.

Adjusted net debt of the EnBW group in € millions ¹	31/12/2012	31/12/2011	Variance %
Cash and cash equivalents	-3,341.2	-3,719.5	-10.2
Cash and cash equivalents of the special funds and short-term investments to cover the pension and nuclear power provisions	1,075.3	1,377.5	-21.9
Adjusted cash and cash equivalents	-2,265.9	-2,342.0	-3.2
Bonds	5,380.7	6,196.3	-13.2
Liabilities to banks	971.7	937.0	3.7
Other financial liabilities	408.8	511.8	-20.1
Financial liabilities	6,761.2	7,645.1	-11.6
Recognised net financial liabilities²	4,495.3	5,303.1	-15.2
Pension and nuclear power provisions	11,190.5	10,875.0	2.9
Long-term investments and loans ³	-5,902.3	-5,213.0	13.2
Cash and cash equivalents of the special funds and short-term investments to cover the pension and nuclear power provisions	-1,075.3	-1,377.5	-21.9
Other	-81.8	-129.7	-36.9
Recognised net debt³	8,626.4	9,457.9	-8.8
Actuarial gains (-)/losses (+) not yet offset arising from provisions for pensions and similar obligations	1,158.1	106.7	-
Market value of emission allowances purchased for planned future electricity generation	-154.4	0.0	-
Non-current receivables associated with nuclear power provisions	-555.5	-511.0	8.7
Valuation effects from interest-induced hedging transactions	-159.0	-125.0	27.2
Restatement of 50% of the nominal amount of the hybrid bond ⁴	-500.0	-375.0	33.3
Adjusted net debt³	8,415.6	8,553.6	-1.6

¹ Prior-year figures restated.

² Adjusted for valuation effects from interest-induced hedging transactions and 50% of the nominal amount of the hybrid bond, net financial liabilities amounted to €3,836.3 million (31 December 2011 restated: €4,803.1 million).

³ Includes investments held as financial assets.

⁴ The structural characteristics of our hybrid bond meet the criteria for half of it to be classified as equity and the other half as debt by the rating agencies Moody's and Standard & Poor's.

The dynamic leverage ratio is adjusted net debt divided by adjusted EBITDA.

$$\text{Dynamic leverage ratio} = \frac{\text{Adjusted net debt}}{\text{Adjusted EBITDA}}$$

Dynamic leverage ratio of the EnBW group in € millions ¹	2012	2011	Variance %
Adjusted net debt	8,415.6	8,553.6	-1.6
Adjusted EBITDA	2,343.1	2,449.0	-4.3
Dynamic leverage ratio	3.59	3.49	2.9

¹ Prior-year figures restated.

As of 31 December 2012, the dynamic leverage ratio came to 3.59. This was attributable to the 4.3% decline in adjusted EBITDA compared to the prior year.

Value added

Value added of the EnBW group for 2012 by segment	Electricity generation and trading	Electricity grid and sales	Gas	Energy and environmental services	Holding/consolidation	Total
Adjusted EBIT including investment result (€ millions)	984.8	471.1	99.4	150.9	-18.4	1,687.8
Average capital employed (€ millions)	5,662.9	4,656.1	1,539.2	1,500.1	1,577.2	14,935.5
ROCE (%)	17.4	10.1	6.5	10.1	-	11.3
WACC (%)	9.7	8.2	8.5	8.9	-	8.7
Value added (€ millions)	436.0	88.5	-30.8	16.5	-	388.3

Value added of the EnBW group for 2011 by segment ¹	Electricity generation and trading	Electricity grid and sales	Gas	Energy and environmental services	Holding/consolidation	Total
Adjusted EBIT including investment result (€ millions)	1,345.4	274.3	60.2	193.2	-87.8	1,785.3
Average capital employed (€ millions)	5,952.2	4,501.3	1,435.6	1,483.8	2,061.2	15,434.1
ROCE (%)	22.6	6.1	4.2	13.0	-	11.6
WACC (%)	9.8	8.0	8.1	8.9	-	8.7
Value added (€ millions)	761.9	-85.5	-56.0	60.8	-	447.6

¹ Prior-year figures restated.

Despite difficult market and industry conditions, the EnBW group generated positive added value of €388.3 million in 2012, which was 13.2% less than in the prior year. This decrease was primarily caused by the lower adjusted EBIT including investment result in 2012. Accordingly, ROCE fell by 0.3 percentage points to 11.3% in fiscal year 2012. At the same time, WACC was exceeded considerably. At group level it remained at 8.7% before tax.

The various segments contributed value as follows:

The electricity generation and trading segment was responsible for the largest share of value added generated by the EnBW group in 2012. However, value added fell significantly from €761.9 million in the prior year to €436.0 million. One main reason for this development is the declining operating result in this segment. A positive value added driver was the lower level of capital employed compared to the prior year, which is due above all to the considerably reduced level of working capital. Capital expenditures on ongoing projects such as the construction of RDK 8 hard coal power station in Karlsruhe as well as the development and realisation of the offshore wind farm EnBW Baltic 2 increased capital employed.

Value added in the electricity grid and sales segment developed positively, rising from € -85.5 million in the prior year to € 88.5 million. The rise in this segment is due to the much better operating result than in 2011. The higher level of capital employed was mainly attributable to capital expenditures on the ongoing modernisation and expansion of grids – in particular to permit the connection of facilities for the generation of renewable energies and to upgrade the grid – as well as changes in working capital.

The value added in the gas segment totalled € -30.8 million in the fiscal year 2012, improving by € 25.2 million in relation to the prior year. This increase is a result of the significant improvement in earnings in this segment. This was partly offset by the higher level of capital employed compared to the prior year, due above all to the increase in working capital.

In the energy and environmental services segment value added declined in the reporting period. This decline by

€44.3 million to €16.5 million in 2012 was due to the lower adjusted EBIT including investment result compared to the prior year. Capital employed remained virtually unchanged compared to 2011.

The capital employed in the holding/consolidation segment fell substantially on account of the divestiture of the Polish non-controlling interests in Elektrownia Rybnik S.A. in the fiscal year 2012. In addition, because the average is calculated for capital employed, impairment losses recognised on equity investments as of year-end 2011 are reflected in full in capital employed.

Further details of the development of adjusted EBIT are given under the heading “Adjusted earnings and non-operating result” above ([Management report](#) [Results of operations](#) [p. 69ff](#)).

Calculating value added

The weighted average cost of capital before tax represents the minimum return on capital employed. Positive value added is only generated once the return on capital employed (ROCE) exceeds the weighted average cost of capital. Cost of capital is determined based on the weighted average cost of equity and debt. The weighted average is the share of equity and debt in total capital. The value of equity refers to the value determined using the mark-to-market method, not the amount recognised. Cost of equity is based on the return of a risk-free investment and a company-specific risk premium. The latter is calculated as the difference between a risk-free investment and the return of the overall market weighted using the company-specific beta factor. The terms at which the EnBW group can obtain debt capital in the long term are used to determine the cost of debt. The tax deductibility of cost of debt is taken into account via the tax shield.

Calculation of the weighted average cost of capital (WACC) of the EnBW group	2012	2011
Risk-free interest rate (r_f)	3.8%	4.0%
Market risk premium (MRP)	5.0%	5.0%
Beta factor (β)	0.9	0.8
Cost of equity after tax	8.2%	7.9%
Cost of debt before tax (r_D)	5.8%	6.0%
Tax shield of interest on debt	-1.5%	-1.5%
Cost of debt after tax	4.3%	4.5%
Percentage of financing that is equity (E)	50.0%	50.0%
Percentage of financing that is debt (D)	50.0%	50.0%
WACC after tax	6.2%	6.2%
Tax rate (s)	29.0%	29.0%
WACC before tax (group)	8.7%	8.7%

In order to reflect the various risks of our activities along the value added chain, we calculate the cost of capital separately for each segment (**> Management report > Goals, strategy and corporate management > p. 60.**)

$$\text{WACC after tax} = \frac{(r_F + \text{MRP} \times \beta) \times E}{(E + D)} + r_D \times (1 - s_{TS}) \times D / (E + D)$$

Adjusted EBIT including investment result of the EnBW group in € millions ¹	2012	2011
EBIT	1,275.2	677.8
Non-operating EBIT	179.6	922.3
Investment result ²	138.9	-670.2
Non-operating investment result ²	26.5	801.7
Tax adjustment investment result ³	67.6	53.7
Adjusted EBIT including investment result	1,687.8	1,785.3

¹ Prior-year figures restated.

² Without income from investments held as financial assets.

³ Adjusted investment result/0.71 – adjusted investment result (where 0.71 = 1 – tax rate of 29%).

Average capital employed of the EnBW group in € millions ¹	2012	2011
Intangible assets	1,926.7	2,004.2
Property, plant and equipment	13,782.5	13,791.5
Investment property	81.5	77.3
Equity investments ²	2,512.3	3,272.2
Inventories ³	1,131.5	955.1
Current trade receivables ⁴	3,900.6	3,040.9
Other assets ⁵	3,173.4	2,790.6
Other provisions	-1,167.6	-1,128.8
Trade payables and other liabilities ⁶	-7,537.7	-6,793.5
Subsidies	-1,566.3	-1,582.8
Deferred taxes ⁷	-1,278.9	-1,454.2
Capital employed as of 31 December	14,958.0	14,972.5
Average capital employed⁸	14,935.5	15,434.1

¹ Prior-year figures restated.

² Including entities accounted for using the equity method, shares in affiliated entities and other investments allocable to operating activities.

³ Without emission allowances purchased for future electricity generation.

⁴ Without affiliated entities.

⁵ Without affiliated entities, without non-current receivables associated with nuclear power provisions.

⁶ Without affiliated entities, without purchase price obligations recognised as liabilities to non-controlling interests.

⁷ Deferred tax assets and liabilities netted.

⁸ Calculation of the average based on the quarterly figures of the reporting year and the prior-year closing figure.

Unrecognised intangible assets

A range of intangible assets that are not recognised in the balance sheet makes a considerable contribution to EnBW's business development and success. This requires optimising the use and organisation of the knowledge of our highly qualified employees in combination with modern, efficient business processes and our relationships with partners and customers. EnBW's intellectual capital, comprising human, structural and relationship capital, has a significant influence on the company's operations and business value.

For EnBW, the professional management of intellectual capital is of strategic importance. We are the only large company in Germany to determine and review our knowledge goals based on the principle of "Intellectual Capital Statement – Made in Germany" and have been doing so since 2005. The factors influencing intellectual capital are assessed at key group entities in a systematic self-assessment process by several employee groups that are representative in terms of the professions and hierarchies of their members. The quality and quantity of individual factors as well as their systematic development within the company are assessed with the help of 27 questions. The results at the individual entities are then consolidated in a group-wide summary.

This makes it possible to assess the development trend of intellectual capital at EnBW and to identify areas for action. More than 300 measures were derived between 2005 and 2011 to develop intellectual capital. Measures in the fields of management and social competence, including above all the team leader development programme, proved particularly effective. EnBW's intellectual capital has seen varied development since 2010. Most recently, the assessments of human, structural and relationship capital were at a "satisfactory" to "good" level on average. As a consequence of the changed energy policy environment, the realignment of the group and the associated uncertainty prevailing among employees and other stakeholders, the assessments of the three kinds of capital have deteriorated since the prior year. The development of human capital was particularly negative ([Management report > Human capital > p. 96](#)).

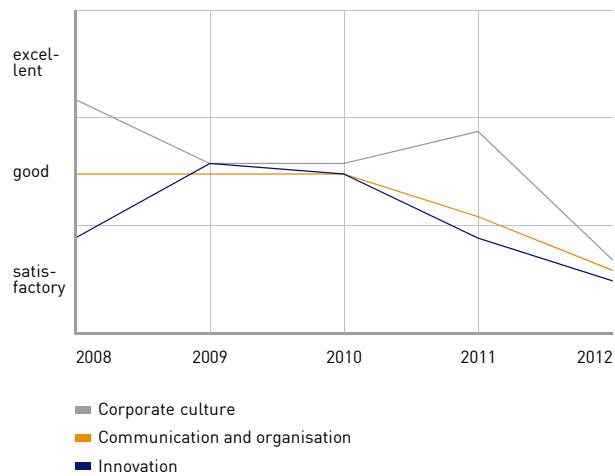
Structural capital: The factors influencing the structural capital showed a negative trend in 2012. The corporate culture is rated "satisfactory" and it is perceived as an open culture characterised by team work and a feeling of unity. Potential for improvement is mainly seen in the reinforcement of interdepartmental relations as a way of speeding up the group's decision-making and operational processes.

The EnBW group's communication and organisation was again rated less favourably in 2012 and is now at a "satisfactory" level. A need for optimisation was identified above all at the interfaces between departments and individual entities on account of the increasing complexity of the group.

The assessment of the company's innovative power is unchanged at a "satisfactory" level. The substantially changed market conditions and laws as well as new competitors give rise to growing strategic demands being placed on innovation. Suggestions for process improvements in particular are not always implemented systematically enough for capacity reasons or due to the current restructuring.

Development of the factors influencing the intellectual capital of EnBW

Structural capital



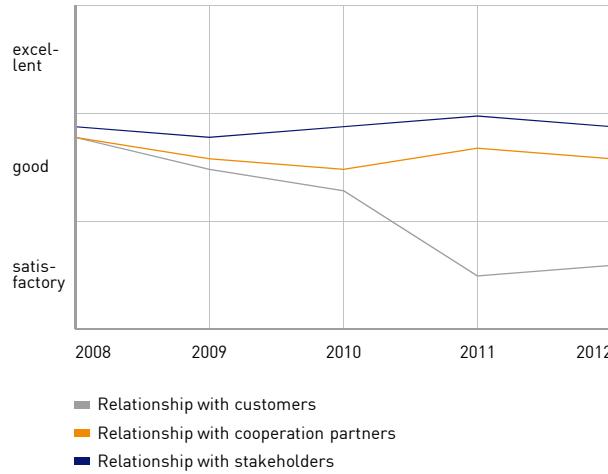
Relationship capital: The assessment of EnBW's customer relationships proved stable and is at the top end of "satisfactory". Some new relationship management instruments were introduced successfully in 2012. Nevertheless, increasingly difficult market conditions and intense competition at a time when growth ambitions continue to rise have a negative effect on the quality of customer relationships.

Relationships with cooperation partners continue to be rated as "good". The quality of and systematic approach to this factor even rose in comparison to 2011. These factors can be strengthened by intensifying the individual relationships, such as those with research institutions, and by a more strategic orientation of our relations with cooperation partners. There is currently potential for improvement in the scope of the relationships, especially in the field of renewable energies.

The assessment of the factor “relationships with stakeholders” remained at the top end of “good” in 2012.

Development of the factors influencing the intellectual capital of EnBW

Relationship capital



Market research

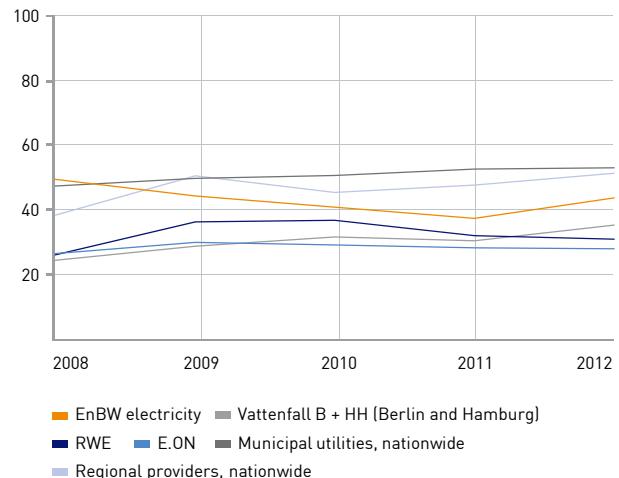
The EnBW brand is very important for us. Our objective is to maintain and expand a positive brand image. It is key to our relationships with customers, partners and authorities. The prerequisite is a clear positioning of EnBW amidst intense competition, which is in turn based on EnBW's brand identity. This strategic alignment has meant that, besides being very well known in Baden-Württemberg, the EnBW brand is also appreciated by its customers as a competent partner with regional roots that is readily reachable by its customers. Managing this intangible asset, the brand, pays off: the image of EnBW perceived by customers strengthens their loyalty to the company. As part of the realignment of our group, we aim to establish ourselves even further on the

market as a partner offering local energy solutions and to secure our generation position with low carbon emissions.

Customer loyalty is based on high customer satisfaction. The intense competition in the industry again took its toll on customer satisfaction and loyalty among EnBW's retail customers this year. We successfully increased customer loyalty at EnBW further in 2012 following a decrease in 2011. Customer satisfaction and loyalty at EnBW in the reporting period again ranked far ahead of RWE, E.ON and Vattenfall, but after municipal utilities and regional providers.

Customer satisfaction

(Share of “extremely satisfied”/“very satisfied” customers [%])



EnBW AG

The profit or loss for the year of EnBW AG improved, despite difficult conditions continuing, by €405.3 million to €336.5 million, above all as a result of non-recurring effects seen in the prior year. Taking account of the profit carryforward of €23.1 million, retained earnings come to €359.6 million. As in the prior year, a dividend of €0.85 per share will be proposed to the annual general meeting.

EnBW AG

As a holding company, EnBW Energie Baden-Württemberg AG (EnBW AG) exercises the management function in the EnBW group. The economic situation of EnBW AG hinges on the economic situation of the group. The financial statements of EnBW AG are prepared in accordance with the German Commercial Code (HGB) and the German Stock Corporations Act (AktG). The detailed financial statements of EnBW AG audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Mannheim, and the management report of EnBW AG, which is combined with the group management report, will be published in the German Federal Gazette ("Bundesanzeiger") together with the unqualified audit opinion. The full financial statements of EnBW AG are available for download (www.enbw.com/report2012 > Financial statements EnBW AG).

Net assets of EnBW AG

The net assets of EnBW AG are largely dependent on its equity investments and the central treasury management. The central treasury management affects financial assets as well as receivables from, and liabilities to, affiliated entities. The provisions for pensions and similar obligations at EnBW AG combine obligations from the company pension scheme and other company agreements of major subsidiaries. The resulting annual expenses for retirement benefits of active employees are paid by the subsidiaries concerned in each case.

Condensed balance sheet of EnBW AG in € millions ¹		31/12/2012	31/12/2011
Assets			
Non-current assets			
Intangible assets		5.4	6.2
Property, plant and equipment		6.6	8.5
Financial assets		17,794.5	16,178.7
		17,806.5	16,193.4
Current assets			
Receivables from affiliated entities		2,661.7	2,600.6
Other receivables and other assets		324.6	211.1
Cash and cash equivalents		2,384.2	2,302.9
		5,370.5	5,114.6
Prepaid expenses		34.9	43.3
Excess of covering assets over pension and similar obligations		0.1	0.1
		23,212.0	21,351.4

¹ In accordance with German commercial law.

Condensed balance sheet of EnBW AG in € millions ¹	31/12/2012	31/12/2011
Equity and liabilities		
Equity		
Subscribed capital	708.1	640.0
Treasury shares	-14.7	-14.7
Issued capital	(693.4)	(625.3)
Capital reserve	776.0	22.2
Revenue reserves	1,592.5	1,592.5
Retained earnings	359.6	230.7
	3,421.5	2,470.7
Provisions	5,060.2	4,774.2
Liabilities		
Liabilities to affiliated entities	12,923.8	12,492.8
Other liabilities	1,791.4	1,603.8
	14,715.2	14,096.6
Deferred income	15.1	9.9
	23,212.0	21,351.4

¹ In accordance with German commercial law.

Financial assets increased by €1,615.8 million. This increase essentially related to loans to affiliated entities (€1,097.4 million) and long-term investments (€233.6 million).

Equity rose mainly as a result of the capital increase of €821.9 million performed in the reporting period 2012. The equity ratio of EnBW AG rose by 3.1 percentage points on the prior year to 14.7%.

The increase in provisions is primarily due to the provisions for pensions and similar obligations, which rose above all due to the lower discount rate.

Other liabilities increased primarily as a result of the increase in the hybrid bond by €250 million.

Net profit of EnBW AG and dividend

Condensed income statement of EnBW AG in € millions ¹	2012	2011
Investment result	1,067.9	1,004.0
Interest result	-377.2	-473.3
Personnel expenses	-93.5	-59.0
Other income and expenses	-100.1	91.6
Profit from ordinary activities	497.1	563.3
Extraordinary expenses	0.0	-503.8
Taxes	-160.6	-128.3
Profit/loss for the year	336.5	-68.8

¹ In accordance with German commercial law.

The profit for the year 2012 recorded by EnBW AG amounts to €336.5 million, €405.3 million above the prior-year level. Retained earnings total €359.6 million and include the profit carried forward of €23.1 million. The investment result improved only marginally by €63.9 million compared to the

prior year, which had been affected by non-recurring effects, due to the poor results of operations of subsidiaries. The negative interest result also improved slightly compared to the prior year by €96.1 million, principally on account of higher loans to affiliated entities.

The increase in personnel expenses is essentially attributable to higher expenses for retirement benefits.

The change in other income and expenses is mainly due to non-recurring effects in the prior year.

The prior-year extraordinary expenses related to the allocation to the provision for pensions and similar obligations as a result of fully taking into account the remaining difference from converting to the requirements of the German Accounting Law Modernisation Act (BilMoG).

At €160.6 million, the tax expense is €32.3 million higher than in the prior year. The increase is primarily due to provisioning for risks from tax field audits. The item relates to current tax only, as the option not to recognise deferred tax assets was exercised for the deferred tax assets net of deferred tax liabilities.

We will propose to the annual general meeting on 25 April 2013 that a dividend of €0.85 per share be distributed from the retained earnings of EnBW AG. As of 31 December 2012, a total of 270,855,027 shares were entitled to dividends. If the annual general meeting approves this proposal, the amount distributed by EnBW AG for fiscal 2012 will total €230.2 million.

Comments on reporting

In accordance with Sec. 315a (1) German Commercial Code (HGB), the consolidated financial statements of EnBW AG have been prepared according to the International Financial Reporting Standards (IFRSs) issued by the International Accounting Standards Board (IASB), as endorsed by the European Union as of the reporting date.

Dependent company declaration

Pursuant to Sec. 312 German Stock Corporations Act (AktG), the Board of Management of EnBW AG prepared a dependent company report for the fiscal year 2012. This details relationships with affiliated entities, and closes with the following declaration: "In the legal transactions listed in the dependent company report, and according to the circumstances that were known to us when those legal transactions were performed, our company received an

appropriate consideration in each legal transaction and was not placed at a disadvantage. We did not take, or refrain from taking, any reportable actions motivated by or in the interest of the controlling companies or their affiliated entities."

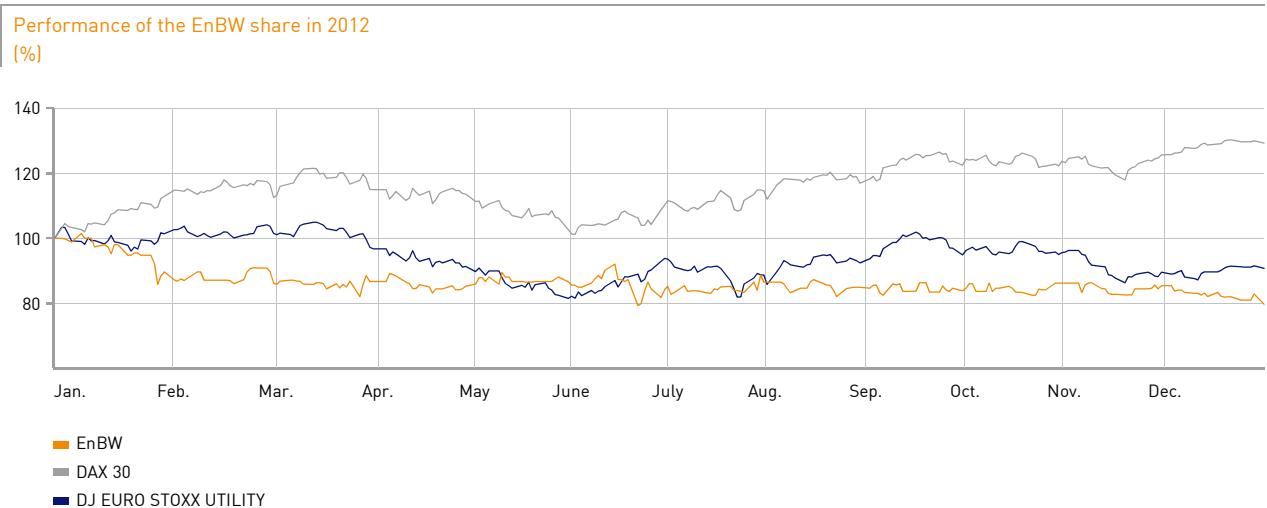
The EnBW share

The German stock exchange index DAX started the year at 6,075.72 points, closing the first quarter just below the 7,000 mark at 6,946.83. The first few months of 2012 saw the threat to insolvency in Greece averted through a debt haircut and the banking system stabilising with low-interest loans by the European Central Bank (ECB). Then the crisis was, however, exacerbated by the situation of the Spanish national budget and numerous large Spanish banks, which had come under pressure on account of real estate transactions. After reaching its annual low of 5,969.40 points at the beginning of June, the DAX index followed an upwards trend over most of the rest of the year. The stock exchange rebound was supported by the short-term relief for Italy and Spain approved by the heads of government of the euro countries and the direct banking bail-out using the European Stability Mechanism (ESM). The DAX index then reached its annual high of 7,672.10 points on 20 December. As of 28 December 2012, its closing rate was determined at 7,612.39 points, with the DAX recording its largest growth rate since 2003, of 29.1% in 2012, and outperforming most of the other indices in Europe.

The challenging environment with the new energy concept continues to put pressure on energy supply companies in Germany. Accordingly, the price of the EnBW share stood at €30.15 at the end of 2012 following the €37.73 at the beginning of the year.

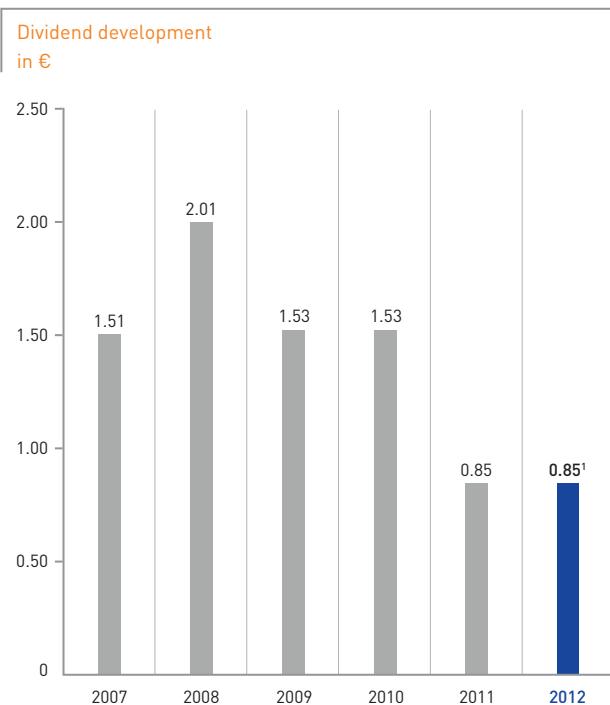
In the European context, the DJ EURO STOXX UTILITY index, which reflects the share price of European utilities, saw a drop of 8.8% as of the end of the year.

In fiscal 2012, a total of 95,154 EnBW shares were traded in XETRA. This corresponds to an average of 433 being traded each day.



Dividend policy

The trust placed in EnBW by capital market players arises from the value generated by the company. The amount of the dividend is based on the performance of the company, the scope of the investment programme, as well as the volume of net financial liabilities and the dynamic leverage ratio. In principle, EnBW's objective is to pay out 40% to 60% of adjusted group net profit as dividend.



¹ Dividend proposal for the fiscal year 2012, subject to the approval of the annual general meeting on 25 April 2013.

Employees

Our employees are key to EnBW's success. The personnel strategy is designed to support implementation of the sharpened corporate strategy and position EnBW as an attractive employer both inside and outside the group. Human capital is assessed more cautiously than in the prior year.

Headcount development and personnel composition

The EnBW group had 19,998 employees as of 31 December 2012. This constitutes a decrease of 185 employees or 0.9% in comparison to the end of 2011. Headcount at the entities concerned by the group-wide reorganisation under the "Fokus" efficiency programme fell by 562 or around 4%. The decrease is mainly attributable to measures such as the hiring freeze announced back in 2011 and the severance

package for employees in seven support and central functions. First-time consolidation of ODR Technologie Service GmbH, RBS wave GmbH and Energie-Service Deutschland AG with a total of 231 employees increased headcount in the energy and environmental services segment. The increase in headcount in the gas segment is due to the change in allocation of some employees from the energy and environmental services segment. Adjusted for these effects from first-time consolidation, the number of employees in the EnBW group decreased by 2.1% as of year-end 2012 compared to the end of 2011.

Employees of the EnBW group ¹	31/12/2012	31/12/2011 ³	Variance %
Electricity generation and trading	4,686	4,826	-2.9
Electricity grid and sales	5,958	6,174	-3.5
Gas	889	702	26.6
Energy and environmental services	8,029	7,990	0.5
Holding	436	491	-11.2
Total	19,998	20,183	-0.9
Number of full-time equivalents ²	18,912	19,330	-2.2

¹ Number of employees without apprentices/trainees and without inactive employees.

² Number of employees translated into full-time equivalents.

³ Adjusted to the consolidated companies as of 31 December 2012.

There is no major change in the regional distribution of our employees compared to the prior year. The majority of our employees are located in Baden-Württemberg. Most of the 8.1% of the workforce outside Germany are employed at the equity investment in the Czech Republic. 25.9% of staff have a degree from a university, university of applied sciences or university of cooperative education (prior year: 25.5%), while 68.7% of the employees at EnBW have completed a training programme at a technical college or an apprenticeship (prior year: 68.6%). The remaining 5.4% have school-leaving

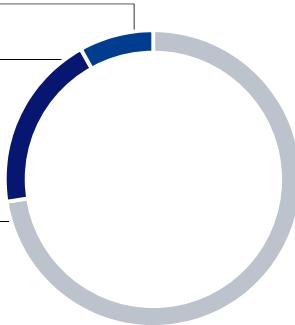
certificates without further professional training (prior year: 5.9%). Women accounted for 25.2% of the total workforce as of the end of 2012 (prior year: 25.7%). The proportion of women in managerial positions reached 10.6% (prior year: 10.1%). At the end of 2012 the EnBW group had 996 severely disabled employees (prior year: 973 employees), accounting for 5.0% of the workforce. The share of foreign nationals among our employees stood at 10.2% as of 31 December 2012 compared to 10.5% in 2011.

Employees by region
[%]

in other countries (8.1)

in other German states (19.4)

in Baden-Württemberg (72.5)

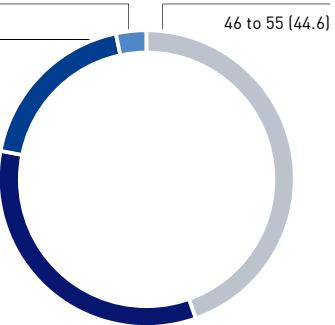


Executive by age group
[%]

under 35 (3.3)

over 55 (18.7)

36 to 45 (33.4)



The proportion of part-time employees, including employees under the phased retirement scheme, rose to 13.3% compared to 2011 (prior year: 12.5%). The percentage of female part-time employees fell from 59.8% in the prior year to 57.3% or 1,528 out of 2,666. Turnover in the EnBW workforce came to 5.3% (prior year: 4.6%), and the sick rate was unchanged from the prior year at 4.3%.

The average age of EnBW's employees in 2012 was practically unchanged at 45.0 (prior year: 44.2). The distribution of age groups changed slightly in a year-on-year comparison. Around 300 young people started their training or studies at EnBW's core companies in 2012. The ratio of trainees to the total workforce in EnBW's core companies in Baden-Württemberg, including students taking combined courses of study, came to 7.0% at the end of 2012 (prior year: 7.1%). EnBW has well over 1,000 trainees and students in its employ.

Employees by age group
[%]

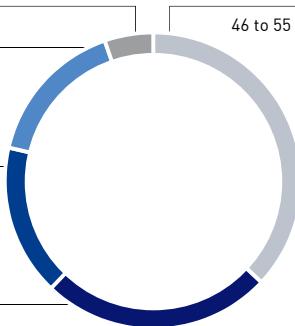
under 25 (5.3)

over 55 (16.1)

26 to 35 (16.5)

36 to 45 (25.1)

46 to 55 (37.0)



Personnel strategy

HR work is of particular significance for EnBW in times of realignment. We develop the competencies of EnBW's employees, retain the skills essential to the group's success and recruit employees in the relevant target groups in order to support the implementation of our corporate strategy. As an employer, we are committed to the principle of sustainability and take our commitment to employees and corporate social responsibility seriously. This translates for instance into measures to promote industrial safety and corporate healthcare management (**> Health and safety management > p. 95**). With our improvement programmes "!impuls", "WIN" and "KVP" (continuous improvement process), we strive, together with our employees, to continuously optimise EnBW. With a total of 780 suggestions for improvement relating to the group-wide processes within the company, the suggestions made by our employees are highly valuable. The savings that can thus be made were some 40% higher in 2012 than in the prior year.

Through our sustainable HR work we aim to continuously increase the attractiveness of EnBW as an employer (**> www.enbw.com/careers**). With this aim in mind, we continued various measures within the four moves of our personnel strategy in 2012. Examples include the realignment of our training programme (**> Management report > Forecast > p. 141f**), the guidelines for executives on how to deal with psychological strains or implementation of the "Mobiles Arbeiten" (mobile work) pilot operations.

Personnel strategy



Efficient and effective HR policy

Following intensive discussions between the employer and employees, an agreement was reached on the planned reduction in personnel and the contribution by employees. The contribution by employees corresponds to around one third of the total "Fokus" improvement target of €750 million and is to be achieved in as socially compatible a manner as possible. As a result, a temporary hiring freeze was already imposed in 2011. In addition, EnBW and the trade union agreed on the first measures to reduce personnel costs on 1 January 2012 in the "Fokus" collective agreement. Among other things, the collective agreement, which precludes redundancies for operational reasons, reduces the working week to 37 hours in a first step while at the same time waiving a collective wage increase that had been agreed for 2012. The second step provides for a reduction in the pay agreement effective as of 2014 by a further 1.8%, together with a working week of 36 hours. In addition, employer and employee representatives reached an agreement to reduce the profit participation for employees covered by the collective agreement for 2013 to 2015 by an average of 18% of the monthly compensation.

In addition, a voluntary severance payment regulation also applied for employees in seven support and central functions up until 31 December 2012. Since May 2012, these functions have additionally offered employees free consulting to help them make their future career choices. The first consulting cornerstone – confidential orientation consulting – was designed to give employees an assessment of their professional development possibilities and an overview of the current labour market. Two further cornerstones – referral consulting and outplacement – were offered, after the individual analysis of potential external options, to identify together with the employee their

associated opportunities of professional reorientation, supplemented where necessary by interview training and qualification measures. This offer also ended on 31 December 2012. In total, around 350 employees from support and central functions accepted the severance pay offer and signed a termination agreement at year-end.

Since the end of July 2012 the following rule applied on phased retirement: employees from support and central functions entitled to severance pay who meet the criteria can sign a phased retirement agreement even if this would as a result mean that more than 5% of the employees at a company were to enter phased retirement.

As of year-end, employer and employee representatives reached an agreement on a series of instruments for personnel restructuring and reduction so as to implement the 1,350 redundancies still required to achieve the overall "Fokus" target in a socially compatible manner. The details are governed by a social plan and an agreement on the reconciliation of interests ([Management report](#) [Forecast](#) [p. 141f.](#)).

Safeguarding competence and developing skills

In order to raise the company's competitiveness, we prepare our employees in a targeted manner for future challenges with the help of EnBW's "KomMit" competence management system. The group of users under this programme initiated back in 2011 was enlarged in 2012 on account of the highly positive feedback. Uniform target profiles for employees and clear assessment criteria during the annual performance reviews make it easier to identify and systematically respond to development needs. Besides "off-the-job" offers, employees can also work on their development "on the job", for example by

taking on new tasks. One other possibility are international assignments, often for several years, in order to develop and manage foreign investments or for however long a project takes to complete.

The objective of EnBW's central successor planning is to ensure that personnel needs are consistently and systematically met at the upper and top management level, taking into account the strategic alignment of the company. Our annual "ME EnBW" management development process, which involves regular, intense discussion with the individual entities, forms the basis for targeted and efficient development and succession planning. "ME EnBW" strengthens the management skills within the company. The assessment of management skills is used to derive individual development measures at annual leadership conferences. Based on future management needs, we offer a group of high-potential employees the opportunity to become increasingly networked within the group and to work together on group-related issues. We have mandatory group-wide qualification programmes for all executives. These are based on the current and future challenges facing EnBW and the entire energy industry.

As a company in Baden-Württemberg that offers traineeships we attach great value to high-quality training. As well as teaching pure factual knowledge, the seminars will also help with methodological and social skills. In addition, EnBW once again offered more than 1,000 students the possibility of gaining valuable practical experience during student jobs, internships or their final thesis in 2012. We attach great importance to supporting students, especially MINT students (mathematics, information technology, natural science and technology). The group participates in projects such as "Energy Career Program" (ECP), "Network²" and "KompetenzKompass" or as a partner of Femtec, a network aiding the promotion of women working in the area of natural science and technology.

As a way of attracting and developing young academic talent, we offered ten university graduates an attractive start to their careers in the energy industry in 2012 with our 15-month group trainee programme. In the course of several practical phases, one international assignment and direct contact with professionals and executives, the trainees above all get to know EnBW's growth areas and are given opportunities for intensive personal development. Once they have completed the programme, they assume responsible duties in the group.

Management of demographic developments

EnBW responds to the challenges posed by demographic change by means of consistent demographic management and by continuously refining our instruments for analysing age structure. In this connection, we developed the strategic and qualitative personnel planning further, thereby minimising personnel risks. Our healthcare management scheme helps to keep our employees healthy and maintain their performance. At the same time, our employee development programme supports lifelong learning. We ensure that expertise and experience at the company is shared and preserved using our knowledge relay tool.

Innovative and flexible working environment

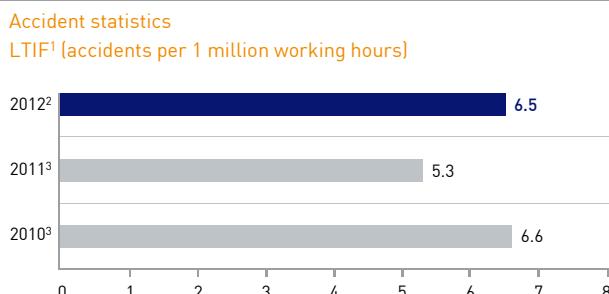
A project manager development model for executives was prepared and introduced in 2011 in order to meet the increased demand for competent and experienced project managers for temporarily processing complex tasks and enabling us to respond in a structurally more flexible manner to current requirements. This model comprises organisational and personnel mechanisms as well as instruments promoting the development of general executives within the EnBW group. As part of the "P³" top group project ([> Management report > Goals, strategy and corporate management > p. 59](#)) we developed qualification components in 2012 in order to systematically enhance project management skills within the company according to group-wide uniform standards.

Family-friendly HR policies have been accorded a high priority at EnBW for many years. In addition to childcare possibilities, leisure offers and flexible working times, there are extensive consulting offers on topics such as nursing care and childcare available to employees. The childcare options for our employees' children were expanded further in 2012. Since January 2012 we have ten more daycare places for children of EnBW employees in Karlsruhe, at the "Wirbelwind" child daycare and sports centre. It is operated by the association Kind und Beruf e. V.

Health and safety management

Safety at work is extremely important to us. We strive to maintain and steadily improve working conditions for our employees. In 2012 we obtained certification pursuant to OHSAS 18001, the internationally recognised standard for occupational health and safety management systems, at a larger number of entities and invited contributions under the EnBW's "JAZ" youth occupational health and safety

competition. The calculation basis for assessing the number of occupational accidents involving at least one day lost per million working hours (Lost Time Injury Frequency, LTIF) was changed in 2012. Instead of assuming 1,700 working hours per employee, as we did in 2010 and 2011, the number of productive hours per employee taken as a basis was 1,446. On this basis, the LTIF at EnBW's core companies was 6.5 in 2012.



¹ Lost Time Injury Frequency (number of accidents involving at least one working day lost per one million working hours, without temporary workers).

² Based on productive hours: 1,446 hours per year per employee.

Reported as of 8 January 2013. Applying the same method as in 2010 and 2011 assuming 1,700 hours per employee – the comparable LTIF would have been 5.5%.

³ Based on the assumption: 1,700 hours per year per employee.

Satisfied employees who are able to do their job are a major factor influencing EnBW's success. Only if our employees are healthy and feel comfortable in their working environment can they make a productive and efficient contribution to the company's success. EnBW's occupational healthcare management system therefore comprises various activities relating to industrial health and safety. It revolves around a whole range of offers and services allowing employees to keep fit and protect their health, such as physiotherapy or prophylactic vaccinations. We launched a group-wide information campaign in the past fiscal year on the topic of organ donations. We were recertified by "Gesellschaft zur Qualitätssicherung in der betriebsärztlichen Betreuung" and won the Corporate Health Award, confirming that in 2012 we again had highly qualified occupational healthcare with particularly exemplary services.

Corporate compliance and data protection

The EnBW group's code of conduct gives all employees an overview of the most important external and internal regulations. The corporate compliance and data protection function provides employees with concrete guidance on how to comply with rules and regulations in everyday business. Since publication of the code in 2009, all employees have been informed about the relevant compliance topics via various e-learning courses. In addition, employees in compliance-sensitive functions have received classroom training on the key topics of

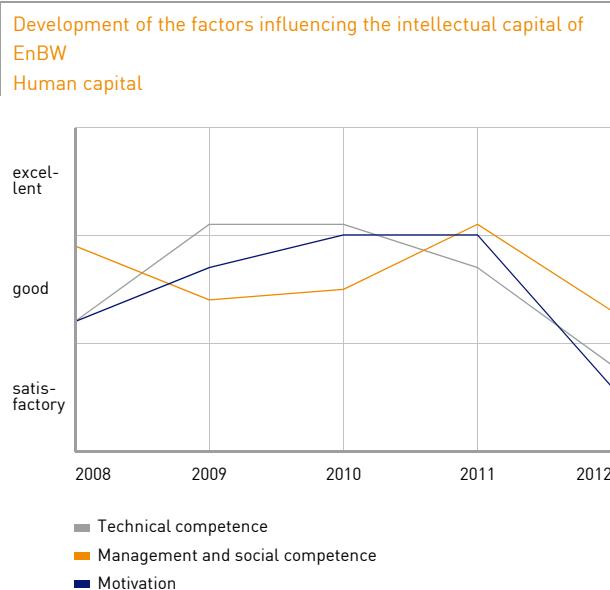
anti-corruption and anti-trust law. In 2012, about 1,000 employees and executives attended classroom training.

The corporate compliance and data protection hotline is an integral part of the preventive compliance function. Every employee in the EnBW group can contact the compliance function if they have any questions or are uncertain about anything. The function received 1,023 queries in the reporting year, mainly on the topics of grants, donations and sponsorship. This can be considered an indication that the workforce is sensitive to issues that could be of relevance in terms of compliance.

By setting up a centrally managed policy management system, the corporate compliance and data protection function has created transparency for employees regarding applicable company policies and made these available in the most recent versions (www.enbw.com/report2012 > Financial report 2012).

Assessment of our intellectual capital: human capital

EnBW has assessed its human capital since 2005 using the method "Intellectual Capital Statement – Made in Germany". This helps to identify influential success factors not mentioned in the financial reporting. By means of a systematic self-assessment it is analysed whether the current assessment of these factors is still sufficient with respect to the medium-term corporate goals. To enhance strengths and minimise weaknesses, specific measures are derived for each factor based on the assessment results. Intellectual capital comprises the three elements human capital, relationship capital and structural capital ([Management report](#) > [Relationship and structural capital](#) > p. 86f). The factors influencing EnBW's human capital were deemed satisfactory to good in 2012. The changes in a large number of factors in comparison to the prior year are due above all to the growing challenges for employees posed by the company's realignment.



In view of future requirements, employees rated the technical competence within the company currently as satisfactory. The hiring freeze as part of the “Fokus” programme had a negative impact on the 2012 assessment. The group’s realignment has increased turnover, leading to a loss of qualified employees. In some cases other competencies are needed to master the new challenges.

Management and social competence was considered good in 2012. This result mainly reflects the ongoing change process and the related increase in requirements due to increasing complexity – at entity and group level. Employees identified potential for improvement above all in managing major change. This assessment is also affected by the fact that good managers have left the group. The leadership development programmes that we have initiated and amended have had a stabilising effect on the current situation.

We aim to continuously increase our employee's motivation. In the reporting year, this factor was assessed as satisfactory. The uncertainty about their personal future development has brought about a decrease in employees identifying with their tasks and the company (**> Management report > Safeguarding competence and developing skills > p. 94f**).

Environmental protection

EnBW has firmly anchored protection of the environment in its corporate goals. Environmental protection is consequently a key task at group level and all the entities and a binding standard for all employees in their activities.

Targeted environmental protection

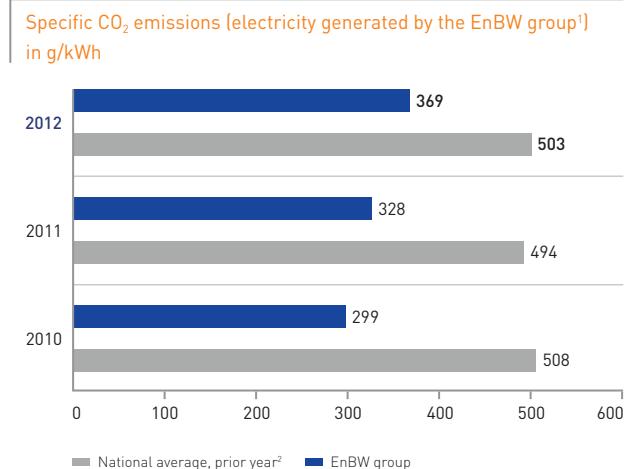
As a company, we bear our share of responsibility for the environment and preserving biological variety. In our activities we consider climate protection and a future-oriented sustainable treatment of all natural resources. EnBW was the first energy group in Germany to introduce an environmental management system certified under ISO 14001 at group level back in 2006. We have set forth our commitment to environmental protection in our environmental principles:

- EnBW stands for safe and sustainable energy supplies.
- EnBW promotes communication and awareness of environmentally relevant topics.
- EnBW stands for environmentally compatible actions in all segments.

Using defined indicators we have set ourselves quantitative group targets for the period from 2011 to 2015 with respect to the topics of renewable energies, direct and indirect CO₂ emissions, aerial pollutants and biodiversity. The year 2010 serves as the starting point. After the first two years we are largely within the target range.

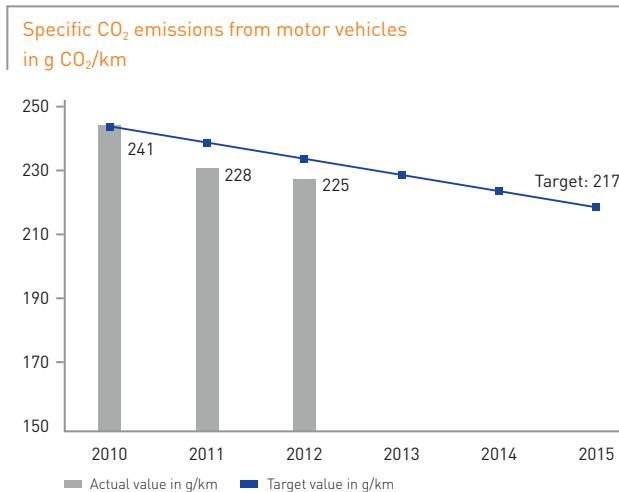
➤ **Specific CO₂ emissions:** It is our aim to secure our position as low-carbon generator and keep the carbon emissions of our electricity generation capacity below the national average in Germany. Compared to the prior-year level of 328 g CO₂/kWh, these emissions increased in 2012 by some 12% to 369 g CO₂/kWh. One reason for the increase is the lower share of nuclear energy in a year-on-year comparison due to the shutdown of the nuclear power plants GKN I and KKP 1, while conventional electricity generation remained roughly at the same level. Nevertheless, the specific CO₂ emissions were still considerably lower than the national average of 503 g CO₂/kWh for Germany in 2011.

➤ **Emissions of our own vehicles:** We want to reduce the CO₂ emissions of our vehicles fleet by 10% per kilometre by 2015 (base year: 2010). Thanks to the measures implemented to date we were able to reduce the CO₂ emissions of our own vehicles to 226 g CO₂/km/vehicle in 2012. EnBW is therefore ideally on track to achieve the target for 2015. These data include the actual fuel consumption of pool and company cars as well as commercial vehicles used for grid purposes, for example.



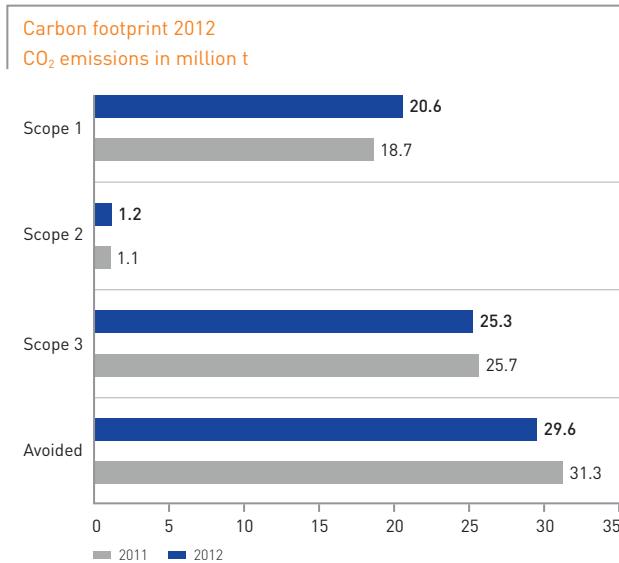
¹ Electricity generated by the group includes fully and partly owned power stations and long-term procurement agreements.

² The national average for each reporting year is not available until the autumn of the following year. The comparison is therefore made with the national average for the prior year.



EnBW's carbon footprint

Increasing carbon efficiency and energy efficiency are two of EnBW's strategic moves in the area of environmental protection. EnBW determined its group-wide carbon footprint for the first time for the year 2010 on the basis of scope 1 and scope 2 of the international Greenhouse Gas (GHG) Protocol. Since 2011 we have been consistently developing our group-wide carbon footprint. We now additionally report on scope 3 emissions, the determination of which is optional under the GHG Protocol.



Numerous business activities of EnBW's help to avoid CO₂ emissions. These include electricity generation from nuclear energy and renewable energies, energy efficiency projects at our customers and partners as well as the generation of electricity and heat using biogas. Overall, these activities save 29.6 million t of CO₂.

Carbon footprint and scopes



EnBW reports its carbon footprint on the basis of the international standard Greenhouse Gas (GHG) Protocol which classifies greenhouse gas emissions into three scopes:

- Scope 1: Direct greenhouse gas emissions from sources belonging to the company or directly controlled by it (e.g. emissions from fossil energy generation, from the operation of gas-fired plants, from heating systems and own vehicles).
- Scope 2: Indirect greenhouse gas emissions from consumption of purchased energy (electricity, gas, district heating) or grid losses.
- Scope 3: All other indirect emissions not covered by scope 2 such as the extraction and transportation of fuels, gas consumption at customers, business trips.

Under the GHG Protocol, scope 1 and 2 emissions must be reported as carbon footprint. Scope 3 and avoided emissions reporting is optional. The carbon footprint of an energy company like EnBW is largely determined by its generating facilities (scope 1).

Energy efficiency at EnBW

- EnBW's drinking water supply system uses a sophisticated machine concept. Our energy management system constantly optimises operation of the water facilities. Instead of "destroying" the hydraulic potential via pressure-reducing valves, we use this energy to produce electricity prior to feeding in into the municipal distribution network. Our own electricity consumption is more than compensated for by this measure.
- **IBEC project:** The goal of EnBW's 20/20/20 energy efficiency programme is to reduce CO₂ emissions by at least 20% and cut costs by at least 20% in its real estate portfolio by 2020 based on 2010 reference values. The programme covers some 500 buildings with a total gross floor area of roughly 1 million square metres. Our "Improving Building Energy Costs" (IBEC) project develops the structures, processes and methods to ensure holistic and sustainable energy management for EnBW's real estate portfolio. The project is geared towards the requirements of the ISO 50001 standard entitled "Energy Management Systems".

Green IT: "Green IT" is the motto under which we are gradually implementing measures to increase the energy efficiency of our IT infrastructure. The efficiency with which the energy is used in the computing centres is typically determined using the power usage effectiveness (PUE) factor. The PUE calculates the ratio between the total power used in the computing centre in relation to the power delivered to the IT components. A good PUE is below 2.0. We were able to improve our PUE of 1.87 from 2010 further to 1.72 in 2012. This shows that EnBW's computing centres are already well positioned. This was achieved through measures such as the retrofitting of an external air cooling system. Depending on the location of the computing centre, this allows us to save up to 8,000 kWh of energy per year.

Biodiversity, nature conservation and species protection

The biological diversity or biodiversity comprises the diversity of individual habitats as well as the genetic diversity within the individual plant and animal species. A dramatic rise in the extinction of species can be observed worldwide. The preservation of biological diversity therefore is a key component of environmental protection and sustainable corporate management.

In the competition for the German Corporate Social Responsibility (CSR) award, EnBW reached the finals in the category "Biodiversity management with the aim to preserve the global biological diversity" in 2012. The core messages of EnBW's application included anchoring the topic of biodiversity in its strategy and making it measurable as well as EnBW's amphibian protection programme and the bird protection measures. In its assessment, the jury made particular mention of how well EnBW is positioned in terms of direct impact on biodiversity (such as high voltage masts or offshore facilities) and real estate management.

➤ **EnBW amphibian protection programme:** In 2011, we initiated the EnBW amphibian protection programme "Stimuli for Diversity" together with the Baden-Württemberg State Institute for the Environment, Measurements and Nature Conservation (LUBW). Through this protection programme, EnBW is for the first time supporting projects throughout the whole of Baden-Württemberg that are not linked to specific locations with the aim of protecting amphibian species in its home state.

In 2011 and 2012 we received a total of 59 support applications from associations, local groups of nature conservation societies, towns and municipalities as well as private individuals. Of these, 29 projects were approved by a specialist committee made up of representatives of state government, species experts and EnBW employees and were implemented. This is an important contribution to the state government's "biological diversity" action plan in Baden-Württemberg.

➤ **Bird protection in the network area:** Bird protection in the overhead line network has long been a matter of high priority for EnBW, and we once again implemented active bird protection measures at various locations in 2012. Our fitters mounted further nesting boxes on overhead line pylons for peregrine falcons, kestrels and little owls and also ringed young storks in cooperation with nature conservation societies and associations. These activities show just how well modern energy supply operations and sustainable species protection can complement each other.

➤ **Reducing ramming noise for the protection of harbour porpoises:** In order to protect noise-sensitive marine mammals we seek to reduce the noise emissions that arise when anchoring the various construction elements of an offshore wind turbine to the sea bed. These noise emissions particularly affect the threatened harbour porpoise. Together with the Hochtief company, EnBW therefore tested the bubble curtain column developed by Hochtief and designed to significantly reduce ramming noise before the start of serious construction work on the second Baltic wind farm, EnBW Baltic 2. After this trial phase, we became involved in the ESRA research programme to evaluate systems for ramming noise mitigation together with seven other builders and operators of offshore wind farms. All systems tested have resulted in noise reduction in certain frequency ranges of up to 20 dB but did not reduce noise levels across the full relevant frequency range. The findings of the project are available to the entire German offshore industry and are used to develop the tested systems further and develop new noise protection systems. The aim is to reliably achieve a level of below 160 dB in the foreseeable future and then to further reduce noise levels in the long term.

To ensure new developments in environmental protection, it is necessary to have data on the basis of which to manage and measure projects. To visualise this, the following table presents the key environmental performance indicators for 2012 compared to the prior year.

Environmental performance indicators ¹	Unit	2012	2011 ¹⁰
Fuels			
Coal	GJ	198,122,580	171,222,376
Natural gas	GJ	17,076,177	23,847,593
Waste	GJ	8,809,393	8,855,220
Biomass	GJ	2,906,582	2,836,802
Other ³	GJ	1,586,682	1,676,487
Nuclear fuel employed ^{4,5}	t	40.0	35.5
Other consumables			
Calcium carbonate products	t	247,347	208,507
Ammonia/ammonium hydroxide	t	17,880	14,906
Sodium hydroxide	t	8,352	7,969
Hydrochloric acid	t	6,152	5,729
Use of water			
Surface/river water drawn	millions of m ³	1,886	2,385
Well/groundwater extraction	millions of m ³	8.1	7.5
Extraction of drinking water	millions of m ³	46.5	45.2
Cooling water discharge (direct discharge)	millions of m ³	1,987	2,378
Wastewater (indirect and direct discharge)	millions of m ³	6.99	5.98
By-products			
Coarse/fly ash	t	631,244	505,376
Gypsum	t	571,647	512,675
Other	t	31,261	10,823
Waste			
Conventional waste	t	865,138	811,615
of which hazardous waste	t	137,562	126,151
Percentage recycled	%	87.9	79.7
Radioactive waste ⁶	g/kWh	0.0012	0.0013
Carbon footprint			
Direct CO ₂ emissions (scope 1) ⁷	millions of t CO ₂ eq	20.6	18.7
Indirect CO ₂ emissions (scope 2)	millions of t CO ₂ eq	1.2	1.1
Other indirect CO ₂ emissions (scope 3)	millions of t CO ₂ eq	25.3	25.7
Avoided CO ₂ emissions ⁹	millions of t CO ₂ eq	29.6	31.3
Specific CO ₂ emissions from electricity generation ^{2,7}	g/kWh	369	328
Conventional air pollutants			
Specific SO ₂ emissions from electricity generation ²	mg/kWh	240	204
Specific NO _x emissions from electricity generation ²	mg/kWh	239	217
Sulphur dioxide (SO ₂)	t	12,951	11,240
Nitrogen oxides, listed as NO ₂	t	15,690	14,459
Environmental protection expenditure⁸			
Capital expenditure on environmental protection	€ millions	180	262
Current environmental protection expenses	€ millions	223	225

¹ Unless otherwise indicated, the data present the entities and facilities of the consolidated group.

² Own generation including contract power stations and long-term procurement agreements; not including short-term procurement where the primary source of energy is unknown.

³ Heating oil and sewage sludge.

⁴ Own power stations.

⁵ Total heavy metal load.

⁶ Pursuant to the BDEW's electricity labelling guidelines (September 2011), in terms of EnBW's own generation portfolio.

⁷ Preliminary data.

⁸ Pursuant to the German Environmental Statistics Act (UStatG) and BDEW's guidelines on the recognition of investment and ongoing expenditure relating to environmental protection (April 2007).

⁹ CO₂ avoidance factors for renewable energies pursuant to the publication by the Federal Environment Agency "Emissionsbilanz erneuerbarer Energieträger" (emissions from renewable energies) with appendix 2 as of December 2011 and for nuclear energy based on BDEW and VGB with 920 g CO₂/kWh.

¹⁰ Prior-year figures restated.

Explanation of selected indicators

To compensate for nuclear energy, electricity generation from renewable energies was expanded compared to 2011 while maintaining EnBW's own generation capacity at the same level and more power stations with fossil energy sources were used.

Fuels, by-products and other consumables

The increased use of fossil-fuelled energy generation facilities compared to 2011 is the reason underlying the rise in generation-related materials flows, such as fuels, by-products and other consumables.

The decrease in the use of natural gas as a fuel by approximately 30% is attributable to the lower electricity production by gas-fired power stations in 2012.

The use of nuclear fuels increased in 2012 compared to 2011. This was not a continuous development, but followed set cycles. In 2011, the nuclear refuelling volume was relatively low, at 35.5 t, whereas the level for 2012 is around the customary level of 40 t.

Waste

A total of 865,138 t of conventional waste was produced in 2012, up 6% on the prior year. This is primarily due to increased construction activity at the equity investments and the new generating facilities commissioned.

The percentage of recycled waste improved to 87.9%. The share of non-hazardous and hazardous waste that was recycled was likewise increased.

Carbon footprint and conventional air pollutants

Direct CO₂ emissions are mainly determined by the usage of fossil-fuelled power stations. Accordingly, the increase in fossil-fuelled electricity generation is the reason for the rise in direct CO₂ emissions from 18.7 to 20.6 million t CO₂eq.

The increase in indirect CO₂ emissions is attributable to grid losses involving higher energy flows in the transmission and distribution grids.

Due to the lower electricity production from nuclear energy, avoided CO₂ emissions decreased from 31.3 to 29.6 million t CO₂eq.

The rise both in the absolute volume of sulphur dioxide and nitrogen oxides and in the specific emissions is directly attributable to substituting nuclear energy with electricity generated from coal.

Use of water

The lower level of electricity generated from nuclear energy had an impact on the amount of water needed for cooling purposes. This is reflected in the lower figures for surface/river water drawn and cooling water discharge.

Environmental protection expenditure

In 2012, capital expenditures for environmental protection dropped from € 262 million to € 180 million. This is principally due to lower investment in the Rheinfelden and Iffezheim hydro-electric power station projects in line with the advanced degree of completion and lower expenditure on the EnBW Baltic 2 offshore wind farm compared to 2011.

Corporate social responsibility

EnBW sees itself as a corporate citizen. As a company located in Baden-Württemberg, we consciously assume responsibility within the state and beyond. Education, social events, art and culture are the essence of society. It is the objective of our wide range of social commitment to promote these areas.

Assuming responsibility

EnBW is aware of its responsibility for society. Social responsibility is part of our sustainability strategy, which supports our corporate strategy. We are not only responsible for reliable energy supplies today and tomorrow, but also assume responsibility for the future of our society. Imparting knowledge to children and young people is particularly important to us. Sponsoring art, culture and sport – above all in Baden-Württemberg – is a high priority at EnBW ([> Management report > Goals, strategy and corporate management > p. 57](#)).

Acceptance through dialogue

For a future energy concept to be accepted by the population, we need a culture of communication and public dialogue. EnBW cultivates its stakeholder relations with a range of measures from institutionalised stakeholder dialogue, offers to participate in innovative business models, such as community energy cooperatives, to educational partnerships.

As an operator of large-scale technical plants with a strong connection to its environment, it is indispensable for EnBW to keep the people in the region and beyond informed and to stay in direct contact with them. EnBW has information centres at a number of locations, inviting people to get an insight into the operation of power stations and inform themselves about energy industry topics. Our employees on site are available to visitors as discussion partners. Visitors include municipal decision-makers, environmental groups, political and cultural associations, scientific delegations, universities, specialist groups, schools, youth groups and private individuals. In 2012, EnBW Kraftwerke AG's ten information centres counted as many as 27,373 visitors (prior year: 24,558). More than 45,000 visitors took up the offer to visit EnBW in 2012 and learn about the entire energy mix used by EnBW and gain an insight into renewable, conventional and nuclear energy generation.

Social performance indicators	Events	2012
	Visitors/participants	
Educational events	2,440	
Debate evenings	544	
Symposia	141	
Information centres		
Visits to nuclear power plants	18,207	
Visits to hydro-electric and conventional power stations	27,373	
Visits to renewable energies facilities	2,352	

To contribute to a better understanding of the interaction between the energy industry and climate protection as well as to safeguard Baden-Württemberg as a research location, EnBW set up a foundation for energy and climate protection in Baden-Württemberg in 2007. The aim of this international network of renowned experts is to encourage a cross-border, fact-based and even controversial discussion of effective measures in the field of energy consumption and generation that can help to achieve the climate protection targets. The results are then introduced into the public debate. Besides debate evenings with representatives from politics, industry and science, we hold symposia and action days as part of various projects. The “climate kids” project, for example, had eight schools and some 50 school classes participating over a period of three years (www.energieundklimaschutzbw.de).

Using social media

We are also using media such as Facebook (www.facebook.com/EnBW), Twitter ([www.twitter.com/EnBW](http://twitter.com/EnBW)) and YouTube (www.youtube.com/user/EnBW) to provide information about our activities and enter into dialogue with our target groups. Our posts mainly deal with the topics of saving energy, innovative products and career opportunities, but also corporate announcements by EnBW.

Community energy cooperatives



When it launched the first community energy cooperatives in 2008, EnBW brought a future-oriented model onto the market. It allows the general public and municipalities in Baden-Württemberg to build new facilities for renewable energies themselves or to participate in EnBW facilities. EnBW supports the community energy cooperatives in implementing their projects financially and with its expertise. The interested public receives support and advice from a project group. They then organise formation and information events together to present plans for projects and give the population the opportunity to subscribe to shares. It is important to EnBW to serve as a reliable long-term partner for the community energy cooperatives. The objective is to offer residents the opportunity to become involved in the implementation of concrete local projects.

Setting the course

Children and young people are at the centre of many of our projects to promote public purposes. It is important to us to create an interest for technology and natural sciences at an early stage and to heighten awareness for the environment, climate and natural resources. We have an EnBW energy kit to support early childhood education in kindergartens. It includes experiments suitable for pre-school-age children to gain an understanding of scientific facts and also energy phenomena.

We have been an educational partner for schools in Baden-Württemberg for more than 30 years. In 2012, for example, 1,077 elementary school children in Stuttgart (prior year: 730) benefited from practical lessons at the hydro-electric power station in Münster, which among other things covered how drinking water is transported to the state capital. Teachers, students training to become teachers and kindergarten staff receive information at workshops and during themed excursions. Our commitment also extends to universities, colleges and research institutes ([Management report](#) [Research and development](#) [p. 108](#)). We aim to promote energy technology and energy industry studies on the one hand and to win new employees with academic qualifications for our group ([Management report](#) [Employees](#) [p. 95](#)).

In order to give school children a practical education in business beyond what is covered by their curricula, EnBW is taking part in the Europe-wide business@school initiative of the Boston Consulting Group. This invites students in the final classes of secondary school to experience themselves how companies and business work. EnBW provides contact persons for the schools participating in the initiative to support the students in their project work.

We also support individual talented children with grants under the Roland-Berger-Stiftung foundation.

Demonstrating social and cultural commitment

Since 2006 EnBW has been working with the non-profit company Arbeit für Menschen mit Behinderungen (AfB); more than half of its employees have mental or physical disabilities. The company performs maintenance on IT hardware that has been discarded by large companies or institutions and resells them. EnBW had 43.5 t of IT end devices and electrical materials processed by AfB for re-use in 2012. Any hardware that was not functioning was separated and recycled by AfB in its in-house disassembly department in accordance with the relevant ISO standard.

EnBW's birthday cards feature pictures drawn by children. In return for the cards, we choose a different social organisation in Baden-Württemberg each year for donations. In 2012, we selected Förderkreis krebskranke Kinder e. V. and Schlupfwinkel. In addition, since Christmas 2011 we no longer send gifts to our business partners like we used to do, but make donations to regional, sustainable projects instead. In 2012, we contributed €7,500 each to the Christmas donations programmes of eight different daily newspapers. Furthermore, we give impetus for art, culture and sports. For many years, we have been supporting cultural institutions such as the Center for Art and Media (ZKM) in Karlsruhe, Stuttgart art museum and Baden-Baden festival hall whose renown extends far beyond regional boundaries. Our commitment in sports focuses on promoting youth and mass sports. We are a partner of Schwäbischer Turnerbund, the sports association with the highest number of members in Baden-Württemberg, and Badischer Turnerbund, the umbrella association of all sports associations in the Baden region. We have also founded the EnBW junior premier league and support some 50 associations in holding state-wide youth division matches.

EnBW Holding AG collected a total of €962,862 for its donations in 2012 (prior year: €1,132,835).

Procurement

A large number of suppliers and service providers contribute to the services rendered by EnBW. We select them carefully and require very high standards. Our strict criteria for sustainable action also apply to our business partners in procurement and trading.

Responsible procurement

EnBW strives to implement its procurement processes efficiently and economically. Qualitative, legal and sustainable aspects must be taken into account at the same time. By realising these goals and working responsibly, our procurement function contributes a positive effect to group profit. The adoption of group policies for procurement provides legal certainty and transparency in our processes. In addition, we thereby guarantee that internal and external requirements are met.

One significant task of procurement is to purchase all materials, capital goods and services for EnBW core entities. Our approximately 16,000 suppliers come from a whole range of industries and geographical areas. Around 50% are located in Baden-Württemberg. Through short supply routes we not only achieve economic savings but also preserve the environment and generate value for Baden-Württemberg. All of our suppliers have one thing in common: they must meet our sustainability requirements along the entire value added chain.

Selection and development of business partners

Sustainable procurement begins with the careful selection of our business partners. For contracts exceeding €400,000 and grid services, prospective suppliers must in a pre-qualification process present how they practise sustainable measures relating to data protection, quality management, environmental management and industrial health and safety and how they develop these measures. In a group-wide project coordinated by our central procurement department in the group in 2012 we developed a group-wide, standardised and optimised pre-qualification process. Since completion of the project, all prospective suppliers are required to successfully pass this process for annual procurement volumes in excess of €50,000.

In defined circumstances, we perform standardised business partner reviews to analyse and minimise risks.

Sustainability measures in procurement

Supplier management Prequalification Supplier selection process Supplier evaluation	Risk management Audits Escalation process Business partner review
Communication/ training Sustainability reporting Training for procurement Dialogue with suppliers	Rules/benchmarks General procurement terms and conditions Group-wide procurement policy Development of standards Performance indicators

Sustainable supplier development

As part of our supplier evaluation and in the course of regular supplier audits, especially for grid-related services, we review in a transparent process whether all requirements are met. Together with the specialist departments concerned, we have developed an overarching supplier evaluation system. In the event of non-compliance with our requirements, a multiple-stage escalation process instructs the supplier once more and, if there are grave defects, the business relationship may even be terminated.

Our suppliers additionally undertake to comply with standardised international environmental management norms such as ISO 14001 in the requisite goods groups. They thereby commit to a continuous improvement process with regard to their environmental performance.

Continuous developments in procurement

Proven experts provide regular training for our employees in compliance matters (www.enbw.com/report2012 > Corporate Governance report).

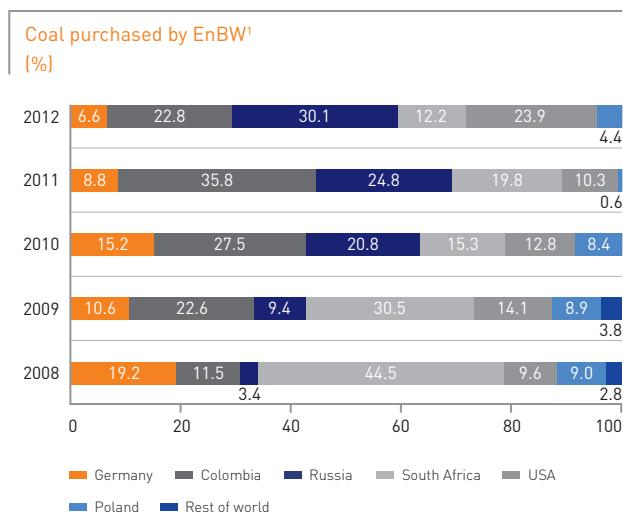
In order to reconcile and optimise our processes, we have for many years been involved in renowned associations, such as the Association Materials Management, Purchasing and Logistics (AMMPL) or the German Energy and Water Association (BDEW). Industry-wide guidelines and key indicators are increasingly being developed in the field of sustainability for procurement.

Sustainable procurement in raw materials trading – coal as an illustrative example

Hard coal trading will in future play an important role to ensure supply reliability in the context of the new energy concept. EnBW is reliant on imports from other countries – including countries such as Colombia, which are also the subject of critical discussions by the public in Germany with respect to the effects of mining on the local population. In a dialogue with local producers and stakeholders in Germany, EnBW therefore seeks ways of making coal procurement sustainable and ensuring that social and environmental standards are complied with.

Worldwide, 6.9 billion t of hard coal were extracted in 2011. The volume of seaborne trading with hard coal had a volume of 978 million t. Of that volume, EnBW procured just under 0.5% or 4.6 million t for use in its own power stations. Only 440,000 t of the coal used for EnBW power stations was mined in Germany. Coal trade is dominated by the economic interests of the coal groups and trading companies. As end consumer, however, EnBW also feels responsible for sustainable trading. That is why we seek solutions together with producers and various stakeholders to improve sustainability in coal procurement across the entire value added chain. Transparency about the origin of coal is the first step in the right direction.

Germany had to cover as much as three quarters of its needs for power station coal from imports in 2011 and this proportion was even higher for EnBW. In 2012, some 81% of coal was imported from the three main countries from which EnBW sources its coal supplies Colombia, Russia and the United States.



¹ Figures rounded.

Sustainable coal supply starts with a review of local mining conditions. EnBW's major producers are evaluated in terms of compliance with human rights, industrial safety, environmental protection and anti-corruption measures. The results are summarised in a sustainability register. In addition, an extensive business partner review is performed for all suppliers. This includes not only their financial creditworthiness, but also compliance with social and ecological minimum standards.

Open dialogue is another important component of EnBW's sustainability strategy. Such dialogue involves direct contact to producers and communication with governments, associations and non-governmental organisations as well as the general public. A continuous exchange is necessary to identify the requirements made of us and reach solutions together. On account of the complexity of coal trading, EnBW is not always able to solve issues on its own. However, we address any specific matters that are brought to our attention and talk to our suppliers and producers. We also use the possibilities of our membership in the UN Global Compact and other organisations to advocate responsible coal procurement and initiate changes towards a greater level of sustainability.

Research and development

EnBW's research and innovation activities are geared towards reducing CO₂ emissions, increasing the use of renewable energies and ensuring the necessary flexibility of the energy system. Our aim is thus to provide the basis for improvements at EnBW and to develop new products for local solutions with renewable energies. The EnBW group spent €36.9 million on R&D activities in 2012 (prior year: €37.0 million).

Objectives and guidelines

Research focus



- Further expansion of renewable energies: Our aim is to viably exploit new technologies for renewable energies and tap additional potential. In performing our research, we are primarily investing in geothermal energy and new bioenergy sources.
- Flexibility of the energy system: Increasingly so, fluctuating renewable energies must be brought in line with electricity consumption, while also having to ensure the competitiveness of our energy system with a high share of renewable energies. In order to meet this challenge, we are looking at new technical and methodical approaches such as local storage facilities and new market models. Such approaches also include the possibility of electromobility through use of charging technology for electric cars and invoicing models as well as other concepts for combining energy and transport systems in a way that is of mutual benefit.
- Reducing CO₂ emissions: As long as fossil-fuel power plants are still in use, ensuring the sparing use of fuels and environmentally friendly operations will remain an important task. In cooperation with partners from the business and scientific communities, we are involved in research projects looking into raising the efficiency of power stations, capturing carbon dioxide from flue gases and identifying new possibilities for reducing CO₂ levels in the atmosphere.

company's entire value added chain as well as applying them directly at the customer. We place special emphasis on pilot and demonstration projects.

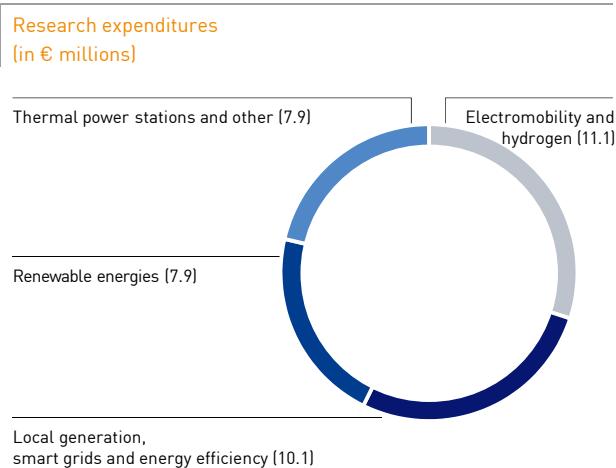
Efficient structure

EnBW's R&D function is characterised by a lean structure. Our objective is to build up our know-how for the development of innovations with practical relevance and to make these available for creating new products and more efficient processes. We implement these new developments within EnBW companies or at our customers. For our projects, we place great value on exchanging information at an early stage with cooperation partners from science and industry. We attach great importance to concepts that are about to reach market maturity. Instead of having our own research laboratories, we have a close and trusting working relationship with our cooperation partners.

Expenditure and personnel

In the fiscal year 2012, the EnBW group spent €31.6 million (prior year: €32.0 million) of its own funds on R&D. The group received a government research grant of €5.3 million (prior year: €5.0 million). Overall, EnBW carried out projects amounting to a volume of €36.9 million in 2012 (prior year: €37.0 million). 190 (prior year: 180) of the more than 200 employees involved in R&D projects are based at EnBW entities. There are 17 employees (prior year: 19) at the holding company's research and development unit coordinating the group's research activities. Most of the employees are engineers, scientists or economists. They also receive support from numerous students as part of the practical training offered by EnBW.

In the course of conducting our research activities, we develop model pilot solutions that create added value in our own plants or at our customers. Developing the solutions is intended to make a contribution to increasing the company's value. Our holistic approach is geared to sustainable energy supply, with EnBW pursuing advanced technologies to implement new developments along the



Incorporating external know-how

We are continuously expanding our know-how by entering into research and development cooperation agreements. The most important external research and innovation partners are the universities, colleges and research institutes in Baden-Württemberg, in particular in Karlsruhe and Stuttgart. Germany-wide, we also work in close cooperation with universities and research institutes in Aachen, Berlin, Cologne, Darmstadt, Dortmund, Dresden, Düsseldorf, Hamburg-Harburg, Munich and Oldenburg. In total, we currently cooperate with some 50 colleges and universities.

We also use international cooperation in conducting our research projects. In fiscal year 2012, we continued with our research together with École Polytechnique Fédérale de Lausanne and additional partners into using special plants to generate electricity from previously unused waste heat at industrial customers. A pilot plant is due to be tested at two German industrial businesses in 2013. Together with a German plant manufacturer and US institutions, we also continued with our transatlantic cooperation in the field of reliability research into the smart grids of the future.

Selected results

Renewable energies

We are committed to tapping further renewable sources of energy. In addition to making technological improvements, increasing our competitiveness is a major challenge.

Geothermal energy: With our research work at the geothermal power stations in Bruchsal and Soultz-sous-Forêts in Alsace, we are making an active contribution to tapping further renewable energy sources. The geothermal power station in Bruchsal commenced operations in 2012. To this end, EnBW, together with Energie- und Wasserversorgung Bruchsal GmbH (ewb), formed a company in which EnBW has a 75% shareholding. Company operations are being accompanied by current government-subsidised

research projects aimed at further optimising the thermal water circuit and power station. These measures are intended to increase the number of operating hours a year to the high level of base load power stations. To this end, EnBW aims to examine how it can make geothermal energy in Germany a viable option. In Soultz-sous-Forêts in Alsace, EnBW is working with partners on developing enhanced geothermal systems (EGS). Since October 2011, the geothermal power station has been feeding electricity into the French electricity grid as scheduled. In this regard, research results reveal pump technology as being key to optimising operations and efficiency.

Bioenergy: In performing our research, we aim to exploit new bioenergy sources for local energy supply. We are also working on technical solutions for making rural biogas available to meet regional energy requirements, thereby increasing its competitiveness.

➤ **"ETAMAX":** As part of the "ETAMAX" project (meaning maximum efficiency), we are working on ways to generate and use biogas derived from biological waste in cooperation with scientists at the Fraunhofer Institute for Interfacial Engineering and Biotechnology and additional partners. At the end of October 2012 we commissioned a demonstration facility at EnBW's power station in Stuttgart-Gaisburg. EnBW is responsible for refining the derived biogas into pure biomethane. By employing innovative technology in the form of the membrane process, the biogas generated from waste is converted to bio natural gas, stored under high pressure and prepared for use as fuel in natural-gas-powered Mercedes Benz vehicles.

➤ **"BioHybrid":** Biogas can – if used in a smart way – help support the new energy concept in rural areas, where temporary surpluses of electricity from solar, wind and bioenergy are becoming increasingly common. Previously stored biogas could be converted into electricity at night or when weather conditions are unfavourable, thereby closing gaps in electricity generation from wind and solar power. The innovative concept developed by EnBW's subsidiary Erdgas Südwest GmbH involves collecting biogas using a yet-to-be-built biogas pipeline network when there is a surplus of electricity from renewable energies and liquefying this gas in a special plant for storage.

Flexibility of the energy system

Integrating large volumes of renewable energies and ensuring consumption matches these volumes count among the key tasks of our energy system.

Smart market: The "MeRegio" project (Minimum Emission Region) subsidised by the federal government was successfully concluded after running for three years. In September 2012 we ended our collection of data on consumer behaviour in response to the different electricity

prices. These results gave rise to a functioning virtual energy marketplace for the future. The aim is to offer our customers solutions that allow them to optimise their own consumption and simultaneously ease the burden on the electricity grid. The some 1,000 MeRegio customers have also reduced their CO₂ emissions through more efficient energy provision and also by reducing their consumption (www.merelgio.de).

To address the issue of how new storage technology – connected to a smart electricity grid – can be used for business purposes, we began additional projects with partners in 2012. For example, we are comparing what the energy industry costs would be for the various possibilities of balancing energy generation and consumption, from flexible generation at centralised and decentralised power stations to storage and generation of hydrogen or heat.

Smart grid: Integrating a large number of facilities for feeding renewable energies into electricity grids requires increasing grid capacity requirements as well as high management and storage needs. The smart monitoring of grids (smart grids) is gaining in importance and can even avoid having to expand a grid to a certain extent. In addition, the current energy volumes of interconnected electricity generation units, electrical consumers and network operating equipment also have to be assessed within the electricity distribution networks. The integration of renewable energies makes it necessary to correct the voltage according to location, for example. In this connection, EnBW is involved in a variety of different projects. In the distribution grid, for example, we are also testing the possibilities of integrating more renewable energies with the help of battery storage technology, to detect energy feed-in peaks and avoid any electrical surges.

➤ **“RiesLing” project:** In October 2012 EnBW Ostwürttemberg Donau-Ries, together with ABB, Deutsche Telekom and EnBW Regional AG, commissioned Germany’s first smart transformer kiosk substation with infinitely variable voltage control in Wechingen-Oberdorf. For the first time, the substation allows grid management to actively adjust the voltage within the local grid to the volume of electricity generated from renewable energies and integrate it far better into the electricity distribution grid.

Linking the electricity grid to the gas grid (power-to-gas): As a result of the increased, albeit fluctuating, power generated from renewable energies, there will be high energy surpluses/shortfalls in the German electricity grid in future. Technologies for storing energy over days and weeks are therefore needed that can increase the capacity limitations of today’s current electricity storage facilities many times over. Suitable alternatives today are chemical energy sources such as hydrogen or methane. In cooperation with partners from the business and scientific communities, EnBW is investigating the long-term potential of this technology as

part of the project on storage of electrical energy from renewable sources in the natural gas grid. This project, supported by the Federal Ministry of Education and Research, involves EnBW analysing the effect of various modes of operation and location-specific factors on the viability of various different power-to-gas concepts.

Hybridisation: We are examining the storage of electricity in the heating market as an efficient alternative to H₂ generation and methanisation. Hybrid heating systems that can switch between using gas and electricity depending on the availability of renewable electricity have great potential in households, district heating and industry for taking up the excess electricity generated from renewable energies.

Local energy generation: Another one of EnBW’s focal points is on local energy generation. We constantly strive to conduct research into new technologies and processes in order to make local solutions available for our customers.

➤ **“CALLUX”:** Around eleven years ago, EnBW, one of the first energy companies to do so, began testing the promising field of fuel cell technology. Fuel cell heating systems reduce primary energy consumption. Efficient, environmentally friendly and virtually silent, the system converts natural gas directly into electricity and heat. This is why EnBW has been involved in various projects in this area, such as the “CALLUX” project, in which the participating companies intend to develop the technology in field tests with subsidies from the German federal government until 2016. In Baden-Württemberg, we aim to have installed around 200 devices by the end of 2013; over 100 fuel cell heating devices are already being tested. In 2012 we also installed the newest generation “Hexitis Galileo 1000 N” which uses the fuel gas employed in an even better way. Furthermore, we commissioned the first ever wall-mounted and therefore space-saving system, thereby also enabling smaller housing units to take advantage of fuel cell heating technology. The first freely available systems are expected to arrive in the next few years.

➤ **“Research platform for local generation of energies”:** The research platform subsidised by the federal government – on which we are active together with the German Aerospace Centre (DLR) – promotes the development of energy-efficient technologies. EnBW is currently working together with a plant manufacturer on the development of a prototype for an environmentally friendly micro gas turbine for commercial use, which is due to be ready for operation in 2013 with an electrical output of 100 kW. Micro gas turbines are an alternative to gas engines and are most suitable for the local energy supply of industrial plants and buildings. The turbines can be operated by means of various types of gas, including renewable, as well as liquid fuel.

Electromobility: Our customers and stakeholders are showing increased interest in us finding solutions for the sustainable and emission-free mobility of tomorrow. We are conducting pilot projects to examine what potential electric and hydrogen mobility have and how they can be integrated into the energy system today and in the future. This is helping us gather important data to develop offerings for our customers. Such work in 2012 included testing charging, invoicing and mobility systems for municipal partners, business partners and retail customers as part of several regional and transnational projects and market testing the first commercial offers.

➤ **Top cluster:** EnBW supports the “Elektromobilität Süd-West” cluster initiated by the federal government in two research projects investigating – among other things – dealing with wireless charging. The cluster bundles the know-how of renowned companies and research institutes from the Karlsruhe-Mannheim-Stuttgart-Ulm region, one that is shaped by the automobile industry.

➤ **Stuttgart and the surrounding region's charging infrastructure:** With state government funding, EnBW, together with the city of Stuttgart, has built some 300 new charging stations which are also available for users of car2go, Europe's largest electric car-sharing service with a final fleet of 500 vehicles. In this context, EnBW will increase the number of charging stations by the end of 2013 to some 500 in Stuttgart and the surrounding region.

➤ **Hydrogen (H2) mobility:** As part of the “H2Mobility” initiative and sponsored by the Federal Ministry of Transport, Building and Urban Development, EnBW erected two publicly accessible hydrogen filling stations in Stuttgart and Karlsruhe. In 2012, the filling station in Stuttgart was additionally equipped with a variable-output electrolysis system to enable hydrogen to be produced on site. The project will serve to test the economic feasibility of hydrogen as a storage medium for renewable energies such as wind energy. The findings from these projects will be incorporated on an ongoing basis in current investigations into potential business models along the H2 value added chain. Drawing on its experience, EnBW will support the creation of a nationwide service station infrastructure for hydrogen fuel cell vehicles in Germany over the next few years.

Reducing CO₂ emissions

“Power Stations of the 21st Century”(KW21): Despite the rise in the share of electricity generated from renewable energies, consumers will still largely be relying on electricity from fossil fuels for the next few decades if solar and wind power are unable to meet demand. EnBW is therefore working together with partners to examine how it can run

its fossil-fuel power stations in a way that is even more efficient, flexible and environmentally friendly. As part of the “KW21” research initiative concluded in 2012, 23 research groups worked with eleven industrial partners – including EnBW – on 70 projects surrounding this issue. The results went towards improving our own plants and processes.

Increasing efficiency in power station technology: Existing power stations must be further developed in order to be able to feed a significantly higher volume of electricity generated from renewable energies into the electricity grids. They must be able to establish a balance between the fluctuating and difficult-to-forecast feed-in volume and current demand where storage facilities are unable to do so. Our power station research involves us examining how quickly performance changes are possible, what products can be purchased on the balancing energy market and at what cost the stability of conventional power stations can be granted. To this end, we work together with partners to examine various different processes for providing balancing energy and the operating costs they incur. Using the findings we make, we aim to identify optimisation potential for the various different power stations. We also looked at the effect of fluctuations in energy output on supply reliability. Another project involves us investigating steam plant processes with carbon separation in providing balancing energy.

Carbon capture: EnBW is investigating various different carbon capture technologies. The findings made form an important basis for complying with environmental and permit conditions. They also allow EnBW to keep a record of carbon capture when constructing new power stations and expanding existing ones. Our projects primarily deal with reducing the high level of energy needed for separating the CO₂, thereby forfeiting only a few percentage points of power station efficiency. We are looking at two promising methods at our own test facilities, also with regard to the scalability of large-scale plants. Our test facility at the Heilbronn hard coal power station uses aqueous amine solutions to clean CO₂ from the flue gases created in the course of incineration. In 2012, we also ran extensive measurement campaigns there with partners to optimise consumption of energy and resources, among other things. We also continued with our research into the pilot plant using the carbonate looping method, which we set up in 2010 together with the University of Stuttgart. This plant involves adding lime powder to the flue gases which then chemically binds to the CO₂. In a second step, the CO₂ is separated from the lime and is prepared for further use. This method promises further improvements in future in terms of the loss of efficiency, emissions and consumables compared to the amine scrubbing process used in Heilbronn.

Subsequent events

EnBW Baltic 2 GmbH and the European Investment Bank concluded a financing agreement on a long-term investment loan of €500 million for the offshore wind farm EnBW Baltic 2. The loan had not been drawn as of the reporting date 31 December 2012.

There were no other events after 31 December 2012 which would be significant for assessing the net assets, financial position and results of operations of EnBW.

Key features of the financial reporting internal control system

General

The purpose of EnBW's financial reporting internal control system (ICS) is to ensure that the financial reporting is reliable and in compliance with laws and regulations. In order to guarantee that the ICS is effective, the group-wide control mechanisms are tested regularly at entity and group level to ascertain that they are suitable and functioning. If control weaknesses are identified and considered relevant for the financial statements, they are then remedied on a timely basis. The ICS methodology in the EnBW group is based on the COSO standard, an internationally accepted framework for internal control systems.

If the control mechanisms reach a standardised and monitored degree of maturity and there are no material control weaknesses, then the financial reporting ICS qualifies as effective. The degree of maturity reflects the understanding of an ICS within the company as a useful method of risk provisioning and the level of implementation of the group-wide ICS methodology at group entities. Materiality of control weaknesses is measured as the probability of occurrence and the extent of a potential misstatement in proportion to the financial statement items concerned. As a component of the financial reporting ICS, the financial reporting risk management system defines measures for identifying and assessing risks that jeopardise the objective of compliant financial statements.

Despite having established an ICS, there is no absolute assurance with respect to the objectives and completeness. The effectiveness of the ICS can be impaired in exceptional cases by unforeseeable changes in the control environment, fraud or human error.

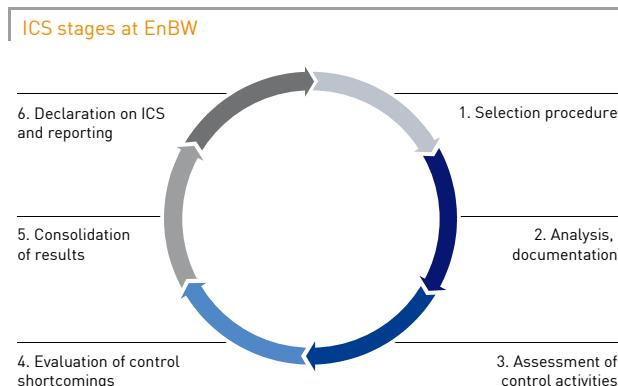
Structure

EnBW's ICS is divided into a central and a local organisation. All major entities have an ICS officer, who monitors the effectiveness of the ICS at entity level and evaluates any control weaknesses as they occur. An ICS report is prepared for the entity on an annual basis and approved by the entity's management. The ICS officer at group level assists the entities with implementing a harmonised approach and consolidates the data surveyed. A consolidated ICS report for the group is provided to the group's Board of Management every year, which serves as the basis for reporting to the Supervisory Board's audit committee.

Process

Standardised processes ensure completeness and consistency in the preparation of the financial statements and financial reporting. The financial reporting ICS defines controls designed to guarantee compliance with the group's accounting policies as well as procedural instructions and deadlines for the individual accounting processes. The ICS has an annual cycle to monitor that documentation is up to date, that the controls are suitable and functioning and identify and assess any control weaknesses.

Relevant entities, significant financial statement items and processes as well as controls are defined in a risk-based selection procedure. The procedure is based on quantitative and qualitative risk indicators.



The defined processes and controls are recorded in a central documentation system. The documentation phase is followed by an assessment of the effectiveness of the control activities, which evaluates whether the control activities are in principle suitable for reducing the risks of misstatement in financial reporting. The defined controls are also reviewed to ascertain that they are functioning by regularly monitoring the implementation of the controls and appropriate documentation of the same. If any control weaknesses are identified, their effect on the financial statements is evaluated. The results are presented in a report at entity level and in a consolidated report for the group. Furthermore, the internal audit function regularly performs ICS reviews for selected group companies as part of risk-oriented audit planning.

Risk and opportunities report

The EnBW group's risk situation intensified in 2012. EnBW faces major challenges on account of the new energy concept introduced in Germany and the associated political and regulatory consequences. This gives rise to considerable risks, but there are also opportunities for new business activities. We use strategic and operating measures to minimise risks and seize opportunities. There are currently no risks to the group's ability to continue as a going concern.

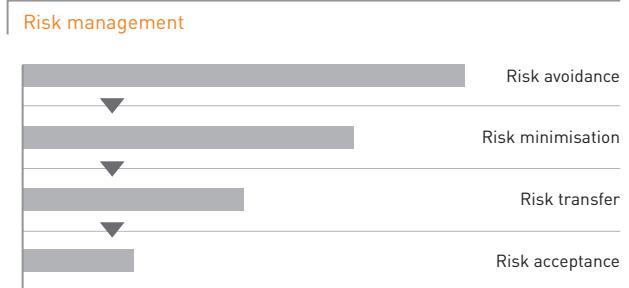
Principles of risk management

EnBW defines risk as potential negative variances from its planned net assets, financial position and results of operations. Risks arise from events that either can basically be planned, but are still subject to chance, or that are not foreseeable. The risks for the EnBW group can be subdivided into the following categories: systemic and industry risks, strategic risks, operating risks, financial risks, legal and other risks.

Risk management at the EnBW group coordinates the proactive and preventive process of managing internal and external risks to EnBW's business activities. The process comprises risk identification, analysis, assessment and reporting.



Risk management involves measures to avoid, reduce or transfer risk, to make provision in the balance sheet for risk or accept the risk. The observation period analysed by risk management generally extends to the medium-term planning horizon; risks to which special importance is attached are also taken into account beyond this period.



Structure and process of risk management

The EnBW group's risk management system is divided into central and local units. The group risk management function at the level of the holding company is responsible for specifying group-wide methods and processes and risk reporting to the Board of Management. The group's risk management guidelines define the handling of risks across the group. Starting at the level of the individual entities, risks are aggregated along defined reporting lines throughout the group.

In its function as a central steering body, the group's risk committee, with the inclusion of the individual entities, addresses questions and issues relating to risk management from various group perspectives. It also ensures the quality of the group's risk report. The Supervisory Board is also informed regularly of the group's risk situation. Within the Supervisory Board, the audit committee is specifically responsible for the detailed assessment of the group's risk situation.

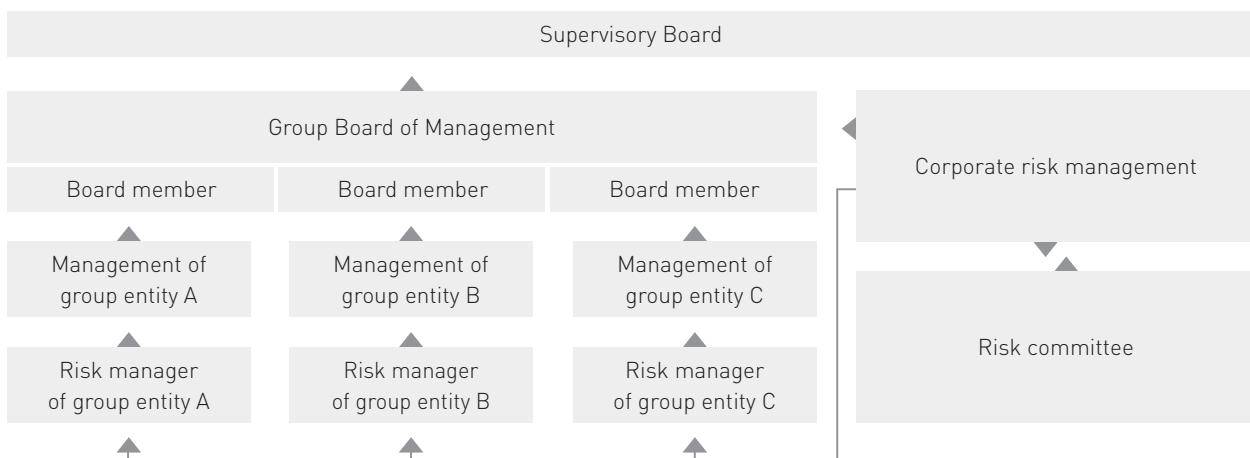
The risk management process is integrated in the operational processes of the EnBW group companies and at the level of the holding company as a continuous procedure. There are various stages of reporting and escalation. The materiality threshold for risks is a potential loss of €1 million over a three-year planning horizon. Control of these risks is the responsibility of the respective entity's management.

Risks of €20 million or more in the planning horizon or €10 million or more in the first budget year are reported to the relevant member of the Board of Management. The group risk threshold is €50 million over the planning horizon. Such risks are presented to the entire Board of Management. The group's risk reports are submitted on a quarterly basis in standardised form. In the case of significant changes in risks, this is performed on a monthly basis as part of a special reporting process. The Board of

Management is informed without delay of the occurrence of any acute risk situations needing immediate attention.

Any risks with a probability of occurrence of up to 50% are subject to an individual review as to whether they have to be dealt with in the next planning round. If there are any risks that are more likely than not, they are taken into account in the planning, with accounting measures being taken as far as possible in the consolidated financial statements in accordance with IFRSs.

Structure



As part of the ongoing development of our risk management process, we expanded the bottom-up process we have in place by adding a systematic top-down perspective. This will provide us with an even more extensive all-round view and allow us to realise additional potential benefits. In a further step, we employ a stochastic model for assessing the top opportunities and risks over the medium-term planning period. This makes it possible to determine the range of the future group net profit or loss and additional targets. We support the development of our employees' professional expertise with regard to risk management by holding workshops and events on a regular basis.

sector threatening to arise as a result of a potential fall in confidence, thus hampering recovery of the real economy. There could also be negative developments stemming from failure of the reform process in Greece as well as an economic downturn in the US as a result of the unbalanced budget, a problem which is yet to be resolved. Ongoing risks include the increased instability of societies in the Middle East and the significant risks this poses to global oil supplies. Against this backdrop, it is not possible to rule out economic risks as well as turbulence on the financial markets with repercussions on the business development and assets, which could result in renewed impairment losses.

Environment and industry risks

Economic risks

Economic situation: Global economic development has lost momentum in virtually all sectors ([Management report](#) [Economic environment](#) [p. 61ff](#)). Despite this, the global economy is expected to report stable growth next year, albeit at a moderate pace in a longer-term context. Here it should be noted that economic development is being carried by the expansive monetary policy of various central banks, with the risk of higher inflation increasing as a result. Should the political willingness within the European Union to perform consolidation measures and structural reforms wane, this would pose another major risk to economic development, with a latent crisis in the European financial

Pension obligations: The pension obligations of the main subsidiaries are bundled at EnBW AG. We strive to cover the group's non-current pension provisions within an economically reasonable period of time by means of investment in appropriate financial assets. As a result of falling interest rates, we were forced to adjust the discount rates for pension obligations in 2012. As of the close of fiscal year 2012, the discount rate was at 3.80%, down 1.45 percentage points on the prior-year interest rate. This resulted in the present value of defined benefit obligations increasing by €1,051.4 million. The procedure used to calculate the interest rate was changed in the fourth quarter of 2012. The fall in the discount rate is primarily attributable to the currently low interest level stemming from the European debt crisis. The discount rate for pension

provisions remains exposed to opportunity and risk depending on how interest rates develop. The resulting changes in the present value of defined benefit obligations can in turn affect the amount of EnBW's adjusted net debt.

Nuclear power provisions: Key factors influencing the present value of nuclear power provisions are the discount rate and inflation rate. A potential diverging development of both factors – a downward trend in the discount rate in contrast to an upward trend for the inflation rate – gives rise to the risk of the present value of nuclear power provisions increasing. An increase in the present value could have a negative effect on the amount of adjusted net debt, thereby jeopardising EnBW's rating.

Settling the balancing group: As a transmission system operator, TransnetBW GmbH (TNG) is responsible for the procurement and use of balancing energy and settles any imbalances within the balancing group of the respective balancing group manager. There is also a possibility that external balancing group managers do not comply with the regulations on how to manage their balancing group and that their balancing group is not covered by energy timetables. This could also arise from fraud. In this case, TNG would have to offset the balancing energy used as part of the settlement of balancing energy with the balancing groups affected. Should these balancing groups not be able to meet their payment obligations, TNG would sustain a financial loss as a result. There is a risk that the Federal Network Agency will not allow the loss to be transferred via the network user charges.

Market development

Market price risks: Almost all assets and transactions of our group entities in the areas of generation, trading and sales are exposed to market price risks. The valuation and management of the profit or loss potential arising from changes in market prices is a main task of our risk management. Our risk management and risk controlling are based on best practices and adapted to reflect market developments on an ongoing basis. On a daily basis, EnBW Trading GmbH's (ETG) risk controlling records market price fluctuation and credit risks, compliance with the limits and earnings measured against current market prices. ETG secures the group net profit by hedging the energy price risks on the forward markets at an early stage. The concept underlying the hedging strategy also involves the use of opportunities. The risk management for our electricity generation gives priority to financial hedging of falling electricity prices and rising prices for fuel and emission allowances. The core business of ETG is to market our own generation products, and to hedge them against market price risks, primarily via the wholesale market. However, these risks can only be hedged over a limited period of time. Despite its hedging strategy, when selling the electricity quantities generated EnBW is exposed to the long-term risk of falling electricity prices and the risk of an unfavourable

development of the fuel prices in proportion to electricity prices. The central body of our risk management is a risk management committee in which various group entities along the value added chain and the group's holding company are integrated. Through risk management in the sales function EnBW ensures that the anticipated sales volume is available. ETG also hedges currency risks from the purchase of fuels which are traded in foreign currency. The potential for optimisation arising from opportunities which result from the flexibility of our power stations continuously used on the basis of current market prices. In order to generate additional income, ETG uses its know-how on the energy markets to trade for our own account in addition to managing the risks.

The following significant market price risks are inherent in market development:

In the context of EnBW's energy trading activities, energy trading contracts are entered into to manage price risks, optimise power stations, offset burdens and optimise margins. Trading for own account is only permitted within narrow, clearly defined boundaries. The price risks mostly arise from the procurement and sale of electricity, the procurement of coal, gas and oil as fuels and the procurement of emission allowances. Furthermore, the EnBW group is exposed to price risks from speculative items entered into in own-account trading. The price risks are hedged using appropriate financial instruments on the basis of continuously monitored forecasts of market prices. The hedging instruments used in 2012 were forwards, futures, swaps and options. As of 31 December 2012, the nominal value of all energy derivatives totalled € 45,355.1 million. The market value of all energy derivatives was € -400.1 million.

The EnBW group has exposure to foreign currency risks from procurement and hedging of prices for fuel needs, as well as from gas and oil trading. In addition, EnBW has currency risks arising from liabilities denominated in foreign currency. We hedge this currency risk with the help of appropriate standardised financial instruments on the basis of continuously monitored exchange rate forecasts. The EnBW group principally has exposure from US dollars, Swiss francs, Hungarian forints and Czech koruny. The net assets tied up at foreign group entities outside the euro area and the translation risks are only hedged against exchange rate fluctuation in exceptional cases.

The EnBW group and EnBW AG use interest-sensitive financial instruments in order to meet the requirements of operational and strategic liquidity management. Interest rate risks therefore only stem from floating-rate instruments. On the assets side, there is interest exposure from bank balances and on the liabilities side from floating-rate liabilities to banks. There is also exposure to interest rate risks from derivatives in the form of swap transactions, primarily in the euro area. A sensitivity analysis is provided

in the section on "Accounting for financial instruments" in the notes to the consolidated financial statements. The nominal volume of interest and currency derivatives amounted to €5,816.3 million as of 31 December 2012. These derivatives had a total market value of €125.2 million.

Competitive risk: The intense competition in the retail customer business as well as the B2C and B2B sectors harbours the risk that we might lose customers. Willingness on the part of customers to switch providers is high, resulting in price and margin risks should it not be possible to pass on energy industry costs to customers.

Electricity procurement agreements: Group electricity procurement agreements can give rise to financial burdens when market price conditions are unfavourable. EnBW has recognised a provision for onerous contracts for an electricity procurement agreement.

Political and regulatory risks

New energy concept: The package of laws on a new energy concept adopted in summer 2011 presents major challenges for the energy industry in Germany. The French president Hollande also announced his intention to reduce France's share of energy generated by nuclear power to 50% by 2025, primarily by shutting down individual nuclear power plants. As a result, the nuclear power plant in Fessenheim in France will most likely be permanently taken off the grid – several months earlier than originally planned – at the end of 2016. There is a basic risk that EnBW will have to share the costs for dismantling the power plant. However, in the opinion of EnBW, the power plant operator cannot legally claim this. The matter is being investigated. There also remains the risk of higher investments potentially having to be made for modernising power plants and, as a result, higher electricity procurement expenses for EnBW as well as for the power plant at Cattenom.

To date, no definitive solution has been found to tackle the problem of how to ultimately store highly radioactive waste in Germany. A site identification act (governing the search for an ultimate repository) that has yet to be enacted is set to identify a suitable location. A preliminary assessment – still fraught with uncertainty – of the resulting costs EnBW would have to bear runs into the mid-hundreds of millions. According to the regulation on advance payments for the establishment of federal facilities for safe custody and ultimate storage of radioactive waste (Endlager VIV), the costs for the investigation of storage locations must be borne by companies using nuclear energy, such as EnBW.

The legal obligation of operators to bear costs for an alternative site to Gorleben is under dispute. It therefore cannot be ruled out that the costs of the exploration and development of ultimate storage locations as well as ultimate storage itself could have significant adverse effects on the net assets, financial position and results of operations of the EnBW group.

Following the new energy concept, EnBW shut down two nuclear power plants in March 2011 and the operations of these plants finally ceased on a permanent basis in summer 2011. EnBW has concluded long-term supply agreements with uranium suppliers. The shutdown of its nuclear power units means that EnBW now needs significantly less uranium than previously planned. Failure to comply with the contractually agreed purchase volume means EnBW risking having to make compensation payments to its suppliers. Depending on how market prices develop, there is a risk of EnBW's potential compensation payments exceeding the balance sheet provision for risk recognised.

Nuclear fuel rod tax and agreement on the fund to promote renewable energies: The German Nuclear Fuel Rod Tax Act entered into effect on 1 January 2011 and provides for a tax rate of €145 per gram of nuclear fuel employed. The tax will be levied over the period from 2011 to 2016. Despite the 13th amendment to the German Atomic Power Act coming into force and the seven oldest German nuclear power plants and Krümmel nuclear power plant having to permanently discontinue operations, the federal government continues to stand by the nuclear fuel rod tax. This places a considerable burden on EnBW's operating result between 2011 and 2016. In July and November 2011, EnBW filed actions at the Baden-Württemberg finance court, Freiburg external senate, relating to the registration of the nuclear fuel rod tax for its shut-down nuclear power plant units Philippsburg 2 (KKP 2) and Neckarwestheim II (GKN II), lodging an appeal for suspension of enforcement. EnBW is of the opinion that the tax violates constitutional and European law. The Baden-Württemberg finance court rejected the action in January 2012. After gaining approval, EnBW appealed to the Federal Finance Court. To optimise costs, it decided not to appeal in parallel proceedings relating to GKN II. As the Federal Finance Court in Munich had rejected a similar appeal relating to Grafenrheinfeld, there was no chance of success for EnBW Kernkraft GmbH (EnKK) had it filed an appeal.

The main actions filed are still pending at the Baden-Württemberg finance court. A decision on the GKN II proceedings is not expected until the second quarter of 2013 at the earliest. At the application of both parties, the KKP 2 proceedings were suspended for reasons of procedural economy until a decision has been reached on GKN II.

In July 2012, a new nuclear fuel rod tax declaration was filed for KKP 2 in the amount of €124.3 million. Direct action against the tax declaration was filed at the Baden-Württemberg finance court, thus steadily continuing the current legal action. Finally, in November 2012, a new nuclear fuel rod tax declaration was filed for GKN II in the amount of €151.5 million. Direct action was also filed at the Baden-Württemberg finance court against this tax declaration.

By order of reference dated 29 January 2013, the Hamburg finance court declared the nuclear fuel rod tax act to be unconstitutional. Consequently, the act will be presented to the Federal Constitutional Court for judicial review. It is likely that EnKK's proceedings relating to KKP 2 and GKN II will be suspended until a decision has been made by the Federal Constitutional Court.

As part of the legislation passed at the end of 2010 to extend the working lives of German nuclear power plants, the federal government and operators of nuclear power plants signed an agreement on a fund to promote renewable energies. It comprised three components: an extension of the working life of nuclear power plants, nuclear fuel rod tax and promotion of renewable energies. According to the agreement, the extension of the working life of nuclear power plants was linked to prepayments into a fund to promote renewable energies. From 2017 onwards, such prepayments were to be credited to the contribution of €9/MWh on the additional volume of electricity generated from the extension of working life. From the view point of nuclear power plant operators, the fact that the 13th amendment to the German Atomic Power Act has now been enforced means that there are no longer any payment obligations.

Network use: The German Incentive Regulation Ordinance and the associated revenue caps and network user charges may be subject to changes within a regulation period. In accordance with Sec. 19 (2) German Electricity Network User Charges Ordinance (StromNEV), network user charges for energy-intensive customers do not apply or will be charged on an individual basis. The transmission system operators perform an equalisation of burdens between themselves in this context and determine and publish a nationwide, standardised cost allocation. As specified by the Federal Network Agency on 14 December 2011, the cost allocation is to be initially determined on the basis of budget figures. The financial risk is minimised in that potential differences to the actual values are taken into account when calculating the cost allocation for following years.

Retrofitting masts: A state-of-the-art safety level is currently being defined for existing masts. It is possible that the demands of the Baden-Württemberg energy regulator will no longer just be limited to inspecting and, if necessary, retrofitting masts manufactured from Thomas steel in future as has been done in the past, but may apply to all masts. Should it emerge during a reliability review that the requirements have not been met, this would necessitate retrofitting measures or the construction of new masts, which have not been taken into account in the current business plans.

Abuse proceedings relating to balancing energy: The abuse proceedings initiated by the Federal Network Agency against German transmission system operators are yet to be concluded. Since May 2010, all German transmission system operators have used the grid balancing organisation, which serves to minimise contradirectional non-harmonised use of balancing energy. This helped to resolve the proceedings with regard to the system-related contradirectional non-harmonised use of balancing energy between the four German balancing zones. There is a risk that some of the costs incurred for balancing energy since 2006 by our transmission system operator, TransnetBW GmbH, might not be recognised and will reduce network user charges in future periods.

Implementation of the third energy liberalisation package: The amendment to the German Energy Industry Act (EnWG) that came into force in summer 2011 contains stricter unbundling requirements for transmission system operators. EnBW has implemented the ITO model. The legal provisions lead to considerable synergy losses. There is a risk that the Federal Network Agency does not recognise or only partly recognises the dis-synergies.

Amendment of the German Water Resources Act: In line with the amendment made to the Water Resources Act in 2009, existing state ordinances on handling substances hazardous to water at plants were removed and replaced with a nationwide ordinance. Following its anticipated entry into force in mid-2013, this will mean plants will require retrofitting in the medium to long term, especially in the grid segment.

Regulation of system services: At the end of the first regulation period, the voluntary commitment currently in place for balancing energy and grid loss energy will expire. For this reason, there is the regulatory risk for the electricity transmission grid that these system services will not be regulated or regulation will be modified.

EEG cost allocations: The new energy concept and the accelerated expansion of renewable energies – which ended up being greater than expected – also has the effect of increasing cost allocations under the German Renewable Energies Act (EEG). Energy suppliers and therefore EnBW are

obligated to pay the required allocation amount. For EnBW, there is currently the risk of not being able to pass on the higher payments to customers in the case of fixed-term contracts with a price guarantee. Only after the contractual terms have expired can the sales function make an appropriate price adjustment.

Temporary shortfall in the EEG account: The greater-than-forecast expansion in EEG quantity volumes increases the EEG remuneration payments within TransnetBW GmbH. As the EEG cost allocation is set for each calendar year, higher payments cannot be settled during the year. Consequently, the resulting shortfall for 2012 will most likely be settled with the EEG cost allocation for 2013. As of the reporting date 31 December 2012, there was a net deficit in the EEG bank account, thereby increasing EnBW's net debt. There is the same risk of this happening for subsequent years.

Use of reprocessed plutonium: Until March 2011, nuclear fuel from the Neckarwestheim I nuclear power plant was reprocessed in Sellafield (UK). According to the German Atomic Power Act (AtG), plutonium obtained through reprocessing must be used as a fuel in Germany, the EU or Switzerland. This is only possible with special mixed-oxide (MOX) fuels, which must now be produced exclusively at a plant in France following the closure of the MOX plant in Sellafield. However, the law does not currently allow the plutonium to be transported from the UK to France. In order to fulfil the statutory obligation on the reuse of plutonium while its own power plants are still in operation, it is planned to produce MOX fuel rods in France in combination with a plutonium title swap in the UK. This solution, in compliance with German Atomic Power Act, renders the transportation of plutonium unnecessary and puts EnKK's plutonium stocks in Sellafield to zero. This solution poses potential risks in the form of contractual risks, additional costs or even risks relating to deadlines that could exceed the provision made in the accounts. The occurrence of one of these risks could have significant adverse effects on the net assets, financial position and results of operations of the EnBW group.

Strategic risks

Capital expenditures

Viability of capital expenditures: The EnBW group is pursuing a host of new construction projects that are by their very nature highly complex and involve the interaction of a large number of participants. For this reason, it is impossible to rule out events in the construction process that will lead or could lead to deviations from the planned project schedules involving delays and cost increases. There is a risk at the moment that construction work for the new RDK 8 hard coal power station could be delayed further beyond the end of 2013 and that construction of unit 9 of the large-scale power plant in Mannheim (GKM 9) could be delayed until 2015. For the offshore wind farm EnBW Baltic 2

currently under construction, there is a risk of costs increasing as well as the commissioning being delayed beyond 2014. As a result of the lengthy discussions on amending the German Energy Industry Act (EnWG) and the German Renewable Energies Act (EEG), EnBW postponed its investment decision for its planned wind farm EnBW Hohe See in the North Sea. The provisions of the EnWG regarding binding deadlines for connecting offshore wind farms to the grid do not themselves offer any planning certainty. The uncertain framework conditions mean there is a risk of incurred project expenses having to be written off.

Divestitures: As part of implementing the corporate strategy, EnBW is planning targeted recoverable activities involving the sale of existing equity investments. The divestiture portfolio is being expanded by means of participation models for renewable energies – such as for the offshore wind farm EnBW Baltic 2 – and the sale of assets. Based on past experience, this gives rise to uncertainties regarding the realisation of reduced or surplus revenue, time delays in the activities mentioned as well as the amount of net debt reduction. Should the divestiture proceeds generated not meet our expectations and projections, this would affect the investment ability of the group.

Investments: If the acquisition of the EnBW shares held by EDF until 17 February 2011 by NECKARPRI-Beteiligungs-gesellschaft mbH (NECKARPRI), attributed to the federal state of Baden-Württemberg, and the conclusion of a shareholder agreement between NECKARPRI and OEW Energie-Beteiligungs GmbH were to represent a change of control within the meaning of the agreement with EWE, EnBW would be obliged to offer its shares to the municipal shareholders of EWE at the market price as determined by an expert appraisal. EnBW is of the opinion that there was no change of control. The municipal shareholders, however, requested that EnBW make an offer. EnBW did not comply with this request. In the event that the parties do not come to a mutual agreement, there is a risk that the sales price will be below the current carrying amount at EnBW.

For investments that are to be stated at market value using share prices, there is a risk of impairment losses if share prices were to show negative developments. For this reason, there is currently a risk of an impairment loss being recognised on EnBW's investment in EVN AG.

Other strategic risks

Renewal of franchise agreements: In 2012, around 70 franchise agreements were renegotiated and concluded. By focusing on municipal targets and our established franchise and relationship management, the EnBW group has managed to maintain virtually the same number of franchises despite the increased competition with municipal utilities. Some 100 electricity and gas franchise agreements within the network territory of EnBW and its main equity investments expire by 2014 and are up for renegotiation. Major franchise agreements for EnBW are those with the municipalities that are members of the Neckar-Elektrizitäts-Verband and the cities of Stuttgart, Düsseldorf and Heilbronn. Towns and municipalities are increasingly showing an interest in returning their electricity, gas and water supply networks to public ownership. The city of Stuttgart will resume operation of its own water supply as of 1 January 2014. It has also established a municipal utility for activities relating to the supply of energy. In the event that an integrated energy supplier acquires the franchise, there is a risk that this company would then gradually lure away the remaining customers of EnBW's sales functions as part of a network transition. Success of the new energy concept in Germany requires smart and high-performance grids. The distribution grids are becoming more and more fragmented as a result of tendencies towards moving back to municipal ownership, with supply reliability and quality also being hit. As a company partly owned by the state, EnBW is an attractive partner for the municipalities and their municipal utilities as part of the new energy concept. We actively approach towns and municipalities with a variety of offers. In addition to extending franchises, the offers also involve entering into partnerships with municipalities and municipal utilities.

"Fokus" efficiency programme: The "Fokus" project is currently on schedule, with the full impact of improvement measures being felt as of 2014, one year earlier than originally planned. For fiscal year 2012, improvements in earnings already exceeded original expectations. However, there is still the risk in future years of the structural and value added chain projects not realising their full potential in terms of planned improvements in earnings. This risk will be reduced to the extent that the prerequisites for realising improvements in earnings are put in place.

Operating risks

Internal and external factors: The production processes along our value added chain in the business segments of the EnBW group involve complex and highly specialised plant and equipment. We make every effort to avoid damage to our plants and minimise downtimes. To prevent intrinsic risks, we use cutting-edge technology, carry out regular maintenance at our facilities and train our staff. However, despite the high standards, it is not possible to rule out risks completely. External factors tend to impact our processes

very rapidly and unexpectedly, making risk assessment difficult. We strive to counter such risks with preventive measures.

The economic effects of operating risks are minimised, among other things, by taking out insurance if this is possible and economically justified. Every year, we analyse the effectiveness of the insurance cover and any additional requirements to guarantee that we are adequately insured should damage to property occur. We select the amount of the deductible based on what makes economic sense. Business interruptions, depending on how long they take, can significantly impact the operations of the group.

Events at the Philippsburg nuclear power plant (KKP 2) from 2009 and 2010 were analysed by external appraisers. The overall assessment by authorities could demand that measures are taken, thus leading to increased expenses.

System responsibility: The German Energy Industry Act assigns EnBW, as an operator of transnational and long-distance transmission networks in the electricity and gas segments, with what is termed "system responsibility". The networks have been subject to changes in requirements over the last few years. Transmission system operators expect that the transmission grid will only be able to be operated subject to more and more extensive intervention in accordance with European minimum safety standards. This has increased the risk of bottlenecks in the electricity and gas grid leading more frequently to supply-related irregularities or disruptions. Should it not be possible to eliminate a disruption or danger to reliable network operations in good time or at all by means of the usual mechanisms in place, the operators of transnational and long-distances transmission networks are entitled by law to perform emergency measures for the duration of which all obligations to perform are suspended. While EnBW's liability as operator of transnational and long-distance transmission networks is excluded for pecuniary damage arising from such emergency measures, EnBW does, however, bear the general risk of failure to assess whether a given situation constitutes an emergency. Should supply irregularities or interruptions arise, EnBW will be liable for any resulting damage, with the legislator having provided for certain limitations of liability (German Low-Voltage Grid Connection Ordinance – NAV). A reputation risk cannot be ruled out.

VAT fraud in energy trading: By participating in cross-border energy trade, there is a risk even for legitimate market participants of being subject to VAT carousel fraud. In fiscal year 2012, the tax authorities issued amended VAT notices to EnBW for the 2009 and 2010 assessment periods in the amount of €50 million. The amendments relate to purchased CO₂ emission allowances, which the tax investigation office does not deem to be tax deductible as, in its opinion, EnBW could have realised that the seller was

involved in VAT carousel fraud. The expenses at hand were recognised under other taxes and the debt paid even though EnBW contests the claims and filed a protest accordingly. A receivable from the tax authorities was not recognised as although it was expected to be realised, it cannot be deemed sufficiently probable as of the end of the reporting period.

Financial risks

Counterparty risk: Apart from customer transactions, transactions on the over-the-counter (OTC) market present counterparty risks. OTC transactions are entered into to hedge and optimise power station capacity in the trading area. On the trading side, counterparty risk consists of settlement risk and mark-to-market risk. Settlement risk arises from unsecured receivables from trading partners and sales-based customer relationships. The mark-to-market risk is the result of market price fluctuations. Price movements affect the value of open positions in the trading and customer portfolio. As a result, this gives rise to a resale/replacement risk in the event of default by a trading partner, with the latter meaning that the position has to be repurchased at the then current market prices.

In order to reduce the counterparty risk, we entered into bilateral margin agreements with some of our trading partners. This involved managing existing counterparty risks by providing collateral, thereby keeping the counterparty risk from the business relationship within the defined level. For trading partners on the OTC market, we define individual credit limits on the basis of their credit standing. Counterparty risk is established and adherence to the line of credit and spread thereof are monitored on a regular basis. We generally carry out OTC market transactions on the basis of master agreements, for example those published by the European Federation of Energy Traders (EFET), the International Swaps and Derivatives Association (ISDA) or the International Emissions Trading Association (IETA). Counterparty risk is excluded by clearing transactions through energy exchanges such as the EEX or ICE and the clearing bank. None of our OTC business partners filed for insolvency in 2012.

Margin regulations for stock market transactions and bilateral margin agreements may lead to short-term cash outflows as a result of unfavourable market developments. These are settled again upon fulfilment of the underlying futures. This liquidity risk is constantly monitored by performing stress tests. In fiscal year 2012, the finance industry saw its creditworthiness drop and several financial institutions downgraded as a result of the euro crisis. This increased the credit risk as a result. There is the risk that the euro crisis will spread to the real economy, leading to a further rise in the credit risk. We limit the potential negative impact where we can by means of active monitoring and management of customer and trading partner credit risks.

Rating: The new energy concept in Germany is burdening the economic situation and outlook for German energy suppliers. The rating agencies are analysing the challenges faced by the energy industry and continue to observe market participants closely. Accordingly, EnBW is in an ongoing dialogue with the rating agencies. Standard & Poor's confirmed EnBW's "A" rating and stable outlook in November 2012. Ratings issued by Moody's and Fitch remain unchanged at A3 (outlook negative) and A- (stable). We are nevertheless aware of the risk that the rating agencies could downgrade EnBW's credit rating if EnBW does not fulfil the expectations of the agencies ([Management report](#) [Financial position](#) [p. 74ff](#)).

Asset management: In pursuit of its conservative cash investment strategy, EnBW is guided by the aims of achieving a good credit standing, a high level of liquidity and broad diversification of the investments. We continued to pursue this strategy in 2012. There was a heightened risk of impairment in 2011 with regard to the portfolio of securities in connection with the euro debt crisis and the resulting impact on the international financial markets. This risk materialised in some cases. The nature of the markets means that there remains a risk of target returns not being achieved as well as other impairments. The value at risk determined per security as of the reporting date is € 63.8 million (95%/10 days). In 2011, this figure came to € 71.5 million (95%/10 days).

The volatile financial markets mean that our financial assets are subject to price risks and other risks of potential losses. Impairment losses have to be recognised on securities if these risks lead to a significant or prolonged decline in the fair value of these investments below their cost. In fiscal year 2012, impairment losses due to a significant decline in fair value totalled € 26.3 million (prior year: € 71.2 million) ([Management report](#) [Financial position](#) [p. 74ff](#)).

Legal risks

In addition to political, legislative and regulatory risks, contractual relationships with customers and business associates bring with them a series of other risks. These sometimes lead to court cases and other legal disputes, less so in the field of corporate law. Adequate risk provisioning has been made accordingly with the approval of the departments concerned and the legal department. There is a risk of € 418.3 million for pending litigation where the counterparty is unlikely to win the case; this is recognised under contingent liabilities and other financial obligations. There are also various proceedings, official investigations or procedures as well as other claims pending against EnBW, the success of which is considered very unlikely meaning no contingent liabilities and other financial obligations have been recognised. Major disputes include:

Price adjustment clauses: Despite further developments, not all open issues have been resolved by existing supreme court rulings. Where necessary, the price adjustment clauses employed by the EnBW group have been reworded to reflect more recent court rulings. There are also three sets of proceedings filed by energy companies pending at the European Court of Justice that concern the effectiveness of price adjustment clauses. Two of these deal with price adjustment clauses in gas and electricity supply agreements in accordance with general supply conditions, Sec. 4 (2) AVB and Sec. 5 (2) GVV, respectively. These two sets of proceedings are currently suspended.

Decommissioning of Obrigheim nuclear power plant: On 25 September 2012 in the proceedings for preliminary legal protection, the Baden-Württemberg administrative court confirmed permission to implement the decommissioning and dismantling of the nuclear power plant in Obrigheim (Second Closure and Dismantling Permit). As the plaintiffs in the main action are yet to bring forward any new arguments, it is currently expected that the administrative court will dismiss this action. If the action against the Second Closure and Dismantling Permit were to go in favour of the plaintiffs, this would cause the decommissioning to be delayed. Depending on the timescale of proceedings, this would result in additional costs.

Company pension scheme: There are still legal proceedings pending before the competent labour courts relating to the reorganisation of the company pension scheme at EnBW. There is a risk of proceedings going against EnBW, thereby having a negative impact on earnings. However, according to our own assessment and that of the lawyers representing the company, the prospects for success are high.

EWE/VNG claims for damages: At the annual general meeting of VNG-Verbundnetz Gas Aktiengesellschaft (VNG) on 15 December 2011, it was resolved to reject transferring the investment held by EWE Aktiengesellschaft (EWE) in VNG to EnBW. At the beginning of April 2012, EWE contacted EnBW and announced that it was seeking so far unspecified claims for damages, alleging that the duty to promote a common purpose in the manner stipulated by the VNG purchase agreement had been breached. EnBW considers the withdrawal from the agreement to be lawful and as such sees no legal basis for the claims.

Anti-trust pricing reviews: The anti-trust control activities for pricing district heating, gas, electricity and water could also give rise to anti-trust risks for the group in 2013. Following publication of the results of the district heating sector survey by the Federal Anti-Trust Office, no anti-competitive behaviour on the part of EnBW could be found, meaning that anti-trust reviews in consultation with EnBW are currently concentrating exclusively on the area of water. Nationwide, more stringent precedents from the German Federal Court of Justice since 2010 as well as increased activities on the part of the competent authorities at state and national level are showing a trend towards taking a more critical stance regarding anti-trust pricing for water. As a water supplier in Stuttgart, EnBW increased the prices as of 1 August 2012, thereby only passing on the costs that had increased since 2007. The responsible anti-trust authority of Baden-Württemberg has since filed abuse proceedings against EnBW, which is not unusual given the comparably high prices. However, on account of the specific circumstances surrounding Stuttgart's water supply, EnBW deems it justified that it is passing on the entire cost increases.

Other risks

Personnel risks: A key success factor in our operating and strategic corporate development is our personnel. In this respect, EnBW is exposed to the risk of not having a sufficient number of employees with the necessary qualifications or skills. When recruiting in the relevant target groups, for example, this risk is primarily caused by competition on the labour market from other companies, exacerbated by demographic developments and stricter conditions for the energy industry. Ongoing analyses provide us with information on areas in particular need of action. The "Fokus" efficiency programme also presents an additional risk of losing important high performers should they not see any prospects for themselves during this restructuring phase. We counter this risk with internal personnel development measures and by positioning the company as an attractive employer ([Management report](#) [Employees](#) [p. 92ff](#)).

IT risks: Communication and information systems are of central importance for supporting and ensuring the smooth running of a large number of EnBW's business processes. In this respect, communication and information security has a high priority within the group. We endeavour to ensure the uninterrupted provision of communication and information networks and applications, to protect from the loss of business-critical information and undesired change as well as to provide optimal support with regard to process performance.

Our high security standards, based on international and industry-specific principles, lower potential communication and information risks. The EnBW group principles for security in information and communication technology (EKSIT@) are an integral part of those standards. These are a group-wide binding set of rules for the use of our information and communication systems. In this regard, we attach particular value to the security of information and data, adherence to legal frameworks and the secure operation of our communication and information systems.

Data in the communication and information network are protected according to their significance and the assigned level of protection. Service level agreements are in place with communication and information service providers to guarantee that the requirements are met. The assessment of the communication and information risk involves comparing the level of protection by business process with the security level implemented for rendering the service. If required, additional measures may be derived in order to create the required level of security. The ongoing analysis and evaluation process involves IT managers as well as risk managers and is constantly optimised.

Overall assessment

Constantly developing the methods and tools of the risk management system allows the EnBW group to assess the economic impact of risks on a regular basis.

Since 2011, the risk situation has intensified for the entire energy supply industry. Framework conditions have changed significantly as a consequence of the new energy concept in Germany. EnBW's overall risk position has become very tense for 2013, with numerous factors jeopardising earnings targets.

The political decision involving Germany phasing out nuclear power reduced planning certainty and will hold great risk potential in future. This resulted in decisive consequences for the operating business and earnings situation of the EnBW group, although it will open up new opportunities for us in the medium term. The euro debt crisis triggered a period of persistent volatility on the international financial markets. In light of this, recognising further impairment losses on investments and other assets may become necessary. Added to this are competition and market risks that may impact the net assets, financial position, result of operations and liquidity situation of the EnBW group. The project risks will also rise as part of future investment projects.

We used operational and accounting measures to reduce the risk potential for the group. Provisions and impairments in the accounts allow for risks where the probability of occurrence is high. Material risks are included in current projections.

Over the course of 2012, although some risks were reduced or were eliminated completely, several additional risks emerged for EnBW or intensified or materialised. There were no risks to the EnBW group's ability to continue as a going concern in 2012.

Development of the risk position in 2012



Risk management system

In the reporting year 2012, EnBW's Board of Management and the management of the group entities were informed of the current risk situation in quarterly reports or on a monthly basis as part of a special reporting process. We also reported changes in the group's risk position to the general public in the quarterly financial reports. Where unforeseen risks occurred, we provided decision-makers with ad-hoc reports. The EnBW Board of Management provided the EnBW Supervisory Board with detailed quarterly reports on the group's current risk situation. In accordance with the German Corporate Governance Code, the audit committee dealt at its meetings with risks which can have a significant influence on the group's results of operations, financial position, net assets and liquidity situation.

The group's internal audit function regularly reviews the group-wide risk management system – both in terms of compliance with legal requirements and also in terms of the way it works and how effective it is. The group's internal audit function reports the results of its review to the Supervisory Board.

Principles of opportunity management

Development of business and the business environment presents opportunities for the EnBW group. Decisions relating to energy policy at national and European level, entering new markets and suggestions made by individual employees under the company-wide suggestion scheme can provide EnBW with new opportunities. If opportunities are recognised and seized at an early stage, they can increase the profit for the company. EnBW's aim is to use opportunities to enable us to return higher profits than planned wherever possible. EnBW is convinced a market characterised by fierce competition serves to the benefit of our customers. All employees, irrespective of their area and level of

responsibility, are encouraged to think and act entrepreneurially and to constantly search for and exploit any opportunities as they arise. In the operating business, this enables the group entities to identify opportunities that might materialise in the course of operating activities or due to an improved market environment or other external factors. The group strategy function together with EnBW's market entities systematically records and assesses any strategic opportunities arising within EnBW or its environment and develops measures to exploit them. EnBW's Board of Management discusses strategic opportunities on a regular basis and decides on associated measures.

Opportunities may arise anywhere within the EnBW group's sphere of operations or in the course of a specific activity. Opportunities and risks are often two sides of the same coin. Opportunities arising from developments in the company's environment can be broken down into opportunities from changes in the political and regulatory environment, opportunities arising from the general economic situation and opportunities from market and technological developments. Changes in the prevailing conditions generally differ in how relevant they are for EnBW in comparison to its competitors.

Company-specific opportunities

Investments

We seek to identify and exploit synergy potential together with investees and partners, opening up the opportunity for EnBW to generate additional contributions to earnings.

New energy concept

We also perceive opportunities of relevance for our corporate strategy in the changes that the energy industry is undergoing. EnBW's above-average share of CO₂-efficient generation capacities in its electricity generation portfolio means that we do not need as many CO₂ allowances in relation to the competition. This gives us the opportunity to secure EnBW's low-carbon energy position on the market. In addition, we invest in renewable energies, which will play a major role in energy generation in Germany and elsewhere in the medium and long term. On the sales side, EnBW has also paved the way early on to distinguish itself as a provider of energy solutions in contrast to sole energy providers. Following thorough market tests, marketing of the associated products and packages will be increased – for example in the areas of smart home, energy efficiency in buildings, electromobility and local generation as well as sustainable town pilot projects – and they will be offered under the relevant brands. We are convinced this will open up new sales prospects and growth opportunities.

We also see our customers' rising environmental awareness as an opportunity for EnBW and offer them a range of green electricity products. Climate and environmental protection are a fixed part of our corporate philosophy. We want to combine a range of fuels in an economically and ecologically efficient way. Our expertise in renewable energies opens up additional business opportunities for EnBW.

New segments and markets

Entering new fields of business offers opportunities in view of EnBW's corporate strategy, especially given the changes arising in the energy policy environment in Germany and technological developments. As part of our refined regional strategy, we aim to strengthen our relationship with local authorities and municipal utilities even further. Cooperation with third parties, public participation and partnership models also offer us the opportunity to successfully implement our projects as part of our focused corporate strategy. We also want to seize further strategic opportunities on selected international markets. In this context, EnBW is focusing on countries exhibiting high growth dynamics in economic output and energy consumption, such as those in central and eastern Europe as well as Turkey. EnBW sees an opportunity to participate in this dynamic growth through local investments.

Overall assessment of the economic situation of the group

Framework conditions for the business activities of energy companies have changed dramatically in recent years, especially in Germany. The changes concern the political and regulatory environment, market and competitive structures as well as social acceptance of energy industry activities. EnBW is in the process of sharpening its corporate strategy, which primarily involves securing our position as a low-carbon generator and expanding our local solution offers in the field of energy. For these key moves, the increased use of renewable energy sources is of fundamental importance.

Realignment of the business model requires considerable investment at a time in which difficult framework conditions are weakening the group's self-financing capability. For this reason, EnBW has taken extensive measures, most of which have already been successfully implemented, thereby creating additional financial headroom and simultaneously reinforcing the company's sound financial position. Important rating agencies confirmed EnBW's A rating in 2012.

The EnBW group's operating result fell slightly by 4.3% in 2012. A sharp fall in revenue in the electricity generation and trading segment was offset by growth in the electricity grid and sales segment and the gas segment. There were far fewer negative extraordinary effects in 2012 than in the prior year. EnBW's group net profit in terms of the profit/loss shares attributable to the equity holders of EnBW AG – amounted to €473.5 million. The Board of Management and Supervisory Board proposed to the annual general meeting on 25 April 2013 that a dividend of €0.85 per share be distributed.

The EnBW group's solvency was ensured at all times throughout the fiscal year 2012 through the liquidity available, the positive free cash flow and the available external sources of financing. The company's sound financial position is also secured for the future. At 19.5%, the equity ratio as of the reporting date was far above the level of 17.2% as of year-end in the prior year. The group's adjusted net debt fell by 1.6% compared to year-end 2011 to €8,415.6 million as of 31 December 2012. The dynamic leverage ratio increased from 3.49 to 3.59 in a year-on-year comparison on account of the decrease in adjusted EBITDA.

Following the numerous extraordinary negative effects in 2011, for example the higher level of provisions and write-downs in the area of nuclear energy, the economic situation of the EnBW group stabilised in fiscal year 2012. However, there are still many challenges that must be overcome in the cooperation between management, employees, shareholders and partners on the way to creating a new energy world.

Remuneration report

The remuneration report summarises the principles applied to determine the remuneration of members of the Board of Management and explains the structure and amount of the board remuneration and the remuneration of the Supervisory Board.

The remuneration report takes into consideration the recommendations of the German Corporate Governance Code and the requirements of the German Accounting Standard (GAS) 17 (amended in 2010). It further contains the disclosures required by German commercial law and the supplementary provisions of the German Act on the Appropriateness of Management Board Remuneration (VorstAG) in the notes to the financial statements in accordance with Sec. 314 German Commercial Code (HGB) and the management report in accordance with Sec. 315 HGB.

Remuneration of the Board of Management

Based on a proposal of the personnel committee, the Supervisory Board passes a resolution on the remuneration of the Board of Management including the main contract elements and reviews it on a regular basis. The criteria for determining appropriate remuneration include the responsibilities and performance of the members of the Board of Management, the economic situation, the company's performance and its sustainable development.

The Board of Management's remuneration consists of the following main components:

Fixed remuneration

This comprises a fixed basic annual salary, of which only a part counts towards pension claims, as well as other remuneration and the minimum bonus (30% of the basic annual salary) agreed as part of the short-term incentive (STI). The minimum bonus no longer applies in the case of new appointments and reappointments after 7 July 2010.

Variable remuneration

➤ **STI (contracts prior to implementation of the VorstAG):** The performance-related component of the STI is disclosed as variable remuneration. The STI depends on the extent to which annual targets are met. These include financial targets at group level measured using the performance indicators EBITDA and ROCE in addition to individual targets. The Supervisory Board performed a weighting of these targets at the beginning of the fiscal year. The STI may not exceed 200% of the average fixed annual basic remuneration.

➤ **Performance bonus (for new appointments and reappointments as of 7 July 2010):** The performance bonus depends on the extent to which annual targets were met. These include financial targets at group level measured using the performance indicators EBITDA and ROCE in addition to individual targets. The Supervisory Board performed a weighting of these targets at the beginning of the fiscal year. The performance bonus may not exceed 200% of the average fixed annual basic remuneration. The performance bonus is based on targets being reached over an overall period of three years: The share of the performance bonus for individual targets (30%) for the respective assessment year is paid out right away; the share of the performance bonus for corporate targets (70%) is divided into three. The first third is likewise paid out immediately. The remaining two shares (deferral 1 and deferral 2) are adjusted to reflect the extent to which corporate targets are met in subsequent years. Interest of 3% per annum is paid on these shares, which are then paid out following ratification of the respective financial statements for subsequent year 1 and subsequent year 2. Payment is made subject to the condition that a minimum level is achieved.

➤ **Long-term incentive (LTI):** The LTI depends on the relative increase in value of the group. This is determined by reference to the increase in value of net equity by comparing the mean averages of net equity for two three-year periods. The LTI can range between 0% and 85% of a member of the Board of Management's average fixed annual basic remuneration and between 0% and 100% for the chair of the Board of Management. This is supplemented by a component that measures the relative performance of the group against a peer group of competitors based on the net equity. This can lead to a change of ±20% on the LTI determined by reference to the net equity value. The payment is made after ratification of the annual financial statements, but not before three years' service on the Board of Management.

➤ **Contribution of the Board of Management to "Fokus":** The Board of Management contributes to the "Fokus" programme by voluntarily waiving a portion of its variable remuneration. The portion of variable remuneration waived relates exclusively to two remuneration components, the collective STI/performance bonus and the LTI including the competition component. Calculations are based on the target income of respective members of the Board of Management. Upon achieving their target income, 20% is deducted from the collective STI/performance bonus and the LTI including the competition component.

This fixed percentage, calculated based on the respective target income, is deducted in the following cases:

- › upon achieving the target income
- › upon exceeding the target income

Should the actual remuneration fall short of the target income, the difference between the target income and actual income is credited against the fixed percentage and the lower amount is deducted. In any case, a minimum of €20,000 per year is deducted.

The contribution of the Board of Management to the "Fokus" programme is the result of supplementary agreements to the service agreement the Supervisory Board made with each individual member of the Board of Management. The supplementary agreements apply for fiscal years 2012 to 2014. This regulation is also applied to new service agreements with members of the Board of Management concluded in the aforementioned period.

Remuneration of the members of the Board of Management in fiscal year 2012

in € (prior-year figures in brackets)	Fixed remuneration			Variable remuneration		Total
	Basic remuneration	Other remuneration ¹	Minimum bonus	Without long- term incentive	Long-term incentive	
Dr. Frank Mastiaux, chairman (since 1 October 2012)	200,000	121,818 ²	-	176,933	- ³	498,751
Hans-Peter Villis, chairman (until 30 September 2012)	637,500 (850,000)	8,701 (13,977)	191,250 (255,000)	959,738 (789,900)	- (187,533)	1,797,189 (2,096,410)
Dr. Bernhard Beck, LL.M.	500,000 (500,000)	49,808 (50,477)	112,500 (150,000)	667,083 (374,500)	- ³ (99,000)	1,329,391 (1,173,977)
Thomas Kusterer (since 1 April 2011)	450,000 (337,500)	21,344 (11,040)	-	389,350 (195,413)	63,917 ³ -	924,611 (543,953)
Dr. Dirk Mausbeck (since 1 October 2011)	412,500 (100,000)	8,257 (4,869)	-	355,238 (56,300)	18,938 ³ -	794,933 (161,169)
Dr. Hans-Josef Zimmer (since 1 January 2012)	450,000	38,401	-	389,350 (4,622)	- ³ (37,400)	877,751 (42,022)
Christian Buchel (until 31 May 2011)	- (187,500)	- (8,363)	- (56,250)	- (128,586)	- (83,934)	- (464,633)
Total	2,650,000 (1,975,000)	248,329 (88,726)	303,750 (461,250)	2,937,692 (1,549,320)	82,855 (407,867)	6,222,626 (4,482,163)

¹ Other remuneration includes fringe benefits, specifically from company cars of € 130,329 (prior year: € 86,660) and from expense allowances of € 5,500 (prior year: € 2,066).

² Included is the one-off premium of € 450,000 (pro rata) agreed with Dr. Frank Mastiaux payable after one year of service on the Board of Management.

³ Current deferral amounts are as follows: Dr. Frank Mastiaux € 192,223, Dr. Bernhard Beck € 120,140, Thomas Kusterer € 482,630 (prior year: € 98,795), Dr. Dirk Mausbeck € 411,313 (prior year: € 29,273) and Dr. Hans-Josef Zimmer € 432,503.

Compensation agreed with the Board of Management in the event of termination of service

During their first term of office, members of the Board of Management are generally not entitled to retirement benefits or termination benefits. There is a special arrangement with Hans-Peter Villis for payment of a fixed amount of €130,000 p.a. already in his first term of office in the following three cases: upon reaching the age of 63, in the event that he becomes permanently disabled, or if the contractual relationship is terminated or not extended before he reaches the age of 63, provided the reason for the

termination or non-extension is not related to his person. Half of any other remuneration is credited until retirement age is reached. For this purpose, €286,144 was added to provisions in the fiscal year. The present value of the obligation is currently €1,997,744.

As of their first term of office, Dr. Frank Mastiaux and Thomas Kusterer have a vested right to retirement benefits. In the case of Dr. Dirk Mausbeck, the entitlement to retirement benefits arises from the contractual provisions relating to his prior work within the group.

From the second term of office onwards, the pension entitlements from the age of 63 or in the event of permanent disability are as follows: the vested benefits rise in proportion to the period as of the first-time appointment to the Board of Management and are capped at 60% of the pensionable basic annual salary. Unless benefits have already become vested by operation of law, they become vested as of the second term of office. The rates of increase are generally set such that the maximum post-employment benefit is reached at the same time as the contractually agreed age limit. Other company pension entitlements acquired are credited once the maximum pensionable basic annual salary has been exceeded.

When the benefit obligations become due for payment, the payments are indexed in accordance with the German Company Pensions Act (BetrAVG).

In the event that a member of the Board of Management dies, the surviving dependants are entitled to continued payment of the remuneration for three months. For as long as they live, widows receive 60% of the benefits that the member of the Board of Management received or would have received on the day they died if the pensions had been due for payment on that day. Children of the member of the Board of Management receive an orphan's allowance until they reach the age of 25 (20% if they have lost both parents, 12% if they have lost one parent). The surviving dependants' benefits are limited to 100% of the pension entitlements.

There are no termination benefit obligations in the event of premature termination of service on the Board of Management. However, termination benefits may be payable on the basis of a cancellation agreement made with the individual. For agreements in place as of the reporting date, it was agreed that payments made to a member of the Board of Management on premature termination of his contract without serious cause, including fringe benefits, do not exceed the value of two years' compensation (severance payment cap) and compensate no more than the remaining term of the contract. In concluding or extending management board contracts, care is taken to ensure that no payments are made to a member of the Board of Management on premature termination of the contract for an important reason for which the member of the Board of Management is responsible.

In the event that service on the Board of Management is terminated prematurely on account of a change of control, it is agreed when signing or extending the management board contract that compensation or severance payments may not exceed more than one and a half times the settlement cap.

Dr. Frank Mastiaux, Thomas Kusterer, Dr. Dirk Mausbeck and Dr. Hans-Josef Zimmer have been given the following change-of-control assurance: in the event of a member of the Board of Management resigning or terminating in connection with a change of control, such member will be entitled to the outstanding basic annual salary until the end of the intended term of contract but no more, however, than three basic annual salaries. This entitlement is due upon premature termination of the service agreement. This commitment has also applied to Dr. Bernhard Beck since 1 October 2012.

In the event of temporary unavailability for work on the part of a member of the Board of Management on account of illness or any other reason for which the member of the Board of Management is not responsible, remuneration will be paid for the first six months. The amount of the variable remuneration will be calculated from the average of the last three years and basic remuneration will be paid for a further six months. The payments in the event of unavailability for work will be made no longer than until the end of the term of the service agreement. Diverging from this, Dr. Bernhard Beck was entitled until 30 September 2012 to continued payment of his remuneration for the duration of twelve months. If prevented from performing his duties for more than twelve months, he was entitled to continued payment of the basic remuneration but no longer than until the end of the term of the service agreement. Hans-Peter Villis was entitled to continued payment of his remuneration for a period of no longer than until the end of the contractual term of the service agreement.

Hans-Peter Villis left the group upon expiry of his service agreement as of 30 September 2012. No further agreements with Hans-Peter Villis were made beyond the regulations contained in his service agreement as described above.

The disclosures for the fiscal year 2012 concerning post-employment benefits (prior-year figures in brackets) are presented below. The presentation complies with the requirements of Sec. 285 No. 9a German Commercial Code (HGB). The disclosures include the vested right as of the end of the reporting period, the annual expenses for pension obligations and the present value of the pension obligations vested as of the end of the reporting period (including pension commitments financed by the board members themselves by converting part of their salary).

	Vested benefit as of 31 December 2012	Annual expenses for pension obligations (in €) ⁵	Present value of the pension obligations (defined benefit obligation) (in €)
Dr. Frank Mastiaux, chairman (since 1 October 2012)	30% ¹ -	158,732 -	158,732 -
Hans-Peter Villis, chairman (until 30 September 2012)	130,000 € (130,000 €)	286,144 (325,128)	1,997,744 (1,208,304)
Dr. Bernhard Beck, LL.M.	60% ² (57.5%)	329,961 (322,902)	4,222,979 (3,229,927)
Thomas Kusterer	32.5% ² (30%)	121,984 (85,395)	1,371,714 (799,005)
Dr. Dirk Mausbeck ³	7% ⁴ (7%)	35,278 (4,673)	357,810 (249,429)
Dr. Hans-Josef Zimmer (since 1 January 2012)	42.5% ² -	247,007 -	3,148,367 -
Christian Buchel (until 31 May 2011)	- [0]	- [0]	- [0]

¹ Basis for entitlement in per cent of the pensionable annual basic remuneration currently € 600,000.

² Basis for entitlement in per cent of the pensionable annual basic remuneration currently € 350,000.

³ From the second term of office, the percentage of pensionable basic salary acquired each year is 2.5%, retroactively to the beginning of the service agreement.

⁴ Basis for entitlement in per cent of the pensionable annual basic remuneration currently € 250,000.

⁵ Including an addition to capital for pension benefits totalling € 79,884 [prior year: € 33,304]. This is deferred compensation.

Annual expenses for pension obligations include the service cost as well as interest cost. There are defined benefit obligations in accordance with IFRSs of € 11.3 million (prior year: € 5.5 million) for the current members of the Board of Management.

The benefits paid to former members of the Board of Management and their surviving dependants amounted to € 5.2 million (prior year: € 5.4 million). These pension payments are indexed to the percentage change in remuneration according to the collective bargaining agreement.

There are defined benefit obligations to former members of the Board of Management of EnBW and their surviving dependants in accordance with IFRSs of € 65.4 million (prior year: € 51.2 million).

As in the prior year, no loans or advances had been granted to members of the Board of Management as of the end of the fiscal year.

Remuneration of the Supervisory Board

The members of the Supervisory Board receive fixed remuneration of € 15,000 payable at the end of a fiscal year in addition to reimbursement of their expenses for the entire fiscal year 2012. They also receive variable remuneration each fiscal year based on the respective EBITDA generated by the EnBW group each fiscal year. For each full € 10 million that the EBITDA achieved in the respective fiscal year exceeds the assessment base of € 1,500 million, each member of the Supervisory Board receives remuneration of € 250. The amount of the variable remuneration is capped, however, at € 20,000 per annum.

The members of the Supervisory Board contribute to the "Fokus" programme by voluntarily waiving a portion of their variable remuneration amounting to € 5,000. The payment of the variable remuneration is made following the annual general meeting at which the resolution is passed on exoneration of the members of the Supervisory Board for the past fiscal year. The chairman of the Supervisory Board receives twice the above amounts and the deputy chairman of the Supervisory Board receives one-and-a-half times the above amounts.

Members of the Supervisory Board receive fixed remuneration of € 5,000 per fiscal year to offset the additional work involved in any activities in one or more Supervisory Board committees. The chair of one or more committees receives twice the amount of the remuneration for the committee work, unless the respective committee has not met in the fiscal year concerned.

Supervisory Board members who belong to the Supervisory Board or a committee or acted as chair for only part of the fiscal year are paid remuneration proportionately to the duration of their office or their position in that fiscal year.

In addition, the Supervisory Board members receive an attendance fee of € 500 for Supervisory Board meetings and committee meetings. Attendance at preliminary meetings is remunerated with € 250 per meeting, however only for one preliminary meeting per Supervisory Board meeting.

According to this remuneration system, the members of the Supervisory Board will receive the following total remuneration for fiscal 2012 (including attendance fees and remuneration for offices held at subsidiaries):

Remuneration of the members of the Supervisory Board of EnBW AG in 2012 in € (prior-year figures in brackets)	Fixed remuneration (incl. attendance fees)	Variable remuneration ¹	Board remuneration of subsidiaries	Total
Dr. Claus Dieter Hoffmann, chairman	51,500 [55,000]	34,500 (15,000)	0 (0)	86,000 [70,000]
Dietrich Herd, deputy chairman	41,250 [47,000]	24,625 [11,250]	19,220 [23,800]	85,095 [82,050]
Günther Cramer	24,330 [11,980]	14,750 [3,596]	0 (0)	39,080 [15,576]
Dirk Gaerte ³	24,500 [27,000]	14,750 [7,500]	0 (0)	39,250 [34,500]
Reiner Koch ⁴	20,250 [24,250]	14,750 [7,500]	14,150 [14,400]	49,150 [46,150]
Silke Krebs ⁵	27,331 [12,979]	14,750 [3,596]	0 (0)	42,081 [16,575]
Marianne Kugler-Wendt ⁴	27,250 [31,500]	14,750 [7,500]	13,420 [17,092]	55,420 [56,092]
Wolfgang Lang	27,000 [30,000]	14,750 [7,500]	7,960 [11,787]	49,710 [49,287]
Dr. Hubert Lienhard	25,500 [22,822]	14,750 [6,452]	0 (0)	40,250 [29,274]
Arnold Messner	30,000 [23,832]	14,750 [5,281]	7,299 [5,764]	52,049 [34,877]
Bodo Moray ⁴	28,750 [31,500]	14,750 [7,500]	15,059 [16,613]	58,559 [55,613]
Bernd Munding	20,250 [16,312]	14,750 [5,280]	7,000 [6,700]	42,000 [28,292]
Gunda Röstel	33,000 [21,233]	14,750 [5,281]	0 (0)	47,750 [26,514]
Dr. Nils Schmid ⁵	25,831 [14,849]	14,750 [3,781]	0 (0)	40,581 [18,630]
Klaus Schörnich ⁴	27,000 [28,771]	14,750 [7,500]	13,250 [12,925]	55,000 [49,196]
Heinz Seiffert ³	28,500 [30,027]	14,750 [7,500]	0 (0)	43,250 [37,527]
Gerhard Stratthaus	26,000 [27,418]	14,750 [7,500]	0 (0)	40,750 [34,918]
Dietmar Weber	27,250 [31,500]	14,750 [7,500]	9,425 [7,325]	51,425 [46,325]
Kurt Widmaier ³	29,000 [32,000]	14,750 [7,500]	0 (0)	43,750 [39,500]
Dr. Bernd-Michael Zinow	36,250 [40,000]	14,750 [7,500]	11,193 [7,300]	62,193 [54,800]
Marc Boudier ² (until 16 January 2011)	0 [657]	0 [329]	0 [0]	0 [986]
Dr. Daniel Camus ² (until 9 January 2011)	0 [370]	0 [185]	0 [0]	0 [555]

Remuneration of the members of the Supervisory Board of EnBW AG in 2012 in € [prior-year figures in brackets]	Fixed remuneration (incl. attendance fees)	Variable remuneration ¹	Board remuneration of subsidiaries	Total
Dr.-Ing. Rainer Dulger (21 February 2011 to 30 June 2011)	0 [9,240]	0 [2,671]	0 [0]	0 [11,911]
Prof. Dr. Dr. h.c.mult. Wolfgang Franz (21 February 2011 to 19 April 2011)	0 [5,295]	0 [1,192]	0 [0]	0 [6,487]
Josef Götz (until 19 April 2011)	0 [11,723]	0 [2,240]	0 [0]	0 [13,963]
Prof. Dr. Ulrich Goll (10 March 2011 to 9 July 2011)	0 [10,534]	0 [2,507]	0 [0]	0 [13,041]
Marianne Laigneau ² (12 January 2011 to 17 February 2011)	0 [1,521]	0 [760]	0 [0]	0 [2,281]
Pierre Lederer ² (until 17 February 2011)	0 [2,630]	0 [986]	0 [0]	0 [3,616]
Serge Massart ² (17 January 2011 to 17 February 2011)	0 [1,315]	0 [658]	0 [467]	0 [2,440]
Thomas Piquemal ² (until 17 February 2011)	0 [3,322]	0 [986]	0 [0]	0 [4,308]
Helmut Rau (8 March 2011 to 9 July 2011)	0 [12,616]	0 [2,548]	0 [0]	0 [15,164]
Gérard Roth ² (until 17 February 2011)	0 [6,130]	0 [986]	0 [0]	0 [7,116]
Christoph Walther (until 19 April 2011)	0 [10,722]	0 [2,240]	0 [0]	0 [12,962]
Total	580,742 (636,048)	324,625 (160,305)	117,976 (124,173)	1,023,343 [920,526]

¹ The variable remuneration for the fiscal year 2012 is not paid out until the annual general meeting has passed a resolution on exoneration of the members of the Supervisory Board in fiscal 2013. The members of the Supervisory Board waiving a portion of their remuneration of € 5,000 is taken into account here.

² The remuneration was transferred to EDF.

³ Pursuant to Secs. 82 – 88 Civil Service Act (LBG) in conjunction with Sec. 5 Ancillary Activities Ordinance (LNTVO), remuneration is transferred to the district.

⁴ In accordance with the regulations of the German Federation of Trade Unions (DGB) on the transfer of supervisory board remuneration, the remuneration is transferred to the Hans-Böckler-Stiftung foundation and ver.di GewerkschaftsPolitische Bildung gGmbH.

⁵ The members of the state government have agreed to transfer any remuneration received for membership of supervisory boards, advisory boards and all other comparable boards to which they have been appointed in connection with their office or to which they are assigned as a member of the state government, applying Sec. 5 Ancillary Activities Ordinance (LNTVO) by analogy, to the extent that the remuneration received in the calendar year exceeds a gross total of € 6,100 (council of ministers resolution dated 24 May 2011).

The above disclosures include attendance fees of the members of the Supervisory Board amounting to € 155,250 in the fixed remuneration (prior year: € 218,000) and attendance fees totalling € 38,100 in the board remuneration of subsidiaries (prior year: € 39,504).

No other remuneration or benefits for services rendered personally, in particular consulting or mediation services, were paid to members of the Supervisory Board. Nor did they receive any loans or advances in the reporting year.

The members of the Board of Management and the Supervisory Board are covered by adequate D&O insurance taken out in the interest of EnBW. An appropriate deductible has been arranged for this D&O insurance – three basic monthly salaries for members of the Board of Management and half of the annual remuneration for members of the Supervisory Board. Since 1 July 2010, the deductible for D&O insurance for members of the Board of Management and Supervisory Board has been 10% of the claims, but no more than one-and-a-half times the fixed annual compensation.

Disclosures pursuant to Secs. 289 (4), 315 (4) German Commercial Code (HGB) and explanatory report of the Board of Management

In the following, the Board of Management provides the information prescribed by Secs. 289 (4) and 315 (4) German Commercial Code (HGB) and explains this in accordance with Sec. 176 (1) Sentence 1 German Stock Corporations Act (AktG).

Composition of subscribed capital

The subscribed capital of EnBW Energie Baden-Württemberg AG (EnBW) amounts to € 708,108,042.24 and is divided into 276,604,704 no par value bearer shares with an imputed value of € 2.56 each.

Direct or indirect capital investments exceeding 10%

OEW Energie-Beteiligungs GmbH, which is based in Ravensburg (Germany), and NECKAPRI-Beteiligungsgesellschaft mbH, which is based in Stuttgart (Germany), each held 46.75% of the share capital of EnBW as of 31 December 2012.

The sole shareholder of OEW Energie-Beteiligungs GmbH is Zweckverband Oberschwäbische Elektrizitätswerke with registered offices in Ravensburg (Zweckverband OEW). The latter therefore had an indirect shareholding of 46.75% in EnBW's share capital via OEW Energie-Beteiligungs GmbH as of 31 December 2012.

The sole shareholder of NECKAPRI-Beteiligungsgesellschaft mbH is NECKAPRI GmbH based in Stuttgart, which in turn is an entity wholly owned by the federal state of Baden-Württemberg. NECKAPRI GmbH and the federal state of Baden-Württemberg therefore each had an indirect share of 46.75% in EnBW's share capital via NECKAPRI-Beteiligungsgesellschaft mbH as of 31 December 2012.

Restrictions relating to the voting rights or transferability of shares

In its tender documents published on 7 January 2011 for the voluntary public takeover offer made to EnBW shareholders, NECKAPRI GmbH announced that, based on an agreement concluded with Zweckverband OEW, OEW Energie-Beteiligungs GmbH and the former shareholders Electricité de France SA (EDF) and E.D.F. INTERNATIONAL SA (EDFI), once the share purchase agreement concluded between NECKAPRI GmbH and EDFI on the purchase by NECKAPRI GmbH of the shareholding in EnBW held at that time by

EDFI has been executed, NECKAPRI GmbH together with the state of Baden-Württemberg will accede to the shareholder agreement with Zweckverband OEW and OEW Energie-Beteiligungs GmbH dated 26 July 2000 in EDFI and EDF's place, releasing the latter from their obligations. The tender documents published by NECKAPRI GmbH do not specify information on any potential changes made to the shareholder agreement dated 26 July 2000 compared to the version published by EDF and printed on page 104 in the EnBW Annual Report 2010. The share purchase agreement concluded between NECKAPRI GmbH and EDFI was executed on 17 February 2011, resulting in the state of Baden-Württemberg and NECKAPRI GmbH becoming parties to the shareholder agreement with Zweckverband OEW and OEW Energie-Beteiligungs GmbH. On 5 April 2011, NECKAPRI GmbH transferred the entire equity interest in EnBW AG it held as of this date to its newly formed subsidiary NECKAPRI-Beteiligungsgesellschaft mbH; the latter thereby in turn became a party to the shareholder agreement with Zweckverband OEW and OEW Energie-Beteiligungs GmbH.

According to the above-mentioned tender documents, the shareholder agreement contains customary clauses governing the relationship between the two major shareholders of EnBW and their relationship with EnBW and coordination of their influence on EnBW. These include but are not limited to clauses prescribing that voting rights are to be exercised in a coordinated and in some cases uniform manner, establishing a shareholders' committee for these purposes and clauses stipulating that each party shall consult with the other party on significant transactions and decisions. In addition, NECKAPRI GmbH stated in the tender documents that the shareholder agreement may potentially be amended or cancelled in full or in part during the term of the acceptance period of the voluntary public takeover offer.

On 27 January 2012, the general meeting of Zweckverband OEW agreed to uphold the shareholder agreement with NECKAPRI and the state of Baden-Württemberg. The Board of Management of EnBW has not received any information on whether any changes or additions to the shareholder agreement have been made compared to the content presented above as a result of this or any other event. According to the information available to EnBW pursuant to

Sec. 21 et seq. German Securities Trading Act (WpHG), the state of Baden-Württemberg, NECKARPRI GmbH, NECKARPRI-Beteiligungsgesellschaft mbH, Zweckverband OEW and OEW Energie-Beteiligungs GmbH were still coordinating their actions regarding EnBW on account of an agreement or otherwise at the time when this management report was prepared.

Legal provisions and statutes on the appointment and dismissal of members of the Board of Management and amendments to the articles of incorporation and bylaws

Pursuant to Sec. 84 German Stock Corporations Act (AktG) in conjunction with Sec. 31 German Co-determination Act (MitbestG), responsibility for the appointment and dismissal of members of the Board of Management rests with the Supervisory Board. This competence is stipulated in Art. 7 (1) Sentence 2 of EnBW's articles of incorporation and bylaws. If under exceptional circumstances a required board member is missing, Sec. 85 German Stock Corporations Act (AktG) requires in urgent cases that the board member be appointed by the court.

The annual general meeting has the right to make changes to the articles of incorporation and bylaws in accordance with Sec. 119 (1) No. 5 German Stock Corporations Act (AktG). The specific rules of procedure are contained in Secs. 179 and 181 German Stock Corporations Act (AktG). For practical reasons, the right to amend the articles of incorporation and bylaws, relating solely to the wording, was transferred to the Supervisory Board. This option pursuant to Sec. 179 (1) Sentence 2 German Stock Corporations Act (AktG) is incorporated in Art. 18 (2) of the articles of incorporation and bylaws.

Resolutions of the annual general meeting to amend the articles of incorporation and bylaws are, pursuant to Sec. 179 (2) German Stock Corporations Act (AktG), passed by the annual general meeting with a majority of at least three quarters of the capital stock represented at the passing of the resolution, unless the articles of incorporation and bylaws provide that the amendment of the purpose of the company requires a higher majority of the capital. Pursuant to Art. 18 (1) of the articles of incorporation and bylaws, the resolutions of the annual general meeting require a simple majority of the votes cast, unless legal regulations or the articles of incorporation and bylaws prescribe otherwise. If the law requires a larger majority of the votes cast or of the capital stock represented when taking the resolution, the simple majority suffices in those cases where the law leaves it up to the articles of incorporation and bylaws to determine this.

Authority of the Board of Management regarding the possibility to issue or redeem shares

Since 29 April 2004, the annual general meeting at EnBW has not authorised the company in accordance with

Sec. 71 (1) No. 8 German Stock Corporations Act (AktG) to purchase treasury shares. The company may purchase treasury shares only on the basis of other reasons justifying acquisition in accordance with Sec. 71 (1) German Stock Corporations Act (AktG). As of 31 December 2012, the company has 5,749,677 treasury shares which were purchased on the basis of earlier authorisations in accordance with Sec. 71 (1) No. 8 German Stock Corporations Act (AktG). The treasury shares of the company can be sold on the stock exchange or by public offer to all shareholders. The use of treasury shares, in particular their sale, in any other way must fall within the scope of the resolution taken by the annual general meeting on 29 April 2004. The treasury shares held by EnBW do not grant the company any rights in accordance with Sec. 71b German Stock Corporations Act (AktG).

Material agreements of the company subject to the condition of a change of control as a result of a takeover bid and the resulting effects

The following agreements of EnBW are subject to the condition of a change of control following a takeover bid as defined by Sec. 289 (4) No. 8 and Sec. 315 (4) No. 8 German Commercial Code (HGB):

Financing arrangements

A syndicated line of credit of €2 billion, which had not been drawn by 31 December 2012, can be terminated by the lenders and fall due for repayment if a third party acquires control. This does not apply if the third party is the state of Baden-Württemberg or Zweckverband OEW or another German public law legal entity.

A bond of JPY 20 billion issued on 12 December 2008 under the debt issuance programme can be terminated by the lenders and fall due for repayment if a third party acquires control. This does not apply if the third party is EDF (whose legal successor as shareholder is now the state of Baden-Württemberg) or Zweckverband OEW or another German public law corporation.

There is also a bilateral long-term bank loan of €500 million that can be terminated by the lender and fall due for repayment if a third party acquires control, provided the change of control may have a negative effect on repayment of the loan in future. This does not apply if the third party is EDF (whose legal successor as shareholder is now the state of Baden-Württemberg) or Zweckverband OEW ([Management report](#) [Financing facilities](#) [p. 75f](#)).

There is also a bilateral long-term bank loan, valued at about €76.7 million on 31 December 2012, that can be terminated by the lenders and fall due for repayment if a third party acquires control, provided the change of control may have a negative effect on repayment of the loan in future. This does not apply if the third party is EDF or the state of Baden-Württemberg or Zweckverband OEW.

Corporate law agreements

Under the shareholder agreement between EnBW and Eni S.p.A., Eni S.p.A. has the right to acquire EnBW's 50% share in EnBW Eni Verwaltungsgesellschaft mbH in the event of a change of control at EnBW. A change of control is deemed to have taken place when an energy supply company directly or indirectly obtains the majority of the voting rights in EnBW. EnBW Eni Verwaltungsgesellschaft mbH holds 100% of the shares in GasVersorgung Süddeutschland GmbH as well as terranets bw GmbH. The purchase price that Eni S.p.A. would have to pay for the share held by EnBW in EnBW Eni Verwaltungsgesellschaft mbH is based on the market value determined by expert appraisal.

In the event of a change of control at EnBW, EnBW is required to offer its shareholding in EWE Aktiengesellschaft (EWE) to EWE's municipal shareholders, Weser-Ems-Energiebeteiligungen GmbH and Energieverband Elbe-Weser-Beteiligungsholding GmbH. The purchase price is the market price as determined by an expert appraisal.

A change of control is deemed to have taken place when a shareholder other than EDF (whose legal successor as shareholder is now the state of Baden Württemberg) or Zweckverband OEW directly or indirectly obtains the majority of the voting rights in EnBW; this may also be achieved through joint control together with another shareholder.

Nos. 4, 5 and 9 of Secs. 289 (4), 315 (4) German Commercial Code (HGB) were not relevant for EnBW in the fiscal year 2012.

Forecast

The framework conditions for the energy sector continue to prove challenging particularly in Germany. The change in Germany's energy policy will have a noticeable impact on EnBW's earnings over the next few years. EnBW has launched and to a great extent already implemented an extensive package of measures as a way of actively shaping the new energy concept in the future and securing EnBW's credit standing in the long term.

To the extent possible, our forecast takes an in-depth look at the expected future development of EnBW and the environment we work in for the next two fiscal years.

Anticipated economic environment

Future economic development

In January 2013, the International Monetary Fund (IMF) updated its previous growth forecast for the global economy as a result of the increase in downward risks. After revising its growth forecast downwards for 2012, the IMF also expects growth in global economic output for 2013 to fall by 0.4 percentage points in total to 5%. The need for consolidation of government finances, tax increases and cost-saving measures are hampering economic development in highly indebted countries in Europe. Economic development in the US also remains unsettled. According to the IMF, further economic prospects primarily depend on decisive economic policy measures being taken in the euro area and the US in order to stabilise trust. In 2013, GDP growth in industrialised countries will merely reach 1.4% and is therefore barely up on growth levels in 2012. The weak economic development in the industrialised countries is also having an impact on emerging countries. According to the IMF, the pace of growth in this group of countries will only increase marginally by 0.4 percentage points to an average of 5.5%.

Development of gross domestic product (GDP) in %	2013	2012
World	3.5	3.2
Euro area	0.1	-0.5
Germany	0.9	1.8
Czech Republic	0.8	-1.4
Turkey	2.9	4.0

According to the forecast made by the European Union, GDP in the euro area will fall by 0.4% in 2012. Low economic growth of 0.1% has been forecast for 2013. This development will be buoyed by more favourable export conditions and improved real income. Following a fall in the GDP of the Czech economy in 2012, Eurostat forecasts slight growth again of 0.8% in 2013. The economy is expected to report growth of 2.0% in 2014. In Turkey, economic growth lost considerable momentum in 2012. According to figures issued by Eurostat, there will be no economic recovery in 2013. GDP growth for this year is estimated at 2.9% after reporting 3.0% in 2012. Only in 2014, according to Eurostat, will economic output pick up again at a stronger pace and generate growth of 3.7%.

The crisis in the euro area has had a more profound effect on the German economy than initially expected, which only reported slight growth in 2012. The weak demand from the euro area is hitting exports. By contrast, domestic demand is expected to provide a positive impulse. In 2013, economic output is anticipated to increase by 0.9% as export demand also begins to rise again. The inflation rate will fall slightly and most likely stand at 1.8% in 2013 ([Management report](#) [Economic environment](#) [p. 61f.](#)).

Demand for energy: Despite the fact that the short-term outlook for global economic growth is currently unclear, the International Energy Agency, in its World Energy Outlook 2012, forecasts that global energy consumption will increase by a third by 2035. Around 60% of this increase will be attributable to China, India and the Middle East. In the OECD countries (Organisation for Economic Co-operation and Development), energy consumption will barely rise. However, the trend in these countries is moving away from oil and coal (and in some countries away from nuclear energy) and towards natural gas and renewable energies. Despite the growing demand for low-carbon energy sources, fossil fuels make up the majority of the global energy mix. EnBW expects the demand for electricity and gas to rise slightly in Germany over the next two years, even if the German economic expansion is somewhat slower at present.

Future development of the markets for primary energy sources, CO₂ allowances and electricity

Oil market: The average price for short-term oil deliveries (front month) stood at US\$ 111.68/bbl in 2012. Forward market prices for the one-year product Brent 2013 amounted to US\$ 106.78/bbl on average in 2012, with market participants at the end of 2012 expecting prices to fall further. The future development in oil prices will primarily be shaped by expectations regarding international economic development. Price development is being hampered by the fact that the debt situation remains strained in several industrial countries and that economic growth in the US is still moderate. There are also fears of the rate of growth in the emerging countries slowing. Oil prices will also be affected primarily by the future value of the US dollar exchange rate and whether crude oil remains attractive as an asset class. As a strategic commodity, oil continues to be influenced by political events. The main factors influencing oil prices include the continuation of the conflict surrounding Iran's nuclear programme, the conflict in Syria and the possibility of the dispute spreading to other countries in the region as well as the resulting risk of disruptions to delivery.

Coal market: The market prices for forward delivery of hard coal to the ARA ports (Amsterdam, Rotterdam, Antwerp) had increased by the end of 2012 (2013: US\$ 94.05/t, 2014: US\$ 102.36/t). These were at a higher level than spot prices, which were at US\$ 87.35/t. Market participants assume rising prices in the medium term. Prices are being pushed upwards primarily by expectations of a high rise in future demand for coal imports by India and China despite the economic outlook currently being uncertain. Japan and Germany are also expected to have higher demand for imports as a result of the reduction in electricity generation from nuclear power. Short-term supply shortages caused by bad weather or impairment to the infrastructure would also drive coal prices upwards. The reduction of the current surplus coal supply, for example by scaling back production, is also causing prices to increase. With regard to demand, development of the global economic growth is of relevance in future pricing. Furthermore, progress made regarding the expansion of renewable energies is dampening demand.

Gas market: In 2012, the forward prices on the gas market for 2013 were significantly higher than the spot price. On the Dutch wholesale market TTF, the price for gas deliveries came to € 27.13/MWh for 2013 and € 27.47/MWh for 2014 at the end of 2012. Gas prices are being pushed upwards by market participants expecting Japan's demand for liquefied natural gas (LNG) to soar as a result of Japan potentially phasing out nuclear power and the delayed recommissioning of nuclear power plants. However, the expansion of renewable energies is expected to dampen

prices. Above all the strong expansion of photovoltaics is reducing the potential operating time of gas power stations. The completion and commissioning of the second section of the North Stream pipeline in the North Sea could result in additional volumes of gas being imported into Germany, thereby increasing supply reliability in the long term, although causing gas prices to fall.

CO₂ allowances: Future prices of CO₂ allowances depend primarily on two factors. Firstly, the future issue volume, which largely depends on the decision on an increase in the European Union's climate targets for 2020 regarding CO₂ emissions and secondly, the course discussions take relating to a possible delay in auctioning quantities for emission allowances in the third trading period. Furthermore, future economic development in the EU and the resulting volume of emissions represent the key factors on the demand side.

Electricity market: With spot market prices averaging € 42.60 /MWh in 2012, forward prices for base load products stood at € 45.07/MWh (2013) and € 45.31/MWh (2014) at the end of 2012. On the supply side, the main factors relevant to the future price development are the prices for fuels and CO₂ allowances as well as the future availability of power station capacities and the expansion of renewable energies. The purchase and remuneration requirement for electricity from renewable energies under the German Renewable Energies Act (EEG) has resulted in a rise in the feed-in level of renewable energies. This in turn has increased volatility on the wholesale markets. In future, this may lead to a more frequent occurrence of very low prices in some hours. Extreme weather conditions, power station downtimes or bottlenecks in other countries could cause prices on the spot market to rise in the short term. On the demand side, the economic development, especially industrial demand, is a significant factor in determining the price of electricity. At the same time, the cost allocation under the German Renewable Energies Act will cause a structural rise in the costs for end customers.

Future political and regulatory environment

EnBW's business operations will continue to be impacted to a significant degree by European and German energy policy over the coming years.

Europe: In Europe, the energy roadmap 2050 and renewable energies strategy had still not been adopted in 2012, with both projects still under negotiation. Current legislative procedures with regard to financial services and procurement law are also highly relevant.

Germany: The German Renewable Energies Act is set to be revised completely. The first suggestions are expected to be made in spring 2013, as are directive proposals pertaining to public procurement law and financial services.

German Energy Industry Act (EnWG): Following an amendment being made to the German Energy Industry Act (EnWG) at the end of 2012, there are additional laws and ordinances still under preparation pertaining to metering and interruptible consumer service programmes. The question still remains as to whether these will be concluded before the 2013 general elections. The same applies for ordinances on handling substances hazardous to water and protection against electromagnetic fields (German Federal Immission Control Ordinance).

Regulatory framework: The European harmonisation in the regulation of grid access in the gas market (grid code CAM) will lead to changes in German grid access regulations. The first grid code – which partly builds on steps already completed in Germany in this area – was developed by the European Network of Transmission System Operators for Gas at the end of 2012. The code regulates the processes surrounding the allocation of transport capacities at transmission level, and is to serve as the basis when allocating capacities to all cross-border points in future depending on the market. At the same time, new regulations for bottleneck management came into force on 17 September 2012, which are largely set to be implemented in the EU member states as of 1 October 2013. As a result, the overbooking and buy-back procedures for transmission capacities, which are currently optional for grid operators in Germany in accordance with the Gas Grid Access Ordinance, will be introduced as a mandatory requirement. These regulatory developments are fundamentally contributing to a harmonisation of market regulations across borders, thereby eliminating existing market entry barriers. However, they are also leading to a higher level of complexity as a result of the interaction between market-based capacity allocation and the new bottleneck management regulations.

Future industry development

The energy sector in Europe is currently in a state of upheaval. The political and regulatory conditions are changing as well as the market and competitive structures, thereby forcing companies in the industry to review their business models. On top of this, many generation facilities are outdated and in need of renovation. Falling generation margins, the full auctioning of CO₂ allowances, increasing requirements relating to the environmental and climate compatibility of business activities as well as increasing government regulations are burdening companies' earning power and thus limiting their ability to invest. The answers

to these challenges vary from company to company. EnBW pursues a balanced and future-oriented corporate strategy that takes into account the interests of the stakeholders and the company's future sustainability.

Competition in the retail and industrial customer business remains fierce, both for electricity and for gas. In certain segments, the competitive situation will get even more intense due to the high level of price sensitivity on the part of customers and a rising number of providers from other industries. EnBW considers itself well equipped to defend its market position. We will continue to systematically expand our offerings in areas such as smart home, electromobility, local generation and energy efficiency.

Politicians are demanding and supporting local generation concepts and more widespread energy services. These conditions are generally positive for EnBW's business development, with the company expecting demand for energy efficiency solutions such as contracting to rise. Such solutions are demanded by industrial and business customers through their needs for energy-efficient and low-carbon facilities as well as by municipalities and in the service sector, where increasing the efficiency of buildings is a top priority.

Corporate strategy and future development of the company

Acting responsibly in a sustainable manner is a core principle at EnBW. We are therefore gradually linking our corporate strategy with our sustainability strategy. At the same time, EnBW is in the process of considerably sharpening its corporate strategy in light of the dramatic changes occurring in our environment which are greatly reducing EnBW's financial headroom. Our strategy focuses on two strategic moves:

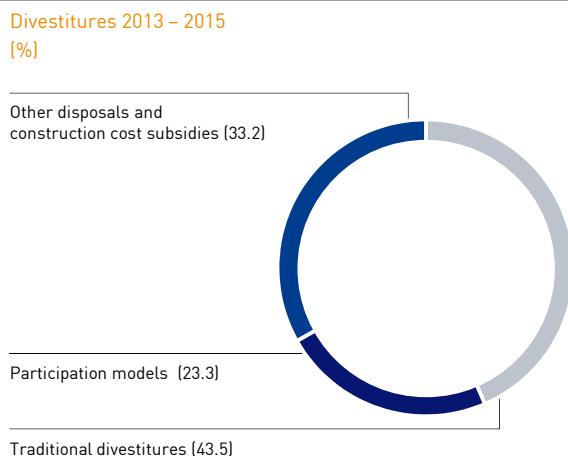
- Safeguarding low-carbon generation capacity
- Establishing local solution offers

In order to continue pursuing our strategy of forming a sound financial basis for the company, the Board of Management of EnBW introduced a package of measures comprising the three elements of capital measures, increasing efficiency and performing divestitures (➤ **Management report** ➤ **Goals, strategy and corporate management** ➤ p. 59).

Capital measures: By placing a hybrid bond of €1 billion in total and performing a capital increase of some €822 million, EnBW has already successfully performed the capital measures it had planned.

Increasing efficiency: The “Fokus” efficiency programme provides for a sustainable target improvement in EBIT of €750 million p.a. The programme is expected to have taken full effect by 2014, with an improvement of over €300 million having been achieved in 2012.

Divestitures: Divestitures totalling €2.6 billion are also planned to be performed between 2013 and 2015, of which 43.5% will relate to the continued sale of non-strategic investments. Around €500 million has already been realised in 2011 and 2012. In particular with regard to our activities abroad, we are concentrating on the Czech Republic, Switzerland and Turkey. Where possible, we aim to end our existing investments in other countries. In addition to this are divestitures from participation models for renewable energies of some 23% as well as other disposals of property, plant and equipment of some 33%.

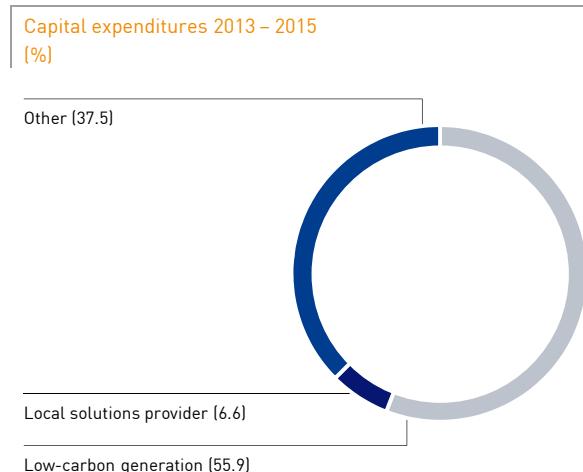


Investments: Based on those elements of the package of measures already implemented and those planned for the coming years, EnBW is in a position to make gross investments of €5.2 billion in the planning period from 2013 to 2015. EnBW’s new and sustainable business model is taking shape.

Securing our leading position as low-carbon generator is one of EnBW’s key strategic moves, with special emphasis being placed on the expansion of renewable energies, primarily wind and hydro-electric power where we will invest €2.4 billion in the planning period from 2013 to 2015. This will help create new generation capacities of some 700 MW. In parallel, we are expanding electricity generation from storage systems and gas. As part of the partnership with Vorarlberger Illwerke, in 2014 we will begin construction of the pumped storage power station Obervermunt II with an output of 360 MW. In addition to pumped storage capacities, gas power stations such as the project at the Lausward location are to make the greatest contribution in providing our generation portfolio with the flexibility required for increasing the use of renewable energies. Investments of €0.5 billion are planned to be made for this purpose by 2015.

Municipalities, municipal utilities, industry and business customers as well as the general public want to have a greater say in energy-related decisions in their localities than has been the case in the past. EnBW is responding to these efforts and is developing and establishing local energy solution offers with the intention of becoming the first point of contact for energy issues. In order to expand this area in which we currently generate revenue of around €200 million, we will invest around €350 million by 2015. We are also open to partnership models along the entire value added chain. We intend to achieve economies of scale by opening up further EnBW’s internal invoicing and settlement systems to third parties.

In addition to the abovementioned investments in low-carbon generation (€2.9 billion) and our position as a local solutions provider (€0.34 billion), we will also invest around €2 billion in the existing portfolio such as grid maintenance and ongoing projects like the completion of the RDK 8 hard coal power station in Karlsruhe. As a supplementary measure, we are optimising EnBW’s existing portfolio of power stations and ensuring that the operation and decommissioning of our nuclear power plants is performed safely following the highest security standards.



Anticipated business development

Starting with the quarterly financial report for January to March 2013, the EnBW group is changing its segment reporting on account of the realignment of our business model and restructuring of the group. The new segment structure is as follows:

- Generation and trading segment
- Renewable energies segment
- Grids segment
- Sales segment
- Other/consolidation

EnBW will face great challenges in the fiscal year 2013, primarily due to the declining spreads in generation as well as the full auctioning of CO₂ allowances which began to take effect as of the beginning of 2013. By contrast, positive effects are emerging as a result of the "Fokus" efficiency programme taking effect more quickly, with the measures being fully developed by the end of 2013 and leading to savings of some €750 million as of 2014. The many different strategic initiatives launched to extend EnBW's portfolio of local energy solutions and the major investments currently being made, such as in offshore wind farms and coal-fired power stations, will also lead to noticeable increases in earnings, meaning we can expect a renewed increase in the operating profit as of 2014.

Anticipated development of unit sales and own generation

The revenue of the EnBW group in absolute terms is of secondary importance for earnings performance as revenue in the electricity generation and trading segment is determined in particular by the trading activities of our trading entity. Depending on how the market develops over the year, prices and revenue may be subject to considerable fluctuations without this being reflected as such in the profit or loss. In the sales segment, the development of revenue tends to be influenced by the indexing of the gas price to the oil price, but that is not decisive for the gross margin in the gas segment.

Revenue in the grid segment depends greatly on the development of EEG revenue, although this does not have an impact on the development of earnings.

Rather, the company's future results of operations are influenced to a greater extent by unit sales in the B2C and B2B sectors of electricity and gas. Overall, we expect sales in the electricity business in 2013 to continue to fall in comparison to 2012. In the B2C business, sales are most likely to fall again slightly on account of competition; while in the B2B business sales are expected to fall considerably in the area of industrial customers. For gas, provided temperatures are average, we expect sales in the B2C business to increase marginally as a result of increased marketing. In the B2B business we expect there to be considerable increases, although this depends on the competitive environment with regard to redistributors.

Our own generation capacity will increase in 2013 as a result of starting trial operations at the coal-fired power station RDK 8 and the continuous expansion of renewable energies.

(External) sales and own generation at the EnBW group in 2013 compared to the prior year

B2C electricity sales	-1% to -5%
B2C gas sales	+1% to +5%
B2B electricity sales	-5% to -10%
B2B gas sales	+5% to +10%
Own generation in the wider sense ¹	+5% to +10%

¹ Electricity generated by the group includes fully and partly owned power stations and long-term electricity procurement agreements.

Anticipated development of earnings (adjusted EBITDA)

Up to now, the generation and trading segment has made the largest contribution to EnBW's earnings – albeit at a declining rate as of late – and thus determines the group's earnings to a large degree. Adjusted EBITDA in this segment will fall considerably in 2013. This is primarily due to prices and spreads falling on the wholesale markets for electricity during prior periods in which we agreed on sales prices for quantities of electricity that are to be supplied in 2013. Coupled with this is the full auctioning of the CO₂ allowances taking effect as of 2013. Our efficiency improvement measures may only slightly cushion these negative influences in this segment in 2013.

The operating result in the renewable energies segment will most likely drop in 2013. One cause of this is an underlying effect from 2012 when conditions were unusually good all year round for electricity generation from run-of-the-river power stations. A second reason for the fall in earnings are falling electricity prices, which are having the primary effect of reducing the profitability of our run-of-the-river power stations. As we anticipate average weather and water conditions in the planning for 2013, this in itself signals a drop in earnings. Also activities relating to onshore wind power will increase earnings in this area. However, the improvement will not be enough to offset the loss of earnings in the area of run-of-the-river power. As of 2014, onshore wind turbines are expected to generate contributions to earnings.

Adjusted EBITDA in the grids segment is likely to increase considerably in 2013 as a result of the rise in network user charges stemming from the loss of charges on account of returning surplus revenue to customers in 2012 as a result of exceeding the 5% limit in the regulatory account.

Development of earnings in the sales segment is also expected to be positive in 2013. The increased marketing of local solution offers in the field of energy should lead to an increase in earnings supported by more efficient cost structures, in particular in the B2B segment.

As things stand today, changes in the consolidated companies will not have any effect on earnings in 2013.

As a result, adjusted EBITDA at group level in 2013 will be between -5% and -10% below the 2012 level. The current extensive efficiency measures will only offset some of the additional costs incurred, especially from the full auctioning

of CO₂ allowances. For 2014, we expect earnings – adjusted to eliminate the changes in the consolidated companies – to rise by 3% as a result of the successive commissioning of power stations and wind farms as well as the effectiveness of our efficiency programme.

Development of earnings 2013 (adjusted EBITDA) ¹ compared to the prior year	2013	2012
Generation and trading segment	-30% to -40%	1,125.2
Renewable energies segment	-10% to -20%	238.7
Grids segment	+15% to +25%	773.6
Sales segment	+10% to +20%	240.7
Other/consolidation	-	-35.1
Consolidated companies	No changes	-
Adjusted EBITDA, group	-5% to -10%	2,343.1

¹ Segments adjusted for changes in the consolidated companies.

Adjusted group net profit, dividend, non-operating result and ROCE

Adjusted amortisation and depreciation will increase slightly in 2013 as a result of high level of growth in investment, among other things. The adjusted investment result for 2013 will most likely be at the level of 2012. The negative adjusted financial result is likely to fall in 2013 as a result of repaying bonds in 2012 and continuing to repay financial liabilities over the course of 2013. The adjusted tax rate is expected to range from 25% to 30%. On the whole, we therefore anticipate the adjusted group net profit after non-controlling interests to fall by between 20% and 30% in the fiscal year 2013, as the decrease in EBITDA will only be offset to a small degree by the improvement in the financial result. Furthermore, the adjusted group net profit is not expected to improve in 2014 due to the planned divestiture activities.

For the non-operating result for 2013, we expect the divestiture programme introduced will help to contribute to profits.

We plan to finance the budgeted net investments from cash flow from operating activities (funds from operations, FFO). The adjusted net debt will most likely fall significantly as a result of the positive balance of FFO, investments and divestitures in 2013. With the discount rate for nuclear energy and pension provisions remaining unchanged, we have set ourselves an adjusted net debt target of between €7.0 billion and €7.5 billion. As a result, despite the drop in earnings, we expect to see an improvement in the dynamic leverage ratio in 2013 in comparison to 2012, thereby safeguarding our rating. Taking financial stability into consideration, in principle we continue to aim to achieve a distribution rate of 40% to 60% of adjusted group net profit.

The fall in return on capital employed (ROCE) seen in 2012 will also continue in 2013 as a result of divestiture activities. We expect a ROCE of around 10% for the fiscal year 2013.

Business development at EnBW AG

EnBW AG's net profit for the year is primarily affected by the investment result, and the anticipated decrease in earnings from the group's operating business will therefore also have an impact on the net profit for the year reported by EnBW AG. Despite this, EnBW AG's earnings are most likely to improve in 2013 in comparison to the prior year due to the positive non-recurring effects, among others, expected from divestitures.

Significant opportunities and risks of the next two years

EnBW's key targets relate to the adjusted EBITDA and adjusted net debt, which the forecast also focuses on. Potential factors influencing the forecast are described in detail in the risk and opportunities report ([Management report](#) [Risk and opportunities report](#) p. 113ff).

EnBW's future adjusted EBITDA is largely determined by the generation margin, which reflects how commodity and electricity prices develop. As part of our hedging strategy, we have entered into forward contracts to hedge the major volumes for 2013 and to a large extent for the following year as well. The unhedged quantities naturally increase in the years thereafter, as do opportunities and risks.

Another risk factor for the results of operations is the availability of our power stations. In the past, our power stations always achieved above-average availability in a national comparison.

With regard to renewable energies, electricity production and therefore earnings too depend strongly on weather conditions (water, wind). We always base our forecast on average years. Furthermore, the development of electricity prices exerts particular influence on the profitability of our run-of-the-river power stations.

In the sales segment, changes in consumer behaviour can give rise to considerable risks. Risks relating to electricity and gas sales as well as the customer base further arise from unforeseeable activities of competitors and the uncertain political and legal framework for pricing measures. Gas sales are generally highly dependent on temperatures. Consumption in trade and industry is influenced significantly by economic development. Sales opportunities for EnBW arise from the growing demand for energy services surrounding issues such as energy efficiency, smart home, energy management, electromobility and local generation.

Some 100 electricity and gas franchise agreements within the network territory of EnBW and its main equity investments expire by 2014 and are up for renegotiation. Major franchise agreements for EnBW are those with the municipalities that are members of the Neckar-Elektrizitäts-Verband and the cities of Stuttgart, Düsseldorf and Heilbronn.

The “Fokus” project is currently on schedule, with the full impact of improvement measures being felt as of 2014, one year earlier than originally planned. For fiscal year 2012, improvements in earnings already exceeded original expectations.

The adjusted net debt can be influenced by a variety of factors over which the company has little or no control.

The discount rate for pension provisions remains exposed to opportunity and risk depending on how interest rates develop. Changes in the present value of defined benefit obligations can in turn affect the amount of EnBW's adjusted net debt. An interest rate sensitivity of 0.5% corresponds to a change in the adjusted net debt of between €400 million and €450 million.

A continued downward trend in the discount rate gives rise to the risk of the present value of nuclear power provisions increasing. An interest rate sensitivity of 0.5% corresponds to a change in the adjusted net debt of around €500 million.

To date, no definitive solution has been found to tackle the problem of how to ultimately store highly radioactive waste in Germany. The legal obligation of operators to bear costs for an alternative site to Gorleben is under dispute. It therefore cannot be ruled out that the costs of the exploration and development of ultimate storage locations as well as ultimate storage itself could have significant adverse effects on the adjusted net debt in particular, but also on the results of operations of the EnBW group.

The German Nuclear Fuel Rod Tax Act entered into effect on 1 January 2011 and provides for a tax rate of €145 per gram of nuclear fuel employed. There will be opportunities for adjusted net debt depending on the decision the Federal Constitutional Court makes on the constitutionality of the German Nuclear Fuel Rod Tax Act.

As part of implementing the corporate strategy, EnBW is planning targeted recoverable activities involving the sale of existing equity investments. Should the divestiture proceeds generated not meet our expectations and projections, this would affect our investment programme and adjusted net debt.

Opportunities and risks relating to EnBW's financial assets also arise from the increasing volatility of the capital markets. A 5% change in the performance of investments corresponds to a change in the adjusted net debt of around €350 million.

The fact that conditions have become tougher for the industry means that rating agencies are paying closer attention to German energy companies. Despite the measures taken to reinforce our sound financial position, there is still a risk of EnBW being downgraded.

Developments in human resources

The realignment of the group structure, involving downsizing and restructuring our human resources, will be implemented in 2013. Following the signing of the redundancy plan and the reconciliation of interests on the part of the employer and employees, the social criteria for redundancy will be determined in the first half of 2013. Employees whose jobs will be cut in future will be offered support from EnBW with finding a new job either inside or outside of the group and with acquiring further qualifications.

Restructuring efforts also require the framework for training at EnBW to be adjusted. In future, training activities will be bundled at only a few companies, with the number of training locations being reduced from 14 to 9. While EnBW's training activities went beyond its own needs in the past, the number of trainees as well as the job profiles on offer and job opportunities for new hires will in future be even more tailored to EnBW's actual personnel needs. EnBW will take on around 200 trainees and students in 2013.

The Verband der Privaten Energiewirtschaft (association of private energy companies) in Baden-Württemberg and the ver.di Vereinte Dienstleistungsgewerkschaft trade union are currently in negotiations concerning the future development of collective remuneration. An offer presented on behalf of the employer in December 2012 was not finalised and is the subject of further negotiations.

The project designed to establish mobile working within the company has begun and is set to be concluded in 2013 after a works agreement has come into effect. The plan is to then be able to offer mobile working in the form of alternating telecommuting, i.e., working from home on a day-to-day-basis, throughout the group.

When working together with external companies, EnBW places great value on health and safety management. The procedure for such collaboration is regulated in a group standard which will be implemented in 2013, the aim being to improve the quality of industrial safety and thereby reducing the number of accidents.

Developments in environmental protection

Based on current estimates, the proposals for implementing EU industrial emissions guidelines and the nationwide ordinance on handling substances hazardous to water will lead to an increase in environmental expenditure. Such expenses relate to technical renovations in the area of air purification at power stations as well as systems for retaining substances hazardous to water in the grid segment. This also leads to increased operating costs. Considerably increasing control and reporting obligations also raise administrative expenses accordingly.

As a result of nuclear power plants gradually shutting down, we expect there to be an increase in specific CO₂ emissions for electricity generation. For the medium to long term, we expect the volume of specific CO₂ emissions to fall as the expansion of renewable energies increases.

In future, EnBW will also be committed to the preservation of biological diversity in Baden-Württemberg. Among other projects, the "Impulse für die Vielfalt" (Stimuli for Diversity) programme is particularly worthy of mention, with EnBW taking the lead in the protection of amphibians in Baden-Württemberg.

Research and development

Expenditure for self-funded research and development activities in 2013 and 2014 is expected to match the level of 2012 (€31.6 million). We also assume that headcount will remain unchanged in this area.

EnBW will continue to pursue its focus on its research and development activities across the company's strategic moves. To ensure sustainable energy supply we will continue in future to viably exploit new technologies, especially for renewable energies and local solutions. The challenge primarily in Germany lies in feeding in large volumes of fluctuating renewable energy into the grid for consumption as and when it is needed. As a result, we will continue in the planning period to examine the possibilities of making the energy system more flexible, with local solutions playing a major role as well as the increasingly sparing use of fossil fuels.

Management's overall assessment of the anticipated development

For 2013, we expect EnBW's adjusted EBITDA to fall between 5% and 10% in comparison to 2012. For 2014, we anticipate an increase of 3% in the operating result adjusted for consolidation effects. We attach great importance to EnBW's sound financial position. For this reason we strive to lower our adjusted net debt, thereby also helping us maintain our rating.

Future-oriented statements

This report contains statements relating to the future that are based on current assumptions and projections of the management of EnBW. Such statements are subject to risks and uncertainties. These and other factors mean that the actual results, financial position, developments or performance of the company may diverge materially from the estimates made here. EnBW assumes no obligation of any kind to update future-oriented statements or to adjust them to reflect future events or developments.

Condensed financial statements

of the EnBW group

- 144 Income statement
- 145 Statement of comprehensive income
- 146 Balance sheet
- 147 Cash flow statement
- 148 Statement of changes in equity
- 149 Significant shareholdings extracted from the list of shareholdings pursuant to Sec. 313 (2) HGB as of 31 December 2012
- 151 Information on the result of the audit of the consolidated financial statements and the combined management report of the company and the group for fiscal year 2012

Income statement

€ millions ¹	Notes	2012	2011
Revenue including electricity and energy taxes		20,131.1	19,723.6
Electricity and energy taxes		-885.2	-967.3
Revenue	(1)	19,245.9	18,756.3
Changes in inventories		-26.6	30.6
Own work capitalised		59.8	59.5
Other operating income	(2)	1,072.4	934.1
Cost of materials	(3)	-15,288.6	-15,094.3
Personnel expenses	(4)	-1,599.3	-1,608.2
Other operating expenses	(5)	-1,170.5	-1,268.4
EBITDA		2,293.1	1,809.6
Amortisation and depreciation	(6)	-1,017.9	-1,131.8
Earnings before interest and taxes (EBIT)		1,275.2	677.8
Investment result	(7)	144.3	-632.2
of which net profit/loss from entities accounted for using the equity method		(25.5)	(-680.1)
of which other income from investments		(118.8)	(47.9)
Financial result	(8)	-712.1	-803.7
of which finance revenue		(395.9)	(347.0)
of which finance costs		(-1,108.0)	(-1,150.7)
Earnings before tax (EBT)		707.4	-758.1
Income tax	(9)	-172.6	-32.8
Group net profit/loss		534.8	-790.9
of which profit/loss shares attributable to non-controlling interests		(61.3)	(51.4)
of which profit/loss shares attributable to the equity holders of EnBW AG		(473.5)	(-842.3)
Shares outstanding (millions), weighted average		257.265	244.257
Earnings per share from group net profit/loss (€)²	(26)	1.84	-3.45

¹ Prior-year figures restated. Further disclosures are presented in the notes under "Changes in accounting policy". The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

² Basic and diluted; in relation to the profit/loss shares attributable to the equity holders of EnBW AG.

Statement of comprehensive income

€ millions ¹	2012	2011
Group net profit/loss	534.8	-790.9
Difference from currency translation	51.6	-83.1
Cash flow hedge	-309.6	-111.5
Available-for-sale financial assets	169.9	-323.3
Entities accounted for using the equity method	0.0	-6.7
Income taxes on other comprehensive income	77.0	50.3
Other comprehensive income	-11.1	-474.3
Total comprehensive income	523.7	-1,265.2
of which profit/loss shares attributable to non-controlling interests	(73.1)	(29.4)
of which profit/loss shares attributable to the equity holders of EnBW AG	(450.6)	(-1,294.6)

¹ Prior-year figures restated. Further disclosures are presented in the notes under "Changes in accounting policy". The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

Balance sheet

€ millions ¹	Notes	31/12/2012	31/12/2011	1/1/2011
Assets				
Non-current assets				
Intangible assets	(10)	1,926.7	2,004.2	2,118.8
Property, plant and equipment	(11)	13,782.5	13,791.5	13,741.9
Investment properties	(12)	81.5	77.3	99.0
Entities accounted for using the equity method	(13)	2,355.9	3,042.4	3,895.1
Other financial assets	(14)	6,058.7	5,442.8	5,950.6
Trade receivables	(15)	567.4	531.1	475.6
Income tax refund claims	(16)	17.1	19.2	23.7
Other non-current assets	(17)	304.6	314.9	288.2
Deferred taxes	(23)	46.4	38.3	27.3
		25,140.8	25,261.7	26,620.2
Current assets				
Inventories	(18)	1,285.9	955.1	987.8
Financial assets	(19)	785.6	1,011.0	964.2
Trade receivables	(15)	3,919.3	3,075.3	3,212.6
Income tax refund claims	(16)	169.4	164.1	389.1
Other current assets	(17)	2,204.5	2,279.3	1,629.1
Cash and cash equivalents	(20)	2,583.3	2,732.3	1,831.2
		10,948.0	10,217.1	9,014.0
Assets held for sale	(25)	681.1	209.9	11.8
		11,629.1	10,427.0	9,025.8
		36,769.9	35,688.7	35,646.0
Equity and liabilities				
Equity	(21)			
Equity holders of EnBW AG				
Subscribed capital		708.1	640.0	640.0
Capital reserve		774.2	22.2	22.2
Revenue reserves		4,541.9	4,272.3	5,372.6
Treasury shares		-204.1	-204.1	-204.1
Other comprehensive income		108.3	131.2	584.8
		5,928.4	4,861.6	6,415.5
Non-controlling interests		1,255.0	1,265.2	1,155.4
		7,183.4	6,126.8	7,570.9
Non-current liabilities				
Provisions	(22)	11,132.5	10,760.5	10,125.7
Deferred taxes	(23)	1,325.3	1,492.5	1,797.6
Financial liabilities	(24)	5,560.1	6,219.1	6,631.9
Income tax liabilities	(24)	289.6	264.1	195.6
Other liabilities and subsidies	(24)	2,006.0	1,959.0	1,963.9
		20,313.5	20,695.2	20,714.7
Current liabilities				
Provisions	(22)	1,225.6	1,243.3	1,048.2
Financial liabilities	(24)	1,201.1	1,426.0	613.0
Trade payables	(24)	3,466.5	3,514.3	3,154.7
Income tax liabilities	(24)	254.2	200.5	210.5
Other liabilities and subsidies	(24)	3,125.0	2,482.0	2,334.0
		9,272.4	8,866.1	7,360.4
Liabilities directly associated with the assets classified as held for sale	(25)	0.6	0.6	0.0
		9,273.0	8,866.7	7,360.4
		36,769.9	35,688.7	35,646.0

¹ Prior-year figures restated. Further disclosures are presented in the notes under "Changes in accounting policy" and "Restatement of prior-year figures".
The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

Cash flow statement

€ millions ^{1,2}	2012	2011
1. Operating activities		
EBITDA	2,293.1	1,809.6
Changes in provisions	-409.1	191.5
Gain/loss on disposal of non-current assets	-6.5	14.7
Other non-cash expenses/income	105.0	169.3
Change in assets and liabilities from operating activities	-915.1	-414.7
Inventories	(-393.4)	(-137.5)
Net balance of trade receivables and payables	(-867.2)	(341.4)
Net balance of other assets and liabilities	(345.5)	(-618.6)
Income tax paid	-211.1	-23.0
Cash flow from operating activities	856.3	1,747.4
2. Investing activities		
Capital expenditures on intangible assets and property, plant and equipment	-816.8	-1,084.5
Cash received from disposals of intangible assets and property, plant and equipment	89.8	33.8
Cash received from construction cost and investment subsidies	66.2	83.1
Cash paid for the acquisition of subsidiaries and entities accounted for using the equity method	-38.8	-168.5
Cash received from the sale of subsidiaries and entities accounted for using the equity method	258.1	6.3
Cash paid for investments in other financial assets	-1,560.7	-1,073.8
Cash received from the sale of other financial assets	1,176.9	1,207.6
Cash received/paid for investments in connection with short-term finance planning	204.8	-56.4
Interest received	188.5	217.8
Dividends received	157.7	176.3
Cash flow from investing activities	-274.3	-658.3
3. Financing activities		
Interest paid for financing activities	-335.9	-346.9
Dividends paid	-313.3	-468.1
Cash received from changes in ownership interest without loss of control	0.0	245.6
Cash paid for changes in ownership interest without loss of control	-1.1	-19.8
Proceeds from financial liabilities	570.8	978.8
Repayment of financial liabilities	-1,470.7	-577.8
Capital increase	819.4	0.0
Cash flow from financing activities	-730.8	-188.2
Net change in cash and cash equivalents	-148.8	900.9
Net foreign exchange difference	-0.2	0.2
Change in cash and cash equivalents	-149.0	901.1
Cash and cash equivalents at the beginning of the period	2,732.3	1,831.2
Cash and cash equivalents at the end of the period	2,583.3	2,732.3

¹ Prior-year figures restated. Further disclosures are presented in the notes under "Changes in accounting policy". The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

² Further disclosures are presented under [33] "Notes to the cash flow statement". The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

Statement of changes in equity

	€ millions ^{1,2}	Subscribed capital and capital reserve ³	Revenue reserves	Treasury shares	Difference from currency translation	Cash flow hedge	Available-for-sale financial assets	Entities accounted for using the equity method	Equity holders of EnBW AG ⁴	Non-controlling interests ⁴	Total
As of 1 January 2011⁵	662.2	5,372.6	-204.1	-49.6	102.8	524.9	6.7	6,415.5	1,155.4	7,570.9	
Other comprehensive income					-68.8	-59.1	-317.7	-6.7	-452.3	-22.0	-474.3
Group net loss/profit ⁶		-842.3							-842.3	51.4	-790.9
Total comprehensive income	0.0	-842.3	0.0	-68.8	-59.1	-317.7	-6.7	-1,294.6	29.4	-1,265.2	
Dividends paid		-373.7							-373.7	-71.0	-444.7
Other changes ⁷		115.7		-1.3					114.4	151.4	265.8
As of 31 December 2011	662.2	4,272.3	-204.1	-119.7	43.7	207.2	0.0	4,861.6	1,265.2	6,126.8	
Other comprehensive income					45.1	-216.5	148.5		-22.9	11.8	-11.1
Group net profit		473.5							473.5	61.3	534.8
Total comprehensive income	0.0	473.5	0.0	45.1	-216.5	148.5	0.0	450.6	73.1	523.7	
Capital increase	820.1								820.1		820.1
Dividends paid		-207.6							-207.6	-83.0	-290.6
Other changes ⁷		3.7							3.7	-0.3	3.4
As of 31 December 2012	1,482.3	4,541.9	-204.1	-74.6	-172.8	355.7	0.0	5,928.4	1,255.0	7,183.4	

¹ Prior-year figures restated. Further disclosures are presented in the notes under "Changes in accounting policy" and "Restatement of prior-year figures".

The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

² Further disclosures are presented in note 21 "Equity". The full consolidated financial statements are published at > www.enbw.com/report2012 > Financial report 2012.

³ Of which subscribed capital € 708.1 million and capital reserve € 774.2 million (31 December 2011: subscribed capital € 640.0 million and capital reserve € 22.2 million).

⁴ Of which other comprehensive income directly associated with assets classified as held for sale amounting to € 0.0 million as of 31 December 2012 (31 December 2011: € 16.5 million).

Attributable to the equity holders of EnBW AG: € 0.0 million (31 December 2011: € 16.5 million). Attributable to non-controlling interests: € 0.0 million (31 December 2011: € 0.0 million).

⁵ Revenue reserves include retroactive restatements as of 1 January 2011 of € -31.6 million. Attributable to the equity holders of EnBW AG: € -31.6 million. Attributable to non-controlling interests: € 0.0 million.

⁶ The group net loss includes retroactive restatements for the period from 1 January 2011 to 31 December 2011 of € 25.0 million. Attributable to the equity holders of EnBW AG: € 25.0 million. Attributable to non-controlling interests: € 0.0 million.

⁷ Of which changes in revenue reserves and the difference from currency translation due to changes in ownership interest of subsidiaries without loss of control amounting to € -0.4 million and € 0.0 million respectively (prior year: € 99.7 million and € -1.3 million respectively). Of which changes in non-controlling interests due to changes in ownership interest of subsidiaries without loss of control amounting to € -0.6 million (prior year: € 146.6 million).

Significant shareholdings extracted from the list of shareholdings pursuant to Sec. 313 (2) HGB as of 31 December 2012

		Footnote	Capital share ¹ [%]	Equity ² [in € thousands]	Earnings ² [in € thousands]
Electricity generation and trading segment					
Subsidiaries					
1	EnAlpin AG, Visp/Switzerland	6	100.00	177,660	19,520
2	EnBW Erneuerbare Energien GmbH, Stuttgart	3	100.00	60,024	-
3	EnBW Kraftwerk Lippendorf Beteiligungsgesellschaft mbH, Stuttgart	3	100.00	297,640	-
4	EnBW Kraftwerke AG, Stuttgart	3	100.00	1,063,141	-
5	EnBW Trading GmbH, Karlsruhe	3	100.00	38,514	-
6	Energiedienst AG, Rheinfelden	6	100.00	214,788	55,064
7	KMS Kraftwerke Grundbesitzmanagement und -service GmbH & Co. KG, Karlsruhe		100.00	235,319	2,104
8	TWS Kernkraft GmbH, Gemmrigheim	3	100.00	149,297	-
9	EnBW Kernkraft GmbH, Obrigheim	3	99.80	10,000	-
10	Energiedienst Holding AG, Laufenburg/Switzerland	6, 10	66.67	746,753	71,986
Entities accounted for using the equity method					
11	Borusan EnBW Enerji yatırımları ve Üretim Anonim Şirketi, İstanbul/Turkey	6, 9	50.00	198,004	-1,994
12	Rheinkraftwerk Iffezheim GmbH, Iffezheim	9	50.00	107,017	2,989
13	Schluchseewerk Aktiengesellschaft, Laufenburg/Baden	5	50.00	59,339	2,809
14	Bayerische-Schwäbische Wasserkraftwerke Beteiligungsgesellschaft mbH, Grundremmingen	5	37.80	79,513	9,142
15	Grosskraftwerk Mannheim AG, Mannheim	5	32.00	114,142	6,647
16	Mátrai Erőmű ZRt. (MATRA), Visonta/Hungary	5	21.71	301,995	68,464
Electricity grid and sales segment					
Subsidiaries					
17	EnBW Regional AG, Stuttgart	3	100.00	730,860	-
18	EnBW Vertrieb GmbH, Stuttgart	3	100.00	34,085	-
19	Energiedienst Netze GmbH, Rheinfelden	3, 6	100.00	30,165	-
20	EVGA Grundstücks- und Gebäudemanagement GmbH & Co. KG, Obrigheim		100.00	91,621	18,828

		Footnote	Capital share ¹ (%)	Equity ² (in € thousands)	Earnings ² (in € thousands)
21	Facilma Grundbesitzmanagement und -service GmbH & Co. Besitz KG, Obrigheim		100.00	199,595	7,352
22	Netzgesellschaft Ostwürttemberg GmbH, Ellwangen	3	100.00	135	-
23	NWS Grundstücksmanagement GmbH & Co. KG, Obrigheim		100.00	320,933	50,710
24	Stadtwerke Düsseldorf Netz GmbH, Düsseldorf	3,5	100.00	1,000	-
25	TransnetBW GmbH, Stuttgart (formerly: EnBW Transportnetze AG, Stuttgart)	3	100.00	178,141	-
26	Watt Deutschland GmbH, Frankfurt am Main	3	100.00	4,896	-
27	Yello Strom GmbH, Cologne	3	100.00	1,100	-
28	EnBW Ostwürttemberg DonauRies AG, Ellwangen	3	99.73	115,439	-
29	ZEAG Energie AG, Heilbronn		98.26	164,955	15,377
30	Stadtwerke Düsseldorf AG, Düsseldorf	5	54.95	379,707	70,291
31	Pražská energetika a.s., Prague/Czech Republic	8	41.40	377,324	79,825

Entities accounted for using the equity method

32	Budapesti Elektromos Müvek Nyrt. [ELMÜ], Budapest/Hungary	5	27.25	791,903	41,091
33	Eszak-Magyarországi Áramszolgáltató Nyrt. [EMASZ], Miskolc/Hungary	5	26.83	282,928	23,786
34	FairEnergie GmbH, Reutlingen	4,5	24.90	90,766	-
35	Stadtwerke Karlsruhe GmbH, Karlsruhe	4,5	20.00	165,710	-

Gas segment

Subsidiaries

36	GasVersorgung Süddeutschland GmbH, Stuttgart	3,7	100.00	65,000	-
37	Erdgas Südwest GmbH, Karlsruhe		79.00	46,975	14,517

Entities accounted for using the equity method

38	Friedeburger Speicherbetriebsgesellschaft mbH "Crystal", Friedeburg	9	50.00	151,147	0
----	---	---	-------	---------	---

Energy and environmental services segment

Subsidiaries

39	EnBW City GmbH & Co. KG, Obrigheim (formerly: EnBW City GmbH & Co. KG, Stuttgart)		100.00	8,885	8,545
40	EnBW Immobilienbeteiligungen GmbH, Stuttgart		100.00	405,119	4,976
41	EnBW Kommunale Beteiligungen GmbH, Stuttgart	3	100.00	995,226	-
42	EnBW Operations GmbH, Karlsruhe	3	100.00	15,287	5,087
43	EnBW Systeme Infrastruktur Support GmbH, Karlsruhe	3	100.00	16,500	-
44	U-plus Umweltservice AG, Karlsruhe	3	100.00	169,870	2,337

		Footnote	Capital share ¹ (%)	Equity ² (in € thousands)	Earnings ² (in € thousands)
45	AWISTA Gesellschaft für Abfallwirtschaft und Stadtreinigung mbH, Düsseldorf	5	51.00	43,031	12,503
Entities accounted for using the equity method					
46	Zweckverband Landeswasserversorgung, Stuttgart	5	27.20	108,140	-101
47	Zweckverband Bodensee-Wasserversorgung, Stuttgart	5	22.13	146,323	1,200
Financial and other holdings					
Subsidiaries					
48	EnBW International Finance B.V., Amersfoort/Netherlands		100.00	1,162,759	31,045
49	Neckarwerke Stuttgart GmbH, Stuttgart		100.00	1,154,295	55,139
Entities accounted for using the equity method					
50	EWE Aktiengesellschaft, Oldenburg	5	26.00	1,981,100	-258,400

¹ Shares of the respective parent company calculated pursuant to Sec. 313 (2) HGB (as of 31 December 2012).

² In the case of separate entities, the figures stem from financial statements prepared pursuant to local principles and do not show the contributions of each entity to the consolidated financial statements. Financial statements denominated in foreign currency are translated.

³ Profit and loss transfer agreement and/or domination agreement.

⁴ Profit and loss transfer agreement with third parties.

⁵ Prior-year figures.

⁶ Preliminary figures.

⁷ Held via EnBW Eni Verwaltungsgesellschaft mbH, Karlsruhe (EnBW shareholding: 50%), which is fully consolidated by virtue of the casting vote regulation.

⁸ Control due to contractual agreement.

⁹ Joint control.

¹⁰ Before taking treasury shares of the company into account.

Information on the result of the audit of the consolidated financial statements and the combined management report of the company and the group for fiscal year 2012

The above – condensed – financial statements for fiscal year 2012 intended for inclusion in the integrated report do not comprise the notes to the consolidated financial statements. The full set of financial statements – including the notes to the consolidated financial statements – and the combined management report of the company and the group, both for fiscal year 2012, were audited by KPMG AG Wirtschaftsprüfungsgesellschaft as the auditor and group auditor elected by the annual general meeting of EnBW Energie Baden-Württemberg AG on 26 April 2012. Based on its audit, KPMG AG Wirtschaftsprüfungsgesellschaft arrived at the overall conclusion that the audit did not lead to any reservations and issued an unqualified audit opinion. The full set of financial statements and the combined management report of the company and the group, both for fiscal year 2012, as well as the unqualified audit opinion issued by the auditor can be accessed on the website of EnBW Energie Baden-Württemberg AG.

Corporate governance

153 Declaration of compliance and corporate governance report

The declaration of compliance and corporate governance report are available on the internet at www.enbw.com/report2012.

153 The Supervisory Board

155 Offices held by members of the Board of Management

156 Other offices held by members of the Supervisory Board

The Supervisory Board

Members

Dr. Claus Dieter Hoffmann, Stuttgart

Managing partner of
H + H Senior Advisors GmbH
Chairman

Dietrich Herd, Philippsburg

Chairman of the central works council of
EnBW Kraftwerke AG
Deputy chairman

Günther Cramer, Kassel

Supervisory board chairman of
SMA Solar Technology AG

Dirk Gaerte, Sigmaringendorf

District administrator of the Sigmaringen
district

Reiner Koch, Glienicke/Nordbahn

Responsible for supply and waste disposal
divisions at ver.di head office

Silke Krebs, Stuttgart

Minister at the state ministry of
Baden-Württemberg

Marianne Kugler-Wendt, Heilbronn

Regional director at ver.di,
Heilbronn-Neckar-Franconia district

Wolfgang Lang, Karlsruhe

Chairman of the central works council of
EnBW Systeme Infrastruktur Support GmbH

Dr. Hubert Lienhard, Heidenheim

CEO of Voith GmbH

Arnold Messner, Aichwald

Chairman of the central works council of
EnBW Regional AG

Bodo Moray, Mannheim

ver.di trade union secretary responsible for
supply and waste disposal divisions in
Baden-Württemberg

Bernd Mundig, Hochdorf

Deputy chairman of the works council of
EnBW Operations GmbH

Gunda Röstel, Flöha

Managing director of Stadtentwässerung
Dresden GmbH and authorised signatory at
Gelsenwasser AG

Dr. Nils Schmid MdL, Nürtingen

Deputy prime minister and minister of
finance and economics of the state of
Baden-Württemberg

Klaus Schörnich, Düsseldorf

Chairman of the works council of
Stadtwerke Düsseldorf AG

Heinz Seiffert, Ehingen

District administrator of the Alb-Donau
district

Gerhard Stratthaus MdL, Brühl

Interim member of the management board of
Badische Staatsbrauerei Rothaus AG

Dietmar Weber, Esslingen

Chairman of the central works council of
EnBW Operations GmbH

Kurt Widmaier, Ravensburg

District administrator of the Ravensburg
district

Dr. Bernd-Michael Zinow, Pfinztal

Senior vice president public affairs at
EnBW Energie Baden-Württemberg AG

Committees

Personnel committee	Audit committee	Ad hoc committee (since 7 June 2010)
<ul style="list-style-type: none">> Dr. Claus Dieter Hoffmann Chair> Dietrich Herd> Arnold Messner> Dr. Nils Schmid<ul style="list-style-type: none">(until 26 April 2012 and since 14 June 2012)¹	<ul style="list-style-type: none">> Gunda Röstel Chair> Marianne Kugler-Wendt> Wolfgang Lang> Dr. Nils Schmid<ul style="list-style-type: none">(until 26 April 2012 and since 14 June 2012)¹> Klaus Schörnich> Heinz Seiffert> Dietmar Weber> Kurt Widmaier	<ul style="list-style-type: none">> Dr. Bernd Michael Zinow Chair> Dirk Gaerte> Dietrich Herd> Gerhard Stratthaus
Finance and investment committee <ul style="list-style-type: none">> Dr. Claus Dieter Hoffmann Chair> Dietrich Herd> Silke Krebs<ul style="list-style-type: none">(until 26 April 2012 and since 14 June 2012)¹> Dr. Hubert Lienhard> Arnold Messner> Bodo Moray> Heinz Seiffert<ul style="list-style-type: none">(since 8 November 2012)> Dr. Bernd-Michael Zinow> Kurt Widmaier<ul style="list-style-type: none">(until 8 November 2012)	Nomination committee <ul style="list-style-type: none">> Dr. Claus Dieter Hoffmann Chair> Günther Cramer<ul style="list-style-type: none">(until 26 April 2012 and since 14 June 2012)¹> Silke Krebs<ul style="list-style-type: none">(until 26 April 2012 and since 14 June 2012)¹> Gunda Röstel> Heinz Seiffert> Kurt Widmaier	Mediation committee (committee pursuant to Sec. 27 (3) German Co-determination Act (MitbestG)) <ul style="list-style-type: none">> Dr. Claus Dieter Hoffmann Chair> Dietrich Herd> Bernd Munding> Dr. Nils Schmid<ul style="list-style-type: none">(until 26 April 2012 and since 14 June 2012)¹

Key

Active member
Inactive member

As of 7 February 2013

¹ The interruption is due to the re-elections to the Supervisory Board at the annual general meeting on 26 April 2012.

Offices held by members of the Board of Management

Dr. Frank Mastiaux

(member and chair
since 1 October 2012)
> EWE Aktiengesellschaft
(since 18 October 2012)

Dr. Bernhard Beck

> EnBW Kernkraft GmbH (chair)
> EnBW Kraftwerke AG (chair)
> EnBW Operations GmbH
> EnBW Perspektiven GmbH, formerly
EnBW Technische Dienste und
kaufmännische Leistungen GmbH (chair)
> EnBW Systeme Infrastruktur
Support GmbH (chair)
> Energiedienst AG
> SOMENTEC Software AG (chair)
> Stadtwerke Düsseldorf AG
(chair since 5 October 2012)

> BKK VerbundPlus, Körperschaft des
öffentlichen Rechts
> EnBW Akademie Gesellschaft für Personal-
und Managemententwicklung mbH (chair)
> Energiedienst Holding AG

Thomas Kusterer

> EnBW Kernkraft GmbH
> EnBW Kraftwerke AG
> EnBW Regional AG
> EnBW Vertrieb GmbH
(since 16 February 2012)

> EVN AG (since 17 January 2013)

Dr. Dirk Mausbeck

> EnBW Operations GmbH (chair)
> EnBW Regional AG (chair)
> EnBW Vertrieb GmbH (chair)
> European Energy Exchange AG
> Stadtwerke Düsseldorf AG
> terranets bw GmbH, formerly GVS Netz
GmbH (until 29 February 2012)
> ZEAG Energie AG (member and
chair since 8 May 2012)

> EPEX SPOT SE (since 18 June 2012)
> GasVersorgung Süddeutschland GmbH
(chair since 1 October 2012)
> Pražská energetika a.s.
(since 17 October 2012)

Dr. Hans-Josef Zimmer

> EnBW Kernkraft GmbH
(since 1 January 2013)
> EnBW Kraftwerke AG
(since 12 March 2012)
> EWE Aktiengesellschaft
> terranets bw GmbH, formerly
GVS Netz GmbH (member since 5 March
2012 and chair since 16 April 2012)
> TransnetBW GmbH, formerly
EnBW Transportnetze AG (chair)

> Gesellschaft für Nuklear-Service mbH
(until 6 November 2012)
> Vorarlberger Illwerke AG

Hans-Peter Villis

(Member and chair
until 30 September 2012)
> EWE Aktiengesellschaft
> terranets bw GmbH, formerly
GVS Netz GmbH (member and chair
until 29 February 2012)
> Stadtwerke Düsseldorf AG
(chair)

> EVN AG
> GasVersorgung Süddeutschland GmbH
(chair)
> Pražská energetika a.s.

Key

Active member

Inactive member

Disclosures of office holders pursuant to
Sec. 285 No. 10 HGB

- > Membership in other statutory supervisory
boards
- > Membership in comparable domestic and
foreign control bodies of business
organisations

As of 7 February 2013
(disclosures of office holder
Hans-Peter Villis as of 30 September 2012)

Other offices held by members of the Supervisory Board

Dr. Claus Dieter Hoffmann

(chair)

> ING-DiBa AG

> C. A. Leuze GmbH + Co. KG
(until 30 June 2012)

> De Boer Holding NV
> EJOT Holding GmbH & Co. KG

Dietrich Herd

(deputy chair)

> EnBW Kernkraft GmbH
> EnBW Kraftwerke AG

Günther Cramer

> SMA Solar Technology AG (chair)

Dirk Gaerte

> Hohenzollerische Landesbahn AG
> SV SparkassenVersicherung Holding AG
> Wirtschaftsförderungs- und Standortmarketinggesellschaft Landkreis Sigmaringen mbH (chair)

> Flugplatz Mengen-Hohentengen GmbH (chair)
> Hohenzollerische Landesbank Kreissparkasse Sigmaringen, Anstalt des öffentlichen Rechts (chair)
> Kliniken Landkreis Sigmaringen GmbH (chair)
> Sparkassenverband Baden-Württemberg, Körperschaft des öffentlichen Rechts
> Technologie- und Innovationszentrum Pfullendorf GmbH (TIP)
> Verkehrsverbund Neckar-Alb-Donau GmbH (naldo)
> Zweckverband Oberschwäbische Elektrizitätswerke
> Zweckverband Protec Orsingen
> Zweckverband Thermische Abfallverwertung Donautal
> Zweckverband Tierkörperbeseitigung Warthausen

Reiner Koch

> EnBW Operations GmbH
(until 31 December 2012)
> Stadtwerke Düsseldorf AG

Silke Krebs

> MFG Medien- und Filmgesellschaft Baden-Württemberg mbH
> Stiftung Kinderland Baden-Württemberg (member and chair since 20 November 2012)
> Südwestrundfunk, Anstalt des öffentlichen Rechts
> SWR Media Services GmbH

Marianne Kugler-Wendt

> Bausparkasse Schwäbisch-Hall AG
> EnBW Kernkraft GmbH
> EnBW Kraftwerke AG
> SLK-Kliniken Heilbronn GmbH
> Heilbronner Versorgungs GmbH
> Regionale Gesundheitsholding Heilbronn-Franken GmbH
> Stadtwerke Heilbronn GmbH

Wolfgang Lang

> EnBW Systeme Infrastruktur Support GmbH
> EnBW Akademie Gesellschaft für Personal- und Managemententwicklung mbH

Dr. Hubert Lienhard

> Heraeus Holding GmbH
> SGL Carbon SE
> Voith Turbo Beteiligungen GmbH (until 9 February 2012, reappointed member and chair since 1 July 2012)

> Voith Hydro Holding GmbH & Co. KG (chair)
> Voith Industrial Services Holding GmbH & Co. KG (chair)
> Voith Paper Holding GmbH & Co. KG (chair)
> Voith Turbo GmbH & Co. KG (until 9 February 2012, reappointed member and chair since 1 July 2012)

Arnold Messner

> EnBW Regional AG

Bodo Moray

> EnBW Kraftwerke AG
> EnBW Regional AG

Bernd Mundig

> EnBW Operations GmbH

Gunda Röstel

> Universitätsklinikum Carl Gustav Carus Dresden an der Technischen Universität Dresden, Anstalt des öffentlichen Rechts

> University council of Technische Universität Dresden, Körperschaft des öffentlichen Rechts (chair)
> Sächsische Aufbaubank, Anstalt des öffentlichen Rechts
> Stadtwerke Burg GmbH

Dr. Nils Schmid

> Landesbank Baden-Württemberg, Anstalt des öffentlichen Rechts

> Baden-Württemberg International – Gesellschaft für internationale wirtschaftliche und wissenschaftliche Zusammenarbeit mbH (chair)
> Baden-Württemberg Stiftung gGmbH

> e-mobil BW GmbH (chair until 24 June 2012)

> Landeskreditbank Baden-Württemberg – Förderbank, Anstalt des öffentlichen Rechts (chair)
> Kreditanstalt für Wiederaufbau (KfW), Anstalt des öffentlichen Rechts

Klaus Schörnich

> Awista GmbH
> Stadtwerke Düsseldorf AG
> Stadtwerke Düsseldorf Netz GmbH

- Heinz Seiffert**
- > Krankenhaus GmbH Alb-Donau-Kreis (chair)
 - > ADK GmbH für Gesundheit und Soziales (chair)
 - > Donau-Iller-Nahverkehrsverbund GmbH
 - > Fernwärme Ulm GmbH
 - > Kreisbaugesellschaft mbH Alb-Donau (chair)
 - > Pflegeheim GmbH Alb-Donau-Kreis (chair)
 - > Regionalverband Donau-Iller (chair)
 - > Sparkasse Ulm, Anstalt des öffentlichen Rechts (chair)
 - > Zweckverband Oberschwäbische Elektrizitätswerke (chair since 1 May 2012)
 - > Zweckverband Thermische Abfallverwertung Donautal (chair)
- Gerhard Stratthaus**
- > Badische Staatsbrauerei Rothaus AG (chair until 12 May 2012, member until 5 September 2012, since inactive)
 - > Zentrum für Europäische Wirtschaftsforschung GmbH (member and chair until 31 December 2012)

- Dietmar Weber**
- > EnBW Operations GmbH
- Kurt Widmaier**
- > Oberschwabenklinik GmbH (chair)
 - > Bodensee-Oberschwaben-Bahn GmbH & Co. KG (chair)
 - > Bodensee-Oberschwaben Verkehrsverbundgesellschaft mbH
 - > Kreissparkasse Ravensburg (chair)
 - > LBS Landesbausparkasse Baden-Württemberg
 - > REAG Ravensburger Entsorgungsanlagen-gesellschaft mbH (chair)
 - > WIR – Gesellschaft für Wirtschafts- und Innovationsförderung Landkreis Ravensburg mbH (chair)
 - > Zentrum für Psychiatrie Weissenau, Anstalt des öffentlichen Rechts
 - > Zweckverband Oberschwäbische Elektrizitätswerke (chair until 30 April 2012)
 - > Zweckverband Tierkörperbeseitigung Warthausen

- Dr. Bernd-Michael Zinow**
- > EnBW Kernkraft GmbH
 - > TransnetBW GmbH, formerly EnBW Transportnetze AG

Key

Disclosures of office holders pursuant to Sec. 285 No. 10 HGB

- > Membership in other statutory supervisory boards
- > Membership in comparable domestic and foreign control bodies of business organisations

As of 7 February 2013

Service

- 159 Glossary
- 162 Our locations
- 164 Five-year summary
- 166 Important note
 - Top issues
 - Financial calendar

Glossary

B

Balancing energy

Ensures that consumers are supplied with sufficient electrical energy of an adequate quality even if unforeseen events occur in the electricity grid. Adjustments in the output can be made at short notice at power stations capable of generating balancing energy; these are power stations that can be started up quickly (such as gas turbine power stations) or pumped storage power stations. The term balancing energy is frequently used for the energy purchased by the transmission system operators to provide system-related services.

Balancing zones

The German transmission grid is subdivided into four regions, so-called balancing zones in which one transmission system operator is allocated the task of system responsibility and system management for each zone. The task of the transmission system operators (TSO) is to maintain at all times a supply balance between power generation and consumption in the balancing zone, and to provide balancing grids (electricity generators and consumers) with balancing energy from the secondary balancing energy reserve and the minutes reserve. The close cooperation between the German TSOs within the grid balancing organisation makes a contribution to keeping total demand for balancing energy to a minimum.

Base

Base load product. Constant purchase/supply throughout the period.

C

Certified Emission Reductions (CER)

Certified emission reductions from > **CDM projects**. Investors from industrialised countries generate these in developing countries with CDM emission reduction projects pursuant to the > **Kyoto Protocol**. 1 CER corresponds to 1 t CO₂. CER can be used by companies to meet the obligation to return allowances under the European emissions trading system (> **emissions trading**).

CHP – Combined heat and power

The waste heat of a power plant can be used as process heat or to heat buildings in the surrounding area. In this case, additional output of energy is obtained with the same amount of fuel. A power plant that generates both electricity and heat from a single source is called a CHP station.

Clean Development Mechanism (CDM)

Instrument from the > **Kyoto Protocol** that uses cost-effective, efficient measures to limit the growth-driven increase in emissions of greenhouse gases in emerging and developing countries. The reductions in emissions achieved are credited to the investor in the form of > **CER**. CER can be used by companies to meet the obligation to return allowances under the European emissions trading system (> **emissions trading**).

CO₂ allowances

CO₂ allowances have been traded on the Leipzig electricity exchange since 2005. Purchasing one CO₂ allowance entitles a company to emit 1 t of CO₂ (> **emissions trading**).

Contracting

Outsourcing, for a specific period and for a specific area, of tasks relating to the provision and supply of energy to a third party (contractor) acting on its own behalf and on its own account. Forms of energy are, for example, cooling, heating, electricity and compressed air.

D

Downstream

Designates business activities in connection with distribution, sales and marketing of natural gas.

E

EEG (Renewable Energies Act)

The German Renewable Energies Act (EEG) regulates the preferred feed-in of electricity from renewable sources into the electricity grid and guarantees producers fixed feed-in remuneration. This is achieved by promoting the generation of electricity from hydropower, wind power, solar energy, > **geothermal energy**, landfill gas, sewage gas, pit gas and biomass.

EEG cost allocations

Cost allocations under the EEG are charged by the transmission system operators. The cost allocations cover the difference between the income generated by the transmission system operators from marketing the electricity from EEG plants and the expenses incurred by the transmission system operators for the fixed feed-in remuneration, market premium payments to direct marketers of EEG plants as well as the costs of implementing the EEG. EEG cost allocations are necessary as the income generated from marketing the EEG electricity falls far short of the expenditure for remuneration payments and market premiums. Half of the electricity price today comprises taxes and levies, with EEG cost allocations making up the largest share having increased from 3.5 ct/kWh in 2012 to 5.3 ct/kWh.

Electromobility

Electromobility refers to the use of electric vehicles for individual and fleet transportation (e.g., electric cars, buses and bicycles), the necessary infrastructure, the generally renewable energies and the associated services (charging, billing, etc.) as well as the appropriate information and communications systems.

Emission Reduction Unit (ERU)

ERUs are emission reduction credits generated through **> joint implementation projects** in accordance with Article 6 of the **> Kyoto Protocol**. The primary difference between ERUs and **> CERs** is that ERUs are generated by converting emission rights of the host country and thereby not creating any additional allowances.

Emissions trading

In order to meet its commitments to reduce emissions, the European Union has introduced emissions trading at a corporate level. Allowances (**> EUA**) are granted to the participating companies on the basis of an emissions cap in place for the whole of the EU. Companies requiring more allowances than they have been issued with have to buy the difference, while those companies that receive more than they need are free to sell them. Every market participant is free to purchase emission allowances or, alternatively, implement measures to reduce emissions. The aim is to achieve the targeted emissions reduction in the most cost-efficient manner possible.

Energy Industry Act (EnWG)

The EnWG, which came into force in July 2005, introduced a regulatory regime for electricity and gas supply. The cornerstones of the act are the definitions of network operator duties, rules for network access and network charges, as well as monitoring by the Federal Network Agency or the state regulatory authorities. The act has been amended several times since coming into force.

EU allowance (EUA)

EU emission allowance. Each EU state allocates its supply of **> CO₂ allowances** (1 EUA = 1 t CO₂) to its national companies, primarily industrial. Should it exceed the permitted limit, it must purchase additional emission rights (allowances). However, to ensure it takes environmental measures itself, a state may not cover more than 50% of the shortfall with allowances.

European aviation allowance (EUAA)

EU emission allowances for air travel. These were created especially for the aviation industry in order to appropriately recognise the peculiarities of this industrial sector. Since 2012, trading such allowances has been obligatory for all airlines wishing to receive permission for their aircraft to take off or land in Europe.

F

Forward market

Market on which electricity, fuel and CO₂ allowance supply and procurement quantities are traded for a future period. Usual periods include weeks, months, quarters and years. Settlement can be either physical or financial. The forward market has the primary function of acting as a price hedge.

Fuel cells

Converts chemically bound energy from the energy source into electrical current and heat based on the principle of inverse electrolysis. Can be employed for electricity supplies to devices and vehicles for example, and for supplying electricity and heat to buildings and for industrial purposes. Fuel cell plants are an efficient technology for local energy generation.

G

Geothermal energy

Power harnessed by means of heat from the interior of the earth. In Germany, temperatures at depths of several thousand metres reach more than 100 °C which can be used for the generation of electricity. To heat buildings, geothermal energy can be extracted using probes that only need to reach a depth of about 100 metres.

J

Joint implementation

Joint implementation of projects. The aim of JI projects is to reduce emissions of greenhouse gases. Pursuant to the **> Kyoto Protocol** these are implemented by investors from industrialised countries in other industrialised countries. The reductions in emissions they achieve are credited to the investor in the form of emission reduction units that can be used by companies to meet the obligation to return allowances under the European emissions trading system (**> emissions trading**).

K

Kyoto Protocol

The Kyoto Protocol from 1997 is the only binding agreement on CO₂ reduction - however it does not even cover 15% of global CO₂ emissions. It only obligates industrial countries to reduce their CO₂ emissions; the US never endorsed the protocol, with Canada and Russia also having left. In December 2012, the 200 or so states participating in the world climate summit reached a compromise on fighting global warming and agreed to extend the Kyoto Protocol, which would have expired at the end of 2012, until 2020. The original aim was to have reduced the six main greenhouse gases, above all CO₂, by a minimum of 5.2% by 2012.

M

Midstream

Designates business activities in connection with the import, trade and storage of natural gas.

N

Network User Charges Ordinance

Since 1 January 2012, electricity-intensive companies have been able to free themselves from network user charges. Benefactors are companies with at least 7,000 hours of use and demand of more than 10 million kWh. Nationwide, the resulting burdens are allocated to the end consumers and transferred from the net invoice totals for electricity.

Nuclear fuel rod tax

This is imposed from 2011 to 2016 at a tax rate of €145/g of nuclear fuel employed. According to the government's coalition agreement, the anticipated revenue of €2.3 billion will be used to consolidate the federal budget. Energy companies may deduct this levy for tax purposes.

O

OTC trading

Over the counter trading.

P

Peak

Peak load product. In Germany, this refers to purchase/supply Monday to Friday, 8 a.m. to 8 p.m.

S

Smart grid

Smart electricity grid. A network that uses information technology to monitor and optimise operation of its interconnected elements – from electricity generators, storage systems, electrical consumers and network operating equipment in energy transmission and distribution networks. The aim is to optimise energy supplies in an efficient, reliable and cost-effective system.

Smart market

Sector outside of the grid where energy volumes or services derived therefrom are traded among different market partners based on available grid capacity. In future, many different service providers will be active in these markets aside from producers and consumers.

Spot market

Market on which electricity supply and procurement quantities are offered and demanded for the following day.

Spread

Interest difference between a risk-free investment and other investment, e.g., an EnBW bond.

System services

Total services to ensure quality of electricity supplies. This includes: provision of balancing energy, frequency stability, voltage control, supply re-establishment, management services.

V

Vertical integration

Companies with activities both on the grid side (transmission and distribution) and on the market side (generation, procurement and sales) are referred to as vertically integrated.

Our locations



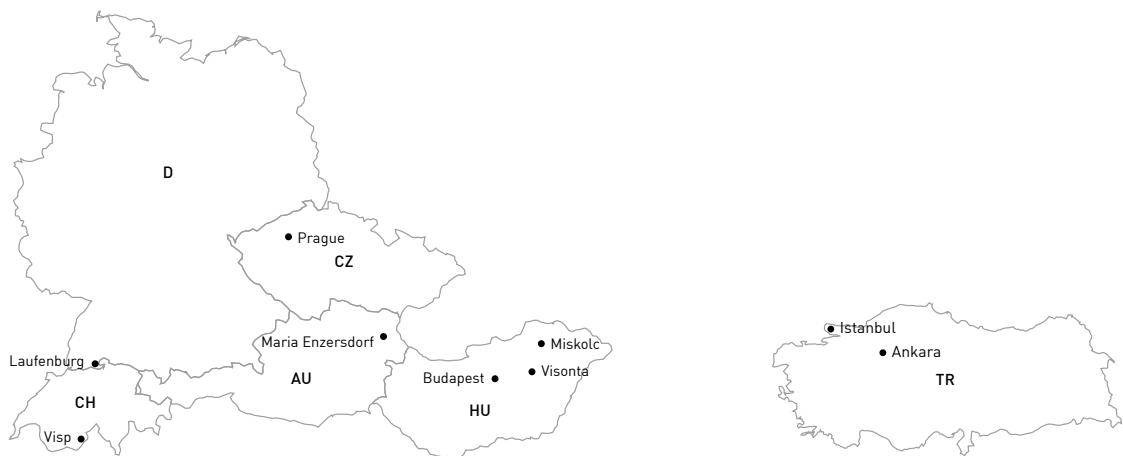
¹ EnBW operates some 70 hydro-electric power stations and numerous other renewable energy facilities. We have therefore only presented some of the major locations.

Baden-Württemberg

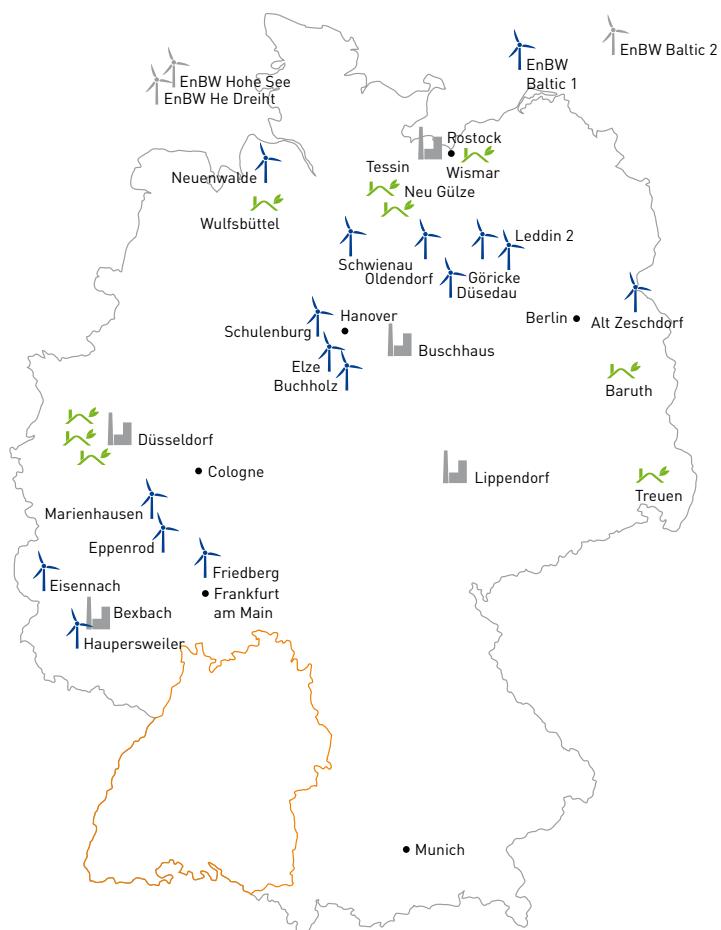


² Operations ceased on 11 May 2005 as a result of the nuclear energy agreement.

Europe



Germany



Five-year summary

EnBW group ¹		2012	2011	2010	2009	2008
Earnings						
Revenue	€ millions	19,246	18,756	17,509	15,564	16,305
Adjusted EBITDA	€ millions	2,343	2,449	2,859	2,615	2,596
EBITDA	€ millions	2,293	1,810	3,315	2,748	2,540
Adjusted EBIT	€ millions	1,455	1,600	1,926	1,794	1,794
EBIT	€ millions	1,275	678	2,125	1,889	1,468
Adjusted group net profit ²	€ millions	652	648	964	879	1,099
Group net profit/loss ²	€ millions	474	-842	1,157	768	879
Earnings per share from adjusted group net profit ²	€	2.54	2.65	3.95	3.60	4.50
Earnings per share from group net profit/loss (€) ²	€	1.84	-3.45	4.74	3.15	3.60
Balance sheet						
Non-current assets	€ millions	24,205	24,358	25,883	23,191	20,267
Total assets	€ millions	36,770	35,689	35,780	34,639	32,759
Equity	€ millions	7,183	6,127	7,603	6,408	5,592
Equity ratio	%	19.5	17.2	21.2	18.5	17.1
Recognised net financial liabilities ³	€ millions	4,495	5,303	5,641	5,812	2,951
Cash flow						
Cash flow from operating activities	€ millions	856	1,747	2,561	2,443	1,524
Capital expenditures	€ millions	877	1,315	2,328	4,374	1,404
Free cash flow	€ millions	206	827	1,087	1,313	572
Profitability						
ROCE	%	11.3	11.6	14.2	15.5	17.1
Value added	€ millions	388	448	801	841	963
Electricity generation and trading						
Electricity sales	billions of kWh	60	77	69	38	37
Revenue	€ millions	3,978	5,419	4,817	2,358	2,542
Adjusted EBITDA	€ millions	1,320	1,609	2,071	1,943	1,787
Electricity grid and sales						
Electricity sales	billions of kWh	75	79	78	81	93
Revenue	€ millions	11,861	10,743	10,193	10,031	10,195
Adjusted EBITDA	€ millions	686	481	505	369	421
Gas						
Gas sales	billions of kWh	73	57	54	66	70
Revenue	€ millions	2,542	1,815	1,788	2,453	2,881
Adjusted EBITDA	€ millions	159	128	154	234	292
Energy and environmental services						
Revenue	€ millions	865	780	711	722	688
Adjusted EBITDA	€ millions	310	355	278	235	232
Energy generated by the EnBW group⁴ by primary energy source						
Nuclear power plants	GWh	25,799	28,382	34,152	35,477	35,357
Conventional power stations	GWh	24,443	22,901	23,769	19,469	19,890
Pumped storage power stations during pumping operation	GWh	1,579	1,764	2,048	2,011	1,682
Renewable energies	GWh	7,230	5,982	7,061	7,058	7,192
Employees						
Annual average number of employees in the EnBW group ⁵	Number	20,098	20,851	20,450	20,914	20,357
Personnel expenses	€ millions	1,599	1,608	1,670	1,618	1,480

¹ The 2011 figures have been restated.

² In relation to the profit/loss shares attributable to the equity holders of EnBW AG.

³ Without cash and cash equivalents of the special funds and short-term investments to cover the pension and nuclear power provisions.

⁴ Own generation includes long-term procurement agreements and generation from partly owned power stations.

⁵ Number of employees without apprentices and without inactive employees.

EnBW share in figures ¹		2012	2011	2010	2009	2008
Annual high	€	38.32	43.00	43.00	41.10	61.00
Annual low	€	30.00	31.90	35.00	34.00	33.02
Closing price	€	30.15	39.00	40.92	40.00	37.70
Number of shares outstanding as of 31 December ²	million shares	270,855	244,257	244,257	244,257	244,257
Market capitalisation as of 31 December ³	€ billions	8.2	9.5	10.0	9.8	9.2
Stock exchange trade (total)	Number of shares	95,154	510,393	791,179	676,205	835,367
Stock exchange trade (daily average)	Number of shares	433	1,986	3,091	2,662	3,289
Operating cash flow per share ⁴	€	3.33	7.15	10.48	10.00	6.24
Distribution	€ millions	230.2 ^{5,6}	207.6	373.7	373.7	491.0
Dividends per share	€	0.85 ⁶	0.85	1.53	1.53	2.01
Number of shares outstanding (weighted average)	million shares	257,265	244,257	244,257	244,257	244,257

¹ Based on trading the EnBW share in XETRA.

² Total number of shares: 276,605 million shares (prior years 2011 to 2008: 250,006 million shares).

³ Number of shares outstanding at the end of the fiscal year multiplied by the closing price.

⁴ Prior-year figures restated.

⁵ Distribution in terms of the shares entitled as of 31 December 2012.

⁶ Dividend proposal for the fiscal year 2012, subject to the approval of the annual general meeting on 25 April 2013.

Stock exchange information

ISIN/security ident. no.	DE0005220008/522000
Stock exchange abbreviation	Bloomberg EKB GY/reutersEBK/EBKG.DE
Stock markets	Regulated market: Frankfurt, Stuttgart; over-the-counter trading: Berlin, Munich
Transparency level	General Standard
Indices	General All Share, DAXsector All Utilities; CDAX
Share capital in number of shares	276,604,704
Class of share	Ordinary no-par value bearer shares

Public bonds of the EnBW Group Issuer	Issue volume in million	Denomination	Maturity (years)	Issue date	Coupon (%)	Security number
EnBW Finance B.V.	CHF 300	CHF 5,000	5	25/1/2008	3.125	3727411
EnBW Finance B.V.	€ 750	€ 50,000	5	20/11/2008	6.000	A0T3UR
EnBW Finance B.V.	€ 750	€ 1,000	6	7/7/2009	4.125	A1AJTU
EnBW Finance B.V.	€ 500	€ 50,000	10	19/10/2006	4.250	A0G Z4C
EnBW Finance B.V.	€ 750	€ 50,000	10	20/11/2008	6.875	A0T3US
EnBW Finance B.V.	€ 500	€ 1,000	20	9/12/2004	4.875	A0DG9U
EnBW Finance B.V.	€ 600	€ 1,000	30	7/7/2009	6.125	A1AJTV
EnBW Energie Baden-Württemberg AG	€ 750	€ 1,000	60.4	28/10/2011	7.375 (initially)	A1MBBB
EnBW Energie Baden-Württemberg AG	€ 250 ¹	€ 1,000	60	2/4/2012	7.375 (initially)	A1MBBB

¹ Increase in the hybrid loan issued on 28 October 2011 with a volume of € 750 million.

Important note

Published by

EnBW Energie
Baden-Württemberg AG
Durlacher Allee 93
76131 Karlsruhe
www.enbw.com

Coordination and editor

Corporate Communications,
Karlsruhe

Concept and design

IR-One AG & Co. KG, Hamburg

Photos

Title and reports

Klaus Lorenz, Karlsruhe

Board of Management and Supervisory Board

Catrin Moritz, Essen

Top issues and additional pictures

EnBW Energie Baden-Württemberg AG

Typesetting

In-house using FIRE.sys

Printed by

Elanders Germany GmbH, Waiblingen



ISBA: R.3098.1303

Publication of the EnBW Report 2012:
1 March 2013

Publication in the German Federal Gazette

The complete consolidated financial statements prepared by EnBW Energie Baden-Württemberg AG and audited by KPMG AG Wirtschaftsprüfungsgesellschaft, Mannheim, and the management report, which is combined with the group management report, will be

published in the German Federal Gazette ("Bundesanzeiger") together with the unqualified audit opinion. The necessary documents will be submitted to the German Federal Gazette ("Bundesanzeiger") by 30 April 2013 at the latest.

Memberships



German
SUSTAINABILITY
Code

The German Sustainability Code (GSC) is a standard supported by the federal government and initiated by the Council for Sustainable Development for sustainable corporate governance. EnBW has been one of the first companies to commit to it.



EnBW is a member of the UN Global Compact initiative, the largest multi-stakeholder initiative for the promotion of corporate social responsibility. Within this network, EnBW is involved in various sustainability issues.

No offer or investment recommendation

This report has been prepared for information purposes only. It does not constitute an offer, an invitation or a recommendation to purchase or sell securities issued by EnBW Energie Baden-Württemberg AG (EnBW), a company of the EnBW group or any other company. This report does not constitute a request, instruction or recommendation to vote or give consent. All descriptions, examples and calculations are included in this report for illustration purposes only.

Future-oriented statements

This report contains future-oriented statements that are based on current

assumptions, plans, estimates and forecasts of the management of EnBW. Such future-oriented statements are therefore only valid at the time at which they are published for the first time. Future-oriented statements are indicated by the context, but may also be identified by the use of the words "may", "will", "should", "plans", "intends", "expects", "believes", "assumes", "forecasts", "potentially" or "continued" and similar expressions.

By nature, future-oriented statements are subject to risks and uncertainties that cannot be controlled or accurately predicted by EnBW. Actual events, future results, the financial position, development or performance of EnBW and the companies of the EnBW group may therefore diverge considerably from the future-oriented statements made in this report. Therefore it cannot be guaranteed nor can any liability be assumed otherwise that these future-oriented statements will prove complete, correct or precise or that expected and forecast results will actually occur in the future.

No obligation to update the information

EnBW assumes no obligation of any kind to update the information contained in this report or to adjust or update future-oriented statements to future events or developments. This annual report can also be downloaded from the internet in German or English. In case of doubt, the German version shall prevail.

Shareholder Hotline/ Investor Relations

Phone: 0800 1020030 or
0800 AKTIEENBW
(only in Germany)
Fax: 0800 3629111
(only in Germany)
E-mail: info@investor.enbw.com
Internet: www.enbw.com

Financial calendar

1 | 3 | 2013

Publication of the Report 2012

25 | 4 | 2013

2013 annual general meeting

7 | 5 | 2013

Publication of the Quarterly Financial Report January to March 2013

26 | 7 | 2013

Publication of the Six-Monthly Financial Report January to June 2013

12 | 11 | 2013

Publication of the Nine-Monthly Financial Report January to September 2013



Cover photo: We are pushing ahead with the conversion of our energy generation capacity by increasing our use of onshore wind power – such as here in Berghülen on the Swabian Alb. In order to harness wind energy at greater heights, we have erected three wind turbines with a hub height of 138 metres. Our cover photo shows the moment our team has been working towards for months: the “star lift”, when the nacelle and rotor blades are put into position on top of the tower. The wind turbines have been connected to the grid since 17 December 2012.



Top issues 2012

January

"Sustainable town" project expanded

A solar farm covering an area of more than 16 football fields (101,000 m²) is commissioned in Leutkirch as part of the "sustainable town" project. With an installed output of around 5 MW, the solar farm is set to generate some 5 million kWh of electricity a year, which will theoretically supply around 1,500 households with solar power and save 2,800 t of CO₂ a year. The citizens of Leutkirch can acquire shares in the solar farm via the energy cooperative Energiegenossenschaft Leutkirch eG.

The major district town of Ehingen, which in June of this year becomes a model sustainable town, is the second town to start moving towards becoming a climate-friendly and energy-efficient town, with EnBW lending its support. The aim of the large-scale project is to achieve an ecologically, economically and socially sustainable energy supply. EnBW plans to have seven or eight "sustainable towns" in Baden-Württemberg by 2015.



February

EnBW supplies electricity for municipal facilities

EnBW reinforces its position as energy partner of the municipalities within Baden-Württemberg. In a tender process by the climate protection and energy consultation agency Heidelberg Nachbargemeinden gGmbH, it is awarded the contract to supply 9.3 million kWh of electricity over the period from 2012 to 2014. Almost half of the electricity generated by EnBW stems from hydro-electric power plants, i.e. from renewable energies. Around 430 municipal facilities in the Rhine-Neckar district are supplied with electricity, such as kindergartens, schools, sports centres or town halls.

March

Onshore portfolio developed further

The highest wind turbine in the northern Black Forest is officially commissioned, located in Schopfloch in the Freudenstadt district and with a hub height of 138 m. With an output of 2 MW, it will in future provide 1,180 homes with electricity per year and reduce annual CO₂ emissions by 3,200 t.

In November, EnBW's second wind farm in Berghülen feeds electricity into the grid for the first time. Since 2009, EnBW has seen a more than six-fold increase in installed output in its onshore wind power portfolio and is planning further growth.



April

Hybrid bond increased to € 1 billion

In March, EnBW successfully increased the volume of the hybrid bond issued in October 2011 of € 750 million by a further € 250 million. The date of issue was 2 April 2012. The hybrid bond is part of the package of measures decided upon in 2011 and half of the amount is recognised as equity by rating agencies, thereby further strengthening equity and supporting EnBW's current A rating.

May

Dismantling of the cellular cooling tower in Neckarwestheim

Work is to be concluded in November. The dismantling is to create free space of some 25,000 m². Where possible, the material recovered will be fed back into the materials cycle.

June

Capital increase successfully concluded

The capital increase passed on 14 June generates gross issue proceeds of around € 822 million. The new shares were offered exclusively to the shareholders of EnBW in the form of indirect subscription rights. This successful implementation is proof of the trust our shareholders hold in EnBW's future sustainability.

July

EnBW optimises gas procurement portfolio

EnBW successfully implements its gas strategy and concludes a long-term gas supply agreement with Novatek. The large-volume supply agreement, which has a term of at least ten years, will protect EnBW from uncertainties in gas procurement also in economic terms.

August

Stuttgart and Esslingen supplied with green electricity from EnBW

EnBW is awarded the contract to supply Stuttgart's properties and facilities with some 180 million kWh of certified green electricity a year.

In creating the "grünES" brand, EnBW and the municipal utilities of Esslingen found a joint venture for selling electricity from renewable energies in the Esslingen region. On offer are products from 100% certified hydro-electric power and bio natural gas.



September

Natural gas storage facility commissioned

Gas storage at Friedeberger Speicher-gesellschaft "Crystal" mbH, a joint venture between EnBW and Electricité de France (EDF), is officially put into commercial operation at four storage caverns, two of which EnBW has leased. The total volume of stored natural gas is enough to supply 300,000 households with natural gas for one year.



November

EnBW receives the Corporate Health Award

EnBW is awarded the prize in recognition of its excellent incorporation of health management in all of its corporate processes and in the local organisational structure. It is the most important award for corporate healthcare management in German-speaking countries. Throughout the entire group, health is defined as being key to sustainable corporate success.



October

Commitment to Turkey reaffirmed

Baden-Württemberg's Minister for the Environment Frank Untersteller, the Turkish Energy Minister Taner Yıldız and EnBW's CEO Dr. Frank Mastiaux attend the ceremony marking the commencement of construction of a new wind farm in Turkey. Together with Borusan, EnBW is to construct the 50 MW Balabanlı wind farm in north-west Turkey, thereby reaffirming the joint venture with the Turkish company.



December

EnBW and Daimler launch largest electric fleet

The mobility concept car2go is launched with 300 battery-driven electric smart fortwo cars. EnBW will set up 500 charging stations in the city and the Stuttgart region by the end of 2013 to provide electricity from renewable energies. The price will be 29 cents per minute of driving.



**EnBW Energie
Baden-Württemberg AG**
Durlacher Allee 93
76131 Karlsruhe
www.enbw.com

