A New Energy Landscape

Annual Report 2012 including Sustainability Report

VATTENFALL

Contents

Vattenfall at a glance	3
Results 2012	4
Interview with the CEO	5–6
Important events 2012	7–8
Goals and goal achievement	9–10
Market and price trends	11–14
Strategy for changed market conditions	15–18
The path to sustainable energy production	19–22
Generation operating segment	23–27
Distribution and Sales operating segment	28–31
Corporate Governance Report	32–39
Board of Directors	40–41
Executive Group Management	42–43
AGM proposal	44
Risks and risk management	45–50
Consolidated accounts, including comments	51–59
Notes to the consolidated accounts	60–97
Parent Company accounts	98–101
Notes to the Parent Company accounts	101–110
Audit Report	111
Combined Assurance Report	112
Quarterly overview	113–114
Several-year overview	115–116
Definitions and calculations of key ratios	117–118
Facts about Vattenfall's markets	120–122
GRI Index	123–124

The Board of Directors and President of Vattenfall AB (publ), Swedish corporate identity number 556036–2138, herewith submit the annual report and consolidated accounts for 2012, encompassing pages 4, 7-8 and 19-110, which have been translated from the Swedish original. The administration report is presented on pages 4, 7–8 and 19–50.

Sustainability Performance Report

Vattenfall's Sustainability Performance Report according to GRI is available at www.vattenfall.com/sustainability, along with further information on Vattenfall's sustainability work.

Financial calendar

24 April 2013	Annual General Meeting
3 May 2013	Interim report for January–March
23 July 2013	Interim report for January–June
29 October 2013	Interim report for January–September
4 February 2014	Year-end report 2013

Investor Relations contacts

Klaus Aurich,
klaus.aurich@vattenfall.com

Anna Viefhues,
anna.viefhues@vattenfall.com

Annika Winlund,
annika.winlund@vattenfall.com

Telephone +46-8-739 50 00

Forecasts and forward-looking statements

This document contains forward-looking statements that are based on Vattenfall's current expectations. Even if Vattenfall's management believes that these expectations are reasonable, no guarantee can be made that these expectations will prove to be correct. The forward-looking statements herein pertain to risks and uncertainties that could have a material impact on future earnings. The statements are based on certain assumptions, including such that pertain to financial conditions in general in the company's markets and the level of demand for the company's products. The outcome may vary significantly compared with what is presented in the forward-looking statements, depending on, among other things, changed conditions regarding the economy, markets and competition, legal requirements, and other political actions and variations in exchange rates, as well as other factors referred to in the administration report.

This English version of Vattenfall's Annual Report is a translation of the Swedish original, which is the binding version and shall govern in the event of any discrepancies.

Cover photo

Construction of Vattenfall's Ormonde offshore wind farm in the UK .

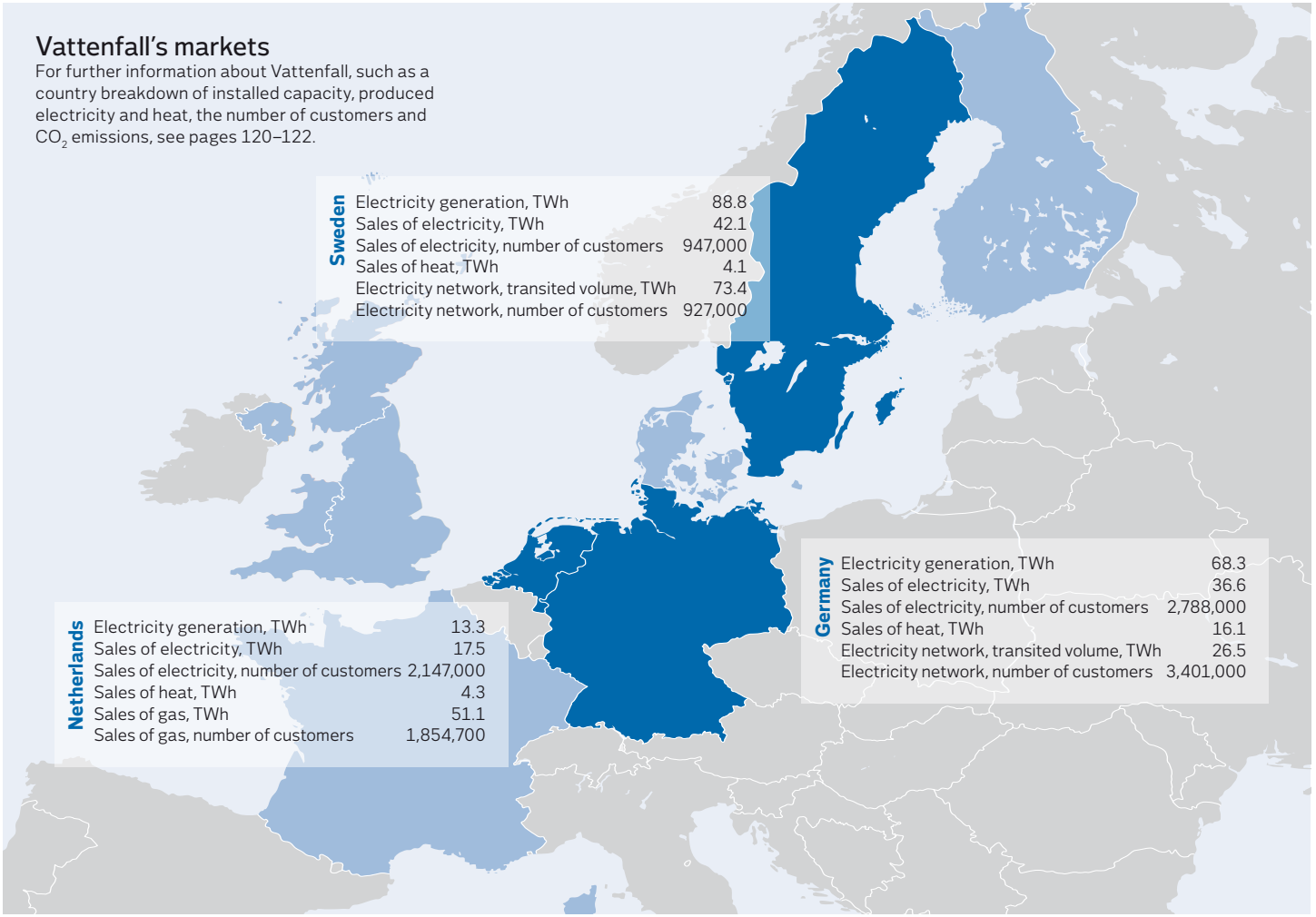
Production: Vattenfall AB and Intellecta Corporate AB.
Photos: Vattenfall AB; Lars Thornblad.

Vattenfall at a glance

Vattenfall is one of Europe's largest generators of electricity and the largest producer of heat. Vattenfall's main products are electricity, heat and gas. In electricity and heat, Vattenfall works in all parts of the value chain: production, distribution and sales. In gas, Vattenfall is active in sales. Vattenfall also conducts energy trading. The Group has approximately 33,000 employees. The Parent Company, Vattenfall AB, is 100%-owned by the Swedish state. In 2012 operations were conducted in the Nordic countries, Germany, the Netherlands, France and the UK.

Vattenfall's markets

For further information about Vattenfall, such as a country breakdown of installed capacity, produced electricity and heat, the number of customers and CO_2 emissions, see pages 120–122.



Sweden

Electricity generation, TWh	88.8
Sales of electricity, TWh	42.1
Sales of electricity, number of customers	947,000
Sales of heat, TWh	4.1
Electricity network, transited volume, TWh	73.4
Electricity network, number of customers	927,000

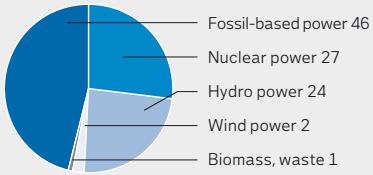
Germany

Electricity generation, TWh	68.3
Sales of electricity, TWh	36.6
Sales of electricity, number of customers	2,788,000
Sales of heat, TWh	16.1
Electricity network, transited volume, TWh	26.5
Electricity network, number of customers	3,401,000

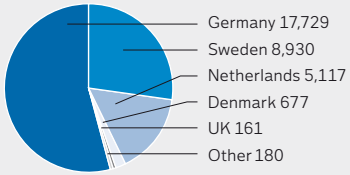
Netherlands

Electricity generation, TWh	13.3
Sales of electricity, TWh	17.5
Sales of electricity, number of customers	2,147,000
Sales of heat, TWh	4.3
Sales of gas, TWh	51.1
Sales of gas, number of customers	1,854,700

Electricity generation 2012, %

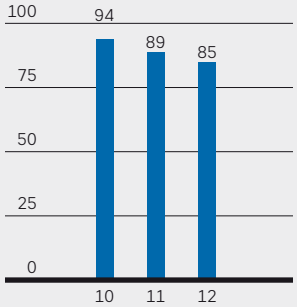


Number of employees per country (FTE)



CO_2 emissions

Million tonnes



Corresponding to Vattenfall's share of ownership in the plants (electricity and heat).

Results 2012

- **Net sales for 2012 decreased by 7.6% to SEK 167,313 million (181,040). For comparable units, i.e., excluding divested operations in Belgium, Finland and Poland, sales increased by 2%.**
- **The underlying operating profit[1] decreased by 9.9% to SEK 27,747 million (30,793). The underlying operating profit for comparable units decreased by 1.6%, to SEK 27,693 million (28,148).**
- **Reported operating profit rose 12.8% to SEK 26,175 million (23,209).**
- **Profit for the year (after tax) rose 65.4% to SEK 17,224 million (10,416), of which the reduced corporate income tax rate in Sweden contributed SEK 3.5 billion.**
- **Electricity generation increased by 7.3% in 2012, to 178.9 TWh (166.7). 2012 was record year for Vattenfall's Swedish electricity generation.**

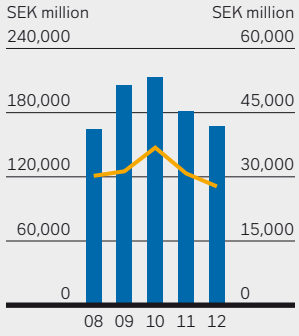
1) Operating profit excluding items affecting comparability.

2) Exchange rate 8.582 SEK/EUR. Values in EUR are shown only to facilitate comparisons between SEK and EUR.

Key data

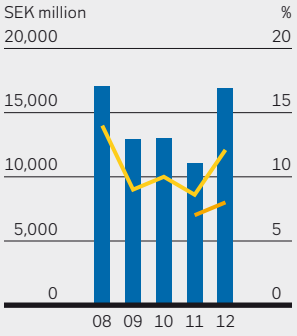
	2012	2011	Change, %	2012, MEUR[2]	2011, MEUR[2]
Net sales, SEK million	167,313	181,040	-7.6	19,496	21,095
Operating profit before depreciation and amortisation (EBITDA), SEK million	54,488	54,538	-0.1	6,349	6,355
Operating profit (EBIT), SEK million	26,175	23,209	12.8	3,050	2,704
Underlying operating profit[1], SEK million	27,747	30,793	-9.9	3,233	3,588
Profit before tax, SEK million	18,301	14,298	28.0	2,132	1,666
Profit for the year	17,224	10,416	65.4	2,007	1,214
Funds from operations (FFO), SEK million	34,419	38,256	-10.0	4,011	4,458
Balance sheet total, SEK million	528,364	524,558	0.7	61,567	61,123
Net debt, SEK million	111,907	141,089	-20.7	13,040	16,440
Adjusted net debt, SEK million	153,943	176,031	-12.5	17,938	20,512
Return on capital employed, %	8.4	7.3	—		
Return on equity, %	12.1	8.6	—		
Debt/equity ratio, net, %	72.1	101.6	—		
Funds from operations (FFO)/adjusted net debt, %	22.4	21.7	—		
Electricity generation, TWh	178.9	166.7	7.3		
Sales of electricity, TWh	202.3	203.0	-0.3		
Sales of heat, TWh	30.3	41.0	-26.1		
Sales of gas, TWh	52.4	53.8	-2.6		
Number of employees, full-year equivalents	32,794	34,685	-5.5		
CO_2 emissions, million tonnes	85.0	88.6	-4.5		

Sales and underlying operating profit



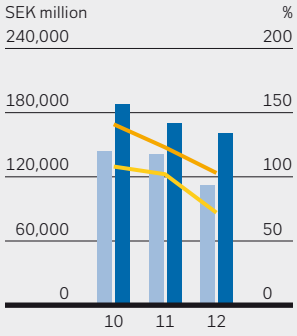
Sales (scale on left)
Underlying operating profit (scale on right)

Profit for the year and return



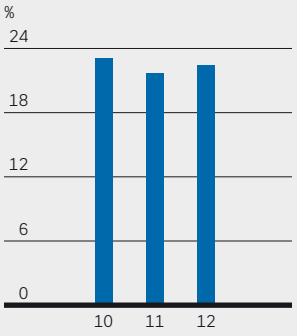
Profit for the year attributable to owners of the Parent Company
Return on equity, %
Return on capital employed, %

Net debt



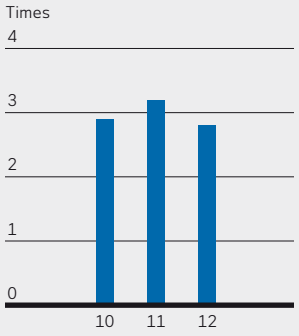
Net debt
Total interest-bearing liabilities
Debt/equity ratio, %
Debt/equity ratio, net, %

FFO/adjusted net debt



See page 55 for calculation of adjusted net debt.

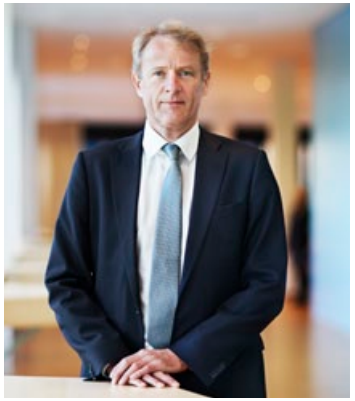
Adjusted net debt/EBITDA



"This is the new normal"

Interview with Øystein Løseth, President and CEO



How would you summarise the past year?
2012 was a tough year for the entire European energy sector, and the industry is facing considerable challenges. Demand stayed low as a result of the economic recession. At the same time, new capacity is being added, especially in renewable energy generation, which has led to low electricity prices. Low margins on electricity generation based on natural gas have put heavy pressure on the profitability of our gas-fired power plants, which a couple of years ago were considered to be a very good long-term investment. Previous market forecasts have been brushed aside, and what used to be considered "normal" no longer applies. This is the new normal.

How has this affected earnings?
We have succeeded in addressing the poorer market conditions with good availability at our production plants and lower costs. Previous years' price hedges in the futures market have largely compensated for the lower market prices. I am therefore pleased to report an underlying operating profit for comparable units, i.e., excluding divested operations, of SEK 27.7 billion, which is nearly level with 2011.

What factors lie behind Vattenfall's record high electricity generation in 2012?
Our major efforts to improve availability at our nuclear power plants have yielded results. Nuclear power generation was 15% higher than a year ago. For Forsmark, 2012 was the third-best production year on record, while Ringhals reached its highest production level since 2008. Hydro power generation posted a record year in 2012. Owing to well-filled reservoirs and high availability at our power plants, we generated more electricity from hydro power during the year than ever before.

What have you done to address the increasingly tougher conditions in the market?
Above all, we have continued to successfully execute our strategy and have taken a number of measures to boost profitability. We lowered our debt at the right time through the divestments we decided on in 2010, and we cut our annual costs by SEK 6 billion a year faster than planned, which corresponds to approximately 11% of our defined cost base.

The new functional organisational structure that was implemented in 2011 has served as a solid platform for the efficiency improvement measures that we are striving for. During the year, we ascertained that we should be able to achieve further synergies above all in central functions. The new cost-cutting programme of SEK 3 billion that was launched in autumn 2012 is therefore mainly focused on these functions. We have also sharpened our focus on improving efficiency throughout the Group. We are working systematically with the availability of our production plants, to ensure that we maintain continued resilience in these tough times. Through our increased ability to adapt, we can meet emerging challenges in the market regardless of what they entail.

Safety is one of Vattenfall's core values. What does it entail?
Safety means that we care about the well-being of our employees, suppliers, customers and society at large. It is therefore gratifying to note that our LTIF (Lost Time Injury Frequency) ratio decreased significantly in 2012, from 3.3 to 2.3. High safety at our plants also contributes to higher availability, especially in the nuclear power operations.

How are you proceeding with implementation of the strategy?
During the year we adapted our strategy to address the increasingly tougher market conditions. However, it is imperative that we further increase our flexibility by embodying a culture in which Operational Excellence is a part of our day-to-day activities. And we will also work smarter – not because we must, but because we can.

I also want to stress what a strength it is for Vattenfall to have operations based on six different sources of energy. This gives us good flexibility while also making us less vulnerable. This is why all six energy sources are important for us.

During the year, the Swedish state set new financial targets for Vattenfall. What will this entail for the operations?
The new financial targets are the fruit of a constructive dialogue with our owner. They are reasonable and realistic, and are adapted to the new market conditions, yet they still pose a significant challenge for us to attain. This dialogue has provided greater insight into our challenges and the variables that affect our profitability. We have also set clear sustainability targets aside from the financial targets.

During the year Vattenfall encountered some challenges in operations in the Netherlands...
Like our other markets, demand for electricity has dropped in the Netherlands due to the recession. Electricity prices have fallen, and the margins for gas-fired electricity generation – so-called clean spark spreads – have deteriorated dramatically. As a result of these changed market conditions, during the third quarter we recognised impairment losses for goodwill and production assets in the Thermal Power business unit – mainly in the Netherlands – totalling SEK 8.6 billion.

Vattenfall is striving for a leading Nordic position. What does that entail?
We are convinced that a strong position in the Nordic market will enable us to be the stable and efficient supplier of energy that our customers demand. To achieve even more effective energy handling and an even more effective energy market for everyone's benefit, greater transmission links from and to Sweden as well as within and between European countries will be necessary. We therefore believe it is imperative to promote such a development and intend to do what we can to further this goal.

Hydro power plays a central role in energy production in the Nordic countries. What impact might new regulations have?
Hydro power had a record year in 2012. However, we are concerned about the ongoing political processes in Sweden – partly with respect to Sweden's interpretation of the EU Water Framework Directive, and partly with respect to the current environmental study surrounding hydro power in the country. Both of these factors risk leading to extensive modifications and rebuilding of hydro power plants, which could result in a substantial loss of production – up to 10% of existing hydro power generation in Sweden. We hope, however, that the national handling of these matters will strike a balance between strong biological diversity and continued high generation availability for this sustainable and clean source of energy, which provides the desired flexibility as regulating power.

What is your view of the future of nuclear power in Sweden?
We believe that nuclear power has a vital role in Sweden's future energy mix, and we have therefore intensified our work on clarifying the conditions for new nuclear power reactors in Sweden. To obtain clarity regarding the criteria that must be fulfilled in order to be able to make such an investment, we have filed a formal application with the Swedish Radiation Safety Authority. This was a necessary first step to enable the authority to build up suitable expertise and resources to guide us on this matter. This means that within a few years we will have a better foundation on which to take a position on a possible investment decision.

Vattenfall also aspires to be a leader in the shift to renewable energy. How will you live up to that ambition?
Access to energy is paramount for all societal development, so naturally as an energy company we are contributing to sustainable development. At the same time, however, all energy generation has an impact on the environment and society. We therefore strive at all times to minimise the impact in everything we do. Our view of sustainable development and sustainable business is based on this premise and our efforts to lead the trend towards sustainable energy generation in the future.

The changed market conditions have made it a greater challenge to free up a sufficient level of capital for the new investments that are needed to achieve our goals in this area. But we are convinced that we will achieve them and have therefore set a new sustainability target that Vattenfall's rate of growth in renewable energy generation should be higher than the average rate of growth for the energy markets in northern and central Europe. In addition, we are analysing the extent to which we can increase our rate of growth in low CO_2-emitting energy generation through co-operation with others. I want to stress that Vattenfall will not invest in new coal-fired power plants until a political framework is in place for Carbon Capture and Storage (CCS), and the technology is fully developed and commercially viable. The shift to energy generation based on renewable sources is a long-term process that will take time, but we are certain we are on the right track.

How are you continuing to reduce your carbon emissions?
In 2010 we declared that we will reduce our CO_2 emissions from 94 million tonnes to 65 million tonnes by 2020. We have begun this reduction, and today our emissions are down to 85 million tonnes. However, these will rise again in 2013 and 2014 with the commissioning of new gas- and coal-fired plants – including Boxberg, Magnum and Moorburg – and thereafter turn down again. Through our current production planning, we can achieve a level down to 80 million tonnes, and we will be carrying out further measures to ensure continued reduction down to 65 million tonnes. We are actively looking at our options for how this can be achieved and what courses of action are the best possible for Vattenfall.

"We will reduce our CO_2 emissions to 65 million tonnes by 2020"

What does the trend in electricity sales look like?
We are pleased with the positive trend in customer satisfaction that we have had in Sweden, the Netherlands and Germany. Naturally, our customers are happy to see lower electricity prices, mainly in Sweden, which has helped shape their perceptions in a positive direction. But we are also making sure that we provide value-added through a greater focus on helping customers achieve more efficient use of energy through new products and services. We are well aware of our responsibility as a major player in the energy sector to contribute to positive societal development through higher energy efficiency, and we see our aspiration to be a "Smart Energy Enabler" as appreciated and urgent.

What will be Vattenfall's greatest challenges in 2013?
With the anticipated, continued low demand for electricity and large supply, the challenges for Vattenfall are substantial. But with the actions that we are now taking, including reducing the number of employees by 2,500, I am convinced that we will keep our freedom to manoeuvre and initiative to drive and adapt our operations no matter what direction tomorrow's energy market moves. Our long-term strategy remains firm. I am therefore confident about our opportunities to achieve the targets that our owners and we ourselves have set.

Øystein Løseth
President and CEO

Important events 2012

Q1

Divestment of operations in Finland
The sale of Vattenfall's electricity distribution and heat business in Finland was completed in January 2012. The buyer was LNI Acquisition Oy. The sale generated a capital gain of SEK 8.1 billion.

Sale of biomass project
Vattenfall reached an agreement to sell its minority interest in the Liberian biomass project, Buchanan Renewables Fuel. The project did not develop as planned, and the volume of biomass was lower than anticipated. In connection with the sale, Vattenfall recognised an impairment loss and made provisions together totalling SEK 1.3 billion during the first quarter.

Q2

Sale of minority interest in Vattenfall's electricity and heating networks in Hamburg
During the year, the City of Hamburg acquired 25.1% of Vattenfall's electricity and heating networks for EUR 463.1 million. The jointly owned companies are now called Vattenfall Stromnetz Hamburg GmbH and Vattenfall Wärme Hamburg GmbH. Vattenfall received payment during the second and fourth quarters.

Request for arbitration
In May, Vattenfall submitted a request for the institution of arbitration proceedings with the International Center for Settlement of Investment Disputes (ICSID) in Washington, D.C., in response to the German government's decision in summer 2011 to close Vattenfall's Krümmel and Brunsbüttel nuclear power plants, among others. The request was submitted jointly with the Krümmel and Brunsbüttel nuclear power companies, which are owned by Vattenfall and E.ON. This is the first step before a formal petition for arbitration can be filed. The Krümmel and Brunsbüttel companies have also filed suit with the Federal Constitutional Court of Germany.

Hemweg 9 connected to electricity grid
In the Netherlands, the new Hemweg 9 combined cycle gas turbine power plant (440 MW) was connected to the electricity grid in May, replacing an older plant at the same location.

Inauguration of Ormonde wind farm
Vattenfall's Ormonde wind farm (150 MW) in the Irish Sea was inaugurated on 19 September.

Vattenfall Europe AG becomes Vattenfall GmbH
On 17 September, Vattenfall's German subsidiary Vattenfall Europe AG was merged with its parent company, Vattenfall Deutschland GmbH, which at the same time changed its name to Vattenfall GmbH. Vattenfall GmbH is 100%-owned by Vattenfall AB. As a result of the merger, the domination agreement (Beherrschungsvertrag) from 2008 between Vattenfall Europe AG and Vattenfall AB no longer applies.

Q3

Analysis of replacement of nuclear power reactors in Sweden
On 31 July Vattenfall filed an application with the Swedish Radiation Safety Authority (SSM) to obtain clarity on the conditions that would apply for the construction of new nuclear power reactors. The application is necessary for Vattenfall to investigate the conditions set by SSM, which is needed to complete Vattenfall's analysis work. Read more on page 26.

First deliveries of electricity from Diemen 34
In August, the first deliveries of electricity were made from the gas-fired Diemen 34 power plant in the Netherlands. The power plant has installed capacity of 435 MW electricity and 260 MW heat.

Impairment of production assets
Vattenfall decided to recognise an impairment loss for goodwill and production assets in the Thermal Power business unit, mainly in the Netherlands, for a total of SEK 8.6 billion, of which SEK 3.5 billion is attributable to goodwill and SEK 5.1 billion to coal- and gas-fired power plants.

Change in form of funding for Swedish occupational pensions
Vattenfall decided to resume full funding of its defined benefit occupational pensions in Sweden on the balance sheet under the item Pension provisions, i.e., in accordance with the structure that applied before Vattenfall's Pension Foundation was established in 1999. A total of approximately SEK 7 billion will gradually be paid out from the foundation to Vattenfall AB and its subsidiaries. The change in funding does not affect Vattenfall's adjusted net debt. Nor will the change affect the company's obligation to pay future pensions to its employees.

Inauguration of new unit in Boxberg
Vattenfall's new Unit R (675 MW) at the Boxberg lignite-fired power plant in eastern Germany was inaugurated in October 2012. The investment decision was made in 2006.

Q4

Vattenfall reorganises
Effective 1 November, a number of changes were made to Vattenfall's organisation. The new Business Division Nuclear Power was formed at the same time that the wind power production unit was integrated with other forms of energy in Business Division Production. To make the structure clearer and to avoid unnecessary overlap, projects and newbuild activities in the former Business Division Renewables and Business Division Asset Development were brought together in a new Business Division, called Sustainable Energy Projects. Vattenfall thereafter has two operating segments: Generation, and Distribution and Sales.

New financial and sustainability targets
At an extraordinary general meeting on 28 November, new financial targets were adopted for Vattenfall. In conjunction with this the company presented new sustainability targets. Read more on pages 9–10.

Goals and goal achievement

Vattenfall's assignment is to conduct energy operations with a market rate of return by operating energy business that enables the company to be among the leaders in developing environmentally sustainable energy production. During the year Vattenfall's owner, the Swedish state, set new financial targets for the company, while Vattenfall's board of directors adopted specific targets for Vattenfall's sustainability work.

The new financial targets were adopted by an extraordinary general meeting on 28 November 2012 against the background of considerably changed market conditions compared with 2006, when the previous targets were set. The new targets, just like the previous ones, will be evaluated over a business cycle, which is defined as a period of 5–7 years. The targets are intended to ensure that Vattenfall creates value and generates a market rate of return, that the company strives for an efficient capital structure, and that its financial risk is kept at a reasonable level.

The overarching aim of the profitability target is to create value for the company's owner. Value creation is defined as return on capital employed less the company's cost of capital (the cost of equity and borrowed capital). The cost of capital has been calculated by the owner to be 6.8%. The long-term profitability target of a 9% return on capital employed corresponds to a return on equity of slightly higher than 10%. In addition to the financial targets set by the owner, Vattenfall has defined a number of Key Performance Indicators (KPI's) for its Business Divisions. These are followed up through the use of balanced scorecards.

Financial targets

	Profitability	Capital structure		Dividend policy
Target	Return on capital employed: 9%	FFO/adjusted net debt 22%–30%	Debt/equity ratio of 50%–90%	The dividend should amount to 40%–60% of profit after tax over the long term (unchanged)
Definition	Operating profit/average capital employed Capital employed is defined as balance sheet total less financial assets and noninterest-bearing liabilities	Funds from operations/adjusted net debt	Net debt/equity	Dividend/Profit for the year after tax attributable to owners of the Parent Company
Outcome 2012	8.4%	22.4%	72.1%	Proposed to the AGM: Dividend of SEK 6.8 billion, corresponding to 40% of profit for the year after tax

Previous targets

Definition	Return on equity: 15% (profit after tax/average equity)	Cash flow interest cover after maintenance investments should amount to 3.5–4.5 times	Long-term rating in "Single A" category from Moody's and Standard & Poor's	The dividend should amount to 40%–60% of profit after tax over the long term
Outcome 2012	12.1%	3.0 times	Moody's: A2 (negative outlook) Standard & Poor´s: A– (stable outlook)	See above

Vattenfall's sustainability targets were adopted by the Board of Directors in October 2012 and are based on the same areas as the EU's 2020 targets, i.e., reduced CO_2 emissions, an increase in renewable generation and improved energy efficiency. The Swedish state has set a requirement for all state-owned companies to adopt sustainability targets for their operations by 2013 at the latest.

Vattenfall has structured its work with sustainability issues in seven focus areas, based on the owner's definition of sustainable business: the environment, business ethics, anti-corruption, human rights, working conditions, diversity and gender equality. While all of these areas are important for the company from a sustainability perspective, Vattenfall has chosen to set its own sustainability targets in the environmental sphere, since that is where the company's operations have the greatest impact. A key aspect of Vattenfall's strategic direction that was established in 2010 was Vattenfall's ambition to reduce the company's CO_2 emissions from 94 tonnes in 2010 to 65 million tonnes by 2020. Vattenfall's total CO_2 emissions in 2012 amounted to 85 million tonnes. The decrease from 2011 (89 million tonnes) is mainly attributable to the divestment of the Polish operations during the year. However, CO_2 emissions are expected to rise in 2013 and 2014 as a result of completion of new coal- and gas-fired plants, including the Moorburg hard coal–fired plant outside Hamburg, Unit R at the Boxberg lignite-fired power plant in eastern Germany, and a few gas-fired plants in the Netherlands.

Sustainability targets

	Lower CO_2 emissions	Renewable energy generation	Energy efficiency improvement
Target	Vattenfall will reduce the company's CO_2 emissions to 65 million tonnes of absolute emissions by 2020.	Vattenfall's rate of growth of installed renewable energy capacity will be higher than the average rate of growth for ten defined countries in northern and central Europe. Follow-up measurements of this target will begin on 1 January 2013.	Targets will be set as soon as the EU directives for energy efficiency improvement have been translated into concrete national targets in the countries in which Vattenfall works.
Comment	The target is an ultimate goal for year-end 2020. Until then, yearly CO_2 emissions will be reported along with Vattenfall's strategy for reducing its emissions. CO_2 emissions pertain to Vattenfall's share of ownership in the respective plants (electricity and heat).	The target is measured yearly as the rate of growth of installed capacity. Renewable energy is defined as wind power and biomass. Hydro power is not included. The ten defined countries are Finland, Sweden, Norway, Denmark, Germany, Poland, the Netherlands, Belgium, France and the UK.	Vattenfall will also help the company's customers reduce their energy consumption by offering products and services for energy efficiency improvement.
Outcome 2012	CO_2 emissions in 2012 totalled 85 million tonnes.		

Market and price trends

The conditions in Europe's energy markets remain challenging. The energy sector is under pressure from low prices, low demand for electricity as a result of the economic recession, and a surplus of production capacity. The sharply rising share of renewable energy in the market – mainly wind power and solar energy – has not only contributed to lower prices, but is also putting greater demands on integration of the energy system, such as expansion of cable links.

Employees at Vattenfall's trading departments in Hamburg, Amsterdam and Stockholm analyse the latest developments in the electricity and commodity markets. Vattenfall continuously hedges its future electricity generation through sales in the forward and futures markets.

Challenging market conditions

The European energy markets are becoming increasingly affected by the rising share of renewable energy. In 2012, uncertainty surrounding global economic growth also had an impact on electricity and commodity prices.

Lower electricity prices in 2012

Compared with 2011, spot prices were an average of 17% lower in Germany and 8% lower in the Netherlands. Mild weather and increased electricity generation from renewable sources contributed to the lower electricity prices. In Germany, installed capacity of solar energy increased by 7.6 GW, while installed capacity for wind power increased by 2 GW during the year. In total, installed capacity of solar energy in Germany is 32 GW and wind power 31 GW. Renewable electricity is dependent on the weather, and as a result, pricing in the market is increasingly steered by complex weather conditions such as wind speed and cloud cover.

Spot prices in the Nordic market were an average of 34% lower than in 2011, mainly due to a strong hydrological balance. A total of 1 GW of new wind power was added to the Nordic market in 2012.

While spot prices are typically impacted by weather and the near-term supply of electricity generation, futures prices give an indication of the price trend in the longer term. During the year, futures prices fell 18% in the Nordic market and 12% in Germany compared with 2011.

Gross margins for gas-fired electricity generation ("clean spark spreads") contracted sharply in 2012 and were near or below zero in Germany for a large part of the year. In the Netherlands, margins were just above zero. Coal-fired power plants, on the other hand – particularly lignite-fired plants – had higher profit margins, since the purchase price of coal was cheaper than for gas, including the cost of CO_2 emission allowances. Over time, increased exploration of shale gas may lead to price pressure for natural gas and an improved competitive position for gas-based electricity generation.

Surplus of production capacity

There is some overcapacity in the Nordic electricity market, mainly due to higher production of renewable energy. In 2010, overcapacity was approximately 28 TWh (compared with annual electricity consumption of approximately 380 TWh). Continued development of renewable energy, especially wind power and the new Olkiluoto 3 nuclear power plant (1,600 MW) in Finland (which is planned for commissioning in 2015/2016), is expected to lead to further overcapacity in the medium term.

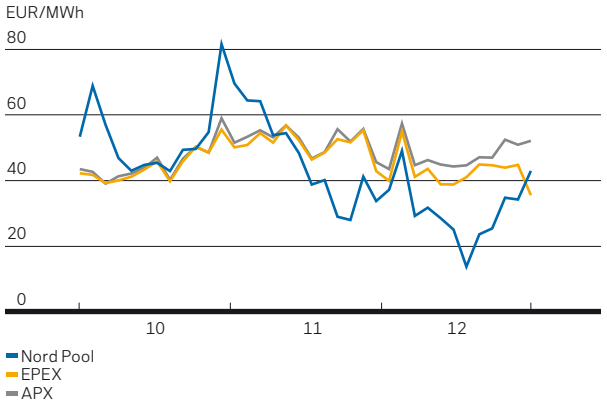
In Germany, conventional generation capacity decreased by 8,5 GW through the closure of eight nuclear power plants in the country in summer 2011. However, the closures have not affected prices to any major degree due to the higher capacity of renewable energy, net growth of conventional generation capacity (4 GW) in Germany and the Netherlands, and higher imports of electricity.

"Lower prices for electricity and CO_2 emission allowances in 2012"

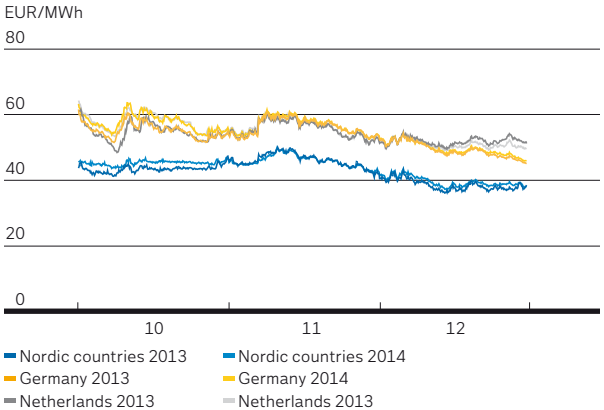
Lower prices of CO_2 emission allowances

The current economic recession has led to considerably lower industrial output and lower demand for electricity, especially in southern Europe, which contributed to a sharp decrease in CO_2 emissions. This, combined with an increase

Electricity spot prices in the Nordic countries, Germany and the Netherlands, monthly averages

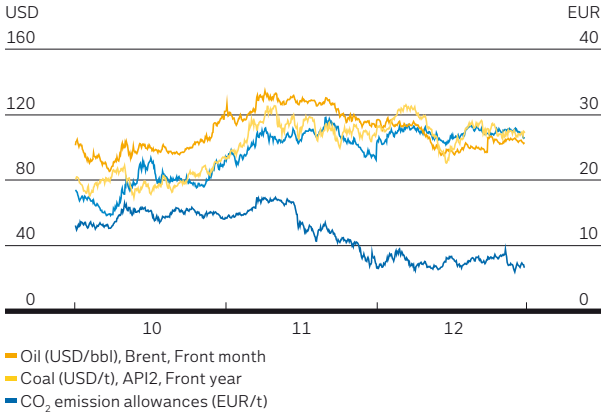


Electricity futures prices in the Nordic countries, Germany and the Netherlands



Sources: Nasdaq OMX Commodities, European Energy Exchange (EEX) and APX.

Price trend for oil, coal, gas and CO_2 emission allowances



in renewable energy, lower utilisation and in certain cases closure of fossil-fired power plants with high marginal costs (especially in the UK and southern Europe), and a high level of carbon credits from climate projects in developing countries (CDM projects), has led to a large surplus of emission allowances and thus historically low CO_2 prices.

The accumulated surplus of CO_2 emission allowances is expected to continue growing to nearly 2 billion tonnes until 2014, which corresponds to the total annual volume of CO_2 emission allowances in the EU ETS system. Discussions are now being held regarding political measures to strengthen the function of this instrument.

The average price of CO_2 emission allowances in 2012 was EUR 7.6/tonne, which is 41% lower than in 2011. This has led to lower costs for production based on fossil fuels and thus lower electricity prices overall.

Demands for higher investments in renewable energy

The energy sector is facing an enormous investment need in the years ahead as a result of political goals to increase the share of renewable energy. The EU's target that 20% of energy consumption will be derived from renewable energy sources by 2020 (2010: 12.5%) – and at least 55% by 2050 – will require major investments by utilities and countries. Even small-scale investments, such as in co-combustion of biomass in coal-fired power plants, are costly and will require subsidies.

Integration of intermittent electricity generation

Renewable forms of energy, such as wind power and solar energy, are strongly dependent on the weather, which means that the electricity they generate is intermittent. It is therefore important that other energy sources can cover the need for electricity during periods of weak winds, for example. Integration of intermittent electricity generation can be facilitated by strengthening the distribution networks and expanding cable links to balance generation over larger geographic areas as well as by steering demand and changing consumers' behaviours (such as by encouraging lower electricity use during periods of peak demand). Vattenfall has a breadth of expertise in integrating intermittent electricity generation through its work with virtual power plants in the heating operations and its own activities in renewable energy.

Market regulations with the greatest impact

Vattenfall's operations are also affected by various market regulations and legislative proposals. Presently the trend points to greater regulation of the European energy markets. One example is Germany, where the so-called Energiewende has changed the playing field for the country's utilities. The structure of national support systems is also an important condition for Vattenfall's investments. All energy production from renewable energy sources (except for hydro power) is currently dependent on support systems in order to compete with conventional technologies.

Following are a few of the market regulations that will have the greatest impact on Vattenfall in the near future:

EU 20–20–20

The EU's climate and energy package, commonly referred to as the 20–20–20 targets, entails that by 2020:

- renewable energy shall account for 20% of Europe's energy production,
- CO_2 emissions shall be reduced by 20% (from 1990 levels), and
- energy use shall be reduced by 20% through efficiency improvements.

Energiewende – what does it entail for Vattenfall?

Energiewende (which can be translated as "energy turnaround"), refers to the reversal of Germany's energy policy following the accident at the Fukushima nuclear power plant in Japan in March 2011. Following the accident, the German government decided in summer 2011 to close eight of Germany's nuclear power plants with immediate effect and to phase out all of the country's nuclear power plants by 2022 at the latest.

Currently, installed capacity for renewable energy production in Germany is approximately 70 GW (mainly wind power and solar energy), accounting for roughly 25% of total energy production in 2012. The goal is to increase the share of renewable electricity production to at least 35% by 2020. By then, installed capacity of renewable energy is projected to be approximately 117 GW, which exceeds current demand during peak electricity consumption hours in Germany (70 GW).

Energiewende will require major investments in renewable generation capacity, but also in new high-voltage transmission lines to handle the sharp rise in intermittent, renewable generation. Estimates indicate that more than 4,500 kilometres of new high-voltage transmission lines will be needed to transport the renewable energy produced in northern and eastern Germany (mainly wind power) to the southern and western parts of the country, which use the most electricity. By comparison, only 90 kilometres of new high-voltage transmission lines were built in Germany from 2007 to 2011. Moreover, greater production of wind power and solar energy requires greater flexibility at conventional power plants with respect to their ability to quickly ramp up or lower production, particularly in areas with a high level of wind power production,low demand and insufficient transmission capacity.

At present, the Energiewende is resulting in substantial costs for all electricity consumers. This is mainly on account of the support programmes for renewable energy (since these technologies still do not generate electricity at a cost that competes with conventional methods) and the increases in electricity network fees to finance the investments and upgrading of the electric grid.

Germany has 32 GW of installed capacity of solar cells.

- **The allocation of network concessions** for electricity distribution in Hamburg and Berlin. Vattenfall currently has these concessions, which expire at the end of 2014. In Berlin, the tendering process has been started, and Vattenfall has submitted a bid to continue running the network operations. In Hamburg, the tendering process will not begin until a referendum has been held in conjunction with the parliamentary election at the end of September. The referendum pertains to the issue of whether the city's electricity network should be returned to municipal ownership. It has still not been decided if a referendum should also be held in Berlin.
- **The future of the EU Emissions Trading System (ETS).** Discussions are currently being held within the EU on a possible reduction of emission allowances on the market in order to raise the price and thus the economic incentive to curb carbon emissions. The future price of CO_2 emission allowances has a major impact on electricity prices and thus also on Vattenfall. Currently the incentives for reducing CO_2 emissions are very small, which is a disadvantage from a climate perspective.
- In addition, **the EU's Water Framework Directive** has been adopted into Swedish law. Strict application of the law could lead to greater demands for measures to mitigate the environmental impact caused by hydro power generation, such as on biological diversity. At the same time, a hydro power study is being carried out in Sweden under the initiative of the Swedish government. There is a risk that the effects of the EU's water directive and the results of the Swedish study will lead to an approximate 10% drop in Sweden's current level of hydro power generation.

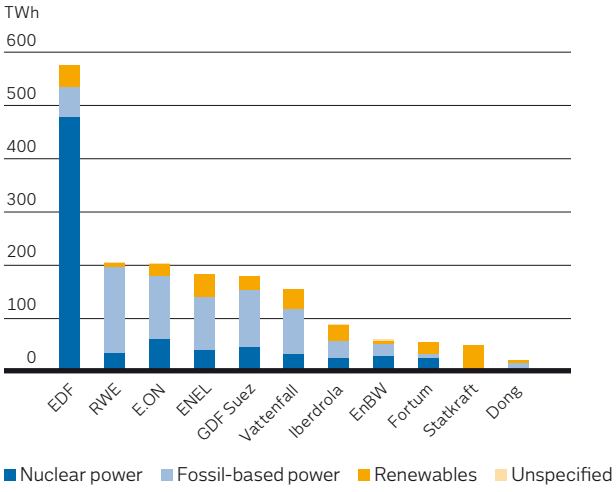
Continued shift to sustainable energy production

In summary, it can be said that the market conditions for Vattenfall and the energy sector continue to be challenging. Supply and demand as well as regulations affect Vattenfall to a high degree. However, compared with other European utilities, Vattenfall has an advantage by being owned by the Swedish state and through its strong market position in the relatively stable northern European countries. Vattenfall's operations in six different energy sources also gives the company good flexibility and makes the company less vulnerable.

"Vattenfall is the largest producer of electricity in the Nordic countries and number 3 in Germany and the Netherlands"

Vattenfall's market positions

Europe's largest electricity generators 2011



The chart shows Europe's largest electricity generators in 2011, broken down by type of energy. Vattenfall is Europe's sixth-largest producer of electricity.

Electricity generation

With a market share of 17%, Vattenfall is the largest generator of electricity in the Nordic countries, through power plants in Sweden, Denmark and Finland.

In Germany, Vattenfall is the third-largest electricity generator, after E.ON and RWE. Also in the Netherlands, Vattenfall is number three after Electrabel (GDF Suez) and Essent (RWE). Overall, Vattenfall is the sixth largest generator of electricity in Europe.

Profitability of the energy companies' production operations is mainly based on the gross margin (the difference between the price of electricity and the production cost, which in turn is dependent on the type of power, the age of the respective plants) as well as the cost of capital.

Electricity sales

In the sales market, Vattenfall competes not only with electricity producers but also with a large number of electricity sales companies. In the Nordic countries, Vattenfall has a market share of around 7% (sales to retail customers). In Germany, Vattenfall's customers are concentrated in the cities of Hamburg and Berlin, where Vattenfall has a market share of approximately 80% in the total retail segment. However, in Germany as a whole, Vattenfall has a market share of approximately 8%. In the Netherlands, Vattenfall currently sells electricity under the "Nuon – part of Vattenfall" brand. The Vattenfall brand will be gradually introduced in the Dutch market. Nuon has a market share of just under 30% of electricity sales to retail customers in the Netherlands.

Price is the most important competitive factor, however, package solutions and customised solutions for customers' energy needs are growing increasingly popular. Profitability is steered mainly by the companies' ability to secure margins between purchases and sales of electricity, and by having a cost-efficient sales organisation.

Sales of heat

Vattenfall is a leading player in the district heating sector in Germany and among the five largest in Sweden, the Netherlands and Denmark.

Strategy for changed market conditions

The market conditions for Vattenfall and the energy sector continue to be challenging. Supply and demand as well as regulations affect Vattenfall to a high degree. In 2012 Vattenfall adapted its strategy to address the changed conditions in the market.

A strong position in the relatively stable northern European countries and operations in six different energy sources give the company good flexibility and make Vattenfall less vulnerable.

Vattenfall has a continued ambitious growth strategy in renewable electricity generation and plans to invest SEK 19 billion in new wind farms in the next five years. Seen here is a pre-assembled rotor being prepared for lift to the wind turbine housing on a tower in the Ormonde offshore wind farm in the North Sea.

Four strategic focus areas

According to the owner's assignment, Vattenfall is to generate a market rate of return by operating a commercial energy business that enables the company to be among the leaders in developing environmentally sustainable energy production.

The heart of the strategy that was decided on in 2010 remains in place. However, on a number of points, the conditions that applied then have changed, and certain assumptions that made up the foundation for the strategy no longer apply. The market outlook has continued to worsen as a result of even higher overcapacity, lower anticipated future electricity prices and narrower margins. Moreover, since 2011 entirely new energy policy conditions exist in Germany as a result of the country's decision to phase out its nuclear power. Vattenfall has therefore modified and adapted its strategy, focusing on four points for the years immediately ahead: Operational Excellence, a continued strong and profitable Nordic position, additional measures for reducing the company's CO_2 emissions, and continued growth in renewable energy. These points are presented in more detail below.

Vattenfall's paramount task now is to successfully and swiftly carry out the necessary changes. In 2010 the company's strategy was broken down into two phases –

Based on the owner's assignment and against the background of dramatically worsened market conditions, in 2010 Vattenfall laid out a new strategic direction:

- Efficiency improvement and cost-cutting
- Strengthening of the balance sheet through debt reduction
- Scaled-back investment programme
- Focus on core markets of Sweden, Germany and the Netherlands
- Divestment of non-core assets
- Increased availability of production
- Reduction of CO_2 emissions to 65 million tonnes by 2020
- Shift from geographic to functional business management and organisation

During the last two years, Vattenfall has successfully delivered on this strategy, through the following measures:

- The goal of the SEK 6 billion cost-cutting programme was achieved already by year-end 2012, one year earlier than planned
- The balance sheet has been strengthened, and net debt has been reduced by approximately SEK 30 billion compared with 31 December 2010
- The investment programme has been reduced, but is still strong and competitive
- Focus on Sweden, Germany and the Netherlands has been achieved through the divestment of operations in Belgium, Finland and Poland
- Availability of production has been improved. In 2012, total availability at Vattenfall's nuclear power plants was 83%, compared with 72% in 2011
- CO_2 emissions have been reduced from 94 million tonnes in 2010 to 85 million tonnes, of which just under 6 million tonnes pertains to divested operations in Poland
- A new, business-led organisation was implemented on 1 January 2011 and was updated in November 2012

Four strategic focus areas:

- Stronger focus on Operational Excellence and cost-cutting
- Continued strong and profitable position in the Nordic countries
- Additional measures to reduce the company's CO_2 emissions
- Continued growth in renewable energy production

a consolidation phase through 2013, followed by a growth phase. This breakdown is no longer relevant on account of the changed market conditions. Instead of planning for growth in general terms, in the foreseeable future Vattenfall must focus on its existing assets aside from growth in renewable energy.

The starting point is relatively favourable, however. Vattenfall has a well balanced production portfolio in terms of geographic spread, diversification of energy sources and CO_2 exposure. Half of production generates no or only small amounts of CO_2. The company's liquidity position is good, but the cost base is too high, and cash flow must be improved. The size of investments must therefore be adapted to the company's financial resources in order to enable growth investments in renewable energy.

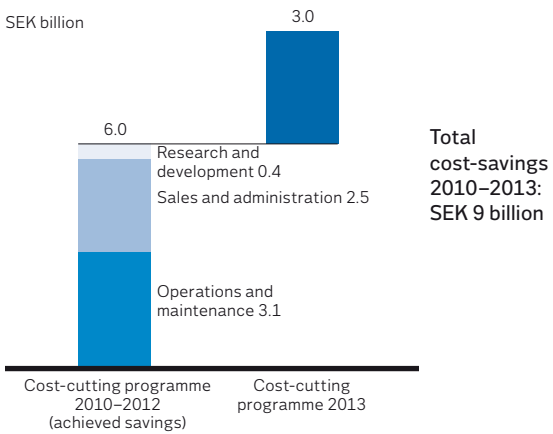
1 Stronger focus on Operational Excellence and cost-cutting

Today's rapid pace of change puts high demands on organisations' ability in the near term to adapt their operations to new conditions. Operational Excellence aims to improve efficiency throughout the Group – in the operative businesses as well as in Staff Functions. It is a matter of measuring and evaluating ways of working and processes, and of creating a company culture that is dedicated to continuous improvement.

The SEK 6 billion cost-cutting programme that was announced in 2010 has been successful. The savings target was reached already in 2012, one year ahead of the original plan. Savings have mainly been achieved through lower purchasing costs, standardisation of processes and routines, greater process efficiency and a sharper focus on personnel costs. For 2013 Vattenfall has decided to cut costs further by setting a new goal to save SEK 3 billion compared with 2012. The savings targets range from 15% to 30% for Staff Functions and Shared Services, and from 3% to 5% for the Business Divisions. This will require a reduction in the workforce.

A new Staff Function for Operational Excellence has been established to promote knowledge-sharing between Vattenfall's various operations and contribute to a culture dedicated to continuous improvement in the day-to-day business.

Cost-cutting programme 2010–2013



2 Continued strong and profitable position in the Nordic countries

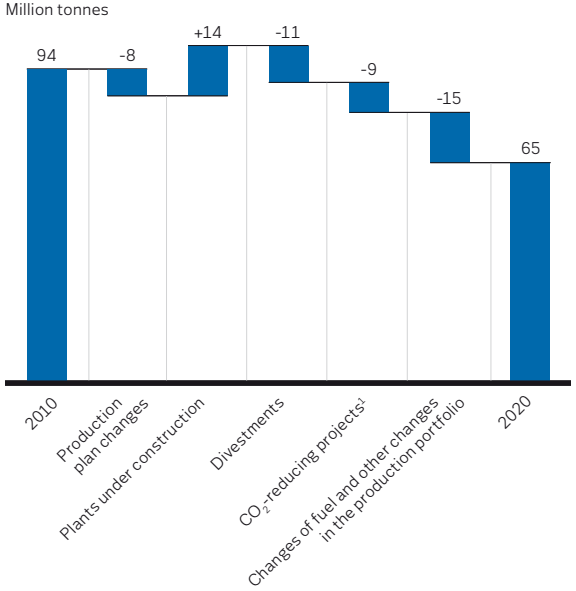
The Nordic countries are a natural focus area for Vattenfall given the company's strong market position. Today Vattenfall has a leading position in the Nordic market in all areas of the value chain and intends to further strengthen its position in the Nordic countries. The company aspires to be a reliable, secure and respected player and to be a leader in the development of renewable energy sources in the Nordic countries when the market conditions are right. Vattenfall will also develop collaborations and take advantage of opportunities to make complementary investments in the Nordic region.

The development of future supply and demand is one of the most important factors for Vattenfall's strategy in the Nordic countries. There is already some overcapacity in the Nordic market today, and this is expected to increase further through continued expansion of renewable energy. At the same time, only a weak rise in demand is anticipated.

To manage this future overcapacity in the Nordic countries, it will be critical to tie the energy markets together through greater electricity transmission capacity, both within and between countries. With an ever-greater share of energy supply being derived from weather-dependent renewable energy, it will be crucial to have more cables to ensure transmission capacity. Greater transmission capacity between the Nordic countries and the European Continent and/or the UK will be good for society, consumers, and also for Vattenfall.

Vattenfall's plan to lower the company's CO_2 emissions

Corresponding to Vattenfall's share of ownership in the respective plants (electricity and heat)



1) E.g., co-combustion of biomass and hard coal.

Vattenfall has a large share of hydro power in the Nordic countries, giving the company a competitive advantage when water supply is good. Conversely, energy supply is vulnerable when there is a shortage of water, which would lead to higher wholesale electricity prices. The more integrated the electricity market it, the better the conditions will be for renewable energy. It is for this reason that Vattenfall is in favour of supporting investments in new cable links.

3 Additional measures to reduce the company's CO_2 emissions

Vattenfall's stated purpose is to be among the leaders in developing environmentally sustainable energy production. The goal of reducing the company's CO_2 emissions is a key part of achieving this vision, and the company is continuing its work with methods to reach the goal of 65 million tonnes by 2020.

Germany's reversal of its energy policy with the decision to phase out the country's nuclear power – the so-called Energiewende (see also page 13) – presents a new challenge for Vattenfall in its efforts to achieve the goals it has set to reduce its CO_2 emissions. To date, Vattenfall has implemented measures that have cut its CO_2 emissions to 85 million tonnes in 2012. Further measures will be needed to bring this level down to 65 million tonnes. Vattenfall intends to develop alternative plans of action for ensuring that this goal is achieved by 2020.

Examples of such measures include co-combustion of biomass in coal-fired plants and changing the type of fuel when older plants are phased out (e.g., replacing coal-fired plants with gas-fired or biomass-based plants). Vattenfall is also counting on a lower number of hours in operation for existing coal-fired plants (and thus lower CO_2 emissions) in connection with rising share of renewable energy in the system.

However, CO_2 emissions are expected to rise in 2013 and 2014 in connection with the commissioning of new coal- and gas-fired plants, including the coal-fired Moorburg plant outside Hamburg, unit R at the Boxberg lignite-fired power plant, and a few gas-fired plants in the Netherlands.

Vattenfall intends to continue operating its existing coal-fired power plants as long as they are economically competitive. Closing profitable power plants would be a destruction of capital. On the other hand, no lifetime extensions will be made of existing coal-fired plants until there is a positive framework in place for CCS (Carbon Capture and Storage) and the technology is fully developed and commercially feasible.

4 Continued growth in renewable energy production

Vattenfall continues to have an ambitious growth strategy in renewable energy production. At the same time, however, the scope for new investments is limited by the poorer market conditions for the entire energy industry. Where suitable, growth projects may be carried out in partnership with other companies. The company may also consider inviting external financiers as part-owners in already completed investments in wind power. It is important to take advantage of economies of scale – Vattenfall has an organisation and documented ability to carry out many and large investments in renewable production.

Vattenfall's goal is that the company's rate of growth in renewable energy production will be higher than the average for the energy markets in northern and central Europe. Read more about Vattenfall's sustainability goals on page 10.

Vattenfall's investment plan for 2013–2017

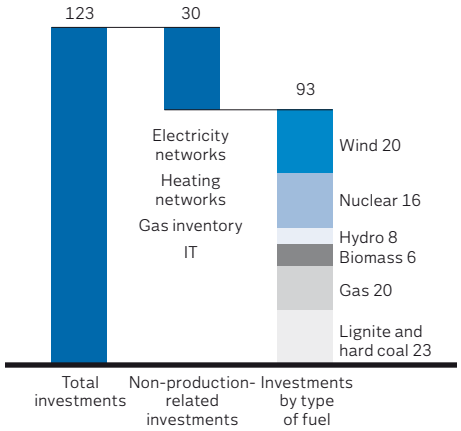
Vattenfall's investment plan for the coming five years (2013–2017) amounts to SEK 123 billion, which is a reduction of SEK 24 billion from the preceding five-year period (2012–2016).

Of the total investment budget, SEK 93 billion pertains to production of electricity and heat. The remaining amount pertains mainly to investments in electricity and heating networks, and IT. Investments in new capacity (growth investments) account for SEK 35 billion (28%) of the total investment budget. The remainder is earmarked for maintenance and replacement investments.

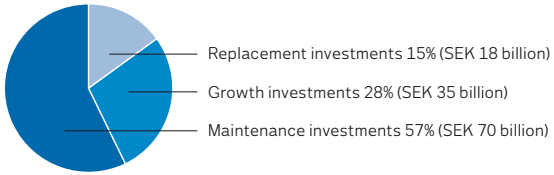
Of growth investments, SEK 21 billion (62%) pertains to investments in low CO_2-emitting technologies (wind, hydro and nuclear power, and biomass). Wind power is the largest single category of growth investments. In the next five years, Vattenfall plans to invest SEK 19 billion in new capacity, roughly equally divided between land-based and offshore wind farms. Investments in fossil forms of energy will account for SEK 9 billion (26%) of growth investments. The largest share of these investments will be in the Moorburg (hard coal) and Magnum (natural gas) power plants. These investments were decided on in 2006 and 2007, respectively, and will be completed by 2015 at the latest. Other growth investments (SEK 4 billion) have been earmarked for expansion of district heating lines.

Investment plan 2013–2017

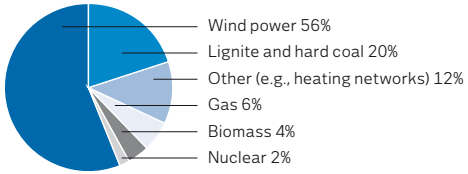
Total investments 2013–2017



28% pertains to growth investments



Wind power accounts for the largest share of growth investments



The path to sustainable energy production

Secure and stable energy supply is a fundamental prerequisite for a functioning society. But all energy production has an environmental impact. Vattenfall therefore has a great responsibility to work with sustainability issues in all areas of its operations – from purchases of fuel to production, distribution and sales of electricity, heat and gas.

Installation of a rotor blade on a tower at the Zuidblob wind farm, west of Zeewolde in the Netherlands. The wind farm is scheduled for commissioning in spring 2013.

Vattenfall's sustainability work is based on the principles of the UN Global Compact, stakeholder expectations and the owner's directives.

During the year, Vattenfall's sustainability work was further developed. Both governance and content have been elevated, and a new advisory and co-ordinating unit was created, where all sustainability issues have been gathered. In autumn 2012 Vattenfall's board set new sustainability targets aside from the company's financial targets. Read more on pages 9–10.

Seven sustainability areas

Vattenfall's sustainability work is broken down into seven areas, see the figure below. All of these areas have been thoroughly reviewed to see what can be done better and to set clear objectives.

Stakeholder analyses indicate that the environment is the area in which people have the most views about Vattenfall's sustainability work. It is also the area in which Vattenfall's operations have the greatest impact.

Society's expectations

Listening to, understanding and balancing stakeholders' varying demands and requests is of utmost importance for enabling the company to conduct its operations in the best possible manner.

Vattenfall is engaged in a continuous dialogue with its various stakeholder groups. The company is continuously seeking out and making an effort to address issues, fears and proposals through meetings and contacts, visits to schools and universities, and through various debates in the media and politics.

Vattenfall has identified nine primary stakeholder groups that all have an interest in and/or are affected by the company's operations. Knowing the stakeholders' priorities and requests in the seven focus areas makes it easier to identify areas with potential for improvement.

Vattenfall therefore conducts regular so-called *materiality analyses* – most recently in autumn 2012 – in which stakeholders are interviewed and asked about which issues they feel are important for Vattenfall to work with and about their perceptions of the company's work in the various areas. Since Vattenfall is a Swedish state-owned company, the primary focus of the analysis is on Swedish stakeholder groups, since they – in their role as both stakeholders and shareholders

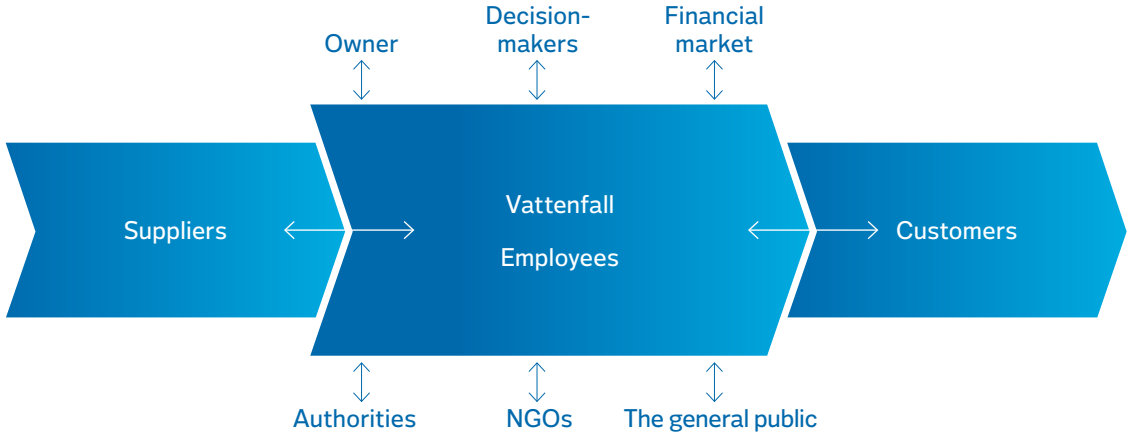
"Sustainable development is development that meets the needs of the present without compromising the ability of future generations to meet their own needs."

Vattenfall's description of sustainability based on the Brundtland Commission's definition from 1987.

Seven sustainability areas

Vattenfall's nine stakeholder groups

Listening to, understanding and balancing stakeholders' varying demands and requests is of utmost importance for enabling the company to conduct its operations in the best possible manner.



– have extra significant bearing on the operations.

The analysis confirms that the seven areas of focus for Vattenfall are relevant, and that the areas that are most important for the company's stakeholders are the environment, business ethics and anti-corruption.

In addition, the analysis shows that Vattenfall's work in the areas of anti-corruption, working conditions and human rights is perceived in a positive light, while the interviewed stakeholders feel that the company's work with sustainability communication, the environment and business ethics have potential for improvement. These results are of central importance, since they form the basis for setting priorities as well as for planning the company's continued sustainability work.

Further information on Vattenfall's sustainability work in general can be found by visiting www.vattenfall.com/sustainability. This site also includes specific results of the stakeholder analysis along with additional information about what is being done within the seven focus areas.

Construction of the Moorburg hard coal–fired power plant outside Hamburg is nearing completion.

Zero tolerance for accidents

Work environment and safety is another important area of sustainability. Safety is one of Vattenfall's three core values, and the company has a "zero tolerance" goal for both workplace-related accidents and absences. The goal is that all employees will have a safe, healthy and inspiring work environment. The goal for 2012, which entailed lowering the LTIF (Lost Time Injury Frequency) by at least 15%, was exceeded by a good margin, with a drop in LTIF from 3.3 to 2.3, or more than 30%.

High demands for the work environment and safety also apply for Vattenfall's contractors, who by signing Vattenfall's Code of Conduct for Suppliers are urged to adhere to the company's guidelines.

Various programmes were started during the year to increase awareness and knowledge about this topic, and several production facilities also implemented own initiatives.

One example can be seen in the construction of the Moorburg power plant outside Hamburg. More than 2,000 people of more than 17 different nationalities work at this massive construction site, which carried out an extensive safety campaign during the year. The safety routines have been translated to 17 languages, and all employees and consultants have participated in a full day of safety training. All pertinent persons also received an electronic instruction guide and must take an annual safety test to gain access to the facility.

Further information about Vattenfall's activities surrounding work environments and safety is available at www.vattenfall.com/sustainability.

Impact of environmental issues on Vattenfall

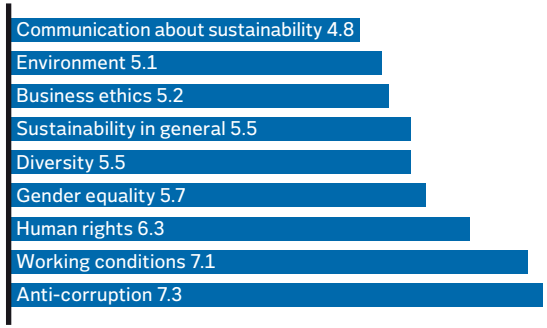
Vattenfall's operations have a considerable environmental impact from emissions to air, water and land, resource handling, biological diversity and nuclear power safety. The single largest environmental impact from Vattenfall's operations is from the production of electricity and heat in power plants. Following are a few examples:

- Hydro power production, wind power production, lignite mining and electricity network operations mainly impact water and land use
- Nuclear power generation impacts the environment mainly through the handling of radioactive waste
- Combustion facilities have an environmental impact mainly in the form of various emissions to the air
- Other environmental impact results mainly from the production of waste, solid residuals and the use of water for cooling at power plants

Materiality analysis 2012

Vattenfall conducted a materiality analysis in autumn 2012, see page 20. The stakeholder groups that were interviewed consisted of people active in research, authorities, companies (customer and business partners), trade organisations, NGOs, consultants, owners, politicians and investors. Apart from questions coupled to Vattenfall's seven focus areas, questions were asked about Vattenfall's sustainability work in general and about how the company's communication about its sustainability work is perceived.

On a scale of 1 (very poor) to 9 (very good), Vattenfall's scores are compiled in the chart at right:



Work on drawing up an improved Code of Conduct for Suppliers was begun in 2012.

Vattenfall's work with ethics

Vattenfall strives to work in an ethically sustainable manner in all aspects of its operations – not only in its own activities, but also in its co-operation with the company's some 47,500 subcontractors.

Vattenfall has a Code of Conduct for Suppliers that stipulates the company's requirements and outlines the company's work with sustainability issues with respect to suppliers. In 2012 Vattenfall decided to make further improvements to this Code of Conduct. Parallel with this, a system for reviewing and monitoring suppliers is being created. The new Code of Conduct for Suppliers will be fully implemented in 2013.

For further information about Vattenfall's work in the area of ethics, see www.vattenfall.com/sustainability.

Stronger corporate responsibility for coal mining

Together with a number of other major European energy utilities, Vattenfall has formed Bettercoal, an initiative dedicated to promoting continuous improvement of corporate responsibility in the coal supply chain, with a specific focus on the mines themselves. During the year, the initiative was formalised as a global not-for-profit organisation.

Bettercoal is striving to establish industry norms for coal mining and is currently drawing up a code of principles and provisions that mine operators will be expected to adhere to.

This code can then form the basis for self-assessments by mine operators and independent third party site assessments in the mines themselves, which can be followed up through internal improvement programmes.

A draft of the code is available for review on the Bettercoal website: www.bettercoal.org. In autumn 2012, a number of organisations, unions and mining companies provided valuable feedback via a special website and at consultation meetings that were held in Europe, South Africa, Russia and Colombia. The final guidelines will be presented in spring 2013.

As a sole operator, the opportunities to influence suppliers' ways of working are limited. But together with other companies in the industry and by working together to escalate and discuss the issues, the work continues towards creating a globally accepted standard of practice for purchasing coal.

For more information, visit www.bettercoal.org.

The coal-fired Fyn power station outside Odense, Denmark.

Separate sustainability result report

Since 2008 Vattenfall has been a signatory of the UN Global Compact's ten principles in the areas of human rights, labour, anti-corruption and the environment, which have been drawn up specifically for companies. Vattenfall reports its sustainability work in accordance with the Global Reporting Initiative (GRI) since 2003.

The GRI is used to obtain measurable results and present open, clear and comparable information. Vattenfall has chosen to report in accordance with the GRI Level B since 2011, instead of Level A as previously, entailing that the company limits the number of reported indicators and instead focuses on matters that are relevant and important.

The GRI section is reported separately on www.vattenfall.com/sustainability and adheres to the GRI layout with respect to the environment, society and economy. It also includes a description of the company's governance structure and management system. Sustainability information and the GRI section have been examined by the company's auditor. See pages 123-124 for a GRI Content Index.

Generation operating segment

The Generation operating segment covers the development and construction of production plants, production of electricity and heat, and sales of electricity on the wholesale market. It includes four Business Divisions – Sustainable Energy Projects, Production, Nuclear Power, and Asset Optimisation and Trading – and accounts for nearly three-fourths of Vattenfall's underlying operating profit. Earnings are affected mainly by wholesale prices and demand for electricity, market prices of fuel and CO_2 emission allowances, availability at power plants, and the cost structure of production.

Inspection of a turbine in connection with a maintenance outage at reactor 1 at the Forsmark nuclear power plant. The technician pictured here is seen placing out spacers that are used to measure the rotor's alignment with the turbine hub. The rotor must be precisely centred within a tenth of a millimetre.

Increased electricity generation in 2012

2012 was a good year for production, in which record-high hydro power generation and high availability at the company's nuclear power plants compensated for lower electricity prices, particularly in the Nordic countries.

Vattenfall's energy sources

Vattenfall's production activities are based mainly on lignite, hard coal, natural gas, nuclear power, hydro power and wind power. During the year the company produced 178.9 TWh of electricity, up 7% from 2011. Hydro power generation in Sweden reached a record high level, and availability at the company's nuclear power plants increased substantially.

Vattenfall's lignite operations

Vattenfall's lignite-fired power plants produced 55.3 TWh of electricity in 2012 from the plants Jänschwalde (3,000 MW), Boxberg (2,575 MW), Schwarze Pumpe (1,600 MW) and Lippendorf (1,800 MW, of which 900 MW belongs to Vattenfall). Jänschwalde and Schwarze Pumpe are located in the federal state of Brandenburg, while Boxberg and Lippendorf are in Saxony. Vattenfall owns the mines from where the lignite is extracted (except for Lippendorf), which are located nearby the power plants.

In October, the new Unit R was inaugurated at Vattenfall's Boxberg power plant. The unit uses state-of-the-art technology to enhance the plant's efficiency and reduce CO_2 emissions. The plant's efficiency of nearly 44% is the highest possible with currently available technology. The investment decision to build Unit R was made in 2006.

Lignite mining permit

It is important to secure the permits for lignite mining at the Welzow and Nochten mines, and to expand the open-cast mine at Jänschwalde Nord to ensure supply for Vattenfall's lignite-fired plants in the future. Considerable progress was made during the year in negotiations with the federal states of Brandenburg and Saxony, which issue the permits. The permitting process is expected to be completed in mid-2013 for Nochten and mid-2014 for Welzow.

Higher costs for CO_2 emissions

In 2012 Vattenfall emitted a total of 85 million tonnes of CO_2, most of which was generated from lignite-fired plants. During the period 2008–2012 Vattenfall received free emission allowances for 61 million tonnes of CO_2 per year. Starting in 2013, the free-of-charge allocation of emission allowances will essentially cease, which is expected to increase Vattenfall's annual costs by SEK 4–5 billion. For further information about Vattenfall's CO_2 emissions per country, see pages 120–122.

Vattenfall still believes that CCS (Carbon Capture and Storage) is the best method for reducing the company's CO_2 emissions. However, due to a lack of support for this technology among the general public, Vattenfall decided earlier to discontinue its CCS demonstration project at Jänschwalde in eastern Germany. The test operation of the pilot plant at Schwarze Pumpe is continuing, however.

Coal- and gas-fired plants

Vattenfall's hard coal– and gas-fired power plants produced 25.7 TWh of electricity in 2012. The gross margins for gas-fired electricity generation ("clean spark spreads") have narrowed and were near and even below zero for most of the year, which has reduced profitability and the number of hours in operation. In addition, costs increased due to a new tax (EUR 13.8/tonne) on coal-fired electricity generation in the Netherlands. As a consequence, Vattenfall recognised an impairment loss for the book value of goodwill and production assets in the Thermal Power business unit, mainly in the Netherlands, for a total amount of SEK 8.6 billion during the third quarter of 2012.

New gas- and coal-fired plants

During the year, the Diemen 34 and Hemweg 9 power plants were commissioned in the Netherlands. Diemen 34, with installed capacity of 435 MW electricity and 260 MW heat, supplied electricity to the grid for the first time in August 2012. In addition, the new district heating line between the cities of Diemen and Almere began operating in April 2012. The district heating line (180 MW) is the largest in the Netherlands. Hemweg 9 (440 MW), which replaced an older gas-fired power plant of 660 MW at the same location, was fully operating in November 2012. The investment decisions for the Diemen and Hemweg plants were made during the first half of 2010.

In Eemshaven, the Netherlands, the Magnum combined cycle gas turbine power plant (1,311 MW) is expected to be commissioned in summer 2013. The investment decision to build the Magnum plant was made in 2007 (before Vattenfall acquired N.V. Nuon Energy).

The hard coal–fired Moorburg power plant (1,640 MW) outside Hamburg, Germany, is expected to be commissioned in 2014. The investment decision on Moorburg was made in 2006.

Greater availability of nuclear power

In 2012 Vattenfall's nuclear power plants produced 48.9 TWh of electricity, which is roughly 30% of Sweden's total electricity generation.

To increase availability at the plants, Vattenfall has developed and improved the routines for audits in a number of areas. For example, so-called Readiness Reviews have been introduced, to ensure that all persons involved are authorised to work with plant audits.

Safety has highest priority at all of Vattenfall's nuclear power plants. During the period 2003–2012, more than SEK 30 billion was invested by Vattenfall and other part-owners

Financial performance

Amounts in SEK million	Full year 2012	Full year 2011	Change, %
Net sales	118,956	128,840	-4.7
External net sales[1]	61,159	61,167	—
Underlying operating profit	20,484	22,579	-9.3
Number of employees	16,928	17,428	-3.0

1) Excluding intra-Group transactions

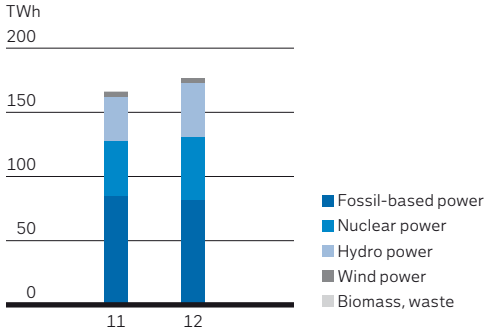
The underlying operating profit decreased by SEK 2.1 billion. This is mainly attributable to average lower electricity prices achieved, mainly in the Nordic market. Fuel costs were higher, mainly for gas, which had a negative impact on profit. Starting in 2012, costs for Staff Functions, except for the Treasury activities, have been allocated to the operating segments. Greater hydro and nuclear power generation had a positive impact on operating profit.

Electricity generation and sales of heat

Amounts in SEK million	2012	2011	Change, %
Sales of heat, TWh	9.9	9.3	6.5
Electricity generation,[1] TWh	167.8	151.6	10.6
– of which, hydro power	42.2	34.5	22.3
– of which, nuclear power	48.9	42.5	15.1
– of which, fossil-based power	72.7	70.8	2.7
– of which, wind power	3.6	3.4	5.9
– of which, biomass, waste	0.4	0.4	—
Sales of electricity, TWh	79.5	65.1	22.1

1) Of electricity generation in 2012, Vattenfall disposed over 150.1 TWh (135.9 TWh), while the rest went to the minority part-owners or was deducted as replacement power.

Electricity generation



In 2012 Vattenfall's plants produced in total 178.9 TWh of electricity, which was 7.3% more than in 2011, owing to record-high generation of electricity from hydro power plants in Sweden and higher availability at the company's nuclear power plants. Fossil-based power generation in the Generation operating segment increased by 2.7%, to 72.7 TWh. In Germany, generation increased to 55.3 TWh (53.7), owing to high availability at the lignite-fired plants and the commissioning of Boxberg Unit R.

Nuclear power generation increased during the year by 15% to 48.9 TWh (42.5). Combined availability for Vattenfall's nuclear power plants in 2012 was 83% (72). Forsmark had availability of 89.3% (86.2) and generation of 24.6 TWh (23.6). This is the highest average level in five years, but still under Vattenfall's goal of 90% availability. The Forsmark nuclear power plant had a very good year in terms of generation, with availability of 89.3% (86.2), and produced a total of 24.6 TWh (23.6). 2012 was the third-best generation year since the plant was commissioned in 1980. The Ringhals nuclear power plant attained its highest level of generation since 2008. The Ringhals 3 reactor achieved an all-time high for its generation, reaching slightly more than 8.3 TWh and availability of 91%.

Vattenfall's hydro power plants generated a record-high 42.2 TWh (34.5) of electricity in 2012, owing to high opening reservoir storage levels, good water supply especially during the spring months, and high availability at the power plants. Electricity generation from wind power amounted to 3.6 TWh (3.4). The increase can be credited mainly to the commissioning of the Ormonde offshore wind farm in the UK during the year.

Sales of heat decreased by 26% to 30.3 TWh (41.0), mainly owing to the divestment of operations in Poland and Finland, which contributed 12.2 TWh of heat in 2011.

A display sign showing availability at the Ringhals nuclear power plant on a cold winter day in 2012. Availability at the Ringhals reactor 3 reached a record high of 91% in 2012.

to raise the level of safety, extend the nuclear power plants' useful lives and implement capacity increases. In 2012 work continued on achieving Vattenfall's goal of achieving world class in nuclear power safety and operation by 2014. As an example, the safety systems have been improved by gaining access to additional reserve power in the event of an emergency. However, further improvements need to be made with respect to the work environment. While Ringhals has shown extraordinary good results in this area – without accidents involving the plant's own staff – there is still scope for improvements at Forsmark. Subcontractors remain a special focus area for work environment improvements.

Throughout 2012, Ringhals remained the subject of special oversight. The Swedish Radiation Safety Authority (SSM) noted in its review report in November 2012 that Ringhals has dedicated major resources to action programmes and has developed in a positive direction. However, SSM wants assurances that the changes will be permanent before releasing Ringhals from the special oversight.

Improvements of physical security

In October, Greenpeace activists were taken into custody after they breached the perimeter fences at the Forsmark and Ringhals nuclear power plants. Reactor safety was never at risk at any point. In response to this event, a number of immediate and long-term measures for strengthening physical security at the plants were presented at a meeting with SSM.

Forsmark and Ringhals have made substantial investments in physical security over a number of years, and these investments will continue. In January 2012, SSM submitted a report to the government on the physical security of the two plants. The report recommended further measures to prevent potentially hostile actions at the plants. This work is continuing in 2013 and may lead to further demands from SSM.

European stress tests
The EU's stress tests continued in 2012. During the spring, a national, report from SSM was examined in a peer review process in the European Nuclear Safety Regulators Group (ENSREG). The national report confirms that Sweden's nuclear power plants meet the current standards. SSM has compiled a national action plan that was presented at the end of 2012. One measure for possible use in the future involves mobile systems for enabling action in the event of several parallel events at different reactors. Other measures pertained to additional reserve power solutions for electricity supply and strengthened crisis organisations.

Record year for hydro power

Vattenfall's hydro power plants generated 42.2 TWh of electricity in 2012. The hydro power plants in Sweden produced at their highest levels ever as a result of good water supply, mainly in the spring months.

In hydro power, the ongoing political processes involving interpretation of the EU Water Framework Directive and the ongoing hydro power study in Sweden are of central importance. During the year, Vattenfall therefore participated in the discussion surrounding these processes together with authorities, ministries and other stakeholders. In addition, Vattenfall started a programme to study how biological diversity can be strengthened in developed rivers while maintaining production capacity at existing hydro power plants.

In 2012 Vattenfall continued to invest in measures to increase dam safety and further raise the availability of the company's hydro power plants. The refurbishment project in Bergeforsen (construction of a new spillway) is continuing according to plan and is expected to be completed in 2014. To secure electricity generation in 2012 in connection with the rebuilding project at the Akkats hydro power plant, Vattenfall decided to push back the start of phase two of the project by one year, until 2013. The project, which involves replacement of the nearly 40 year old 150 MW unit with two new 75 MW units, is expected to be completed in 2016. The first unit has already been put in operation.

New wind farms installed

Vattenfall's wind farms generated 3.6 TWh of electricity in 2012. In all, Vattenfall has more than 900 wind power turbines in operation in Sweden, Denmark, Germany, the Netherlands and the UK.

Two new onshore wind farms
The Swinford wind farm in the UK was fully commissioned in September 2012. The wind farm comprises 11 wind turbines with total installed capacity of 22 MW. In the Netherlands, installation of the Zuidlob onshore wind farm, west of Zeewolde, will be completed in spring 2013. The wind farm comprises 36 wind turbines with total installed capacity of 122 MW.

New offshore capacity
In September, Vattenfall inaugurated its most advanced wind farm, Ormonde, which is located offshore Barrow-in-Furness in the Irish Sea, with total capacity of 150 MW.

The DanTysk wind farm, comprising 80 wind turbines with total capacity of 288 MW in the North Sea, 70 km offshore the island of Sylt, is planned to be commissioned in early 2014. DanTysk is a joint venture between Vattenfall and Stadtwerke München. Construction of the transformer substation was begun in April 2012, and it will be standing in place in the North Sea in summer 2013.

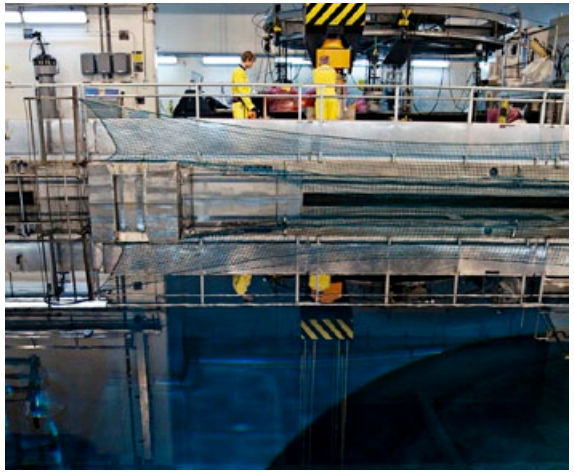
Optimisation of Vattenfall's plants

The Generation operating segment is also responsible for

Vattenfall's nuclear power plants in Germany

In November 2012 Vattenfall began the licence authorising process for closing and dismantling the Brunsbüttel nuclear power plant in Germany. A so-called immediate dismantling will allow optimal use of the expertise and knowledge of existing personnel. A precondition for Vattenfall to proceed with an immediate dismantling is that it obtains access to a storage site for low and medium-level radioactive waste. The licence authorising process has been initiated with the responsible ministry in the federal state of Schleswig-Holstein and is expected to take a few years.

The decision to dismantle the plant is a result of the German government's decision in summer 2011 to phase out the country's nuclear power. To obtain reasonable compensation for the financial losses, Vattenfall and the Krümmel and Brunsbüttel nuclear power companies have submitted a request for the institution of arbitration proceedings with the International Center for Settlement of Investment Disputes (ICSID) in Washington, D.C. The Krümmel and Brunsbüttel nuclear power companies have also filed suit with the Federal Constitutional Court of Germany.



Replacement of nuclear power in Sweden

Vattenfall expects that slightly more than 20 TWh of nuclear power generation from older reactors will be phased out in Sweden between 2025 and 2035. This is a significant share of the country's electricity generation which, in contrast to hydro power and wind power, is not dependent on weather and wind conditions. In the absence of replacement power or long-term planning, this phase-out may cause price turbulence and uncertainty in the electricity market.

In 2010 Sweden's Parliament decided that it should be possible to replace existing reactors with new nuclear power capacity. In 2012 Vattenfall therefore began a more in-depth analysis involving studies as well as formal processes intended to establish clarity on the conditions for an investment in replacement reactors. Among other measures, an application for replacement power has been filed with the Swedish Radiation Safety Authority (SSM). The purpose of Vattenfall's studies is to make it possible for the company in 8-10 years to make a decision on a potential investment in replacement reactors.

The intensified investigative work does not mean that a decision on new nuclear power has already been made or will be made by Vattenfall within the years immediately ahead. The physical preconditions for the potential sites must be analysed in depth, and access to technical expertise, personnel and resources in the field of nuclear power must also be identified. Moreover, the financing of such an extensive investment would require an analysis of various alternatives and potential co-operation partners.

central optimisation (dispatch) of all of Vattenfall's generation assets. Operation of the plants is optimised on the basis of the forecast electricity price and the power plants' variable production costs. Production costs, in turn, are affected mainly by the type of fuel that is used and the cost of any CO_2 emission allowances.

The produced electricity is sold on the wholesale market to electricity exchanges and bilateral counterparties. To reduce the impact of market prices on Vattenfall's earnings, Vattenfall hedges a large share of its future electricity generation in the electricity futures market. Vattenfall also hedges purchases of CO_2 emission allowances and fuel. Further, Vattenfall conducts proprietary trading in electricity to a limited extent. Vattenfall's board of directors has set risk mandates for both hedging and proprietary trading (see also pages 46–47 for a description of the risk mandate and price hedges).

Research and development (R&D) at Vattenfall

The goal of Vattenfall's R&D portfolio is to support Vattenfall's ambition to shift the energy mix towards low CO_2-emitting generation. R&D work is also focused on increasing the flexibility of existing hydro power plants and combined heat and power plants, in parallel with development of the network operations, in the aim of making it possible for Vattenfall to manage the mounting challenges associated with a growing share of intermittent energy generation.

Vattenfall's R&D expenditure in 2012 corresponded to roughly 0.3% (0.6) of consolidated net sales.

Operations requiring permits

During the year, Vattenfall conducted operations that require permits under national legislation in Sweden, Finland, Denmark, Germany, the Netherlands and the UK. The Parent Company Vattenfall AB conducts operations that require permits in accordance with the Swedish Environmental Code. These consist primarily of electricity and heat production plants that require permits and/or registration. Vattenfall's other operations requiring permits that make up a significant part of the business are conducted primarily by subsidiaries.

Lignite mining at Vattenfall's power plant in Jänschwalde, Germany.

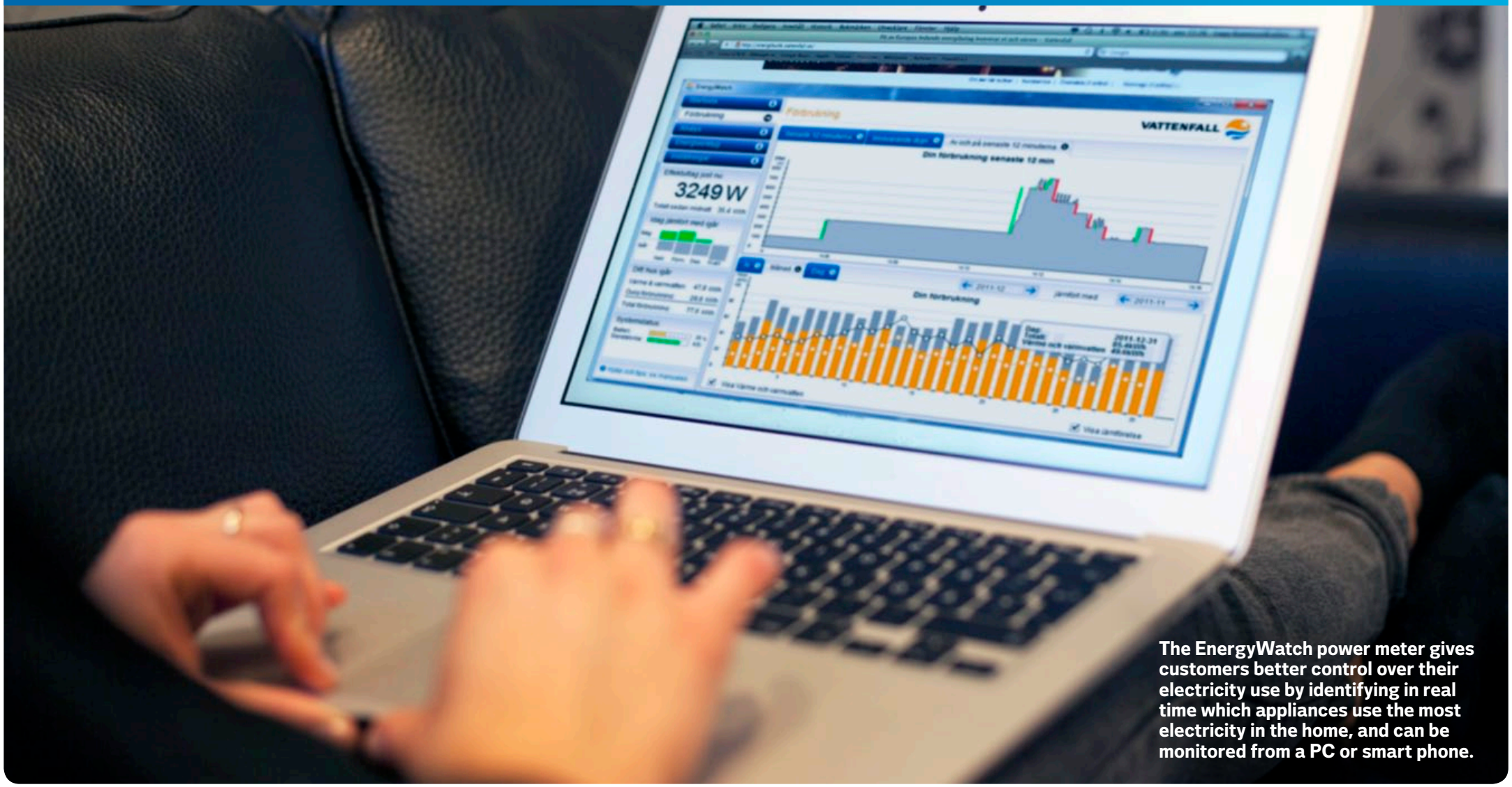
Greater production flexibility at lignite-fired power plants

Vattenfall is currently evaluating various alternatives for the development of lignite drying techniques in an effort to increase power plant flexibility and reduce the technical minimum load. At present, the boiler in a lignite-fired power plant must be supported with fuel oil or be completely shut down if the technical minimum load falls below a certain threshold (between 40% and 50% of full load). Using dried lignite is a way to further reduce the minimum load while avoiding costly fuels with accompanying CO_2 emissions.

To increase knowledge about lignite drying techniques, Vattenfall is developing a new dry coal boiler that will be tested at the Jänschwalde lignite-fired power plant. Additional tests will be conducted in a boiler at the pilot plant in Schwarze Pumpe, starting in 2013. Vattenfall is also investigating techniques for thermal and chemical energy storage and how to integrate these techniques in existing power plants. The most recent results are positive, and the first practical results can be expected in 2014.

Distribution and Sales operating segment

The Distribution and Sales operating segment is responsible for all relationships with Vattenfall's end-customers, including sales of electricity, heat and gas, and distribution of electricity and heat. The operating segment accounts for slightly more than a fourth of Vattenfall's underlying operating profit. Earnings for the operating segment are affected by, among other things, profit margins, cost efficiency and tariffs for the regulated operations. Satisfied customers and reliable deliveries of electricity and heat are prerequisites for the success of the business.



The EnergyWatch power meter gives customers better control over their electricity use by identifying in real time which appliances use the most electricity in the home, and can be monitored from a PC or smart phone.

Smart energy solutions

The energy landscape is ever-changing, which requires continuous adaptation of products and offerings in order to meet customers' needs. Demand for smart solutions for customers' energy needs is on the rise – regardless of whether the customer is an entire city, a large industrial corporation, or a retail customer.

With a total of 6.2 million retail electricity customers in seven countries and total sales of 122.8 TWh of electricity, 52.4 TWh gas and 20.4 TWh heat, Vattenfall has a strong market position in all of its core markets. Vattenfall aspires to be a "Smart Energy Enabler", which entails offering customers smart energy solutions and opportunities to be more environmentally conscious. Apart from sales of electricity, gas and heat, Vattenfall also offers package solutions including charging stations for electric cars, installation of solar cells, solutions for energy efficiency improvement and energy advice.

Financial performance, electricity and heat sales and electricity generation

Amounts in SEK million	Full year 2012	Full year 2011	Change, %
Net sales	130,671	155,299	-15.9
External net sales[1]	123,495	144,575	-14.6
- of which, Distribution	14,216	17,965	-20.9
- of which, Heat	14,785	17,481	-15.4
Underlying operating profit	7,855	10,496	-25.2
- of which, Distribution	5,428	5,067	7.1
- of which, Heat	2,727	4,509	-39.5
Sales of gas, TWh	52.4	51.6	1.6
Sales of heat, TWh	20.4	31.7	-35.6
Sales of electricity, TWh	122.8	137.9	-10.9
- of which, retail customers	29.5	34.0	-13.2
- of which, resellers	22.0	28.7	-23.3
- of which, industrial customers	71.3	74.8	-4.7
Electricity generation, TWh	11.1	15.1	-26.5
- of which, fossil-based power	9.0[3]	14.2	36.6
- of which, biomass, waste	2.1[3]	0.9	133.3
Transited volume, excl. production transiting	99.9	118.8	-15.9
Number of employees	11,235	12,166	-8.3

1) Excluding intra-Group transactions.

2) Of electricity generation in 2012, Vattenfall disposed over 11.1 TWh (15.1 TWh), while the rest went to the minority part-owners or was deducted as replacement power.

3) Values adjusted compared with previously published information (year-end report 2012).

The underlying operating profit decreased by SEK 2.6 billion, mainly due to the lost earnings contribution from divested operations in Belgium, Poland and Finland. Profit improved for the B2C (Business to Consumers) unit as a result of better margins. The Heat business unit showed a decline mainly as a result of average lower electricity prices. Starting in 2012, costs for Staff Functions, except for the Treasury activities, have been allocated to the Generation, and Distribution and Sales operating segments.

Sales of gas to end customers increased to 52.4 TWh (51.6). The increase is mainly due to colder weather. The divested Belgian operation contributed 3.2 TWh in 2011.

Sales of heat decreased by 11.3 TWh to 20.4 TWh (31.7). The decrease is attributable to the divested Polish and Finnish operations, which contributed 12.2 TWh in 2011. Electricity generation decreased by 4.0 TWh to 11.1 TWh (15.1), which is mainly attributable the divestment of the Polish operation (3.7 TWh).

Sales of electricity to retail customers decreased by 4.5 TWh to 29.5 TWh (34.0), which is mainly attributable to the divestment of the Polish and Belgian operations (4.3 TWh). Sales to resellers decreased by 6.7 TWh to 22.0 TWh (28.7), of which 4.8 TWh was attributable to Germany and 1.2 TWh to the Nordic countries. Sales to industrial customers decreased by 3.5 TWh to 71.3 TWh. The Polish and Belgian operations contributed 7.3 TWh in 2011. Sales to industrial customers in France increased to 10.7 TWh (6.7).

Fierce competition in the electricity market

The end-customer market for electricity is characterised by fierce competition, with a plethora of suppliers and wide range of opportunities to combine electricity and gas contracts, and offer add-on services. Switching electricity suppliers is easy, which makes the competition even tougher. While electricity price is one of the chief selection criteria for retail customers, energy efficiency services have become an increasingly important part of energy companies' product offerings. Industrial customers mainly want customised, long-term contracts with fixed prices.

In Sweden Vattenfall has a market share of 27% in the retail market. In Germany Vattenfall's market share is approximately 80% among retail customers in the cities of Berlin and Hamburg, while the company's total market share in Germany is approximately 8%. In the Netherlands, Vattenfall currently sells electricity under the brand "Nuon – part of Vattenfall". The Vattenfall brand is being gradually phased into the Dutch market. Nuon has a market share of just under 30% in the retail market for electricity sales in the Netherlands.

Vattenfall's sales of gas are mainly concentrated in the Netherlands, where Vattenfall has a market-leading position of just under 30%. Since 2011 Vattenfall has also been supplying gas to customers in Germany.

Improved profitability among retail customers

Profitability of electricity sales to retail customers improved considerably in 2012. Vattenfall has changed its pricing strategy from an ambition to be price-leading to an ambition to offer the best value to every customer in the form of agreements, service, environmental profile and add-on services. Parallel with this, the number of customers has been stable, and most customers choose to renew their existing electricity contracts with Vattenfall when they expire. In addition, administrative costs have also been reduced. Customer satisfaction increased during the year, especially in Germany, Finland and Sweden.

Customised business solutions

During the year, Vattenfall intensified its co-operation with many industrial customers, mainly through customised offerings that go beyond physical deliveries of electricity and gas. For example, Vattenfall offers various tools for controlling and monitoring energy use, risk management and market information. Vattenfall's Environmental Product Declarations (see page 30) are appreciated by customers. During the year,

sales of combined electricity and gas products to industrial customers in Germany increased, particularly to property and construction companies. Vattenfall continues to support customers that work in multiple countries. One example is the German chemical group BASF, where Vattenfall's engagement was originally limited to Germany, while today it has been expanded to also include BASF's operations in Belgium, the Netherlands and France.

Leading provider of district heating

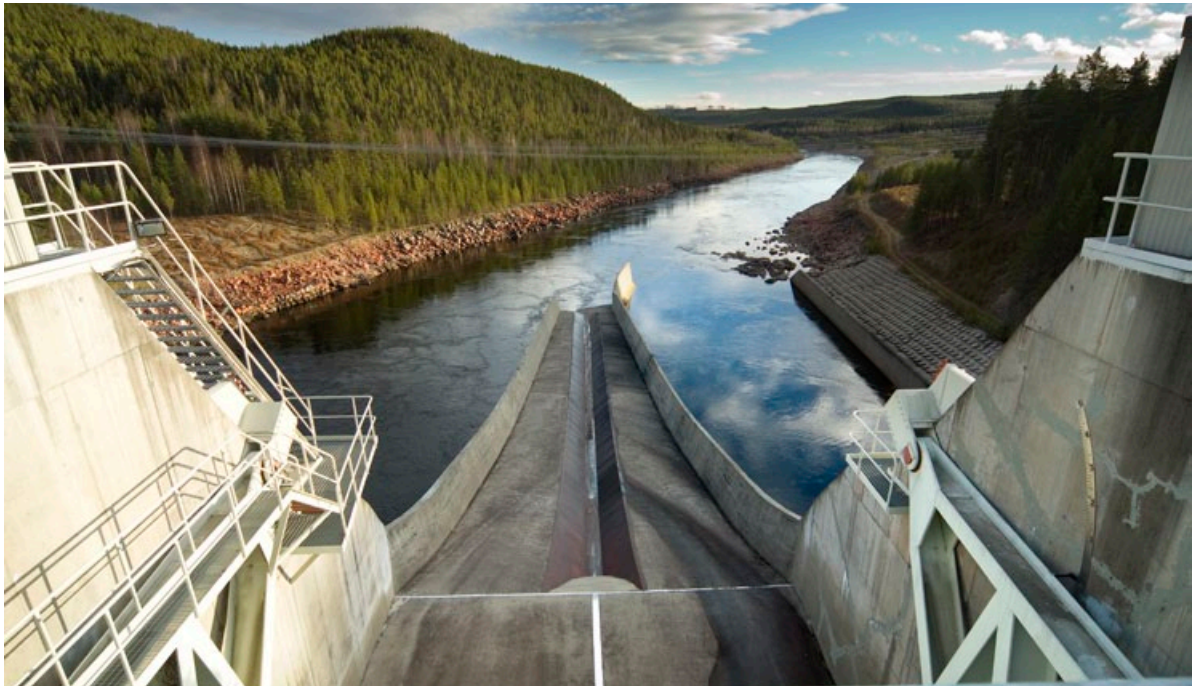
Vattenfall is a leading provider of district heating in Germany and one of the five largest in Sweden, the Netherlands and Denmark. In 2012 Vattenfall sold 20.4 TWh of district heating. During the year, several new contracts for heat sales were signed, including with real estate companies in Uppsala and Berlin. In the Netherlands, Vattenfall signed three new, large concession agreements for the supply of heat and electricity – one in Waalsprong-Waalfront and two in the Amsterdam area (Zeeburgereiland and Houthaven).The latter two agreements are part of a collaboration project with the City of Amsterdam.

Investments in electricity network operations

Electricity distribution is a monopoly business that is regulated by network regulators in the respective countries. It is legally and functionally separated from Vattenfall's operations that are open to competition. Vattenfall has 4.3 million network customers in Sweden and Germany. High-quality, uninterrupted electricity service is one of the chief requirements made by network customers. Vattenfall is continuing with its extensive investments in the electricity network that were begun in the mid-1990s to protect the grid from the effects of weather and thereby ensure highly reliable services for all of its electricity network customers.

The increasing availability of renewable energy – especially wind power – along with customer needs for better and more intelligent information about their electricity use, is driving the development of smart grids. Vattenfall is conducting extensive development work in smart grids in parallel with extensive modernisation and expansion of the electricity grid in order to meet the emerging needs of customers and the authorities.

Vattenfall Eldistribution AB – along with half of the other network companies in Sweden – had previously appealed a decision by the Swedish Energy Markets Inspectorate on revenue frameworks for the Swedish operations for the



Nearly 100% of Vattenfall's electricity generation in Sweden is certified under Environmental Product Declarations. Pictured here is the Tuggen hydro power plant on the Ume River, approximately 20 kilometres downstream of Lycksele, in northern Sweden.

Environmental impact of electricity – unique product

Vattenfall is unique in the Nordic market in offering certified Environmental Product Declarations for electricity. Nearly 100% of Vattenfall's electricity generation in Sweden is EPD-certified. This entails that detailed information is provided on the environmental impact of electricity, including CO_2 emissions. Environmental impact is analysed from a life cycle perspective which takes into account the complete value chain of electricity generation, from production of fuel and plant construction to waste management.

In 1999 Vattenfall was the first company in the world to obtain an Environmental Product Declaration certified according to the EPD® (Environmental Product Declarations) system for the electricity generated by its hydro power plants on the Lule River in Sweden. Since then, Vattenfall's other hydro power, nuclear power and wind power generation has also been certified. EPD is a systematic tool that guarantees quality-assured information on such factors as emissions, use of resources and impact on biological diversity. Environmental Product Declarations are verified and certified by an independent third party.

EPD-certified electricity has become an important add-on service for Vattenfall and has strengthened Vattenfall's competitive edge. EPD-labelled electricity is the only product in the Nordic market that takes into account the environmental impact of electricity supplies from a life cycle perspective. Environmental Product Declarations for hydro power, wind power and nuclear power can be downloaded from Vattenfall's website. Vattenfall is currently working on certifying its entire wind power production portfolio and thereby obtain EPDs for its generation in all major markets.

period 2012–2015. During the year, this legal process continued in the administrative court. In October, the Swedish Energy Markets Inspectorate issued its reply to the appeal, in which it conceded to changes that will result in more reasonable terms for financing the electricity network operations.

Introduction of hourly metering
In Sweden, effective 1 October 2012, all electricity customers with hourly based variable electricity prices have the opportunity to obtain hourly metering of their electricity service. A new law has resulted in extensive changes in the metering systems for Sweden's network companies. During the year, Vattenfall Eldistribution AB made the necessary investments and installations of metering equipment to meet the new requirement on short notice.

Online monitoring of electricity consumption

In Sweden and Finland, Vattenfall offers EnergyWatch, a web-based tool that allows customers to check their electricity use in real time. By identifying the different areas of electricity use in their homes, customers can control their consumption and energy costs. Statistics on measured electricity use can be saved and compiled in various comparisons. EnergyWatch works via a data collection box that is hooked into the customer's electricity meter. Customers can also download an EnergyWatch app and thereby gain access to information about their electricity use directly via their smartphones.

In the Netherlands, Vattenfall markets a similar product, "E-manager", where customers can obtain real-time information about their electricity and gas use via a website or directly in their mobile devices using an app. Customers can also control their energy use by turning appliances on or off remotely from their smart phones. E-manager also allows households to compare their electricity and gas use with similar households, or to set specific energy saving goals.

Network concessions in Hamburg and Berlin
Vattenfall's network concessions for electricity distribution in Hamburg and Berlin expire in 2014. In Berlin, the tendering process has been started, and Vattenfall has submitted a bid to continue running the network operations. In Hamburg, the tendering process will not begin until a referendum has been held in conjunction with the parliamentary election at the end of September 2013. The referendum will address the issue of whether the city's electricity network should be returned to municipal ownership. It has still not been decided if a referendum will also be held in Berlin.

New products and services

During the year, Vattenfall further developed products and customer offerings as part of its ongoing efforts to adapt to changes in the energy market. One example is in the fast-emerging "prosumers" segment, i.e., customers who both produce and consume electricity.

Direct sales of electricity from wind farms
Since 1 January 2012 it has been possible for producers of renewable energy in Germany to sell electricity that they have generated directly to the electricity exchange, instead of receiving a fixed price for feed-ins to the grid. Since the start of the year Vattenfall has offered this service to producers of electricity from wind farms, solar power plants and combined heat and power plants that use biomass.

Several product offerings in solar energy
During the year Vattenfall launched a number of solar energy–based products and services. In Sweden, for example, Vattenfall offers retail customers a turnkey system that includes assembly and installation. Customers can choose between solar panels for home water heating or solar cells for electricity generation. Vattenfall offers to buy all surplus electricity that is produced at the hourly spot price on the electricity exchange less a small fee. In Amsterdam, Vattenfall – in co-operation with Amsterdam municipality and the network operator Liander – has started a pilot project with three tenant-owner co-operatives. The project involves installing solar panels on rooftops of jointly owned buildings, such as for tenant-owner co-operatives.

Charging stations for electric cars
In 2008 Vattenfall took the initiative for an industrial partnership with Volvo Cars. This resulted in the launch of the first 1,000 vehicle series of Volvo and Vattenfall's V60 plug-in hybrid, which were immediately sold out. In Sweden, Germany and the Netherlands, Vattenfall offers charging services for the V60 as well as for electric cars from other manufacturers. For example, car owners can buy a basic package that includes installation of a wall-mounted charging box.

In addition to Vattenfall's solutions for home charging of electric cars, Vattenfall is also developing charging solutions for public places and has installed a number of public charging stations in Amsterdam, Berlin and Hamburg. After signing up for a charging subscription, customers receive a card that they can use at the public stations.

Collaborations with cities
A growing number of cities are setting their own ambitious climate targets that go beyond the EU's targets and national legislation. Vattenfall is lending support to such cities, including Amsterdam, Berlin, Hamburg and Uppsala, in their efforts to achieve more sustainable energy use. For Vattenfall, this mainly involves research into producing and storing energy in an intelligent and sustainable way, providing advice on smart energy use and developing new products and services that help customers use the energy from both electricity and heat production more efficiently.

Carbon-neutral heat
In Uppsala, Vattenfall offers major industrial customers the product "Carbon-Neutral Heat". Customers receive information about lower CO_2 emissions in relation to their consumption, which they can then use in statistics about reduced CO_2 emissions in their own operations. In practice it works like this: Vattenfall substitutes non-renewable waste fractions in the local district heating plant with a higher share of biomass in the overall fuel mix. For 2012, sales of such heat entailed a reduction in CO_2 emissions by 6,300 tonnes.

In Hamburg and Berlin, Vattenfall offers the product "Natural Heat". Customers can choose to receive district heating that is entirely or partly produced using renewable energy sources, including wood-based fuel, waste and methane gas.

Corporate governance report

The following pages includes information on corporate governance during the 2012 financial year in accordance with law and with the Swedish Code of Corporate Governance. The Articles of Association, previous corporate governance reports and material from the most recent general meetings are available on Vattenfall's website, www.vattenfall.com, under "Corporate Governance", where links are also provided to the Swedish state's ownership policy and the Swedish Code of Corporate Governance.

Vattenfall introduced a new Code of Conduct in 2012. The code is based on eight principles – Health and Safety, People, Customers and Suppliers, Business Ethics, Communication, Information Security, Company Resources and the Environment.

Vattenfall's corporate governance in general

The Parent Company of the Vattenfall Group, Vattenfall AB, is a Swedish public limited liability company with registered office in Solna. Vattenfall AB is thereby subject to the provisions of the Swedish Companies Act. The Board of Directors is elected by the Annual General Meeting (AGM). The Board, in turn, appoints the President and CEO, who is responsible for the day-to-day administration of the company in accordance with the Board's guidelines and instructions.

Vattenfall is wholly owned by the Swedish state, and therefore certain stipulations in the Swedish Code of Corporate Governance ("the Code") are not applicable for Vattenfall. See specifically the deviations from the Code in the box below.

Annual General Meeting

By law, the Annual General Meeting (AGM) of Vattenfall AB shall be held within six months after the end of the financial year. The AGM elects the Board of Directors and auditors, sets their fees, adopts the income statement and balance sheet, grants discharge from liability for the board members and CEO, and decides on other matters of business that are incumbent upon the AGM pursuant to law or the Company's Articles of Association.

Important internal and external rules and regulations for Vattenfall

External rules and regulation:

- Swedish and foreign legal rules, particularly the Swedish Companies Act and Swedish Annual Accounts Act
- The Swedish State's ownership policy and other owner directives
- The Swedish Code of Corporate Governance ("the Code")
- Stock exchange rules[1]

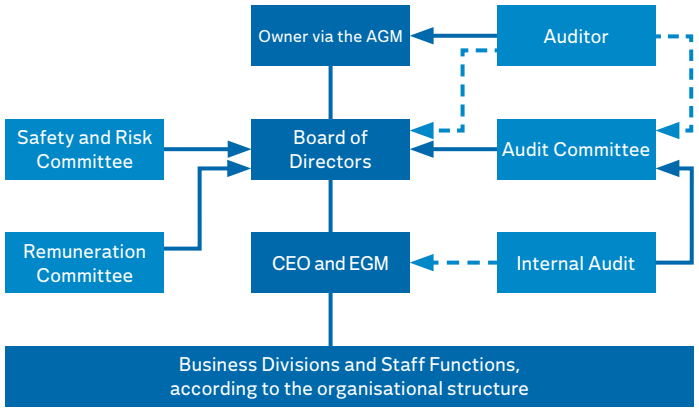
Internal rules and regulations:

- Vattenfall's Articles of Association
- The Board's Rules of Procedure, including the CEO's instructions and instructions for reporting to the Board
- The Vattenfall Management System (VMS) and other internal governance documents

1) Vattenfall adheres to the stock exchange rules that apply for companies that have fixed-income securities registered on Nasdaq OMX Stockholm and other marketplaces.

Vattenfall's Annual General Meeting was held on 25 April 2012. In addition to the points outlined above, the Board reported on compliance with the applicable guidelines for remuneration of senior executives, after which the AGM resolved in favour of unchanged guidelines. Members of Parliament were given the opportunity to ask questions, as stipulated in Vattenfall's Articles of Association. An open Q&A session was arranged after the AGM, in accordance with the Swedish state's ownership policy. The meeting was open to the general public and was aired live via webcast. A recorded version of the AGM, along with the minutes and other material, can be viewed on www.vattenfall.se, under

Governance and reporting structure



Deviations from the Code

Vattenfall deviates from the following stipulations of the Code, since they are not applicable for Vattenfall due to its ownership structure.

Code stipulation	Description	Explanation and chosen solution
1.4 Chairman to preside over the Annual General Meeting	The nomination committee shall propose a person to serve as AGM chairman	Due to its ownership structure, Vattenfall has no nomination committee. Election of an AGM chairman is instead done at the AGM in accordance with the stipulations of the Swedish Companies Act and the Swedish state's ownership policy.

"Bolagsstyrning", translations are available on www.vattenfall.com, under "Corporate Governance".

Extraordinary general meeting

Vattenfall AB held an extraordinary general meeting on 28 November 2012. At the proposal of the owner, the meeting adopted changed financial targets for profitability and capital structure. The meeting also approved the current dividend policy. A more detailed description of the financial targets is provided on page 9. In addition, the Articles of Association were amended to stipulate that the Board's registered office shall be in Solna instead of Stockholm, and that the AGM may be held in Stockholm or Solna. A recorded version of the meeting, the minutes and other material are available at www.vattenfall.se, under "Bolagsstyrning", translations are available on www.vattenfall.com, under "Corporate Governance".

The Board's composition

Appointment of the Board

For enterprises that are wholly owned by the Swedish state, uniform and joint principles for a structured nomination process apply. These principles take the place of the Code's rules on drafting work for decisions on the nomination of board members and auditors.

The Ministry of Finance co-ordinates the process for nominating directors. A work group analyses competency needs based on the company's operations, situation and future challenges, as well as the Board's composition. Thereafter, any recruitment needs are determined and recruitment work is initiated. Once this process has been completed, any nominations are to be publicly announced in accordance with the Code; however, no report is made on the directors' independence. Vattenfall provides orientation training for new directors who are elected by the AGM.

Additional stipulations on the nomination of board members are set forth in the Swedish state's ownership policy, which is published in the annual report for state-owned companies, issued by the Swedish Government Offices.

Board members

Vattenfall's Articles of Association stipulate that the Board of Directors, in addition to the employee representatives, shall have a minimum of five and a maximum of ten members without deputies. The directors are elected annually by the Annual General Meeting, which also appoints the Chairman of the Board.

In 2012 Vattenfall's board included seven AGM-elected directors until the AGM and eight for the time thereafter. Lars G. Nordström was Chairman of the Board. For the time up until the AGM, Christer Bådholm served as Deputy Chairman. By law, the unions are entitled to appoint three board members plus three deputies, and they have exercised this right.

No members of the Executive Group Management (EGM) are directors on the Board. Three board members and one deputy are women. One board member (Eli Arnstad) is a foreign citizen. The average age of board members in 2012 was 55, based on the Board's composition after the AGM. Biographical information about the board members is provided on pages 40–41.

The work of the Board

The Board's duties

The Board's fundamental duties are stipulated in the Swedish Companies Act and the Code. Each year the Board adopts its Rules of Procedure and a number of instructions. The Rules of Procedure and instructions regulate such matters as reporting to the Board, the allocation of authority between the Board, the CEO and the Board's committees, the Chairman's duties, the form of board meetings, and evaluation of the work of the Board and the CEO.

The Board's Rules of Procedure stipulate, among other things, that the Board shall approve major investments, acquisitions and divestments, and adopt central policies and instructions. The Board shall also approve certain important contracts, including contracts between Vattenfall and the CEO, the Deputy CEO and such other persons in the Group who are defined as senior executives by the Annual General Meeting. The Board's duties pertain to Vattenfall AB as well as the Vattenfall Group.

The Chairman leads the work of the Board and is responsible for ensuring that other board members receive the necessary information.

Board meetings

According to the Board's Rules of Procedure, the Board shall hold eight to twelve regular board meetings every year. In addition to the regular meetings, the Board meets when necessary. The Rules of Procedure stipulate that the agenda of every regular meeting shall include the following items of business:

- Important business events since the last meeting
- Financial report
- Safety situation at the Group's nuclear power plants

In addition, the following items of business are included on the agenda every year:

- Strategic plan, business plan, investment plan and communication plan
- Risk exposure and risk mandate
- Strategic personnel issues
- The Group's research and development activities

Investments are monitored and analysed by the Board three years after they have been decided on by the Board.

The Board also holds a number of board seminars every year. At these seminars the Board receives more detailed information about and discusses Vattenfall's long-term development, strategy, competitive situation and risk management.

The Board met eleven times in 2012, including the statutory meeting. The agendas of these meetings included the following items of business:

- The Group's strategy and organisation
- Financial and sustainability targets
- Operational Excellence programme
- Development of risk management in the hedging and trading operations
- Investments in wind, heat and nuclear power operations
- The biomass project in Liberia
- Work with the analysis of the prospect for replacement of nuclear power in Sweden
- Discontinuation of the German nuclear power operations
- Analysis of action options to reduce CO_2 emissions
- Sustainability targets

Evaluation of the Board's and CEO's work

The Board evaluates its own work and the CEO's work once a year in the aim of developing the Board's way of working and effectiveness. This evaluation is conducted under the direction of the Chairman and is reported to the Board. The most recent evaluation was begun in autumn 2012 and was reported to the Board in early 2013.

Board committees

The Board has established within itself an audit committee, a remuneration committee, and a safety and risk committee, along with rules of procedure for the committees. For each committee, the Board has appointed three directors elected

by a general meeting to serve as members, of whom one serves as committee chair. In addition, the Board can, where necessary, establish other committees or temporary work groups to look into matters in more defined areas.

The committees report their work to the Board at the next regular board meeting, whereby the committee chair presents a report accompanied by minutes of the committee meeting. Except for certain matters conducted by the Audit Committee, the committees are only drafting bodies.

Audit Committee
The Audit Committee's most important duties are:
- To oversee Vattenfall's financial reporting
- To oversee the effectiveness of Vattenfall's internal control, internal audit and risk management with respect to the financial reporting
- To stay informed about the audit of the annual report and consolidated accounts
- To review and monitor the auditor's impartiality and independence, and in connection with that, to pay particular attention to whether the auditor provides other services to the company than auditing services
- To monitor the management of market and credit risks
- To assist in the drafting of recommendations for decisions on the election of auditor by the Annual General Meeting
- To conduct an annual evaluation of the external auditors' work

The Audit Committee is responsible for meeting with Vattenfall AB's external and internal auditors on a regular basis in order to confirm the planning of internal audit and to gain information about the planning, focus and scope of the external audit. The Audit Committee is also responsible for discussing co-ordination of the external and internal audits and views of the company's risks.

The Audit Committee has the right, on behalf of the Board, to decide on the internal audit budget, the Internal Audit Charter, the internal audit plan and guidelines for which other services than auditing that Vattenfall may procure from the Group's auditors.

The CFO, the Chief Risk Officer (CRO) and Head of Internal Audit serve in a reporting role on the Audit Committee. The company's external auditors attend all regular meetings and report on their observations of the audit.

Remuneration Committee
The Remuneration Comittee's most important duties are:
- To conduct drafting work for board decisions on matters regarding compensation principles, remuneration and other terms of employment for members of the Executive Group Management and other senior executives
- To monitor and evaluate application of the guidelines for compensation of senior executives, which the AGM, by law, is required to decide on as well as the applicable compensation structures and levels of compensation in the company

The committee's duties also include:
- Serving as a drafting body for ensuring implementation and compliance with guidelines
- Where applicable, conducting drafting work for any special reasons that may exist in an individual case to deviate from the guidelines
- Conducting drafting work for the Board's report on compensation of senior executives in the annual report and, ahead of the Annual General Meeting, monitoring and following up the auditors' review

The CEO serves in a reporting role on the Remuneration Committee.

Safety and Risk Committee
The Safety and Risk Committee is tasked with reinforcing Vattenfall's risk and safety work and cultures. The committee's most important duties are:
- To conduct drafting work for the Board in its efforts to oversee and quality-assure safety and risk work, including the focus areas nuclear power safety, dam safety and the environment
- To conduct an annual review and, when the committee deems it suitable, provide suggestions regarding the Group's strategy, identification and handling of the safety and risk matters described above
- To monitor and review development of the Group's guidelines, instructions and overall framework for management and control of safety and risk issues
- To review and make recommendations regarding risk appetite and risk exposure within the Group

The CRO serves in a reporting role on the Safety and Risk Committee. Since June 2012 the nuclear power operations and the Chief Nuclear Safety Officer (CNSO) present a quarterly report on nuclear power safety to the committee.

For a more detailed description of Vattenfall's risks and risk management, see pages 45–50.

Guidelines for remuneration of the Board

Directors' fees and fees for committee work are set by the AGM, based on the Swedish state's ownership policy. For information on directors' fees in 2012, see Note 53 to the consolidated accounts.

Guidelines for remuneration of senior executives

Vattenfall AB applies the Swedish Government Offices' "Guidelines for terms of employment for senior executives in state-owned companies".

The 2012 AGM approved Vattenfall's deviation from application of the guidelines with respect to executives of subsidiaries, in such way that instead of the definition of senior executive in the Swedish Companies Act, senior executives shall be defined on the basis of whether they have a significant impact on the Group's earnings. Through use of the International Position Evaluation (IPE) model, managers with positions of IPE 68 and higher are to be considered to be senior executives. Ahead of the AGM's resolution, the Board issued a reasoned statement regarding the deviation from the government's guidelines. This reasoned statement is provided in the 2011 Annual Report, on page 56.

According to the AGM's definition, in 2012 a total of 20 persons excluding the CEO were covered by the stipulations on contracts with senior executives. Actions taken with respect to agreements with these executives were continuously reported to the Remuneration Committee and Board, which also decided on the entering into such agreements. Compensation of senior executives and compliance with the adopted guidelines are described in more detail in Note 53 to the consolidated accounts.

The proposed guidelines ahead of the 2013 AGM are shown on page 44.

Auditors

The Swedish state's ownership policy states that the owner is responsible for the election of auditors and that the auditors are to be appointed by the Annual General Meeting. The auditors are currently elected for a mandate period of one year, in accordance with the main rule in the Swedish Companies Act.

Vattenfall's Articles of Association stipulate that the company shall have one or two auditors with or without one or two deputy auditors, or a chartered auditing firm as auditor.

The 2012 Annual General Meeting re-elected the auditing firm Ernst & Young AB as auditor, with Authorised Public Accountant Hamish Mabon as auditor-in-charge. Hamish Mabon is also the auditor of Hexagon AB, Dustin AB and Ambea AB, among other companies. The auditor has no assignments with companies that affect his independence as auditor of Vattenfall.

The Audit Committee has approved guidelines for how procurement of other services than auditing shall take place from the auditor. Consulting services provided by Ernst & Young AB from 2010 to 2012 mainly pertained to tax and accounting issues as well as special input in connection with the divestment of subsidiaries that are no longer core businesses.

The auditor reported his review of the year-end accounts for 2011 to the entire Board at the board meeting on 20 February 2012 (without the presence of any person from the Executive Group Management), and also reported on his observations at the board meeting on 12 December 2012.

In accordance with the Act on Auditing of State Activities, etc., the Swedish National Audit Office may appoint one or more auditors to participate in the annual audit. No such auditor was appointed in 2012.

The Group's auditing costs are described in more detail in Note 22 to the Group accounts and Note 19 to the Parent Company accounts

Internal governance

Core values and vision

Vattenfall's core values are Safety, Performance and Cooperation. Vattenfall's vision is to develop a sustainable, diversified European energy portfolio with long-term increased profits and significant growth opportunities. At the same time, Vattenfall will be among the leaders in developing environmentally sustainable energy production.

Governing business ethics

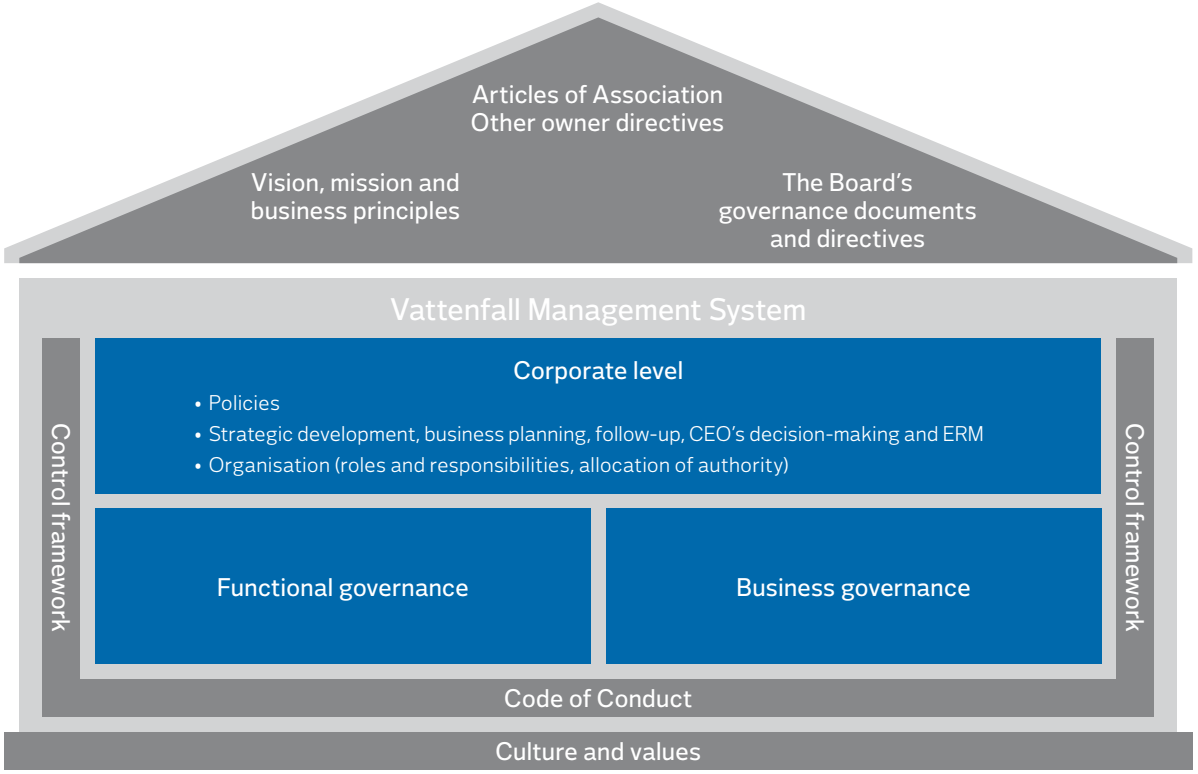
In 2012 Vattenfall's board adopted a new Code of Conduct, which is more concrete and clear. Information on the Code of Conduct has been provided through numerous announcements on the Group's intranet by the CEO and other senior executives, in articles in Vattenfall's employee magazine, and through publications of "dilemma of the week" features on the intranet, where answers can be found in the Code of Conduct. This has helped familiarise the employees with the Code of Conduct. The new Code of Conduct outlines eight principles – Health and Safety, People, Customers and Suppliers, Business Ethics, Communication, Information Security, Company Resources and the Environment. The Code of Conduct also includes clear references to the Vattenfall Management System, which more clearly elaborates on the principles in the Code of Conduct. Vattenfall's Code of Conduct is published on www.vattenfall.com.

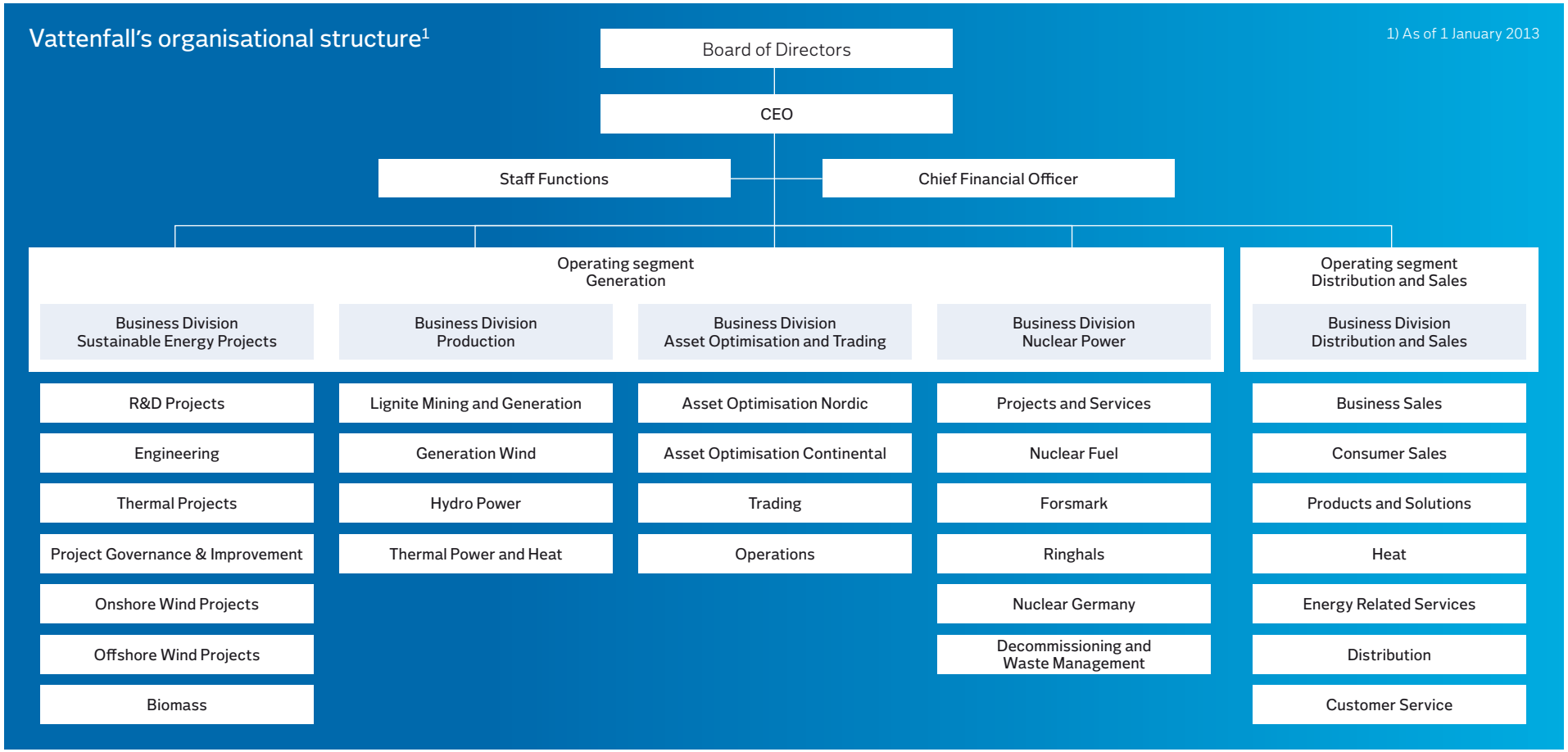
Employees have the opportunity to report incidents through a whistleblowing function staffed by locally appointed external ombudsmen (lawyers), to whom employees, consultants and contractors can turn to report suspected, serious improprieties that the "whistleblower" for some reason does not want to report internally via the normal reporting channels.

CEO and Executive Group Management

The President of Vattenfall AB, who is also CEO of the Vattenfall Group, is responsible for the day-to-day administration in accordance with the Swedish Companies Act. The CEO has appointed decision-making bodies for governance of the

Structure for the VMS and other governance documents





Group and makes decisions independently or with the support of these decision-making bodies. The most important of these decision-making bodies is the Executive Group Management (EGM) and the Vattenfall Risk Committee (VRC).

The Executive Group Management focuses on the Group's overall direction and decides – within the framework of the CEO's mandate from the Board of Directors – on matters of importance for the Group, such as certain investments. The VRC makes decisions pertaining to the risk mandate and credit limits, among other things, and exercises oversight over the risk management framework. Both of these bodies conduct preparatory drafting work on matters that are to be decided by the Board of Directors.

Information on the members of the Executive Group Management is provided on page 42–43.

Vattenfall Management System (VMS)

The Vattenfall Management System is the framework that ensures that Vattenfall's governance adheres to formal requirements as well as to requirements made by the Board, the CEO, the business operations and the Staff Functions. The VMS is documented in binding governance documents consisting of policies, instructions and process documents on three different levels: corporate level, function level and business level. The VMS is an integrated management system that applies for the entire Vattenfall Group, along with the limitations that may arise from legal requirements, such as regarding the

unbundling of the electricity distribution business. Vattenfall's Environmental Management System is integrated in the VMS.

Special routines are in place to ensure adherence to the management system also by subsidiaries. With respect to the German subsidiaries, the so-called domination agreement (Beherrschungsvertrag) that has existed between Vattenfall AB and the German holding company, Vattenfall Europe AG, has become superfluous and ceased to apply in September 2012, in connection with the change in the company structure in the German operations.

Organisation

Vattenfall's governance model is business-led and based on the value chain for electricity and heat (production, distribution and sales). Operations rest on two building blocks:

- Business activities, broken down into two operating segments. These comprise cross-border Business Divisions that have full responsibility for the governance of their business activities, which are performed by business units.
- Functional areas, organised in Staff Functions, which lead, manage and support the business activities. The Staff Functions are centralised and co-ordinated, and have the authority within their respective areas that spans the entire Group.

The breakdown into business units is shown in the organisation chart above. Every unit is defined in the VMS, especially with respect to area of responsibility, decision-making authority and risk mandate.

Internal control over financial reporting

This section describes the most important elements in Vattenfall's system of internal control and risk management in connection with the financial reporting, as required by the Annual Accounts Act and the Swedish Code of Corporate Governance. Vattenfall's framework for this control is based on the COSO framework, which has been developed by the Committee of Sponsoring Organizations of the Treadway Commission. For further information see also the risk section, pages 45–50.

Control environment

According to the Swedish Companies Act and the Code, the Board of Directors has overarching responsibility for internal control over financial reporting. The Board's audit committee conducts drafting work for the Board on matters related to internal control over financial reporting.

The control environment is based on the division of responsibility between the Board and the CEO, which is set forth in the Board's Rules of Procedure, along with the reporting requirements made by the Board. The Board has adopted Vattenfall's Code of Conduct, which lays out the overarching principles governing employee conduct.

The VMS contains governing documents for, among other things, roles and responsibilities, authority, decision-making processes, risk management and internal control. The VMS indicates which decision-making and advisory bodies exist within the Group, apart from those required by law.

Based on these starting points, the control environment was further developed during the year as described on page 36.

Risk assessment

Each year the Board conducts a general review of the Group's risk assessment and risk management processes. The Board's audit committee conducts preparatory drafting work for matters concerning evaluation and monitoring of risks and the quality of the financial reporting. The Audit Committee maintains continuous and regular contact with the Group's internal and external audit functions. Other risks of an operational character that are evaluated and monitored at the board level are mainly addressed and drafted by the Board's safety and risk committee.

The Board's risk management and reporting is centrally co-ordinated via Vattenfall's risk committee. A continuous Enterprise Risk Management process makes it possible to quantify and compare both financial and non-financial risks.

The VMS includes a framework for internal control that identifies and defines material risks related to financial reporting. Staff Function CFO performs analyses of risks related to financial reporting and is responsible for updating this framework.

The external and internal auditors discuss Vattenfall's risk situation in connection with the planning work ahead of the annual audit.

Control activities and monitoring

Vattenfall applies the "three lines of defence" model for management and control of risks. The first line of defence consists of the business units, which own and manage risks. The risk organisation makes up the second line of defence and is responsible for monitoring and controlling risks. Internal and external audit make up the third line of defence. Internal Audit is an independent and objective assurance and advisory function that reviews and oversees the first and second lines of defence.

The Chief Risk Officer (CRO) is responsible for the risk management organisation within the Group and regularly informs the Board's Audit Committee and Safety and Risk Committee.

Internal Audit evaluates and recommends improvements to the effectiveness of Vattenfall's risk management, internal controls and governance processes. This also applies for compliance with Vattenfall's governance documents, including the Code of Conduct. The Internal Audit function is directly subordinate to the Board of Directors and its audit committee. The Head of Internal Audit reports administratively to the CEO and informs the management teams of the business units and other units about audit activities that have been performed.

The Board monitors the Group's financial situation and

addresses this matter at every regular board meeting. The EGM has regular follow-up meetings with the heads of the Business Divisions and Staff Functions regarding the financial outcome. The internal framework for internal control includes processes for self assessment, follow-up, reporting and improvement of control activities in order to prevent, discover and correct errors in the financial reporting. Written confirmation of adherence to internal and external stipulations is part of these processes.

Information and communication

The Group's governance documents are available for all employees on Vattenfall's intranet. Accounting policies and reporting principles are laid out in a joint manual for the entire Group. Updates and changes of these policies and principles are communicated on a continuous basis via the intranet as well as at meetings with representatives of Vattenfall's Business Divisions and Staff Functions.

Reporting and follow-up reporting to the Board and EGM are conducted as an integral part of follow-up. Internal Audit and the CRO also report on their observations to the Board's audit committee and safety and risk committee.

Financial reporting includes interim reports, the year-end report and the annual report. In addition to these reports, financial information is provided to the Group's external stakeholders via press releases and Vattenfall's websites, in accordance with the Swedish Securities Market Act, among other things.

Composition of the Board and meeting attendance

Name	Function	Committee assignments	Attendance at board meetings	Attendance at committee meetings
Lars G. Nordström	Chairman of the Board	Remuneration Committee	11 of 11	6 of 6
Carl-Gustaf Angelin	Employee representative	–	11 of 11	–
Eli Arnstad	Director	Safety and Risk Committee (as committee chair from 25 April)	11 of 11	5 of 5
Lennart Bengtsson	Employee representative, deputy	-	10 of 11	–
Gunilla Berg[1]	Director	Audit Committee (from 25 April)	7 of 8	6 of 6
Johnny Bernhardsson	Employee representative	Safety and Risk Committee	11 of 11	5 of 5
Håkan Buskhe[1]	Director	Safety and Risk Committee	7 of 8	3 of 4
Christer Bådholm[2]	Director, Deputy Chairman of the Board	Safety and Risk Committee (chair) (through 25 April)	3 of 3	1 of 1
Ronny Ekwall	Employee representative	Audit Committee	11 of 11	7 of 8
Håkan Erixon	Director	Audit Committee (chair); Safety and Risk Committee (through 25 April)	11 of 11	AC: 8 of 8 S&R: 1 of 1
Lone Fønss Schrøder[2]	Director	Audit Committee, through 25 April	1 of 3	1 of 2
Lars-Göran Johansson	Employee representative, deputy	–	9 of 11	–
Jan-Åke Jonsson[1]	Director	Remuneration Committee (from 25 April)	8 of 8	3 of 3
Patrik Jönsson	Director	Audit Committee, Remuneration Committee (through 25 April), Safety and Risk Committee (from 25 April)	10 of 11	AC: 8 of 8 RemCom: 3 of 3 S&R: 4 of 4
Jeanette Regin	Employee representative, deputy	–	8 of 11	–
Cecilia Vieweg	Director	Remuneration Committee (chair)	10 of 11	6 of 6

1) Elected at 2012 Annual General Meeting

2) Resigned at 2012 Annual General Meeting

Board of Directors

Eli Arnstad, Lars G. Nordström

Ronny Ekwall, Lennart Bengtsson, Carl-Gustaf Angelin

Cecilia Vieweg, Patrik Jönsson

Lars G. Nordström
Chairman of the Board
Born 1943. Law studies. Elected in June 2011.
Member of the Remuneration Committee.
Other assignments: Chairman of the Finnish–Swedish Chamber of Commerce. Director of Nordea Bank, Viking Line Abp and the Swedish–American Chamber of Commerce. Member of the Royal Swedish Academy of Engineering Sciences (IVA). Honorary Consul for Finland in Sweden.
Previous positions held: Director of TeliaSonera (2006–2010). Chairman of the Royal Swedish Opera (2005–2009). President and CEO of Posten Norden AB (2008–2011). Various executive positions with Nordea (1993–2007), including as President and Group CEO of Nordea Bank AB (2002–2007). Various positions with Skandinaviska Enskilda Banken (1970–1993), including as Executive Vice President (1989–1993).

Eli Arnstad
Born 1962. Studies in public law and political science. Elected in 2008.
Member of the Safety and Risk Committee (chair).
CEO of SpareBank 1 SMN.
Other assignments: Director on the board of the Norwegian University of Life Sciences in Ås, Norway. Director of the Norwegian Football Association.
Previous positions held: Independent consultant (2008–2012). CEO of Enova SF (2001–2007).

Gunilla Berg
Born 1960. M. Sc. Econ. Elected in 2012.
Member of the Audit Committee.
Executive Vice President and CFO of the Teracom Group.
Other assignments: Director of Alfa Laval and Lundbergs.
Previous positions held: Executive Vice President and CFO of SAS (2002–2009). Executive Vice President and CFO of the KF Group (1997–2001). Various positions in the AGA Group (1987–1997).

Håkan Buskhe
Born 1963. M. Sc. Eng., Licentiate in transport and logistics. Elected in 2012.
Member of the Safety and Risk Committee.
President and CEO of Saab AB.
Other assignments: Director of the Association of Swedish Engineering Industries.
Previous positions held: President and CEO of E.ON Nordic AB and E.ON Sverige AB (2008–2010). Executive Vice President of E.ON Sverige AB (2007–2008). Senior Vice President of E.ON Sverige AB (2006–2007). CEO of Schenker North (2002–2006). Managing Director Schenker-BTL AB (2000–2002).

Håkan Erixon
Born 1961. M. Sc. Econ. Elected in 2011.
Member of the Audit Committee (chair).
President of H. Erixon & Co AB.
Other assignments: Director of Saab Automobile Parts AB. Member of the NASDAQ OMX Stockholm AB Listing Committee. Directors of Alfvén & Didrikson Invest AB.
Previous positions held: Senior advisor, Corporate finance, The Swedish Government Offices, which included work for the Swedish National Debt Office (2007–2010). Director of Carnegie Investment Bank AB (2008–2009). Director of Vasakronan AB (2007–2008). Various positions with UBS Investment Bank Ltd, London (1997–2007), including as Vice Chairman of the Investment Banking Division. Various positions with Merrill Lynch International Ltd, London (1992–1997). Kansallis–Osake–Pankki, London (1992–1993). Citicorp Investment Bank Ltd, London (1989–1991).


Gunilla Berg, Jan-Åke Jonsson


Håkan Buskhe, Håkan Erixon


Lars-Göran Johansson


Jeanette Regin, Johnny Bernhardsson

Jan-Åke Jonsson
Born 1951. Degree in Business Economics/Information Systems. Elected in 2012.
Member of the Remuneration Committee.
Other assignments: Chairman of Bythjul Norden AB, Polstiernan Industri AB, Västkustens affärsänglar AB and Datachassi AB. Director of Castellum AB and Opus Prodox AB (publ).
Previous positions held: Various positions with Saab Automobile AB (2002–2011), most recently as President and CEO (2005–2011). Executive Director and Vehicle Line Executive – Commercial Vehicles, General Motors Europe (1997–2002). Various positions with Saab Automobile AB (1975–1997).

Patrik Jönsson
Born 1971. M.Sc. Econ. Elected in 2010.
Member of the Audit Committee and Safety and Risk Committee.
Deputy Director at the Unit for State Owned Enterprises at the Ministry of Finance.
Other assignments: Director of Svevia AB.
Previous positions held: Investment analyst at Bure AB (2001–2003). Management consultant for Brögger & Partners (2000–2011).

Cecilia Vieweg
Born 1955. LL.B. Elected in 2009.
Member of the Remuneration Committee (chair).
Member of Electrolux executive management with responsibility for legal affairs, intangible rights, risk management and security.
Other assignments: Director of the Association of Swedish Engineering Industries. Member of the Swedish Securities Council.
Previous positions held: General Counsel for Volvo Car Corporation (1992–1998). Corporate lawyer for AB Volvo (1990–1992).

Employee representatives, board members

Carl-Gustaf Angelin
Born 1951. M.Sc. Eng. Elected in 2003. Employee representative for Akademikerrådet at the Vattenfall Group.
Vattenfall employee since 1988, currently in Business Division Distribution and Sales.

Johnny Bernhardsson
Born 1952. Engineering studies with supplementary coursework in economics. Employee representative for Unionen. Vattenfall employee since 1970, currently as Controller for Vattenfall Business Services.
Other assignments: Chairman of the European Works Council.

Ronny Ekwall
Born 1953. Elected in 1999. Employee representative for SEKO Facket för Service och Kommunikation.
Vattenfall employee since 1977 as fitter.

Employee representatives, deputies

Lennart Bengtsson
Born 1958. Two-year secondary school degree in mechanics and network technology training in IT. Elected in 2011. Employee representative for SEKO Facket för Service och Kommunikation.
Vattenfall employee since 1979, currently as IT technician.

Lars-Göran Johansson
Born 1953. Secondary school education. Elected in 2008.
Employee representative for Ledarna (the Association of Management and Professional Staff).
Vattenfall employee since 1971 as foreman and technician.

Jeanette Regin
Born 1965. Secondary school diploma and two-year education in healthcare. Elected in 2011. Employee representative for Unionen. Currently head of customer service/office services for Gotland Energientreprenad (a subsidiary of the Vattenfall Group).

Board members who left the Board in 2012:

Christer Bådholm, elected in 2002, and Lone Fønss Schrøder, elected in 2003, left the Board on 25 April 2012.

Executive Group Management

Ingrid Bonde, Øystein Løseth

Stefan Dohler, Tuomo Hatakka, Peter Smink

Øystein Løseth
Born 1958. Master of Civil Engineering, degree in economics. President of Vattenfall AB and CEO since 12 April 2010. Various positions in the energy sector in Norway, the UK and the Netherlands, including a member of the executive management of Statkraft from 2002 to 2003. Joined Nuon N.V. in Amsterdam in 2003 as Managing Director of Nuon Energy Sourcing. Became member of the executive management of Nuon N.V. in 2006, and appointed as President and CEO in April 2008. In 2012 Øystein Løseth did not have any significant shareholdings in companies with which Vattenfall has business relations.

Ingrid Bonde
Born 1959. M.Sc. Econ.
Chief Financial Officer and Deputy CEO since 14 May 2012. Many years of experience in the financial sector, both from the public sector and private business, most recently as Director General of the Swedish Financial Supervisory Authority (2002–2008) and President and CEO of AMF (2008–2012).

Anders Dahl
Born 1957. M.Sc. Eng.
Senior Vice President, Business Division Distribution and Sales. Vattenfall employee since 2002. Director of Production for Vattenfall's Polish CHP operations (2002–2005). Head of Business Unit Wind 2005–2010. Head of Business Division Renewables 2010–2012.

Stefan Dohler
Born 1966. M.Sc. Aerospace Engineering. MBA.
Senior Vice President, Business Division Asset Optimisation and Trading.
Vattenfall employee (HEW) since 1998. Head of network operations, Vattenfall Europe AB 2008–2010. Chairman of Distribution and Transmission System Operators. Vice President Finance, Business Division Production 2011–2012.

Tuomo Hatakka
Born 1956. Economics studies.
Senior Vice President, Business Division Production.
Executive Vice President of Vattenfall AB.
Vattenfall employee since 2005. Head of Business Group Poland 2005–2007. Head of Business Group Central Europe 2008–2010.

Olof Gertz
Born 1963. M.Sc. in Human Resources and Work Life Matters.
Senior Vice President, Human Resources.
Vattenfall employee since March 2012. Active in the DeLaval Group 1994–2012, incl. as Senior Vice President, Human Resources and member of executive management 2001–2012.

Torbjörn Wahlborg, Anne Gynnerstedt

Olof Gertz, Anders Dahl

Anne Gynnerstedt
Born 1957. LL.B.
Senior Vice President, General Counsel and Secretary to the Board of Directors. Vattenfall employee since January 2012. General Counsel, Secretary to the Board and member of executive management of SAAB AB 2004–2012. General Counsel and member of executive management of the Swedish National Debt Office 2002–2004. Corporate Legal Counsel, SAS 1990–2002.

Peter Smink
Born 1965. Economics degree and studies in accounting.
Senior Vice President, Business Division Sustainable Energy Projects.
Vattenfall employee (Nuon) since 2001. Acting Chief Financial Officer from October 2011 to May 2012. Head of Control for Vattenfall's Business Division Asset Development, and CFO and member of executive management of N.V. Nuon Energy 2011. Active in N.V. Nuon Energy in several management positions since 2001.

Torbjörn Wahlborg
Born 1962. M.Sc. Eng.
Senior Vice President, Business Division Nuclear Power. Executive Vice President of Vattenfall AB.
Vattenfall employee since 1990. Held positions in Vattenfall's Polish operations since 1997, incl. as country manager 2008–2009. Head of Business Group Nordic 2010. Head of Business Division Distribution and Sales 2010–2012.
.

Persons who left the Executive Group Management in 2012:

Elisabeth Ström (Senior Vice President, Staff Function External Relations and Communications). Left Vattenfall in July 2012 and Executive Group Management in May 2012.

Harald von Heyden (Senior Vice President, Business Division Asset Optimisation and Trading). Left Vattenfall in June 2012.

Andreas Regnell, Senior Vice President Strategy and Sustainability, and **Huib Morelisse**, CEO N.V. Nuon Energy, are no longer members of the Executive Group Management, since May and October 2012, respectively.

AGM proposal

Proposed principles for compensation and other terms of employment for senior executives

The Annual General Meeting resolved on 25 April 2012 to adopt the Board's proposed guidelines for compensation of senior executives. The Board proposes that the 2013 Annual General Meeting resolve to adopt the Board's proposal for unchanged guidelines for compensation of senior executives.

The Board's proposed guidelines correspond to the government's guidelines for terms of employment for senior executives of state-owned enterprises, adopted by the government on 20 April 2009 (www.regeringen.se), with the deviation set out below.

In accordance with a resolution by the Annual General Meeting on 25 April 2012, Vattenfall deviates from the definition of senior executive of a subsidiary in such way that instead of using the definition of senior executive set forth in the Swedish Companies Act, senior executives shall be defined based on whether they have significant influence on the Group's earnings. Through application of the International Position Evaluation (IPE) model, executives with positions of IPE 68 and higher shall be considered to be senior.

The Board certifies that the compensation in question is in compliance with the guidelines set by the Annual General Meeting, in the following respects. Before a decision is made on compensation and other terms of employment for a senior executive, written documentation shall be available that shows the company's total cost. The proposal for decision shall be drafted by the Board's remuneration committee and thereafter be put to the Board for a decision. The company's auditors shall perform a review to ensure that the set compensation levels and other terms of employment have not been exceeded and, in accordance with the Companies Act, shall once a year – not later than three weeks before the Annual General Meeting – issue a statement as to whether the adopted guidelines have been adhered to.

The Board's explanation for deviations from the guidelines

The deviation decided on by the owner at the 2012 Annual General Meeting entails use of a generally accepted ranking model instead of the definition of senior executive of a subsidiary in the Swedish Companies Act. The Board is of the opinion that the following, special reasons exist for deviating from the guidelines.

Like other international groups, Vattenfall governs its operations from a commercial perspective (via the business areas) and not primarily according to the legal company structure. For commercial and legal reasons, the Vattenfall Group has more than 300 subsidiaries. Through application of the government's guidelines for subsidiaries, a very large number of executives would be considered to be senior, without them having any significant influence on the Group's earnings.

The proposed deviation reflects these circumstances. The criteria used to define what constitutes a senior executive are the individual subsidiary's size, based on sales, the number of employees and number of links in the value chain, as well as the requirements on the individual executive for innovation, knowledge, strategic/visionary role and international responsibility.

The International Position Evaluation (IPE) model is used as support for determining in a systematic manner which positions can be considered to be senior. The Board's conclusion is that, in addition to the fact that the members of the Executive Group Management shall be executives is positions of IPE 68 or higher, they shall also hold leading positions within the Group.

Proposed distribution of profits

The Annual General Meeting has at its disposal retained profits, including profit for the year, totalling SEK 73,196,152,198.

The Board of Directors and President propose that the profits be distributed as follows:

To be distributed to the shareholder	SEK 6,774,000,000
To be carried forward	SEK 66,422,152,198

The proposed distribution corresponds to a dividend of SEK 51.44 per share. The dividend is proposed for payment on 2 May 2013.

Statement by the Board of Directors pursuant to the Swedish Companies Act, Chapter 18, Section 4

Based on the Parent Company's and Group's financial position, earnings and cash position, the Board of Directors is of the opinion that the proposed distribution of profits will not lead to any material limitation of the Parent Company's or Group's ability to make any necessary investments or to meet their obligations in the short and long term. In view of the above, the Board of Directors finds the proposed distribution of profits, totalling SEK 6,774,000,000, to be carefully considered and justified. Further, the Board of Directors finds that the proposed distribution of profits adheres to the principles of the adopted dividend policy (page 9).

The Board of Directors and President's assurance upon signing the Annual Report for 2012

The undersigned certify that the consolidated accounts and the Annual Report have been prepared in accordance with International Financial Reporting Standards (IFRS), as endorsed by the European Commission, for application within the EU, and generally accepted accounting principles, respectively, and give a true and fair view of the Parent Company's and Group's financial position and earnings, and that the Administration Report for the Parent Company and Group presents a fair overview of the development of the Parent Company's and Group's operations, financial position and earnings and describes significant risks and uncertainties that the companies in the Group face.

Stockholm, 20 March 2013

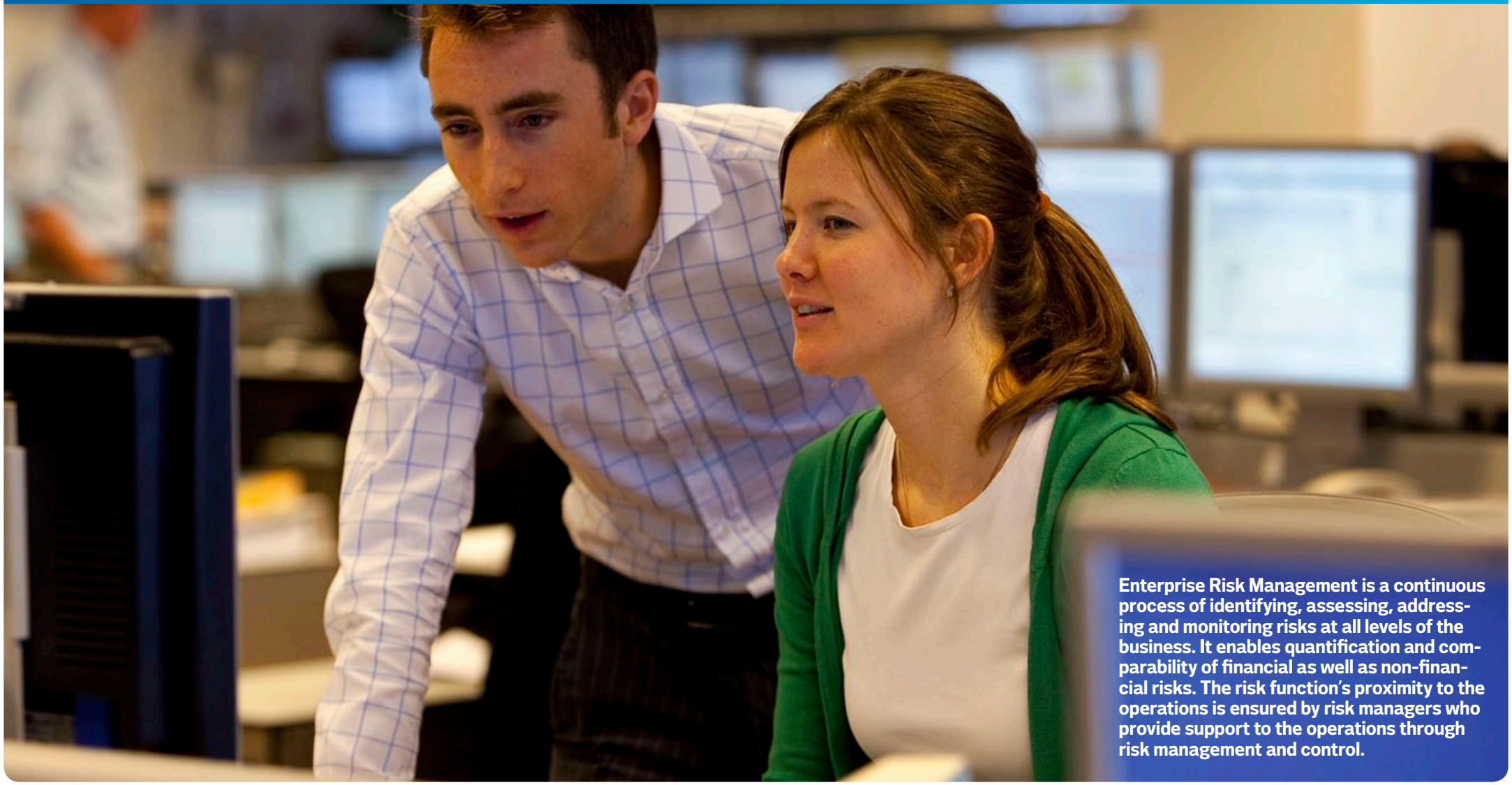
Lars G. Nordström
Chairman of the Board

Carl-Gustaf Angelin	Eli Arnstad	Gunilla Berg	Johnny Bernhardsson	Håkan Buskhe
Ronny Ekwall	Håkan Erixon	Jan-Åke Jonsson	Patrik Jönsson	Cecilia Vieweg

Øystein Løseth
President and CEO

Risks and risk management

Transparency, control and risk-based governance are guiding principles in a risk-conscious organisation. Vattenfall applies conscious and balanced risk-taking in which business transactions are reviewed from both profitability and risk perspectives. Well-considered risk management provides scope to capitalise on business opportunities. In accordance with the Swedish Code of Corporate Governance and the Board of Directors' Rules of Procedure, Vattenfall's risk management framwork ensures thorough identification of Vattenfall's risks.



Enterprise Risk Management is a continuous process of identifying, assessing, addressing and monitoring risks at all levels of the business. It enables quantification and comparability of financial as well as non-financial risks. The risk function's proximity to the operations is ensured by risk managers who provide support to the operations through risk management and control.

Vattenfall's risk framework

Vattenfall's risk framework consists of policies, instructions and processes that ensure that risks are managed in an appropriate manner. Responsibility issues and the internal control environment with respect to risk are described in more detail in the Corporate Governance Report on page 38. During the year, Vattenfall subjected its risk framework to an expert review, which found that it meets high standards.

Enterprise Risk Management at Vattenfall

In the course of its operations, Vattenfall is exposed to various types of risk. Enterprise Risk Management (ERM) is a continuous process of identifying, assessing, managing and following up risks at all levels of the business at an early stage. ERM enables quantification and comparability of both financial and non-financial risks. This provides support to decision-makers and has led to greater transparency and risk awareness throughout the company. Vattenfall bases its ERM on the risk management standards of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and co-ordinates the process with the company's financial reporting. Appropriate risk mitigation measures are then taken based on Vattenfall's risk tolerance, including decisions on whether to avoid, reduce, share or accept a given risk. Selected examples of risks that Vattenfall is exposed to are described below.

Financial risk

Vattenfall's financial risks arise in both the commodity and financial markets. Vattenfall's board of directors has given the CEO a risk mandate for the Group, which is delegated onwards to the business units. In 2012 the risk mandate structure was reviewed and adapted in an effort to improve risk governance in the operations. For trading in commodities, a maximum loss of approximately 1.5% of equity is allowed on a yearly basis, while for the treasury operations the corresponding limit is approximately 1.0%. On average, approximately 25%–30% of permissible exposures are used under these limits.

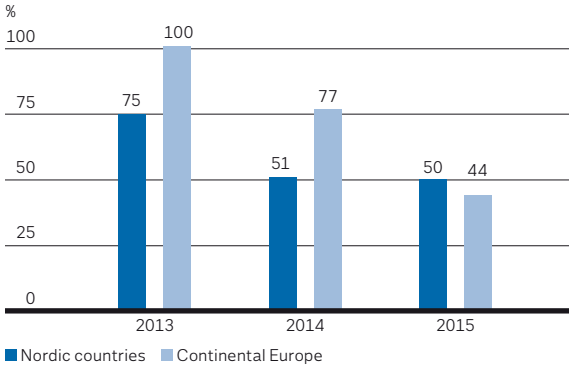
A majority of Vattenfall's exposures in the proprietary trading portfolio are valued based on market prices (mark-to-market). In cases where market prices cannot be observed, modelled prices are used (mark-to-model). Mark-to-model positions occur primarily in the asset- and sales-related portfolios, see Note 47. Handling of such valuation

Enterprise Risk Management

General overview of Vattenfall's risk exposure	Examples of risks	Examples of risk mitigation
Financial risk: Financial risk (short- to medium-term)	Electricity price risk Fuel price risk Volume risk Credit risk Liquidity risk Interest rate risk Currency risk Price risk in equities	Hedging of electricity and fuel prices Effective management of debt portfolio Analysis and selection of counterparties Risk mandate
Operational risk: Risks in operational assets and infrastructure, and personnel and organisational risks (short- to long-term)	Operational asset risk Security risk Personnel risk Legal risk	Maintenance and renewal Optimisation of asset management Insurance High process safety Internal governance and control Succession and competence planning
Strategic risk: Risk for changes in political policies, changes in public opinion, changes in regulations and risk in choice of technology (medium- to long-term)	Political risk Investment risk Sustainability risk	Active business intelligence activities Diversified and sustainable generation portfolio Scenario analyses in the strategic process

The diagram above illustrates Vattenfall's general risk structure and indicates a relative net exposure/impact on the value of Vattenfall's generation and distribution portfolio after appropriate risk mitigation measures have been taken.

Hedge ratios for planned electricity generation as per 31 December 2012



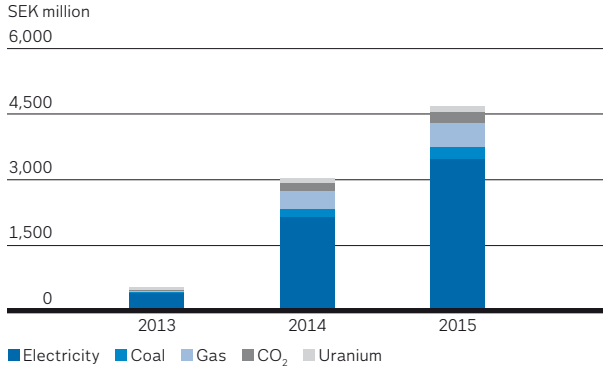
Average price hedges as per 31 December 2012

EUR/MWh	2013	2014	2015
Nordic countries	45	42	41
Continental Europe	55	52	50

The 2011 Annual Report reported hedge ratios and average prices for the years 2012, 2013 and 2014 as follows: Nordic countries: 2012: 76%, price EUR 45/MWh, 2013: 52%, price EUR 46/MWh, 2014: 25%, price EUR 43/MWh.

For Continental Europe, the following figures were reported: 2012: 98%, price EUR 55/MWh; 2013: 52%, price EUR 58/MWh; and 2014: 13%, price EUR 60/MWh

Sensitivity analysis, impact of price movements (+/–10%) on operating profit



Market-quoted risks

	Impact of +/–10% price movement on Vattenfall's operating profit before tax, SEK million[1]			Observed yearly volatility[2], %
	2013	2014	2015	
Electricity	+/– 410	+/– 2,200	+/– 3,500	9–17
Coal	–/+ 7	–/+ 190	–/+ 260	11–12
Gas	–/+ 40	–/+ 420	–/+ 570	11–12
CO_2	–/+ 20	–/+ 180	–/+ 260	49–50
Uranium	–/+ 0	–/+ 30	–/+ 60	

1) The denotation +/– entails that a higher price affects operating profit favourably, and –/+ vice versa.

2) Observed yearly volatility in 2012 for daily price movements for each commodity, based on forward contracts for the period 2013–2015. Volatility normally declines the further ahead in time the contract pertains to.

The sensitivity analysis shows the impact that variations in market prices can have on Vattenfall's operating profit. The exposure of Vattenfall's hedges for electricity and fuel prices is monitored daily. The effect of price movements increases as the share of exposure that is not hedged increases. The exposure for the next-coming year is hedged to a higher degree than the exposure that is expected three years ahead.

Fundamentally, Vattenfall is a net seller of electricity (long position) and net buyer of commodities (short position), which means that an increase in electricity prices would have a positive effect on Vattenfall's operating profit. Conversely, an increase in commodity prices would have a negative effect on operating profit. This analysis is based on the assumption that risks are independent of each other and are based on 252 trading days in a year. Prices and positions are stated as per 31 December 2012.

For example, a price movement of +10% for electricity in Vattenfall's markets has an effect on profit of SEK +410 million for 2013. Observed yearly volatilities for 2012 are provided in the far right-hand column.

models is strictly regulated, and approval is required from the risk organisation before they may be used.

Electricity price risk

Electricity prices are affected by fundamental factors such as supply (water levels, and available generation and transmission capacity), demand (electricity use, which in turn is affected by weather and the economy, among other things), fuel prices and the price of CO_2 emission allowances.

Vattenfall hedges its electricity generation and electricity sales through the use of physical and financial forward contracts and long-term customer contracts. See the chart above for the hedge ratios for Vattenfall's planned electricity generation. The long-term customer contracts pertain to time horizons in which there is no possibility to hedge prices in the liquid part of the futures market and stretch as far as to 2023. The total hedged volume for the period 2016–2023 is 67 TWh, where most is hedged in the beginning of the period, with falling volumes over time.

Vattenfall's risk committee decides how much of future electricity generation is to be hedged within the mandates issued by the Board of Directors. To measure electricity price risk, Vattenfall uses methods such as Value at Risk (VaR) and Gross Margin at Risk along with various stress tests.

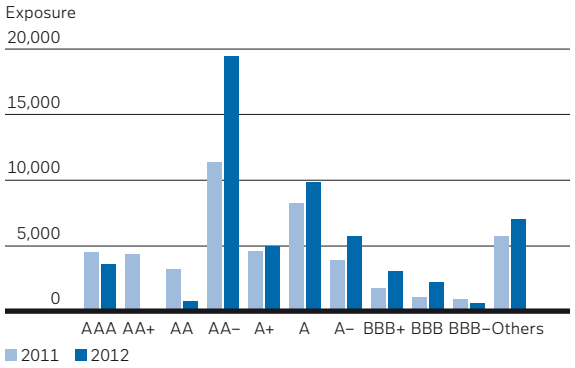
Fuel price risk

Fuel price risk is minimised through analysis of the various commodity markets and diversification of contracts with respect to price model and terms. Regarding hard coal–fired and gas-fired electricity generation, hedges on electricity and fuel prices are co-ordinated to ensure a set fuel cost and thus the gross margin on the electricity generation. For lignite-fired plants, there is no fuel price risk, since Vattenfall owns the lignite mines. The price risk for uranium is limited, since uranium accounts for a relatively small proportion of the total cost of nuclear power generation. The sensitivities of Vattenfall's fuel prices are shown in the sensitivity analysis above.

Volume risk

In hydro power generation, volume risk is managed by analysing and forecasting such factors as precipitation and snowmelt. Volume risk also arises in the sales activities as

Credit exposure per rating class, SEK million



The chart shows exposures to Vattenfall's counterparties where the exposure is greater than SEK 50 million per counterparty, broken down per rating classification according to Standard & Poor's rating scale. Counterparties with an exposure greater than SEK 10 million must be reviewed by Vattenfall's credit risk department. Smaller exposures are considered to have such a large diversification effect that the net risk for Vattenfall is judged to be low.

Procurement and heat exposures are not included. Sales exposures in Benelux are not included in the comparative information for 2011.

Other financial assets (that are neither past-due nor impaired) are considered to have good creditworthiness. The item "Others" in the chart represents mostly counterparties covered by policy and limit exceptions, mainly pertaining to long-term sales contracts and exceptions pertaining to contracts in force that Vattenfall has taken over in connection with acquisitions.

deviations in anticipated vs. actual volumes delivered to customers. There is a correlation between electricity price and generated electricity volume, which is included in the calculation of price sensitivity in the sensitivity analysis above.

Credit risk

Credit risk arises in Vattenfall's commodity trading, sales, treasury operations and investments. Vattenfall's credit risk management involves analyses of the company's counterparties, reporting of credit risk exposure and proposals for risk mitigation measures (such as by obtaining collateral). Credit risk exposure per rating class is shown in the chart above.

Liquidity risk

Liquidity risk refers to the risk of not being able to pursue the price hedging strategy due to insufficient liquidity in the electricity and fuel markets, for example. This risk is managed through, among other things, so-called proxy hedging and by securing an optimal number of trading counterparties.

Liquidity risk also pertains to the risk of Vattenfall not being able to finance its capital needs. Liquidity risk is mitigated by having several types of debt issuance programmes and credit facilities (see above), which ensure access to capital and flexibility. The maturity profile for Vattenfall's debt portfolio is shown in the chart at right as well as in Note 40.

The Group has a defined target for its short-term accessibility to capital. The goal is that funds corresponding to no less than 10% of the Group's sales, or the equivalent of the next 90 days' maturities, shall be available. This is measured on a continuous basis, and the target was met with a good margin throughout 2012. In addition, different liquidity outcomes are simulated through various stress tests.

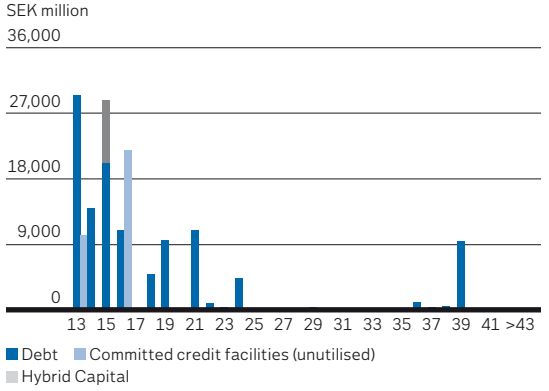
Borrowing programmes and credit facilities

SEK million 2012 (2011)	Currency	Maximum aggregated amount		Maturity		Used portion, %		Reported external liability	
Borrowing programmes									
Commercial Paper	SEK	15,000	(15,000)	—		—	(11)	—	(1,581)
Euro Commercial Paper	EUR	2,000	(2,000)	—				—	(—)
Euro Medium Term Note	EUR	15,000	(15,000)	—		66	(66)	92,230	(96,047)
Committed credit facilities									
Revolving Credit Facility[1]	EUR	2,550	(2,550)	2016	(2016)				
Multi-option Credit Facility	EUR	1,300	(1,300)	2013	(2012)	11	(10)	—	(—)

1) Back-up facility for short-term borrowing.

Committed credit facilities consist of a EUR 2.55 billion Revolving Credit Facility that matures on 20 January 2016 and a EUR 1.3 billion 12-month Revolving Multi-option Credit Facility (unused portion EUR 1.2 billion) contracted in August 2011. A EUR 1 billion Revolving Credit Facility that was to mature in February 2013 was terminated during the first quarter of 2012. The largest issues of benchmark loans are shown in Note 40. Nominal amounts.

Maturity profile of debt portfolio 2012



The chart shows the maturity structure of the debt portfolio excluding loans from minority owners and associated companies (SEK 21,183 million). No major changes took place in loans in the maturity structure for 2012 compared with 2011. Further information on the maturity structure of the debt portfolio is provided in Note 40.

Remaining fixed rate term in debt portfolio 2012 (2011)

SEK million	Debt		Derivative		Total	
< 3 months	12,201	(6,685)	46,870	(22,925)	59,072	(29,610)
3 months–1 year	19,283	(1,860)	-31,625	(18,504)	-12,342	(20,364)
1 year–5 years	53,864	(86,244)	1,709	(-33,073)	55,573	(53,171)
>5 years	43,010	(44,602)	-20,094	(-11,946)	23,916	(32,656)
Total	**129,359**	**(139,392)**	**-3,140**	**(-3,590)**	**126,219**	**(135,802)**

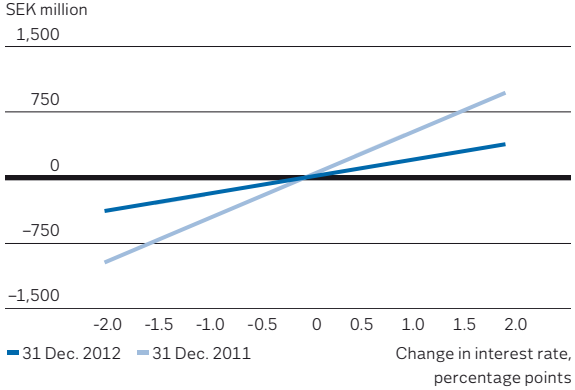
The portfolio includes loans and interest rate derivatives in order to steer the duration of borrowing. Negative amounts are explained by the use of derivatives, such as interest rate swaps and interest rate forwards. The sum of derivatives is not equal to zero due to currency effects. Figures are exclusive of loans from minority owners and associated companies, totalling SEK 21,183 million. The average financing rate as per 31 December 2012 was 3.41% (3.75%). Figures for 2011 have been adjusted compared with previously published values (in the 2011 Annual Report, the values were reported exclusive of Hybrid Capital). All figures in nominal amounts.

Debt portfolio, breakdown per currency 2012 (2011), SEK million

Original currency	Debt		Derivative		Total	
CHF	4,088	(4,229)	-4,088	(-4,229)	—	—
DKK	—	—	—	—	—	—
EUR	97,189	(105,101)	16,561	(20,963)	113,750	(126,064)
GBP	14,200	(14,422)	-10,516	(-14,418)	3,684	(4)
JPY	3,709	(4,558)	-3,709	(-4,558)	—	—
NOK	2,657	(2,617)	-2,657	(-2,617)	—	—
PLN	33	(22)	—	—	33	(22)
SEK	7,483	(8,442)	1,269	(1,270)	8,751	(9,711)
Total	**129,359**	**(139,392)**	**-3,140**	**(-3,590)**	**126,219**	**(135,802)**

The table shows the currency risk in the debt portfolio and the currencies that Vattenfall is exposed to. The debt, and thus the currency risk, decreased in 2012 compared with 2011. Figures above are exclusive of loans from minority owners and associated companies, totalling SEK 21,183 million. Figures for 2011 have been adjusted compared with previously published values (in the 2011 Annual Report, the values were reported exclusive of Hybrid Capital). All figures in nominal amounts.

Interest rate sensitivity



The chart shows how changes in interest rates affect the Group's interest income and expenses during a 12-month period given the Group's current structure of fixed rate borrowing. Including derivatives and Hybrid Capital, but excluding loans from minority owners and associated companies. All figures in nominal amounts

Vattenfall is committed to maintaining financial stability. Even though the company's credit rating is no longer a specific criterion set by the owner, Vattenfall's ambition is to maintain a Single A rating from both Moody's and Standard & Poor's.

Interest rate risk

Vattenfall quantifies interest rate risk in its debt portfolio in terms of duration, which describes the average term of fixed interest. Duration is to have a norm of four years with a permissible variation of +/– one year. The norm duration is based on the company's current financing need and desired interest rate sensitivity in net interest income/expense. The duration of the Group's debt portfolio at year-end was 3.32 years including Hybrid Capital (2011: 4.25). See the table above for the remaining fixed rate term in Vattenfall's debt portfolio.

Currency risk

Vattenfall is exposed to currency risk through exchange rate movements attributable to future cash flows (transaction exposure) and in the revaluation of net assets in foreign subsidiaries (translation or balance sheet exposure).

Vattenfall's debt portfolio per currency is shown in the table above. Currency exposure in borrowing is limited using currency interest rate swaps. Vattenfall strives for an even maturity structure for derivatives. Derivative assets and derivative liabilities are reported in Note 30.

Vattenfall has limited transaction exposure, since most generation, distribution and sales of electricity take place in the respective local markets. Sensitivity to currency movements is thus also relatively low. All transaction exposure that exceeds a nominal value equivalent to SEK 10 million is to be hedged immediately when it arises. The goal for hedging translation exposure is to, over time, match the currency composition in the debt portfolio with the currency composition of the Group's funds from operations (FFO). Vattenfall's largest exposure is in EUR (SEK 154,265 million). Of this amount, 43.7% was hedged at year-end. For further information, see Note 49.

With respect to currency movements, a 5% change in exchange rates, for example, would affect the Group's equity by approximately SEK 5.2 billion (6.4), where a strengthening of the currencies shown in the table in Note 49 would result in a positive change in equity.

Price risk in equities

Vattenfall is also exposed to a certain level of price risk in equities. This exposure is shown in Note 25 to the consolidated accounts and pertains mainly to Vattenfall's shareholding in the Polish energy company Enea S.A. In this case,

Consolidated operating income and expenses per currency, %, 2012 (2011)

Currency	Income		Expenses	
EUR	66	(67)	70	(76)
SEK	27	(25)	16	(16)
PLN	2	(—)	2	(1)
DKK	1	(5)	1	(6)
Others	4	(3)	11	(1)
Total	100	(100)	100	(100)

The values are calculated based on a statistical compilation of external operating income and expenses. Changes in inventories and investments are not included in the compilation.

a change in the share price by 5% would affect comprehensive income by SEK 140 million.

Operational risk

In the course of its operations, Vattenfall is exposed to numerous operational risks, such as in plants, infrastructure, personnel and organisation.

Operational asset risk

Vattenfall's largest operational asset risks are associated with the operation of power generation and heat production plants. An important part of the continuous risk management work involves a rolling inspection programme, continuous control of plant conditions, and effective maintenance.

Nuclear power safety and dam safety are special focus areas for Vattenfall's Safety and Risk Committee. Vattenfall's Chief Nuclear Safety Officer (CNSO) is responsible for overseeing nuclear power safety at the Group level. Vattenfall's ambition is to be world leading in nuclear power safety by promoting a strong safety culture, by having competent employees and by establishing clear and effective processes. Detailed analyses of Vattenfall's nuclear power plants are updated continuously in consultation with the safety authorities in the respective countries and form the basis for continuous improvement work.

With respect to hydro power, Vattenfall's large plants with consequences in the event of a dam failure have been upgraded, and the dams have been reinforced to be able to handle water flows and water levels that are so high that they have a statistical probability of occurring once every 10,000 years.

Risks associated with operational assets concern not only electricity generation but also damage to machinery, such as at Vattenfall's open cast lignite mines, and damage to distribution networks. In the Nordic countries, Vattenfall is continuously working on replacing overhead power lines with underground cables to make the electricity grid less vulnerable. This work has already been completed for the most of the German grid.

Vattenfall protects itself against economic loss to the greatest extent possible through insurance. Information about Vattenfall's contingent liabilities, including dam liability, property insurance and liability for Vattenfall's nuclear power operations, is provided in Note 51.

Security risks

Vattenfall works with loss prevention and mitigating security measures to protect the Group's assets, IT systems, information, personnel and continuing operations. The Group ensures that assets and information are protected from improprieties and fraud, among other things by adherence to the so-called four eyes principle, entailing that decisions must be approved by at least two persons unless special exceptions exist.

Personnel risk

Vattenfall works with preventive measures and adopts best practices in its health and safety work. Vattenfall's production sites maintain a high level of process safety to ensure the safety of both employees and society in general.

In addition, Vattenfall takes a structured approach to succession and competence planning, both in the near and long term.

Legal risk

Vattenfall mitigates legal risks by engaging Staff Function Legal Affairs in the ongoing business activities and decision-making processes. Vattenfall's General Counsel regularly reports on ongoing disputes to the Board of Directors.

Strategic risk

Vattenfall is exposed to a range of different factors that are difficult to influence. To manage strategic risk, Vattenfall relies on scenario analyses and business intelligence activities as well as on risk diversification in the generation and distribution portfolios with respect to markets as well as to sources of energy.

Political risk

To protect itself from political risks, Vattenfall conducts active business intelligence activities and maintains contacts with decision-makers. In addition, Vattenfall belongs to various national and international trade organisations in order to safeguard and promote the company's interests.

Investment risk

Vattenfall is a highly capital-intensive company with an extensive investment programme.

The company applies a very through project governance process in which risk assessment is an integrated part. Before every investment decision, the risk unit performs an independent review of obligations and transactions. In addition to a strategic investment roadmap, a detailed five-year plan of investment projects is updated yearly to provide the Executive Group Management with guidance in the investment decision process.

Sustainability risk

At the initiative of the owner, Vattenfall has structured its work with sustainability issues in seven areas: the environment, human rights, working conditions, gender equality, diversity, business ethics and anti-corruption. During the year, integration of these sustainability aspects with the continuing operations was intensified. Both governance and content have been escalated to the Group level, and a new, advisory and co-ordinating function has been established to ensure that Vattenfall manages sustainability issues in the best possible manner.

Consolidated income statement

Amounts in SEK million, 1 January–31 December	Note	2012	2011
Net sales	7, 8, 9	167,313	181,040
Cost of products sold[1]	10	-131,698	-144,492
Gross profit		**35,615**	**36,548**
Other operating income	11	10,755	7,169
Selling expenses		-6,376	-6,838
Administrative expenses		-11,029	-10,912
Research and development costs		-879	-1,099
Other operating expenses	12	-2,047	-1,691
Participations in the results of associated companies	8, 27, 56	136	32
Operating profit (EBIT)[2]	8, 13, 14, 15, 21, 22	**26,175**	**23,209**
Financial income[3, 5]	16	2,636	3,843
Financial expenses[4, 5]	17	-10,510	-12,754
Profit before tax		**18,301**	**14,298**
Income tax expense	19	-1,077	-3,882
Profit for the year[6]		**17,224**	**10,416**
Profit for the year attributable to:			
Owners of the Parent Company		16,936	11,083
Non-controlling interests (minority interests)	20	288	-667
Total		**17,224**	**10,416**
Earnings per share			
Number of shares in Vattenfall AB, thousands		131,700	131,700
Earnings per share, basic and diluted, SEK		128.60	84.15
Dividend, SEK million		6,774[6]	4,433
Dividend per share, SEK		51.44[6]	33.66

Amounts in SEK million, 1 January–31 December	2012	2011
Supplementary information		
Operating profit before depreciation and amortisation (EBITDA)	54,488	54,538
Financial items, net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	-6,180	-7,893
Underlying operating profit	27,747	30,793
1) Of which, depreciation, amortisation and impairment losses pertaining to intangible assets (non-current) and property, plant and equipment	-27,712	-30,737
2) Of which, depreciation, amortisation and impairment losses pertaining to intangible assets (non-current) and property, plant and equipment	-28,313	-31,329
2) Including items affecting comparability attributable to:		
Capital gains/losses, net	8,010	4,722
Impairment losses and other close-down costs for German nuclear plants	—	-10,513
Other impairment losses and reversed impairment losses, net, pertaining to intangible assets (non-current) and property, plant and equipment	-8,648	-402
Unrealised changes in the fair value of energy derivatives	729	-1,690
Unrealised changes in the fair value of inventories	-395	-541
Restructuring costs	-824	—
Other items affecting comparability	-444	840
Total items affecting comparability in operating profit which also constitute the difference between operating profit and the underlying operating profit	**-1,572**	**-7,584**
3) Including return from the Swedish Nuclear Waste Fund	1,430	1,948
4) Including interest components related to pension costs	-1,012	-1,043
4) Including discounting effects attributable to provisions	-3,124	-2,966
5) Items affecting comparability recognised as financial income and expenses, net	-1,090	-1,508
6) Proposed dividend		

Comments on the consolidated income statement

Net sales

Consolidated net sales in 2012 decreased by SEK 13.7 billion compared with 2011. The decrease is mainly attributable to Vattenfall's divested operations in Belgium, Finland and Poland. Excluding these divestments, net sales increased by 2%.

Underlying operating profit

The underlying operating profit for 2012 decreased by SEK 3.0 billion, mainly on account of the following:

- Negative price effects of average lower electricity prices achieved, mainly in the Nordic market (SEK -5.5 billion)
- Positive volume effects (SEK 7.9 billion) of greater hydro and nuclear power production
- Higher fuel costs and costs for CO_2 emission allowances (SEK -1.8 billion, net)
- Lower costs for operations and maintenance, sales and administration, and research and development (SEK 2.5 billion, net)
- Higher costs for commissioning of new plants, including Boxberg Unit R and Ormonde (SEK -0.6 billion)
- Lost earnings contribution from divested operations in Belgium, Finland and Poland (SEK -2.6 billion)
- Other items (SEK -2.9 billion, net), consisting of several items: compensation in 2011 in the German generation operations (SEK -0.6 billion); repair costs for the transmission cable between the Thanet wind farm and the UK mainland (SEK -0.4 billion); lower earnings contribution from the associated company GASAG (SEK -0.4 billion); higher nuclear power tax (SEK -0.2 billion); and a number of other project-related costs for nuclear power safety, IT and customer service, among other things

Items affecting comparability in 2012 amounted to SEK -1.6 billion, net. These consist mainly of a capital gain on the sale of Vattenfall's electricity distribution and heat business in Finland (SEK 8.1 billion), impairment of goodwill and production assets in the Thermal Power business unit (SEK -8.6 billion), and restructuring costs (SEK -0.8 billion). Impairment losses and provisions pertaining to the Liberian biomass project, Buchanan Renewables Fuel, amounted to SEK -0.5 billion.

Items affecting comparability in 2011 pertained mainly to impairment of book value and higher provisions for handling nuclear waste and dismantling of the German nuclear power plants (SEK -10.5 billion), capital gains on divestments in 2011 (SEK 4.8 billion), and unrealised changes in the fair value of energy derivatives and inventories (SEK -2.2 billion).

Items affecting comparability affecting operating profit

Amounts in SEK million	2012	2011
Capital gains	8,399	4,780
Capital losses	-389	-58
Impairment losses	-8,648	-11,301
Reversed impairment losses	—	386
Unrealised changes in the fair value of energy derivatives	729	-1,690
Unrealised changes in the fair value of inventories	-395	-541
Restructuring costs	-824	—
Other items affecting comparability	-444	840
Total	**-1,572**	**-7,584**

Costs for CO_2 emission allowances

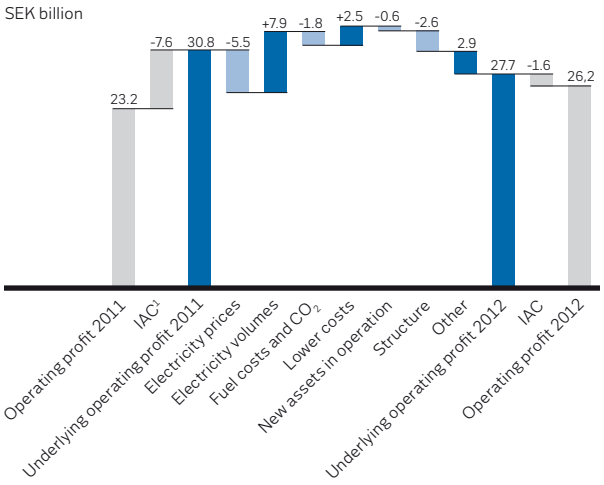
Costs for CO_2 emission allowances for own use in 2012 amounted to SEK 4.0 billion, compared with SEK 4.7 billion in 2011.

Financial items

Financial items amounted to SEK -7.9 billion, an improvement of SEK 1.0 billion compared with 2011. The improvement is mainly attributable to a positive change in the fair valuation of derivatives and the the fact that financial items in 2011 were negatively affected by an impairment loss for Vattenfall's holding in the energy company Enea S.A. (SEK 1.6 billion). During the second quarter of 2012 a further impairment loss of SEK 0.3 billion was recognised for the shareholding in Enea S.A.

Financial items in 2012 also include an impairment loss and provisions totalling SEK -0.8 billion for the Liberian biomass project, Buchanan Renewables Fuel (in addition to the items affecting comparability that affected operating profit).

Explanation items for underlying operating profit in 2012 compared with 2011



1) IAC = items affecting comparability

Taxes

The tax expense for 2012 decreased by SEK 2.8 billion. The lower tax expense is mainly attributable to the decision to lower the corporate income tax rate in Sweden from 26.3% to 22%, effective 1 January 2013, which resulted in a revaluation of deferred tax liabilities. This affected profit for the year postively by SEK 3.5 billion.

The effective tax rate for 2012 was 5.9% (27.1) as a result of the revaluation. Excluding the revaluation, the effective tax rate was 25.3%.

Consolidated statement of comprehensive income

Amounts in SEK million, 1 January–31 December	2012	2011
Profit for the year	**17,224**	**10,416**
Other comprehensive income:		
Cash flow hedges:		
Changes in fair value	7,025	-4,675
Dissolved against the income statement	-2,476	6,668
Transferred to cost of hedged item	70	224
Tax attributable to cash flow hedges	-1,381	-638
Total cash flow hedges	**3,238**	**1,579**
Hedging of net investments in foreign operations	4,035	960
Tax attributable to hedging of net investments in foreign operations	-1,049	-242
Total hedging of net investments in foreign operations	**2,986**	**718**
Translation differences	-7,242	-2,014
Translation differences and exchange rate effects, net, divested companies	79	621
Revaluation of available-for-sale financial assets	30	-1,591
Transferred to the income statement, available-for-sale financial assets	—	1,591
Total other comprehensive income, net after tax	**-909**	**904**
Total comprehensive income for the year	**16,315**	**11,320**
Total comprehensive income for the year attributable to:		
Owner of the Parent Company	16,231	12,008
Non-controlling interests (minority interests)	84	-688
Total	**16,315**	**11,320**

Consolidated balance sheet

Amounts in SEK million	Note	31 December 2012	31 December 2011
Assets	8		
Non-current assets			
Intangible assets: non-current	9, 23	39,045	46,229
Property, plant and equipment	9, 24	279,284	279,445
Investment property	9, 25	489	539
Biological assets		11	8
Participations in associated companies and joint ventures	27	11,620	12,344
Other shares and participations	28	2,980	3,235
Share in the Swedish Nuclear Waste Fund	29	29,954	28,430
Derivative assets	30, 47	23,756	20,691
Current tax assets, non-current	19	807	990
Prepaid expenses		168	188
Deferred tax assets	19	1,018	1,303
Other non-current receivables	31	5,249	5,732
Total non-current assets		**394,381**	**399,134**
Current assets			
Inventories	32	19,463	18,564
Biological assets		3	1
Intangible assets: current	33	6,083	5,627
Trade receivables and other receivables	34	34,409	41,880
Advance payments paid	35	5,396	6,368
Derivative assets	30, 47	12,498	9,408
Prepaid expenses and accrued income	36	7,806	6,450
Current tax assets	19	1,830	1,853
Short-term investments	37	28,450	17,417
Cash and cash equivalents	38	18,045	11,268
Assets held for sale	39	—	6,588
Total current assets		**133,983**	**125,424**
Total assets		**528,364**	**524,558**

Amounts in SEK million	Note	31 December 2012	31 December 2011
Equity and liabilities			
Equity attributable to owner of the Parent Company			
Share capital		6,585	6,585
Reserve for cash flow hedges		3,478	245
Other reserves		-12,141	-8,203
Retained earnings incl. profit for the year		148,506	133,361
Total equity attributable to owner of the Parent Company		**146,428**	**131,988**
Equity attributable to non-controlling interests (minority interests)		**8,790**	**6,943**
Total equity		**155,218**	**138,931**
Non-current liabilities			
Hybrid Capital	40	8,543	8,883
Other interest-bearing liabilities	40	112,524	149,602
Pension provisions	41	21,890	17,995
Other interest-bearing provisions	42	68,326	66,487
Derivative liabilities	30, 47	15,193	12,590
Deferred tax liabilities	19	34,681	35,406
Other noninterest-bearing liabilities	43	7,534	8,238
Total non-current liabilities		**268,691**	**299,201**
Current liabilities			
Trade payables and other liabilities	44	35,219	35,108
Advance payments received	45	2,138	1,142
Derivative liabilities	30, 47	5,612	9,864
Accrued expenses and deferred income	46	15,830	18,507
Current tax liabilities	19	854	844
Interest-bearing liabilities	40	39,194	11,865
Interest-bearing provisions	42	5,608	7,237
Liabilities associated with assets held for sale	39	—	1,859
Total current liabilities		**104,455**	**86,426**
Total equity and liabilities		**528,364**	**524,558**

See also information on Collateral (Note 50), Contingent liabilities (Note 51) and Commitments under consortium agreements (Note 52).

Comments on the consolidated balance sheet

Non-current assets

Non-current assets were essentially unchanged compared with at 31 December 2011.

Current assets

Current assets increased by 6.8%. This is mainly explained by an increase in the items Short-term investments and Cash and cash equivalents as a result of payment received for the divested operations in Belgium, Finland and Poland, and the sale of minority interests in Vattenfall's electricity network and heat operation in Hamburg.

Financial assets as per 31 Dec. 2012

Amounts in SEK million	
Cash and cash equivalents, and short-term investments	46,495
Receivable attributable to the Swedish pension foundation	1,807
Committed credit facilities (unutilised)	32,172

Vattenfall's target is to have no less than 10% of the Group's net sales, but at least the equivalent of the next 90 days' maturities, in the form of liquid assets or committed credit facilities. As per 31 December 2012, available liquid assets and/or committed credit facilities amounted to 43% of net sales.

Current and non-current liabilities

Net debt decreased by SEK 29.2 billion, to SEK 154 billion, compared with at 31 December 2011. The decrease is mainly attributable to payment received for sales of assets (SEK 22.8 billion), exchange rate effects of the stronger Swedish krona (SEK 4.6 billion), and payment received as a result of the ongoing dissolution of Vattenfall's Swedish Pension Foundation (SEK 4.6 billion of a total of approximately SEK 7 billion). Payment of the dividend (SEK 4.5 billion) increased net debt. Total interest-bearing liabilities decreased by SEK 10.1 billion.

Net debt as per 31 Dec. 2012

Amounts in SEK million	2012	2011
Hybrid Capital	-8,543	-8,883
Bond issues, commercial paper and liabilities to credit institutions	-94,254	-102,234
Present value of liabilities pertaining to acquisitions of Group companies	-27,080	-30,472
Liabilities to associated companies	-9,308	-10,521
Liabilities to owners of non-controlling interests (minority owners)	-11,876	-10,240
Other liabilities	-9,200	-8,000
Total interest-bearing liabilities	**-160,261**	**-170,350**
Cash and cash equivalents	18,045	11,268
Short-term investments	28,450	17,417
Receivable from Vattenfall's Pension Foundation	1,807	—
Loans to owners of non-controlling interests (minority owners) in foreign Group companies	52	576
Net debt	**-111,907**	**-141,089**

When setting a company's credit rating, as a rule the credit rating agencies and analysts make a number of adjustments of various items on the balance sheet in order to arrive at an adjusted level of gross and net debt. The table at right shows adjusted gross and net debt calculated by Vattenfall. Adjusted net debt decreased by SEK 22.1 billion compared with at 31 December 2011.

Adjusted gross debt and net debt as per 31 Dec. 2012

Amounts in SEK million	2012	2011
Total interest-bearing liabilities	-160,261	-170,350
50% of Hybrid Capital	4,272	4,442
Present value of pension obligations	-30,192	-22,461
Provisions for mining, gas and wind operations and other environment-related provisions	-12,229	-12,542
Provisions for nuclear power (net)	-18,463	-18,470
Currency derivatives for hedging of debt in foreign currency	3,027	3,282
Margin calls received	7,170	7,369
Liabilities to owners of non-controlling interests (minority owners) due to consortium agreements	10,495	9,771
Adjusted gross debt	**-196,181**	**-198,959**
Reported cash and cash equivalents and short-term investments	46,495	28,685
Receivable from Vattenfall's Pension Foundation	1,807	—
Unavailable liquidity	-6,064[1]	-5,757
Adjusted cash and cash equivalents and short-term investments	**42,238**	**22,928**
Adjusted net debt	**-153,943**	**-176,031**

1) Includes Vattenfall GmbH's share of the solidarity agreement ("Solidarvereinbarung") between the German nuclear power plant owners (SEK 2,921 million), paid margin calls (SEK 1,258 million) and other items (SEK 1,885 million).

Equity

The Group's equity increased by SEK 16.3 billion. The change is mainly attributable to profit for the year.

Consolidated statement of cash flows

Amounts in SEK million, 1 January–31 December	Note	2012	2011
Operating activities			
Profit before tax		18,301	14,298
Reversal of depreciation, amortisation and impairment losses[1]		28,624	33,040
Tax paid		-3,545	-5,250
Capital gains/losses, net		-8,031	-4,827
Other, incl. non-cash items	48	-930	995
Funds from operations (FFO)		**34,419**	**38,256**
Changes in inventories		-1,657	-3,350
Changes in operating receivables		-6,348	944
Changes in operating liabilities		2,505	668
Other changes		-434	-3,050
Cash flow from changes in operating assets and operating liabilities		**-5,934**	**-4,788**
Cash flow from operating activities		**28,485**	**33,468**
Investing activities			
Acquisitions in Group companies	5	—	-257
Investments in associated companies and other shares and participations	5	-345	-140
Other investments in non-current assets	48	-29,236	-35,353
Total investments		**-29,581**	**-35,750**
Divestments	48	22,836	16,280
Cash and cash equivalents in divested companies		-145	-1,332
Cash flow from investing activities		**-6,890**	**-20,802**
Cash flow before financing activities		**21,595**	**12,666**
Financing activities			
Changes in short-term investments		-11,830	11,292
Changes in loans to owners of non-controlling interests (minority owners) in foreign Group companies		510	-287
Loans raised[2]	48	1,427	10,511
Amortisation of debt pertaining to acquisitions of Group companies		-2,738	-13,538
Amortisation of other debt		-5,265	-15,688
Divestment of shares in Group companies to owners of non-controlling interests (minority owners)		4,113	—
Payment from Vattenfall's Pension Foundation		2,800	—
Dividends paid to owners		-4,500	-6,701
Contribution from owners of non-controlling interests (minority interests)		737	569
Cash flow from financing activities		**-14,746**	**-13,842**
Cash flow for the year		**6,849**	**-1,176**

Amounts in SEK million, 1 January–31 December	Note	2012	2011
Cash and cash equivalents			
Cash and cash equivalents at start of year		11,268	12,595
Cash flow for the year		6,849	-1,176
Translation differences		-72	-151
Cash and cash equivalents at end of year		**18,045**	**11,268**
Supplementary information			
Cash flow before financing activities		**21,595**	**12,666**
Financing activities			
Dividends paid to owners		-4,500	-6,701
Payment from Vattenfall's Pension Foundation		2,800	—
Divestment of shares in Group companies to owners of non-controlling interests (minority owners)		4,113	—
Contribution from owners of non-controlling interests (minority interests)		737	569
Cash flow after dividend		**24,745**	**6,534**
Analysis of change in net debt			
Net debt at start of year		-141,089	-144,109
Cash flow after dividends		24,745	6,534
Changes as a result of valuation at fair value		316	-2,210
Change in interest-bearing liabilities for leasing		-621	114
Interest-bearing liabilities/short-term investments acquired/divested		344	-459
Changes in liabilities pertaining to acquisitions of Group companies, discounting effects		-520	-549
Receivable from Vattenfall's Pension Foundation		1,807	—
Interest-bearing liabilitiy for future dividend		-984	—
Interest-bearing liabilities associated with assets held for sale		-344	344
Translation differences on net debt		4,439	-754
Net debt at end of year		**-111,907**	**-141,089**
Free cash flow (Cash flow from operating activities less maintenance investments)		12,619	17,637

1) In this context, impairment losses also include other close-down costs than impairment in 2011 pertaining to nuclear power plants in Germany. The total of these impairment losses and other close-down costs amounted to SEK 10,513 million.

2) Short-term borrowings in which the duration is three months or shorter are reported net.

Comments on the consolidated statement of cash flows

Funds from operations (FFO)

Funds from operations (FFO) decreased by SEK 3.8 billion. This is mainly attributable to average lower electricity prices achieved, higher costs for fuel and CO_2 emission allowances, and lost earnings contribution from divested operations. Higher production volumes, lower costs for operations and maintenance, sales and administration, and research and development, and lower paid tax had a positive impact.

Change in operating assets and operating liabilities (operating capital)

Cash flow from changes in working capital amounted to SEK -5.9 billion. This is mainly explained by higher operating receivables and operating liabilities, totalling SEK 3.8 billion, net, mainly attributable to CO_2 emission allowances and increased inventory, totalling SEK 1.7 billion. Other items affected working capital negatively by SEK 0.4 billion.

Cash flow from investing activities

Cash flow from investing activities was SEK -6.9 billion. Total investments during the year amounted to SEK 29.6 billion. Divestments during the year gave rise to cash flow of SEK 22.8 billion, mainly pertaining to the sale of Vattenfall's electricity distribution and heat business in Finland, and the proceeds from the sales of Vattenfall's heating operation in Poland and Vattenfall's operations in Belgium, which were divested in 2011.

Investments

Amounts in SEK million	2012	2011
Maintenance/replacement investments	15,866	15,831
Growth investments	13,715	19,919
– of which, shares	345	396
Total investments	**29,581**	**35,750**

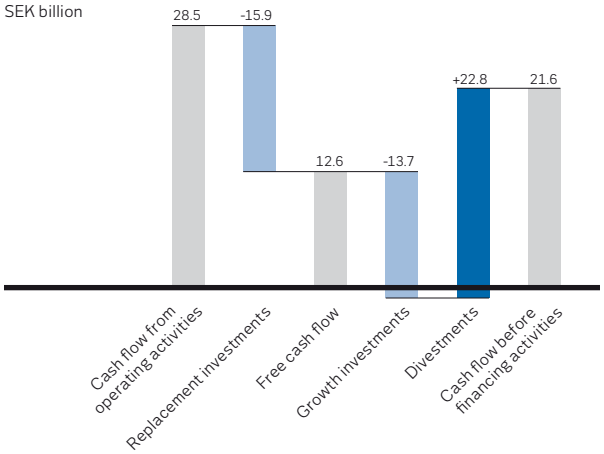
Divestments

Amounts in SEK million	2012	2011
Divestments	22,836	16,280
– of which, shares	20,969	13,553

Cash flow from financing activities

Cash flow from financing activities amounted to SEK -14.7 billion (-13.8). Short-term investments decreased by SEK 11.8 billion. Repayment of loans amounted to SEK 5.3 billion, and the acquisition of an additional 3.04% of the shares in the subsidiary N.V. Nuon Energy amounted to SEK 2.7 billion.

Explanation items to the change in cash flow



Specification of investments

Amounts in SEK million	2012	2011	Change, %
Electricity generation			
Hydro power	1,245	1,157	7.6
Nuclear power	3,011	4,800	-37.3
Coal power	4,511	5,982	-24.6
Gas	4,977	6,172	-19.4
Wind power	2,716	2,972	-8.6
Biomass, waste	16	163	-90.0
Other	1,170	1,927	-39.3
Total electricity generation	**17,646**	**23,173**	**-23.8**
CHP/heat			
Fossil-based power	2,264	3,810	-40.6
Biomass, waste	334	225	48.8
Other	1,003	1,448	-30.7
Total CHP/heat	**3,601**	**5,483**	**-34.3**
Electricity networks			
Electricity networks	4,658	5,024	-7.3
Total electricity networks	**4,658**	**5,024**	**-7.3**
Purchases of shares	345	396	-12.9
Other, excl. purchases of shares	3,331	1,674	99.0
Total	**29,581**	**35,750**	**-17.3**

Investments in fossil-based electricity generation (coal-fired power and gas) pertain to projects in Germany and the Netherlands, where the costs for the remaining investments amount to a total of SEK 9 billion, of which SEK 6 billion pertains to coal-fired power.

Consolidated statement of changes in equity

Amounts in SEK million	Attributable to equity owner of the Parent Company					Attributable to non-controlling interests (minority interests)	Total equity
	Share capital	Reserve for cash flow hedges	Other reserves	Retained earnings	Total		
Balance brought forward 2011	**6,585**	**-1,315**	**-7,568**	**129,002**	**126,704**	**6,917**	**133,621**
Dividends paid to owners	—	—	—	-6,500	**-6,500**	-201	**-6,701**
Group contributions from owners of non-controlling interests (minority interests), net after tax	—	—	—	—	**—**	358	**358**
Changes in ownership	—	—	—	-224	**-224**	557	**333**
Cash flow hedges:							
Changes in fair value	—	-4,689	—	—	**-4,689**	14	**-4,675**
Dissolved against income statement	—	6,667	—	—	**6,667**	1	**6,668**
Transferred to cost of hedged item	—	213	—	—	**213**	11	**224**
Tax attributable to cash flow hedges	—	-631	—	—	**-631**	-7	**-638**
Total cash flow hedges	**—**	**1,560**	**—**	**—**	**1,560**	**19**	**1,579**
Hedging of net investments in foreign operations	—	—	960	—	**960**	—	**960**
Tax attributable to hedging of net investments in foreign operations	—	—	-242	—	**-242**	—	**-242**
Total hedging of net investments in foreign operations	**—**	**—**	**718**	**—**	**718**	**—**	**718**
Translation differences	—	—	-1,974	—	**-1,974**	-40	**-2,014**
Translation differences and exchange rate effects net, divested companies	—	—	621	—	**621**	—	**621**
Revaluation of available-for-sale financial assets	—	—	-1,591	—	**-1,591**	—	**-1,591**
Transferred to the income statement, available-for-sale financial assets	—	—	1,591	—	**1,591**	—	**1,591**
Total other comprehensive income for the year	**—**	**1,560**	**2,309**	**—**	**3,869**	**19**	**3,888**
Profit for the year	—	—	—	11,083	**11,083**	-667	**10,416**
Total comprehensive income for the year	**—**	**1,560**	**-635**	**11,083**	**12,008**	**-688**	**11,320**
Balance carried forward 2011	**6,585**	**245**	**-8,203**	**133,361**	**131,988**	**6,943**[1]	**138,931**

Amounts in SEK million	Attributable to owner of the Parent Company					Attributable to non-controlling interests (minority interests)	Total equity
	Share capital	Reserve for cash flow hedges	Other reserves	Retained earnings	Total		
Dividends paid to owners	—	—	—	-4,433	**-4,433**	-67	**-4,500**
Group contributions from owners of non-controlling interests (minority interests), net after tax	—	—	—	—	**—**	532	**532**
Changes in ownership in Group companies on divestment of shares to owners of non-controlling interests (minority owners)	—	—	—	2,642	**2,642**	572	**3,214**
Other changes in ownership	—	—	—	—	**—**	726	**726**
Cash flow hedges:							
Changes in fair value	—	7,031	—	—	**7,031**	-6	**7,025**
Dissolved against income statement	—	-2,478	—	—	**-2,478**	2	**-2,476**
Transferred to cost of hedged item	—	58	—	—	**58**	12	**70**
Tax attributable to cash flow hedges	—	-1,378	—	—	**-1,378**	-3	**-1,381**
Total cash flow hedges	**—**	**3,233**	**—**	**—**	**3,233**	**5**	**3,238**
Hedging of net investments in foreign operations	—	—	4,035	—	**4,035**	—	**4,035**
Tax attributable to hedging of net investments in foreign operations	—	—	-1,049	—	**-1,049**	—	**-1,049**
Total hedging of net investments in foreign operations	**—**	**—**	**2,986**	**—**	**2,986**	**—**	**2,986**
Translation differences	—	—	-7,033	—	**-7,033**	-209	**-7,242**
Translation differences and exchange rate effects net, divested companies	—	—	79	—	**79**	—	**79**
Revaluation of available-for-sale financial assets	—	—	30	—	**30**	—	**30**
Total other comprehensive income for the year	**—**	**3,233**	**-3,938**	**—**	**-705**	**-204**	**-909**
Profit for the year	—	—	—	16,936	**16,936**	288	**17,224**
Total comprehensive income for the year	**—**	**3,233**	**-3,938**	**16,936**	**16,231**	**84**	**16,315**
Balance carried forward 2012	**6,585**	**3,478**	**-12,141**	**148,506**	**146,428**	**8,790**[1]	**155,218**

1) Of which, Reserve for cash flow hedges SEK -48 million (-53).

See also Note 49 to the consolidated accounts, Specifications of equity.

Notes to the consolidated accounts

Contents

Note		Page
1	Company information	60
2	Important changes in the financial statements compared with the preceding year	60
3	Accounting policies	61
4	Important estimations and assessments in the preparation of the financial statements	68
5	Acquired and divested operations	69
6	Exchange rates	70
7	Net sales	70
8	Operating segments	70
9	Information about geographical areas	72
10	Cost of products sold	73
11	Other operating income	73
12	Other operating expenses	73
13	Depreciation and amortisation	73
14	Impairment losses and reversed impairment losses	73
15	Operating costs according to type	73
16	Financial income	73
17	Financial expenses	74
18	Ineffectiveness of hedges	74
19	Income tax expense	74
20	Non-controlling interests (minority interests)	75
21	Leasing	75
22	Auditors' fees	76
23	Intangible assets: non current	76
24	Property, plant and equipment	78
25	Investment property	79
26	Shares and participations owned by the Parent Company Vattenfall AB and other Group companies	79
27	Participations in associated companies and joint ventures	80
28	Other shares and participations	82
29	Share in the Swedish Nuclear Waste Fund	83
30	Derivative assets and derivative liabilities	83
31	Other non-current receivables	83
32	Inventories	84
33	Intangible assets: current	84
34	Trade receivables and other receivables	84
35	Advance payments paid	85
36	Prepaid expenses and accrued income	85
37	Short-term investments	85
38	Cash and cash equivalents	85
39	Assets held for sale	85
40	Interest-bearing liabilities and related financial derivatives	85
41	Pension provisions	87
42	Other interest-bearing provisions	88
43	Other noninterest-bearing liabilities (non-current)	89
44	Trade payables and other liabilities	89
45	Advance payments received	89
46	Accrued expenses and deferred income	89
47	Financial instruments by category and related effects on income	90
48	Specifications of the cash flow statement	92
49	Specifications of equity	92
50	Collateral	93
51	Contingent liabilities	93
52	Commitments under consortium agreements	94
53	Number of employees and personnel costs	94
54	Gender distribution among senior executives	95
55	Related party disclosures	95
56	Events after the balance sheet date	95

Note 1 Company information

The year-end report for Vattenfall AB for 2012 was approved for publication on 11 February 2013 in accordance with a decision by the Board of Directors . The Annual Report was approved in accordance with a decision by the Board of Directors on 20 March 2013. The Parent Company, Vattenfall AB, is a limited liability company with its registered office in Stockholm and with the address SE-169 92 Stockholm, Sweden. The consolidated balance sheet and income statement included in the Annual Report will be submitted at the Annual General Meeting (AGM) on 24 April 2013.

The main activities of the Group are described in Note 8 to the consolidated accounts, Operating segments.

Note 2 Important changes in the financial statements compared with the preceding year

New definition of items affecting comparability

Vattenfall has previously defined Items affecting comparability as: Capital gains and capital losses from shares and other non-current assets, impairment losses and reversed impairment losses pertaining to non-current assets, and other nonrecurring items. Starting with the first quarter of 2012, this definition has been expanded to also include unrealised changes in the fair value of energy derivatives, which according to IAS 39 cannot be recognised using hedge accounting, and unrealised changes in the fair value of inventories.

In the third quarter of 2011 Vattenfall introduced the profit measure "Underlying operating profit". Starting with the first quarter of 2012, this profit measure is defined as operating profit (EBIT) excluding items affecting comparability.

Comparison figures and key ratios containing items affecting comparability for prior periods have been recalculated to reflect these new definitions.

Changes in segments

On 1 November 2012 Vattenfall's organisation was changed. The new organisation focuses on the highest operational standard and safety in the nuclear power operations through formation of the new Business Division Nuclear Power. To make the organisational structure clearer and avoid unnecessary overlap, projects and newbuild activities in the former Business Division Renewables and Business Division Asset Development have been integrated to form a new Business Division, Sustainable Energy Projects. Vattenfall thus now has two operating segments: Generation, and Distribution and Sales. Comparison figures have been recalculated. See Note 8 to the consolidated accounts, Operating segments.

Changes in geographical areas

Information about geographical areas has been changed compared to what previously has been published. Starting with the first quarter of 2012, information is provided for the core markets Sweden, Germany and the Netherlands. In addition, activities in other countries are reported as a total. Comparison figures have been recalculated. See Note 9 to the consolidated accounts, Information about geographical areas.

Reporting of derivatives on the balance sheet

On the balance sheet, starting with the first quarter of 2012 a split has been made of "Derivative assets" whereby these, on the assets side of the balance sheet, have been split into current assets and non-current assets, respectively. Previously such derivatives were recognised only as current assets. Similarly, the item "Derivative liabilities" has been split into current liabilities and non-current liabilities, respectively, compared with previously, when these were recognised as current liabilities in their entirety. Comparison figures have been recalculated.

Key ratios based on capital employed

At an extraordinary general meeting on 28 November 2012, Vattenfall's owner, the Swedish state, adopted new financial

targets for Vattenfall. The profitability target "Return on capital employed" was introduced, which is a new key ratio that Vattenfall now presents and which has been calculated as from the first quarter of 2011. See page 117 for a definition of capital employed.

Key ratios based on net assets

As a result of introduction of the new key ratio "Return on capital employed" as described above, Vattenfall's internally defined key ratio "Return on net assets" will not be calculated as from 2013.

Change in form of funding for Swedish occupational pensions

In late 2012 Vattenfall decided to resume the practice of fully funding defined benefit occupational pensions in Sweden on the balance sheet under the item "Pension provisions", i.e., in accordance with the practice that applied before Vattenfall's Pension Foundation was established in 1999. A total of approximately SEK 7 billion will gradually be paid out from the foundation to Vattenfall AB and its Swedish subsidiaries in pace with the return of the pension obligations from the foundation to these Swedish companies. In 2012, compensation of SEK 4,607 million was received from the foundation, of which SEK 2,800 million was settled as payment, while SEK 1,807 million has been booked as a receivable from the pension foundation as per 31 December 2012. The change in funding does not affect Vattenfall AB's adjusted net debt. Nor does it affect the company's obligation to pay future pensions to its employees. See also Note 41 to the consolidated accounts, Pension provisions.

In connection with this change in funding, Vattenfall AB has pledged shares in Vattenfall Eldistribution AB to the insurance company PRI Pensionsgaranti as security for the credit insurance that is required to fund the pensions. See Note 50 to the consolidated accounts, Collateral.

Note 3 Accounting policies

Conformity with standards and regulations

The consolidated accounts have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) as well as the interpretations issued by the IFRS Interpretations Committee (IFRIC) as endorsed by the European Commission for application within the EU.

In addition, recommendation RFR 1 – *Supplementary Accounting Policies for Groups,* issued by the Swedish Financial Reporting Board (RFR), has been applied. RFR 1 specifies the mandatory additions to the IFRS disclosure requirements in accordance with the Swedish Annual Accounts Act.

Basis of measurement

Assets and liabilities are reported at cost or amortised cost, with the exception of certain financial assets and liabilities and inventories held for trading, which are measured at fair value. Financial assets and liabilities measured at fair value consist of holdings in the categories financial assets and liabilities recognised at fair value through profit or loss, and all derivatives.

Functional and presentation currencies

The functional currency is the currency of the primary economic environment in which each Group entity operates.

The Parent Company's functional currency is Swedish kronor (SEK), which is also the presentation currency of both the Parent Company and the Group. This means that the financial statements are presented in Swedish kronor. Unless otherwise stated, all figures are rounded off to the nearest million Swedish kronor (SEK million).

Estimations and assessments

Preparation of the financial statements in accordance with IFRS requires the company's executive management and Board of Directors to make estimations and assessments as well as to make assumptions that affect the application of the accounting policies and the reported amounts of assets, liabilities, income and expenses.

Assessments made by the company's executive management and Board of Directors, when applying IFRS, that have a material effect on the financial statements, and estimations that may result in substantial adjustments to the following year's financial statements, are described in greater detail in Note 4 to the consolidated accounts, Important estimations and assessments in the preparation of the financial statements.

Accounting policies

The accounting policies of the Group detailed below, with the exception of what is stated below under the heading New IFRSs and interpretations effective as of 2012, have been applied consistently for all periods presented in the consolidated financial statements.

New IFRSs and interpretations effective as of 2012

The new standards and amendments to standards and interpretations described below, and endorsed by the EU, are effective as of the 2012 financial year. Amendments to IFRS 1 – *First-time Adoption* of IFRS have been omitted as these are not relevant for Vattenfall.

Amendments in IFRS 7 – *Financial Instruments: Disclosures.* The amendments require additional quantitative and qualitative disclosures when derecognising financial instruments from the balance sheet. If transferred assets are not derecognised in their entirety, this fact shall be disclosed. In the same way, if the entity has a continuing involvement in the derecognised asset, this shall also be disclosed. For 2012, Vattenfall is not affected by this change.

Amendments in IAS 12 – *Income Taxes pertaining to Deferred tax: Recovery of Underlying Assets.* Deferred taxes on property that is measured at fair value are to be calculated based on the property's sales value if there are no indications that the property will be recovered in another manner. Vattenfall is not affected by this amendment, as its properties are not measured at fair value.

New IFRSs and interpretations not yet adopted

New standards, amendments to standards and interpretations endorsed by the EU as per 31 December 2012, which are effective as of the 2013 financial year and which have not been applied prospectively.

Amendments in IFRS 7 – *Financial Instruments: Disclosures.* The amendment entails that further disclosures are to be provided about financial instruments that are recognised net in accordance with the rules of IAS 32 as well as about financial assets and liabilities covered by master netting agreements and similar, regardless of whether these have been offset or not. Vattenfall has identified which financial instruments are to be covered by the new disclosure requirements. Reporting will be done in future interim reports.

IFRS 13 – *Fair Value Measurement.* The standard includes uniform rules for measuring fair value where another IFRS requires fair value measurements or disclosures about fair value measurements. New types of disclosures are to be made in order to clarify which valuation techniques are used and which inputs are used. The new standard is not expected to affect Vattenfall's financial statements to any significant degree, but may lead to more detailed disclosures.

Amendments in IAS 1 – *Presentation of Financial Statements.* The amendment entails a change in the presentation of transactions that are reported in other comprehensive income. Items that are to be reclassified (or "recycled") to profit or loss are to be reported separately. The proposal does not affect the actual content of other comprehensive income, but only the presentation format.

Amendments in IAS 19 – *Employee Benefits* Significant changes mainly pertaining to the reporting of defined benefit pension plans, where the opportunity to defer actuarial gains and losses over time as part of the so-called corridor rule may no longer be applied; instead, these are to be reported immediately in other comprehensive income. The current year's service cost of defined benefit pensions, gains and losses that arise from settlement of a pension liability, and financial items pertaining to the defined benefit plan, are reported through profit or loss.

Actuarial gains/losses as per 31 December 2012 for the Vattenfall Group are reported in Note 41 to the consolidated accounts, Pension provisions, where effects of the amendments on Vattenfall's financial statements as from 2013 are also described.

IFRIC 20 – *Stripping Costs in the Production Phase of a Surface Mine.* The interpretation addresses how costs for stripping the surface layer of an open cast (surface) mine are to be determined and reported, initially and on a continuous basis, during

the production phase. Vattenfall already applies the valuation and reporting stipulated in IFRIC 20.

New standards, amendments to standards and interpretations endorsed by the EU as per 31 December 2012, which become effective as of the 2014 financial year and which have not been applied prospectively:

IFRS 10 – *Consolidated Financial Statements.* The standard contains uniform rules for determining which units are to be consolidated and will supersede major parts of IAS 27 – *Consolidated and Separate Financial Statements* and SIC 12, which addresses Special Purpose Entities. The rules in IAS 27 on consolidation and on when consolidated financial statements are to be prepared have been transferred unchanged from IAS 27. The new standard is not expected to have any significant effect on Vattenfall's financial statements.

IFRS 11 – *Joint Arrangements.* The standard addresses the reporting of joint arrangements, i.e., arrangements in which two or more parties have joint control, and will supersede IAS 31 – *Interests in Joint Ventures.* Vattenfall is currently analysing the effects that application of the new standard will entail. However, the joint arrangements that Vattenfall is party to are of limited scope.

IFRS 12 – *Disclosures of Interests in Other Entities.* Expanded disclosure requirements regarding subsidiaries, joint arrangements and associates have been gathered in a single standard. The disclosures address the effects of holdings on the financial statements and risks associated with the current holdings.

Amendment and change of name for IAS 27– *Separate Financial* Statements, where the requirements concerning separate financial statements are unchanged, while other parts of IAS 27 are superseded by IFRS 10.

Amendment of IAS 28 – *Investments in Associates and Joint Ventures,* which has been adapted to IFRS 10, IFRS 11 and IFRS 12.

Amendments in IAS 32 – *Financial Instruments: Presentation* and amendments in IFRS 7 – *Financial Instruments: Disclosures* clarifying some of the requirements for offsetting financial assets and financial liabilities on the balance sheet. Vattenfall is currently analysing the effects that application of the amendments will entail.

New standards, amendments to standards and interpretations issued by IASB/IFRIC which at 31 December 2012 had not yet been endorsed by the EU:

IFRS 9 – *Financial Instruments* is a new standard that is currently being developed to supersede IAS 39 – *Financial Instruments: Recognition and Measurement.* The first part of the revision of the standard has been published and pertains to recognition and measurement of financial assets and liabilities. IFRS 9 prescribes that financial assets are to be divided into two classifications – those measured at fair value and those measured at amortised cost. Classification is made at the time the financial asset is initially recognised based on the characteristics of the asset and the company's business model. For financial liabilities, no major changes have taken place compared with IAS 39. The biggest change pertains to liabilities recognised at fair value. For these, the portion of the change in fair value that is attributable to own credit risk is to be reported in other comprehensive income instead of through profit or loss, insomuch as this does not cause an inconsistency in the reporting.

The standard will be complemented with rules on impairment and hedge accounting. At present the standard is expected to take effect on 1 January 2015 at the earliest. Pending the completion of all parts of the standard, the Group has not yet evaluated the effects of the new standard.

"Improvements to IFRSs" (issued in May 2012) aim to streamline and clarify the accounting standards concerning presentation, recognition and measurement including changes in terminology or amendments of an editorial nature. The changes are to be applied for the 2013 financial year, but are not expected to have any significant effect on Vattenfall's financial statements.

Investment Entities (Amendments to IFRS 10, IFRS 12 and IAS 27) provides an exception to the consolidation requirements for companies that meet the definition of an investment entity. The changes are to be applied for the 2014 financial year, however, Vattenfall is not affected by these.

Segment information

An operating segment is a component of the Group that engages in business activities from which it may earn revenues and incur expenses and for which discrete financial information is available. An operating segment's result is reviewed regularly by "the chief operating decision maker", who in Vattenfall is the Chief Executive Officer, to assess its performance and to make decisions about resources to be allocated to the operating segment. Segmental information (see Note 8 to the consolidated accounts) is only provided for the Group.

Classification of current and non-current assets and liabilities

An asset is classified as a current asset when it is held primarily for the purpose of trading or is expected to be realised within twelve months after the balance sheet date or consists of cash and cash equivalents, provided it is not subject to restrictions on its exchange or use for regulating a liability at least twelve months after the balance sheet date.

All other assets are classified as non-current assets.

A liability is classified as a current liability when it is held primarily for the purpose of trading or is expected to be settled within twelve months after the balance sheet date or one for which the Group does not have an unconditional right to defer settlement of for a minimum of twelve months after the balance sheet date.

All other liabilities are classified as non-current liabilities.

Assets held for sale

Non-current assets (or disposal groups) are classified as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. The assets are valued at the lower of their carrying amount and fair value less costs to sell and are not subject to amortisation or depreciation.

Assets (and liabilities) held for sale are classified as current assets (current liabilities) since the sale transaction is expected to be settled within twelve months after the balance sheet date.

Principles of consolidation

Subsidiaries

Subsidiaries are all entities over which the Parent Company, Vattenfall AB, has the power to govern the financial and operating policies generally accompanying a shareholding of more than 50% of the voting power.

Business combinations are accounted for using the purchase method. This method entails that the acquisition of a subsidiary is considered to be a transaction through which the Group indirectly acquires the subsidiary's assets and takes over its liabilities and contingent liabilities. The consideration transferred includes the fair value of any asset or liability resulting from a contingent consideration agreement.

Through purchase price allocation (PPA) of the business acquisition, the cost of the participating interests or business activities is established as well as the fair value of acquired identifiable assets, assumed liabilities and contingent liabilities. Deferred tax is taken into account for differences between the carrying amount and the corresponding tax base on all items except goodwill. The difference between the cost of the subsidiaries' shares and the fair value of acquired assets, assumed liabilities and contingent liabilities constitutes goodwill. If the cost of the subsidiaries' shares is less than the fair value of the net assets of the subsidiary acquired, the difference is recognised directly in the consolidated income statement. There is a choice on an acquisition-by-acquisition basis to measure the non-controlling interest (minority interest) in the acquiree at fair value or at the non-controlling interest's (minority interest's) proportionate share of the acquiree's net assets.

Contingent payments are classified as liabilities subsequently remeasured through profit or loss.

All acquisition-related costs are expensed.

The subsidiary's financial statements, which are prepared in accordance with the Group's accounting policies, are included in the consolidated accounts from the point of acquisition to the date when control ceases.

Acquisitions and divestments of non-controlling interests (minority interests) in subsidiaries are recognised in equity.

When the Group ceases to have control in a subsidiary, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The

fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associated company, joint venture or financial asset.

A discontinued operation is reported separately from continuing operations if the discontinued operation amounts to a significant value.

Associated companies

Associated companies are companies in which the Group has a significant – but not controlling – influence over their operational and financial management, usually through shareholdings corresponding to between 20% and 50% of the votes. In conjunction with the acquisition of an associated company, a purchase price allocation similar to that of a business combination is made. Identifiable surplus values are handled in a similar manner to surplus values in business combinations. From the point at which the significant influence is acquired, participations in associated companies are reported in the consolidated accounts in accordance with the equity method. The equity method entails that the value of the shareholding in associated companies reported in the consolidated accounts corresponds to the Group's share of the associated companies' equity plus consolidated goodwill and any unamortised value of consolidated surplus and deficit values less internal profit reserves. Dividends received from an associated company reduce the carrying amount of the investment.

In the consolidated income statement, the item Participations in the results of associated companies is shown net after tax.

The equity method is applied from the point of acquisition up to the point when the significant influence ceases.

Joint ventures

In the accounts, joint ventures are activities in which the Group has joint control over the operational and financial management through a contractual arrangement with one or more parties. In the consolidated accounts, holdings in joint ventures are consolidated in accordance with the equity method.

Transactions that are eliminated upon consolidation

Intra-Group receivables and liabilities, income and expenses, as well as gains or losses arising from intra-Group transactions between Group companies, are eliminated in their entirety when preparing the consolidated accounts.

Gains arising from transactions with associated companies and joint ventures are eliminated to an extent that corresponds to the Group's holding in the company. Losses are eliminated in the same manner as gains, but are treated as an indicator of impairment.

Foreign currencies

Transactions in foreign currencies

Transactions in foreign currencies are translated to the functional currency at the exchange rate on the day of the transaction. On the balance sheet date, monetary assets and liabilities in foreign currencies are translated to the functional currency at the exchange rate applicable on that day. Exchange rate differences arising from translation of currencies are reported in the income statement. Operationally derived exchange gains and losses are shown under other operating income and other operating expenses, respectively. Financially derived exchange gains and losses are shown as financial income and expenses, respectively. Financial reporting of foreign activities Assets and liabilities of foreign activities, including goodwill and other consolidated surplus and deficit values, are translated to SEK at the exchange rate in effect on the balance sheet date. Income and expenses of foreign activities are translated to SEK using an average exchange rate. Translation differences arising from foreign currency translation of foreign activities are reported in other comprehensive income.

For the Vattenfall Group, key exchange rates applied in the accounts are provided in Note 6 to the consolidated accounts.

Revenue recognition

Net sales include sales proceeds from core businesses, i.e., generation, sales and distribution of electricity, sales and distribution of heat, sales of gas, energy trading and other revenues such as service and consulting assignments and connection fees.

Sales of electricity, heat and gas

Sales of electricity, heat and gas and related distribution are recognised as revenue at the time of delivery, excluding value-added tax and excise taxes.

Starting in 2006, Vattenfall has replaced intra-Group physical electricity transactions between Nordic electricity generation and sales activities in the Nordic countries with transactions vis-à-vis Nord Pool. The purchases that the sales activities make from Nord Pool are, at the Group level, offset against sales of generation to Nord Pool.

The change in fair value of derivatives, including commodity derivatives, that does not qualify for hedge accounting is reported in gross profit unless it does not relate to derivative instruments used in financial activities.

Other revenues

In the case of service and consulting assignments, the percentage of completion method is applied, i.e., revenues and expenses are reported in proportion to the degree of completion. The degree of completion is established according to the relation between accrued expenses on the balance sheet date and estimated total expenses. In cases where losses are expected, a provision is established immediately.

Connection fees for electricity distribution and heat distribution are reported as revenues to the extent that they are not required to cover future obligations.

Government grants

Grants are reported at fair value when it can reasonably be assumed that the grant will be received and that the Group will meet the conditions of the grant.

A grant tied to a non-current asset reduces the reported cost of the asset.

A grant intended to cover expenses is reported in the income statement as other operating income.

Operating expenses

Operating leases

Expenses paid for operating leases are reported in the income statement on a straight-line basis over the leasing period. For a definition of operating leases, see below under the heading Property, plant and equipment/Leasing.

Financial income and financial expenses

Financial income

Financial income consists of interest income on bank balances, receivables and interest-bearing securities, returns from the Swedish Nuclear Waste Fund, dividend income, exchange rate differences, and positive changes in values of financial investments and derivative instruments used in financial activities.

Interest income is adjusted for transaction costs and any rebates, premiums and other differences between the original value of the receivable and the amount received when due. Interest income is reported as it is earned. The calculation is made on the basis of the return on underlying assets in accordance with the effective interest method.

Dividend income is reported when the right to receive payment is established.

Financial expenses

Financial expenses consist of interest expenses on loans, discounting effects and interest attributable to provisions, exchange rate differences, and negative changes in values of financial investments and derivative instruments used in the financial activities. Discounting effects are defined here as the periodic change of the present value which reflects the time value of money.

Issue expenses and similar direct transaction costs for raising loans are distributed over the term of the loan in accordance with the effective interest method.

Borrowing costs directly attributable to investment projects in non-current assets which take a substantial period of time to complete, are not reported as a financial expense but should be included in the cost of the non-current asset during the construction period.

Leasing fees pertaining to finance leases are distributed between interest expense and amortisation of the outstanding debt. Interest expenses are distributed over the leasing period so that each accounting period is charged in the amount cor-

responding to a fixed interest rate for the reported debt in each period. Variable fees are carried as an expense in the period in which they arise.

Financial assets and financial liabilities

General principles

Financial instruments are reported initially at cost, corresponding to the instrument's fair value plus transaction costs for all financial instruments, except for those that belong to the category "financial assets at fair value through profit or loss" and all derivatives, which are reported at fair value excluding transaction costs.

A financial asset or financial liability is recognised on the balance sheet when Vattenfall becomes a party to such in accordance with terms of the instrument's contract. A trade receivable is recognised on the balance sheet when an invoice has been sent. A liability is recognised when the counterparty has performed a service and a contractual obligation to pay exists, even if the invoice has not yet been received. A trade payable is recognised when the invoice has been received.

A financial asset is derecognised from the balance sheet when the rights under the contract are sold, expire, or when Vattenfall loses control over them. The same applies for parts of a financial asset. A financial liability is derecognised from the balance sheet when the contractual obligation has been fulfilled or in some other way extinguished. The same applies for parts of a financial liability.

Foreign exchange gains and losses concerning operating receivables and liabilities in foreign currencies are reported under operating profit, while foreign exchange gains and losses concerning other receivables and liabilities in foreign currencies are reported under net financial items.

For financial instruments traded in active financial markets, the fair value is set at the rate applicable when the market closes on the balance sheet date. The same rule applies for fixing the fair value of bilaterally traded financial instruments (OTC trading). For unlisted financial instruments, fair value is set by discounting estimated future cash flows. Discounting is done using discounting factors based on return curves in the cash flows of the respective currencies. The return curves are based on the market interest rates, such as swap rates, that apply on the balance sheet date.

Financial assets

Financial assets are classified in various categories depending on the purpose of the acquisition of the financial asset. The classification is determined at the original point of acquisition.

Settlement day accounting is applied for spot purchases and spot sales of financial assets.

Financial assets at fair value through profit or loss

This category includes assets classified as held for trading, which means that the intention is for them to be divested in the near term. Derivative instruments not held for hedging purposes are always regarded as held for trading. Fair value of currency forward contracts is calculated by discounting the difference between the contracted forward rate and the forward rate that can be contracted on the balance sheet date for the remaining contract period. Discounting is done at a risk-free interest rate based on government bonds. Fair value of interest rate swaps is based on a discounting of calculated future cash flows in accordance with the contract's terms and due dates, based on the market rate of interest. Fair value of options is based on quoted prices, where such are available. The value of unquoted options is calculated using the Black-Scholes model, based on underlying market data.

Fair value of commodity contracts is calculated by discounting the difference between the contracted forward price and the contracted forward price that can be obtained on the balance sheet date for the remaining contract period.

For Vattenfall, the category "Financial assets at fair value through profit or loss" also includes short-term liquid investments with terms of less than three months, since Vattenfall follows up and measures these based on fair values. The category also includes short-term investments with original maturities in excess of three months. For listed securities, fair value is based on the quoted buying price on the balance sheet date. For other short-term investments, fair value is calculated by discounting estimated future cash flows in accordance with the contract's terms and maturity dates, and based on the market rate of interest for similar instruments on the balance sheet date.

The assets are remeasured on a continuous basis to fair value, with changes in value presented in profit or loss.

Loans and receivables

Loans and receivables are financial assets with fixed payments or payments whose amounts can be determined. Receivables arise when the company provides money, goods and services directly to the debtor without the intention of trading in the receivable rights. Acquired receivables are also covered. Loans and receivables are measured at amortised cost. Amortised cost is defined as the value at which a financial asset or liability is stated when it is initially recorded on the balance sheet, less any repayments, and with additions or deductions for the distribution over time of any differences between the amount initially recognised and the repayment amount.

Trade receivables are reported at the amount expected to be paid, i.e., less doubtful debts. Impairment losses on trade receivables are reported under operating expenses. Trade receivables have a short anticipated term and are therefore valued at a nominal amount without discounting.

Fair value of loans is calculated for disclosure purposes by discounting future cash flows using the current interest rate. For trade receivables, the reported value is considered to reflect fair value.

The category Loans and receivables also includes Cash and bank balances, i.e., immediately available balances with banks and similar institutions, and Shares in the Swedish Nuclear Waste Fund.

Available-for-sale financial assets

Financial assets that are available for sale are measured at fair value, with changes in value recognised in other comprehensive income. On the date that the assets are derecognised from the balance sheet, any previously recognised accumulated gain or loss in other comprehensive income is transferred to the income statement.

Holdings in listed companies are measured based on the share price on the balance sheet date.

Shares and participations for which there are no balance sheet date quotations and for which a fair value cannot be established are valued at cost, after taking accumulated impairment losses into account.

Financial liabilities

Financial liabilities have been classified in various categories depending on the purpose of the acquisition of the financial liability. The classification is determined at the date of original acquisition.

Financial liabilities at fair value through profit or loss

Derivative instruments not held for hedging purposes are always classified in this category. These financial liabilities are measured at fair value with changes in value recognised in profit or loss. For a description of how fair value is measured, see above under the heading "Financial assets at fair value through profit or loss".

Other financial liabilities

In this category, interest-bearing and noninterest-bearing financial liabilities that are not held for trading purposes are reported. Other financial liabilities are measured at amortised cost.

Trade liabilities have a short anticipated term and are therefore valued at a nominal amount without discounting.

Fair value of other financial liabilities is calculated for disclosure purposes by discounting future cash flows using the current interest rate for the remaining term, with the exception of trade payables, where the reported value is considered to reflect fair value.

Liabilities included in a hedge relationship are reported in accordance with the principles described below.

Derivative instruments

Vattenfall uses various types of derivative instruments (forwards, futures and swaps) to hedge various financial risks,

primarily interest rate risks, currency risks and commodity price risks.

Derivative assets are reported as a separate line item on the balance sheet under non-current assets and current assets, respectively, while derivative liabilities are reported as a separate line item under non-current liabilities and current liabilities, respectively.

Derivative instruments are reported at fair value on the balance sheet date. The reporting of changes in value depends on whether the derivative instrument is classified as a hedge or not. In a situation where hedging is not applied, the change in value is recognised in profit or loss in the period in which it arises. Based on the purpose of the contract, changes in value are reported either under operating profit or as financial income/expense. Effects of hedge accounting are described below.

Embedded derivatives

Embedded derivatives are parts of another contract (the host contract), whose terms and conditions meet the definition of a derivative instrument. In cases where embedded derivatives are identified, and where the risk profile of the embedded derivative is not considered to be closely related to the risk profile of the host contract, the embedded derivative is separated and accounted for as if it were a free-standing derivative instrument, in accordance with what is described under the heading Derivative instruments above.

Hedge accounting

Hedge accounting is applied for derivative instruments that are included in a documented hedge relationship. For hedge accounting to be applied, a direct connection between the hedge and the hedged item is required. Further, it is necessary for the hedge to protect the risk effectively as intended, that the effectiveness of the measure can be demonstrated at all times to be sufficiently high through effectiveness testing, and that hedging documentation has been prepared. The reporting of changes in value depends on the type of hedge entered into.

Cash flow hedges

Cash flow hedges are used primarily in the following cases: i) when forward commodity contracts are used to hedge commodity price risk in future purchases and sales, ii) when forward exchange rate contracts are used to hedge currency risk in future purchases and sales in foreign currencies, and iii) when interest rate swaps are used to replace borrowing at a floating interest rate with a fixed interest rate.

For derivative instruments that constitute a hedge instrument in a cash flow hedge, the effective part of the change in value is reported in other comprehensive income while the ineffective part is recognised directly in profit or loss. The part of the change in value that is reported in other comprehensive income is then transferred to the income statement in the period when the hedged item affects the income statement. In cases where the hedged item refers to a future transaction, which is later capitalised as a non-financial asset or liability on the balance sheet (for example, when hedging future purchases of non-current assets in a foreign currency), the part of the change in value reported in other comprehensive income is transferred to and included in the cost of the asset or liability.

If the conditions for hedging are no longer met, the accumulated changes in value that were reported in other comprehensive income are transferred to the income statement/balance sheet in the later period when the hedged item affects the income statement/balance sheet. Changes in value from the day on which the conditions for hedging ceased to be met are recognised directly in profit or loss. If the hedged transaction is no longer expected to occur, the hedge's accumulated changes in value are immediately transferred from other comprehensive income to the income statement.

Hedges of fair value

For hedges of fair value, hedge accounting is applied in cases where the hedge pertains to an item that is normally stated at amortised cost. In such cases, hedge accounting entails that changes in fair value of the hedged item relating to the hedged risk are recognised in profit or loss when they occur. The carrying amount of the hedged item is adjusted with these changes.

If a hedge no longer meets the criteria for hedge accounting, the adjustment of the carrying amount of the hedged item for which the effective interest method is used will be allocated over the remaining term in the income statement.

A hedge of fair value is primarily used in cases where interest rate swaps are used for hedging interest rate risk on borrowings at a fixed interest rate.

Hedges of net investments in foreign operations

For derivative instruments and loans in foreign currencies that constitute hedge instruments in hedging of net investments in foreign operations, the effective part of the change in value is reported in other comprehensive income while the ineffective part is recognised directly in profit or loss. The changes in value reported in other comprehensive income are transferred to the income statement at the later date when the foreign activity is divested.

Hedging of net investments is primarily used when forward exchange rate contracts and loans in foreign currencies are used to hedge the currency risk of the company's investments in foreign subsidiaries.

Intangible assets: non-current

Capitalised development costs

Development costs resulting from the application of research findings or other knowledge to produce new or improved products or processes are reported as an asset on the balance sheet from the time when the product or process is expected to become technically and commercially viable and the company has sufficient resources to complete the development work and subsequently use or sell the intangible assets. The reported value includes costs for materials, direct costs for salaries and indirect costs, all of which can be attributed to the asset. Other development costs are recognised in profit or loss as expenses as they arise. On the balance sheet, development costs are reported at cost less accumulated amortisation and any impairment losses.

Research costs with the purpose of obtaining new scientific or technical knowledge are reported as expenses as they arise.

Goodwill

Goodwill represents the difference between the cost of a business combination and the fair value at the point of acquisition of acquired assets, assumed liabilities and contingent liabilities. The difference is the cost of goodwill.

Goodwill is measured at cost less any accumulated impairment losses. Goodwill is not subject to amortisation but is tested at least annually for impairment. Goodwill that arises on acquisition of associated companies or joint ventures is included in the carrying amount of Participations in associated companies and joint ventures.

Exploration and evaluation assets

Exploration and evaluation assets represent capitalised costs for exploration and evaluation of gas reserves. Examples of costs eligible for capitalisation include exploration rights, geological and other studies, and exploration drillings in relation to either prospective or possible reserves under evaluation, or prospective deposit sites.

Costs that are not eligible for capitalisation are costs incurred before obtaining exploration rights and other general costs that are not related to a specific exploration well.

Exploration and evaluation assets are valued at cost less any accumulated impairment losses. Exploration and evaluation assets are not amortised.

When a specific exploration and evaluation asset is designated as technically feasible and commercially viable, and a management decision to extract the exploration well has been taken, the capitalised costs are reclassified to Property, plant and equipment – construction in progress. If management makes a decision not to extract the exploration well, any costs already capitalised are charged as an impairment loss in the income statement.

Other non-current intangible assets

Other non-current intangible assets such as concessions, patents, licences, trademarks and similar rights as well as renting rights, mining rights and similar rights acquired by the Group are

reported at cost less accumulated amortisation and impairment losses.

Principles for amortisation

Amortisation for non-current intangible assets other than goodwill and exploration and evaluation assets is reported on a straight-line basis in the income statement over the estimated useful life of the asset, provided the useful life not is indefinite. Estimated useful lives are unchanged compared with a year ago and are further described in Note 23 to the consolidated accounts, Intangible assets: non-current. Assessments of the residual value and useful life of an asset are conducted at least annually.

Property, plant and equipment

Owned assets

Property, plant and equipment are reported as assets on the balance sheet if it is likely that there will be future financial benefit for the company and the cost of the asset can be calculated in a reliable manner.

Assets reported as property, plant and equipment are land and buildings, plant and machinery as well as equipment, tools and fixtures and fittings. These assets are valued at cost less accumulated depreciation and impairment losses.

Cost includes the purchase price and costs directly attributable to putting the asset in place and in a suitable condition for use in accordance with the management's intention of the acquisition. Examples of directly attributable expenses included in cost are delivery and handling, installation, land registration and consulting services. Borrowing costs directly attributable to investment projects in property, plant and equipment, which take a substantial period of time to complete, are included in the cost of the asset during the construction period.

Within nuclear power operations in Germany (impaired during 2011) and Sweden, cost at the time of acquisition includes a calculated present value for estimated costs for dismantling and removing the plant and restoring the site where the plant is located. Similarly, for mining operations in Germany and for gas operations in the Netherlands (divested during 2011), for example, cost at the time of the acquisition includes a calculated present value for estimated costs for restoring undertakings.

The equivalent estimated cost calculated on the basis of the present value is reported initially as a provision.

See also below under the heading Other provisions than provisions for pensions.

Leasing

Leases are classified as either finance or operating leases. A finance lease exists when the economic risks and benefits associated with ownership are, in essence, transferred to the lessee; if this is not the case, it is classified as an operating lease.

Leased assets

Assets leased under finance leases are reported as assets on the consolidated balance sheet. The commitment to pay future leasing charges is reported as a non-current or current liability. The leased assets are depreciated on a straight-line basis over the shorter of the leasing period or useful life, while the leasing payments are reported as interest and amortisation of the debts.

Operating leases normally entail recognition of the leasing charge as an expense on a straight-line basis over the leasing period.

Assets leased out

Assets that are leased out under finance leases are not reported as property, plant and equipment, since the risks associated with ownership are transferred to the lessee. Instead, a financial receivable is entered for the future minimum lease payments.

Assets leased out under operating leases are reported as property, plant and equipment and are subject to depreciation.

Subsequent costs

Subsequent costs for property, plant and equipment are only added to the acquisition cost if it is likely that there will be future financial benefits associated with the asset for the company and the cost can be calculated in a reliable manner. All other subsequent costs are reported as expenses in the period when they arise.

What is decisive for the assessment when a subsequent cost is added to the acquisition cost is whether the cost concerns the replacement of identified components, or parts of them, whereby such costs are capitalised. Also in cases where new components are created, the cost is added to the cost of the asset. Any undepreciated reported values of replaced components, or parts of components, are retired and carried as an expense in connection with the replacement. Repairs and maintenance are expensed as incurred.

Depreciation principles

Depreciation is reported on a straight-line basis in the income statement over the estimated useful life of the asset except for depreciation related to the German nuclear power plants (impaired during 2011) and to gas operations in the Netherlands (divested during 2011 – see below). The Group applies component depreciation, which means that the components' estimated useful life provides the basis for the straight-line depreciation. Estimated useful lives are unchanged compared with the preceding year for all property, plant and equipment. Estimated useful lives are described further in Note 24 to the consolidated accounts, Property, plant and equipment. Assessments of the residual value and useful life of an asset are conducted annually.

For the German nuclear power plants, as per 1 April 2008 the depreciation method was changed from the straight-line method to the units of production method, since this better reflects the expected pattern of consumption of the future economic benefits embodied in the assets.

Gas fields and platforms are also depreciated according to the units of production method. The basis for depreciation is the expected remaining production volume and is determined annually on the basis of recognised industry practice. New discoveries during ongoing extraction activities can also cause changes in the expected remaining production volume. The depreciation amount per unit produced is thus adjusted for coming periods to the new, expected remaining production volume.

Land and water rights are not subject to depreciation.

Investment property

Investment property is property held in order to earn rental income or an increase in value or a combination of these two objectives.

Investment property is reported on the balance sheet at cost less accumulated depreciation and impairment losses. Depreciation is done on a straight-line basis, and an assessment of residual value and useful life of an asset is conducted annually.

Biological assets

By biological assets is meant so-called energy forests that Vattenfall grows – following harvest and thereafter reported as inventory – for use as biofuel in own plants.

Biological assets are reported on the balance sheet as current assets or non-current assets and are measured at fair value less costs to sell.

Inventories

Nuclear fuel, fossil fuels, emission allowances, and materials and spare parts

Inventories (except for inventories held for trading) are valued at the lower of their cost and net realisable value. Net realisable value is the estimated sales price in operating activities, less estimated costs for completion and to bring about a sale.

The consumption of nuclear fuel is calculated as a depletion of the energy content of the fuel rods, and is based on the cost of each batch of fuel loaded into the core.

The cost of inventories is estimated through the application of the first-in first-out method (FIFO) and includes costs that arose on acquisition of the inventory items.

Inventories held for trading are valued at fair value less costs to sell.

The value of the energy stored in the form of water in reservoirs is not reported as an asset.

Intangible assets: current

Emission allowances

Since 2005, a trading system applies in the EU (the Emission Trading Scheme – ETS) with the purpose of reducing emissions of the greenhouse gas carbon dioxide. Within the framework

of this system, some concerned plants have received, without payment or for prices below fair value, so-called emission allowances (European Union Allowances – EUAs) from the authorities in each country. Sales and purchases of emission allowances are conducted on designated exchanges, where plants that have a greater need for emission allowances than their free-of-charge or subsidised allocation are required to purchase allowances to cover their remaining need and thereby settle their obligations.

During the first trading period, 2005–2007, trading was conducted only in EUAs. During the second trading period, 2008–2012, trading is being conducted in parallel with the first commitment period in the Kyoto Protocol, and the EU's Emission Trading Scheme is being opened up to international trading in Certified Emission Reductions (CERs) and Emission Reduction Units (ERUs).

Purchased emission allowances held for own use are reported as intangible assets under current assets at cost less accumulated impairment losses, while emission allowances that have been received free of charge from the respective countries' authorities are stated at a value of SEK nil. As carbon dioxide is emitted, an obligation arises to deliver emission allowances (EUAs, CERs, ERUs) to the authorities in the respective countries. An expense and a liability are recognised only in cases where the emission allowances that were received free of charge do not cover this obligation. This liability is valued in the amount at which it is expected to be settled.

Certificates

With the aim to increase renewable energy sources for electricity generation, Sweden and UK, among other countries, have so-called electricity certificate systems. Plants included in these systems receive, free of charge from the authorities in the respective countries, certificates in pace with their generation of electricity qualifying for certificates.

Accumulated certificates, received free of charge, are reported as an intangible asset under current assets at fair value when obtained. The corresponding amount is recognised as revenue under Net sales. Purchased certificates held for own use are reported at cost less accumulated impairment losses.

When electricity is sold, an obligation arises to deliver certificates to the authorities in the respective countries. This obligation is reported as an expense and as a liability. The liability is valued at the amount at which it is expected to be settled.

Impairment losses

Impairment of non-financial assets

General principles

Assessments are made throughout the year for any indication that an asset may have decreased in value. If there is an indication of this kind, the asset's recoverable amount is estimated. For goodwill and other intangible assets with an indefinite useful life and for intangible assets that are still not ready for use, the recoverable amount is calculated at least annually or as soon there is an indication that an asset has decreased in value.

If the essentially independent cash flow for an individual asset cannot be established for the assessment of any need for impairment, the assets must be grouped at the lowest level where it is possible to identify the essentially independent cash flow (a so-called cash-generating unit). An impairment loss is reported when an asset or cash-generating unit's reported value exceeds the recoverable amount. Any impairment loss is recognised in profit or loss.

Impairment of assets attributable to a cash-generating unit is allocated primarily to goodwill. Thereafter, a proportional impairment loss is conducted of other assets that are part of the unit.

Calculation of the recoverable amount

The recoverable amount is the higher of fair value less costs to sell and value in use. When calculating value in use, the future cash flow is discounted by a discounting factor that takes into consideration risk-free interest and the risk associated with the specific asset. For an asset that does not generate cash flow independently of other assets, the recoverable amount is calculated for the cash-generating unit to which the asset belongs.

Reversal of impairment losses

Impairment of goodwill is never reversed. Impairment of other assets is reversed if a change has occurred in the assumptions that formed the basis for the calculation of the recoverable amount. An impairment loss is reversed only if the asset's carrying amount after reversal does not exceed the carrying amount that the asset would have had if the impairment loss had not been recognised.

Impairment of financial assets

General principles

On each reporting occasion, an assessment is made to determine if there is objective evidence that a financial asset has become impaired. Objective evidence consists in part of observable conditions that have occurred that have a negative impact on the ability to recover the cost of the asset, and in part of a significant or prolonged decrease in the fair value of an investment in a financial asset that is classified as an available-for-sale financial asset.

Vattenfall classifies trade receivables as doubtful when – after a missed or significantly late payment and individual assessment of the debtor's financial conditions – a need to recognise impairment can be considered to exist. Impairment is determined on the basis of historical experience of customer losses for similar receivables. Impaired trade receivables are reported at the present value of anticipated future cash flows. When determining any need to recognise impairment, the existence of any credit insurance and other forms of security is also taken into account.

Listed shareholdings that are classified as an available-for-sale financial asset are considered to be in need of impairment and are impaired if the fair value falls below cost by a significant amount, or when the decrease in value has become prolonged over time.

Reversal of impairment

Impairment of financial assets reported at amortised cost is reversed if a subsequent increase in the recoverable amount can objectively be attributed to an event that occurred after the impairment was recognised.

Impairment of listed shareholdings that are classified as available-for-sale financial assets, which was previously reported in the income statement, is not reversed through profit or loss but in other comprehensive income.

Employee benefits

Defined contribution pension plans

Defined contribution pension plans are post-employment benefit plans according to which fixed fees are paid to a separate legal entity. There is no legal or constructive obligation to pay additional fees if the legal entity does not have sufficient assets to pay all benefits to the employees. Fees for defined contribution pension plans are reported as an expense in the income statement in the period they apply to.

Defined benefit pension plans

Defined benefit pension plans consist of other post-employment benefit plans than defined contribution pension plans. The Group's defined benefit pension obligations are calculated separately for each plan in accordance with the Projected Unit Credit Method by calculating employees' current and past service cost. Estimated future salary adjustments are taken into consideration. The net obligation comprises the discounted present value of the total earned future salaries less the fair value of any plan assets. The discount rate consists of the interest rate on the balance sheet date of high quality corporate bonds with lifetimes that corresponds to the Group's pension obligations. When there is no deep market in corporate bonds of this kind, the market rate yield on government bonds with an equivalent lifetime shall be used instead.

When benefits in a plan are improved, the proportion of the increased benefit attributable to the employees' past service cost is reported as an expense in the income statement on a straight-line basis distributed over the average period until the benefits are fully earned. If the benefits are fully earned, an expense is reported directly in the income statement.

For actuarial gains and losses, the so-called corridor rule is applied. Actuarial gains and losses arise from the effects of changes in actuarial assumptions. The corridor rule entails that the part of the net amount of the accumulated actuarial gains and losses that exceeds 10% of the greater of the obligations' present value and the fair value of plan assets is reported

through profit or loss, starting in the year after that they arise, over the expected average remaining service period for the employees covered by the plan.

When the calculation leads to an asset for the Group, the reported value of the asset is limited to the net of unreported actuarial losses and unreported past service costs and the present value of future repayments from the plan or reduced future payments to the plan.

Other provisions than pension provisions

A provision is reported on the balance sheet when the Group has a legal or constructive obligation as a result of an event and it is probable that an outflow of financial resources will be required to regulate the obligation and a reliable estimate of the amount can be made. Where the effect of the time when payment is made is material, provisions are estimated by discounting the anticipated future cash flow at an interest rate before tax that reflects current market estimates of time value of money. The discount rate does not reflect such risks that are taken into consideration in the estimated future cash flow.

Changes in discounted provisions for dismantling, restoration or similar measures, which at the time of acquisition have also been reported as tangible non-current assets, are reported as follows: In cases where the change is due to a change in the estimated outflow of resources or a change in the discount rate, the cost of a non-current tangible asset is changed in an amount corresponding to the provision. The periodic change of the present value is recognised as a financial expense. See also above under the heading Property, plant and equipment/Owned assets.

Provisions are also reported for onerous contracts, i.e., where unavoidable costs of meeting the obligations under the contract exceed the economic benefits expected to be received from the contract.

Income taxes

Income tax comprises current tax and deferred tax. Income tax is reported in the income statement except when the underlying transaction is reported in other comprehensive income, whereby also the associated tax effect is reported in other comprehensive income.

Current tax is tax to be paid or received for the current year, with the application of the tax rates that are established or, established in practice as of the balance sheet date. Adjustments of tax paid attributable to previous periods are also included in this.

Deferred tax is calculated in accordance with the balance sheet method on the basis of temporary differences between the reported and taxable values of assets and liabilities. The following temporary differences are not taken into account: temporary differences that arises with the initial reporting of goodwill and temporary differences on initial reporting of assets and liabilities that are not business combinations and at the time of the transaction do not affect either reported or taxable profit. Further, such temporary differences attributable to shares or participations in subsidiaries or associated companies that are not expected to be reversed in the foreseeable future are not taken into account either. The valuation of deferred tax is based on how the reported value of assets or liabilities is expected to be realised or settled. Deferred tax is calculated in accordance with the tax rates and tax rules that have been established or have been established in practice by the balance sheet date.

Deferred tax assets concerning non-deductible temporary differences and tax-loss carryforwards are only reported to the extent that it will be possible for these to be used. The value of deferred tax assets is reduced when it is no longer considered likely that they can be used.

Note 4 Important estimations and assessments in the preparation of the financial statements

Preparation of the financial statements in accordance with IFRS requires the company's executive management and Board of Directors to make estimations and assessments as well as to make assumptions that affect application of the accounting policies and the reported amounts of assets, liabilities, income and expenses. These estimations and assessments are based on historic experience and other factors that seem reasonable under current conditions. The results of these estimations and assessments are then used to establish the reported values of assets and liabilities that are not otherwise clearly documented from other sources. The final outcome may deviate from the results of these estimations and assessments. The estimations and assessments are revised on a regular basis. The effects of changes in estimations are reported in the period in which the changes were made if the changes affected this period only, or in the period the changes were made and future periods if the changes affect both the current period and future periods. Important estimations and assessments are described below.

Impairment testing for intangible assets and property, plant and equipment

The Group has substantial values reported on the balance sheet regarding intangible assets and property, plant and equipment. These are tested for impairment in accordance with the accounting policies described in Note 3 to the consolidated accounts, Accounting policies. The recoverable amount for cash-generating units is determined by calculating the value in use or fair value less costs to sell. For these calculations, certain estimations must be made regarding future cash flows along with other adequate assumptions regarding the required rate of return, for example. See also Note 20 to the consolidated accounts, Intangible assets.

For 2012 the Group reported impairment losses including reversed impairment losses in the amount of SEK 8,647 million (10,916). These impairment losses are described in more detail in Note 14 to the consolidated accounts, Impairment losses and reversed impairment losses.

The largest impairment losses in terms of amount in 2012 pertain to goodwill (SEK 3,469 million) and production assets (SEK 5,092 million) in the Thermal Power business unit, mainly in the Netherlands.

Pension provisions

The value of pension obligations for defined benefit pension plans is determined through actuarial computations that are based on assumptions about the discount rate, the expected return on plan assets, future salary increases, inflation and demographic conditions. Every change in these assumptions affects the calculated value of pension obligations.

For pension provisions in Sweden, the discount rate was unchanged, at 3.5%, compared with the preceding year. For Sweden, through 2009 the judgement has been made that in the absence of an effective market for high quality corporate bonds, the interest rate for government bonds has instead been used as the discount rate. As from 2010, the judgement has been made that the discount rate should be based on mortgage bonds with high credit ratings, the market for which is large and liquid.

In Germany, where the discount rate is based on high quality corporate bonds, the discount rate was lowered to 3.75%, compared with 5.0% in the preceding year.

For further information on pension provisions, see Note 41 to the consolidated accounts, Pension provisions.

Provisions for future expenses for nuclear operations

Provisions for future expenses for nuclear operations, which pertain to future obligations for handling the decommissioning of Vattenfall's nuclear power plants in Sweden and Germany as well as for handling nuclear waste, are based on long-term cash flow estimations with respect to future expenses. These long-term cash flow estimations mainly pertain to technical plans, estimations on the amount of the expenses, when in time these are expected to fall due, and the discount rate. In many cases, these cash flow estimations must be approved by the pertinent authorities.

For provisions for future expenses for nuclear operations in Sweden, the discount rate has been lowered to 4.0%, compared with 4.25% in the preceding year. The corresponding discount rate in Germany was unchanged at 4.75% (4.75%) compared with the preceding year.

For further information on provisions for future expenses for nuclear operations, see Note 42 to the consolidated accounts, Other interest-bearing provisions.

Other provisions than pension provisions and provisions for future expenses of nuclear power operations

For other types of provisions, such as provisions for future expenses for mining, gas and wind operations and other environmental measures/undertakings, and for personnel-related provisions for non-pension purposes, provisions for tax and legal disputes, or other provisions, the following discount rates are used: Sweden 3.75% (4.25%), Germany 4.25%–4.75% (4.5%–4.75%), Netherlands 2.0% (2.5%), Finland 3.5% (4.0%), Denmark 4.0% (4.5%) and the UK 4.25% (5.0%).

For further information on these provisions, see Note 42 to the consolidated accounts, Other interest-bearing provisions.

Income taxes and deferred taxes

On its balance sheet, Vattenfall reports deferred tax assets and liabilities that are expected to be realised in future periods. In calculating these deferred taxes, certain assumptions and estimations must be made regarding future tax consequences pertaining to the difference between assets and liabilities reported on the balance sheet and their corresponding tax values.

The estimations also take into account the fact that future earnings for the Group's units will correspond to previously reported earnings, that applicable tax laws and tax rates will be unchanged in the countries in which the Group is active, and that applicable rules for exercising tax loss carryforwards will not be changed.

The Group also reports future expenses arising out of ongoing tax audits or tax disputes under Provisions. The outcome of these may deviate from the estimations made by Vattenfall.

For further information on taxes, see Note 19 to the consolidated accounts, Taxes.

Valuation of embedded derivatives

A limited number of Vattenfall's long-term electricity contracts include specific pricing clauses. For example, the price in an electricity contract may have couplings to the price trend for commodities and indirectly also to exchange rate movements, since the commodity prices in question are quoted in foreign currency. In such contracts, the clauses entail that the contracts contain embedded derivatives. In valuations of these contracts containing embedded derivatives, the company's executive management must make certain estimations and assessments.

For example, the company has contracts with terms extending through 2019. In view of the structure of these contracts in general and their duration in particular, plus the fact that reliable market quotations are only available for a period of 27 months ahead in time, an estimation must be made of the price development beyond this 27-month period. Through the first quarter of 2011, the value of these embedded derivatives for the period beyond 27 months has been set to zero.

In a review conducted during the second quarter of 2011 of the valuation of these long-term electricity contracts, Vattenfall determined that, for valuation of the period beyond 27 months, i.e., the time horizon for which market quotations are available and up until the contract's expiration date, the use of modelled prices provides a reliable value. The effect of this review on the value of these embedded derivatives amounted to SEK +1,120 million as per 30 June 2011 and affected operating profit (EBIT) in its entirety as an increase in net sales. The value of these derivatives at 31 December 2012 was SEK +430 million (+785).

See also Note 47 to the consolidated accounts, Financial instruments per category and related effects on income.

Valuation of available-for-sale financial assets

Vattenfall owns approximately 19% of the shares in the energy company Enea S.A., which is listed on the stock exchange in Warsaw, Poland.

The holding in Enea is classified as a financial instrument in the subcategory "Available-for-sale financial assets". Such assets are to be carried at fair value with changes in fair value recognised in other comprehensive income; alternatively, they are to be recognised as being impaired in the income statement. In 2011 Vattenfall initially recognised the change in the fair value of the shareholding in Enea in other comprehensive income; however, during the last quarter of 2011 Vattenfall recognised an impairment loss of SEK 1,591 million in the income statement, since the change in fair value was considered to be both significant and prolonged over time. In 2012 an additional impairment loss of SEK 311 million was recognised. As in 2011, this impairment loss is reported as a financial expense in the income statement. In addition, in 2012 a change in fair value amounting to SEK +30 million, net, for the shareholding in Enea, is reported in other comprehensive income.

Assets held for sale

According to IFRS 5 *Non-current Assets Held for Sale and Discontinued Operations, an entit*y shall classify as asset as held for sale if its carrying amount will be recovered principally through a sale transaction rather than through continuing use. For that to be the case, certain criteria must be fulfilled. The asset must be available for immediate sale in its present condition subject to usual and customary terms. Further, the sale must be highly probable. The last-mentioned criterion means that a plan for the disposal must have been prepared and approved at the appropriate level of management, an active program for the disposal must have been initiated, and the asset must be marketed for sale at a price that is reasonable in relation to its current fair value. In addition, the sale should be expected to be completed within one year from the date of classification.

As per 31 December 2012, Vattenfall's management is of the opinion that there are no assets that meet with the requirements in IFRS 5 to be accounted for as Assets held for sale.

Note 5 Acquired and divested operations

During 2012, no acquisitions of Group companies have been made. In 2011 Vattenfall acquired the Dutch wind company Zuidlob B.V. for SEK 228 million.

In 2012, the acquisitions/investments in associated companies and other shares and participations amounted to SEK 345 million (140). See Notes 27 and 28 to the consolidated accounts.

	Fair value	
Acquired operations	2012	2011
Intangible assets: non-current	—	308
Property, plant and equipment	—	268
Trade receivables and other receivables	—	147
Provisions	—	-30
Deferred tax liabilities	—	-80
Trade payables and other liabilities	—	-385
Total net assets	**—**	**228**
Goodwill	—	29
Total purchase consideration = Cash flow for the year	**—**	**257**

Divestments in 2012

The sale of Vattenfall's electricity distribution and heat business in Finland was completed in January 2012. The buyer was LNI Acquisition Oy – a consortium comprising 3i Infrastructure plc, 3i Group plc, GS Infrastructure Partners and Ilmarinen Mutual Pension Insurance Company. The sale generated a capital gain of SEK 8.1 billion. Vattenfall has retained ownership of its electricity sales organisation and hydro power operations in Finland.

Total proceeds received during 2012 for divested operations amounted to SEK 20.9 billion, of which SEK 13.2 billion pertained to the electricity distribution and heat business in Finland, SEK 5.8 billion to the heat business in Poland, and SEK 1.9 billion to Vattenfall's operations in Belgium.

Capital gains from the latter two divestments were booked during 2011.

Divestments in 2011

In 2011 the Dutch company Exploration and Production B.V. was divested. Consideration for the sale amounted to EUR 281 million. In addition, the heat and distribution operations in Poland were divested for combined consideration of SEK 15,251 million. All of the Group's operations in Belgium were divested. Consideration for the sale amounted to EUR 214 million. In Germany, the associated company Energieversorgung Sachsen Ost AG (ENSO) was divested for consideration of EUR 147 million. In addition, Vattenfall divested its 25% interest in the hard coal–fired plant in Rostock, Germany, as well as the combined heat and power plant in Helsingør, Denmark. Parts of the Swedish engineering consultancy were also divested in 2011.

Divested operations	Carrying amount 2012	2011
Intangible assets: non-current	—	2,093
Property, plant and equipment	—	14,172
Participations in associated companies and joint ventures	16	—
Deferred tax assets	—	93
Other non-current assets	—	68
Inventories	—	696
Intangible assets: current	—	294
Trade receivables and other receivables	—	4,026
Derivatives with positive fair values	—	468
Short-term investments	—	2,181
Cash and cash equivalents	—	1,332
Assets held for sale	8,506	1,130
Borrowings	—	-1,722
Provisions	—	-1,088
Deferred tax liabilities	—	-2,140
Trade payables and other liabilities	—	-4,103
Liabilities associated with assets held for sale	-3,527	—
Total net assets	**4,995**	**17,500**
Divestment of non-controlling interests (minority interests)	—	5
Proceeds of sale	**13,215**	**21,211**
Of which, proceeds received in 2012 from divestments in 2011	7,658	7,658
Cash flow for the year	**20,873**	**13,553**
Capital gain/loss recognised in the income statement	**8,090**	**3,706**
Divestment of shares in Group companies to owners of non-controlling interests (minority owners) which in the statement of cash flows is reported as a financing activity	4,113	—

Note 6 Exchange rates

Key exchange rates applied in the accounts of the Vattenfall Group:

		Average rate		Balance sheet date rate	
	Currency	2012	2011	31 Dec. 2012	31 Dec. 2011
Europe	EUR	8.7036	9.0215	8.5820	8.9400
Denmark	DKK	1.1692	1.2110	1.1503	1.2033
Norway	NOK	1.1627	1.1579	1.1679	1.1505
Poland	PLN	2.0797	2.1900	2.1065	2.0300
UK	GBP	10.6954	10.3810	10.5159	10.6800
USA	USD	6.7343	6.4922	6.5045	6.9200

Note 7 Net sales

	2012	2011
Sales including excise taxes:		
-sale of goods (electricity, heat, gas, etc.)	174,683	190,071
-rendering of services	7,069	8,310
Excise taxes	-14,439	-17,341
Net sales	**167,313**	**181,040**

Note 8 Operating segments

Effective 1 January 2011 Vattenfall moved from a geographical to a business-led organisational structure that is based on the value chain and which as of 1 November 2012 comprises the following two operating segments: Generation, and Distribution and Sales.

Responsibilities of the operating segments:

The Generation segment is Vattenfall's interface towards the wholesale market and includes development and building of production assets, generation of electricity and heat, and sales of electricity on the wholesale energy market.

Vattenfall's management believes that a composite assessment of the following four divisions' operations is needed to gain a complete picture of the operations' performance at the Group level. Together they form the Generation operating segment.

- Business Division Sustainable Energy Projects is responsible for project development and execution of new build generation projects in electricity and large modification projects in thermal power, heat, infrastructure, nuclear power and hydro power. Business Division Sustainable Energy Projects is also responsible for the Group's R&D activities and Engineering consulting business.
- Business Division Production operates Vattenfall's lignite mining and power generation assets (exclusive of nuclear power assets) as cost-effectively as possible to ensure optimal levels of generation capacity and availability. The Division also operates Vattenfall's combined heat and power (CHP) plants in Germany, Denmark and the Netherlands.
- Business Division Nuclear Power is responsible for the operation of all Vattenfall's nuclear power assets.
- Business Division Asset Optimisation and Trading is responsible for optimising the dispatch of all of Vattenfall's generation assets (i.e., it manages when and how the plants generate electricity) and hedges the production output of those assets for maximum profitability within a given risk mandate. This Business Division also conducts proprietary trading under defined risk mandates.

The Distribution and Sales segment is Vattenfall's interface towards the end-customer market and includes the unbundled and regulated electricity distribution business.

- Business Division Distribution and Sales is responsible for Vattenfall's electricity sales and heat businesses, the regulated electricity distribution business and other downstream businesses. This Business Division is responsible for all relationships with Vattenfall's end customers.

The operating segments are followed up on the basis of Underlying operating profit, i.e., Operating profit (EBIT) adjusted for items affecting comparability (for definitions see page 117), which is why financial items and expenses as well as taxes are reported in their entirety under the heading "Other", as shown below. All segments apply IFRS.

Deliveries of electricity, heat and gas between segments are made at market prices. For services between segments, cost price generally applies, although in certain cases market prices are applied.

Staff Functions and Shared Service Centres

A number of Group-wide Staff Functions support Vattenfall's business as well as the decision-making process of the Executive Group Management (EGM) and CEO. The Staff Functions also govern relevant business processes in Vattenfall as a whole. The Staff Functions are managed and co-ordinated centrally with employees located at both the corporate level and closer to the business. Shared Service Centres (SSCs) are an important and integral element of Vattenfall's business operations and focus on transaction-related processes. Shared Services are led with a focus on process efficiency and utilisation of economies of scale. Shared Services provide such services and specialist functions which, from a cost perspective, are advantageous to handle and perform on a shared basis. Staff Functions and Shared Service Centres are reported under the heading "Other".

Operating segments

2012	Generation	Distribution and Sales	Other	Eliminations	Total
External net sales	61,159	123,495	245	-17,586[1]	**167,313**
Internal net sales	57,797	7,176	5,200	-70,173	**—**
Total net sales	**118,956[2]**	**130,671**	**5,445**	**-87,759**	**167,313**
Underlying operating profit	20,484	7,855	-592	—	**27,747**
- including items affecting comparability	-9,473	71	7,830	—	**-1,572**
Operating profit (EBIT)	**11,011[2]**	**7,926**	**7,238**	**—**	**26,175**
Financial income and expenses	—	—	-7,874	—	**-7,874**
Profit before tax	**11,011**	**7,926**	**-636**	**—**	**18,301**
Income tax expense	—	—	-1,077	—	**-1,007**
Profit for the year	**11,011**	**7,926**	**-1,713**	**—**	**17,224**
Participations in the results of associated companies	236	-100	—	—	**136**
Depreciation and amortisation	13,522	5,584	559	—	**19,665**
Impairment losses affecting operating profit (EBIT)	8,644	—	4	—	**8,648**
Total	**22,166**	**5,584**	**563**	**—**	**28,313**
Investments	22,117	6,674	3,132	-2,342	**29,581**
Assets	463,328	153,226	282,819	-371,009[4]	**528,364**

2011	Generation	Distribution and Sales	Other	Eliminations	Total
External net sales	61,167	144,575	983	-25,685[1]	**181,040**
Internal net sales	63,673	10,724	6,320	-80,717	**—**
Total net sales	**124,840[2]**	**155,299**	**7,303**	**-106,402**	**181,040**
Underlying operating profit	22,579	10,496	-2,282	—	**30,793**
- including items affecting comparability	-11,537	627	3,326	—	**-7,584**
Operating profit (EBIT)	**11,042[2]**	**11,123**	**1,044**	**—**	**23,209**
Financial income and expenses	—	—	-8,911	—	**-8,911**
Profit before tax	**11,042**	**11,123**	**-7,867**	**—**	**14,298**
Income tax expense	—	—	-3,882	—	**-3,882**
Profit for the year	**11,042**	**11,123**	**-11,749**	**—**	**10,416**

2011	Generation	Distribution and Sales	Other	Eliminations	Total
Participations in the results of associated companies	-320	352	—	—	**32**
Depreciation and amortisation	13,043	6,606	764	—	**20,413**
Impairment losses affecting operating profit (EBIT)	11,282[3]	—	20	—	**11,302**
Reversed impairment losses affecting operating profit (EBIT)	—	-386	—	—	**-386**
Total	**24,325**	**6,220**	**784**	**—**	**31,329**
Investments	27,008	8,247	-881	1,376	**35,750**
Assets	463,661	153,938	257,277	-350,318[4]	**524,558**

1) Pertains to Generation's sales to Nood Pool, the Nordic electricity exchange. Vattenfall's sales organisation buys the corresponding electricity from Nord Pool.

2) Of which, changes in market value of financial instruments, inventories and embedded derivatives not subject to hedge accounting (changes in fair value) in total net sales SEK 1,015 million (-253) and in operating profit SEK -675 million (-1,067).

3) In this context, impairment losses also include other close-down costs than impairment in 2011 pertaining to nuclear power plants in Germany, SEK 10,513 million.

4) Chiefly concerns Treasury's liquid assets and financial receivables from other operating segments.

Note 9 Information about geographical areas

Geographical areas

2012	Sweden	Germany	Netherlands	Other[1]	Eliminations	Total
External net sales	49,483	77,205	33,537	10,678	-3,590	**167,313**
Internal net sales	6,940	38,061	35,323	2,171	-82,495	**—**
Total net sales	**56,423**	**115,266**	**68,860**	**12,849**	**-86,085**	**167,313**
Operating profit (EBIT)	23,461	11,786	-9,999	927	—	**26,175**
- including items affecting comparability	7,682	599	-9,997	144	—	**-1,572**
Underlying operating profit	**15,779**	**11,187**	**-2**	**783**	**—**	**27,747**
Intangible assets: non-current, property, plant and equipment and investment property	106,329	115,511	71,357	25,621	—	**318,818**

2011	Sweden	Germany	Netherlands	Other[1]	Eliminations	Total
External net sales	46,075	76,194	33,155	30,494	-4,878	**181,040**
Internal net sales	1,734	27,869	24,865	3,663	-58,131	**—**
Total net sales	**47,809**	**104,063**	**58,020**	**34,157**	**-63,009**	**181,040**
Operating profit (EBIT)	15,684	1,065	3,157	3,303	—	**23,209**
- including items affecting comparability	1,915	-11,198	1,704	-5	—	**-7,584**
Underlying operating profit	**13,769**	**12,263**	**1,453**	**3,308**	**—**	**30,793**
Intangible assets: non-current, roperty, plant and equipment and investment property	101,702	116,861	79,028	28,622	—	**326,213**

1) Chiefly concerns Trading, Treasury operations and other Staff Functions. Also includes operations in the UK.

Vattenfall did not have transactions in 2011 or 2012 with a single external customer where revenues amounted to more than 10% of the Group's total net sales.

Note 10 Cost of products sold

Direct costs include production taxes and duties of SEK 6,238 million (5,742) and property taxes of SEK 2,124 million (2,298).

Note 11 Other operating income

Other operating income consists of capital gains from sales of non-current assets, emission allowances and certificates, operationally derived exchange rate gains SEK 1,368 million (1,019), rental income, government grants SEK 374 million (269), and insurance compensation.

Note 12 Other operating expenses

Other operating expenses consist primarily of capital losses from sales of non-current assets, emission allowances and certificates, operationally derived exchange rate losses SEK 726 million (653), and close-down and restructuring costs.

Note 13 Depreciation and amortisation

Depreciation of property, plant and equipment and of investment property and amortisation of non-current intangible assets in the income statement are broken down as follows:

	2012	2011
Cost of products sold	19,088	19,841
Selling expenses	368	352
Administrative expenses	181	201
Research and development costs	19	7
Other operating expenses (investment property)	9	12
Total	**19,665**	**20,413**

Amortisation of non-current intangible assets is included in Cost of products sold above in the amount of SEK 1,519 million (1,591), Selling expenses in the amount of SEK 73 million (90) and Administrative expenses in the amount of SEK 69 million (93).

Note 14 Impairment losses and reversed impairment losses

Impairment losses of non-current intangible assets, property, plant and equipment and investment property in the income statement are broken down as follows:

	2012	2011
Cost of products sold	8,624	11,282[1]
Administrative expenses	—	5
Research and development	20	—
Other operating expenses	4	15
Total	**8,648**	**11,302**

1) In this context, impairment losses also include other close-down costs than impairment in 2011 pertaining to nuclear power plants in Germany, for a total of SEK 10,513 million.

Reversed impairment losses of non-current intangible assets, property, plant and equipment and investment property in the income statement are broken down as follows:

	2012	2011
Cost of products sold	—	386
Total	**—**	**386**

The following large impairment loss is included under the heading above:

2012

Generation operating segment:
Impairment losses in the Generating operating segment amounted to SEK 8,644 million. As a result of the yearly impairment testing, Vattenfall recognised impairment losses for the book value of goodwill and production assets in the Thermal Power cash generating unit (CGU), mainly in the Netherlands, for a total amount of SEK 8,561 million. The impairment losses were recognised on account of sharply lower margins ("clean spark spreads") and higher costs associated with additional taxes on coal-based power generation in the Netherlands. Of total impairment losses, SEK 3,469 million is attributable to goodwill and SEK 5,092 million to coal- and gas-fired power plants. More information about the impairment process is provided in Note 23 to the consolidated accounts, Intangible assets: non current.

2011

Generation operating segment:
The decisions in 2011 by the German government and Germany's parliament that all German nuclear power plants are to be closed by 2022 at the latest entail that the Brunsbüttel and Krümmel nuclear power plants, for which Vattenfall has operating responsibility and owns 66.7% and 50%, respectively, may not be restarted. Because of this, Vattenfall was forced to recognise an impairment loss for the entire book value of these two plants and increase its provisions for dismantling and handling of nuclear fuel. A charge of EUR 1,145 million (SEK 10,240 million) was booked against operating profit (EBIT) for the second quarter of 2011 for these measures. Calculated at the exchange rate applicable after four quarters in 2011, the corresponding effect on income was SEK 10,330 million. In addition, during the fourth quarter of 2011, provisions for dismantling and handling of nuclear fuel were increased by an additional SEK 183 million.

An impairment loss of SEK 257 million was recognised for the Jänschwalde CCS demonstration project in eastern Germany. An impairment loss of SEK 387 million was recognised for the CCS project in Buggenum, the Netherlands, of which SEK 155 million pertains to impairment of goodwill.

Distribution and Sales segment
Previously recognised impairment of the heat production plant was reversed in the amount of SEK 379 million.

Note 15 Operating costs according to type

	2012	2011
Personnel costs	25,148	24,253
Depreciation and amortisation	19,665	20,413
Impairment losses of non-current assets	8,647	11,302
Reversed impairment losses of non-current assets	—	-386
Other operating costs incl. input commodities	98,569	109,450
Total	**152,029**	**165,032**

Note 16 Financial income

	2012	2011
Dividends	82	101
Interest income attributable to investments, etc.	812	1,454
Return from the Swedish Nuclear Waste Fund	1,430	1,948
Exchange rate differences, net	127	235
derivatives	164	—
Capital gains from divestments of shares and participations	21	105
Total	**2,636**	**3,843**

Note 17 Financial expenses

	2012	2011
Interest expenses attributable to loans, etc.	6,044	6,176
Interest components related to pension costs, net after deductions for expected return on plan assets	1,012	1,043
Interest effects attributable to provisions	3,124	2,966
Net change in value from reassessment of derivatives	—	837
Net change in value from reassessment of other financial assets	19	21
Impairment losses for shares and participations	311	1,711
Total	**10,510**	**12,754**

Note 18 Ineffectiveness of hedges

	2012	2011
Ineffectiveness of fair value hedges[1]	-728	-719
Ineffectiveness of cash flow hedges	-137	77
Total	**-865**	**-642**
1) Ineffectiveness of fair value hedges is distributed as follows:		
Gains(+)/losses(-) from hedging instruments	359	2,210
Gains(+)/losses(-) from hedged items	-1,087	-2,929
Total	**-728**	**-719**

Note 19 Income tax expense

Profit before tax amounted to:

	2012	2011
Sweden	17,554	7,737
Other countries	747	6,561
Total	**18,301**	**14,298**

The reported income tax expense breaks down as follows:

	2012	2011
Current tax		
Current taxes related to the period:		
Sweden	14	2,234
Other countries	2,281	1,433
Adjustment of current tax for prior periods:		
Sweden	-448	-506
Other countries	491	-1,079
	2,338	**2,082**
Deferred tax		
Sweden	-665	1,695
Other countries	-596	105
	-1,261	**1,800**
Total income tax expense	**1,077**	**3,882**

The difference between the nominal Swedish tax rate and the effective tax rate is explained as follows:

%	2012	2011
Swedish income tax rate at 31 December	26.3	26.3
Difference in tax rate in foreign operations	2.8	-0.9
Tax adjustment for previous periods	-2.8	1.4
Revaluation of previously non-valued losses and other temporary differences	0.3	—
Tax-loss carryforwards from current year that are not valued	0.4	0.2
Capital gains[1]	-11.0	-4.4
Participations in the results of associated companies	-0.3	—
Non-deductible impairment losses[2]	6.3	3.4
Changed tax rates excl. Sweden	1.7	-0.4
Non-deductible interest	1.9	3.1
Other non-deductible expenses	1.6	1.8
Non-taxable income	-1.9	-3.4
Effective tax rate before change of tax rate in Sweden	**25.3**	**27.1**
Changed tax rate in Sweden	-19.4	—
Effective tax rate after change of tax rate in Sweden	**5.9**	**27.1**

1) Including capital gain from the divestment of Finnish companies.

2) See Note 14, to the consolidated accounts, Impairment losses and reversed impairment losses.

Accumulated tax-loss carryforwards are broken down as follows:

	2012	2011
Sweden	713	66
Other countries	7,706	2,696
Total	**8,419**	**2,762**

The tax-loss carryforwards fall due as follows:

	2012
2013	83
2014-2017	58
2018 and beyond	2,191
No time limit	6,087
Total	**8,419**

On the balance sheet, unrecognised tax-loss carryforwards represent a tax value of SEK 147 million (175).

A non-current tax asset for current tax has arisen following changed legislation in Germany (December 2006) which entails that a tax credit received during the years 2002–2005 pertaining to previously abolished rules regulating tax on dividends, can now be recovered without conditions for further distribution. The relaxed tax credit will be paid out during the years 2009–2017. The non-current part is represented in the balance sheet by a discounted value.

Balance sheet reconciliation – Current tax[1]	2012	2011
Balance brought forward	-127	1,797
Reclassification	—	1,283
Translation differences	-2	-14
Divested companies including liabilities associated with assets held for sale	—	-41
Interest- and discounting effects on non-current tax items	-87	-354
Change via income statement	2,338	2,082
Tax effect to equity	1,239	370
Taxes paid, net	-3,545	-5,250
Reclassification to other receivables	526	—
Balance carried forward	**342**	**-127**

1) Including tax liabilities reported under provision for tax disputes.

Balance sheet reconciliation – Deferred tax	Balance brought forward 2012	Translation differences	Acquired companies	Divested companies	Assets held for sale	Changes via income statement	Changes via Other comprehensive income	Balance carried forward 2012
Non-current assets	42,474	-710	—	—	—	-2,028	—	39,736
Current assets	3,541	-74	—	—	—	588	—	4,055
Provisions	-10,313	43	—	—	—	599	—	-9,671
Other non-current liabilities	2,866	112	—	—	—	-194	—	2,784
Current liabilities	-4,071	38	—	—	—	1,032	—	-3,001
Cash flow hedges	183	-4	—	—	—	—	1,381	1,560
Tax losses carried forward	-577	35	—	—	—	-1,258	—	-1,800
Total	**34,103**	**-560**	**—**	**—**	**—**	**-1,261**	**1,381**	**33,663**

Balance sheet reconciliation – Deferred tax	Balance brought forward 2011	Translation differences	Acquired companies	Divested companies	Assets held for sale	Changes via income statement	Changes via Other comprehensive income	Balance carried forward 2011
Non-current assets	44,660	143	71	-2,496	-969	1,065	—	42,474
Current assets	2,426	-13	—	-50	—	1,178	—	3,541
Provisions	-10,496	18	—	136	—	29	—	-10,313
Other non-current liabilities	3,421	5	—	—	—	-560	—	2,866
Current liabilities	-4,335	11	2	39	—	212	—	-4,071
Cash flow hedges	-460	5	—	—	—	—	638	183
Tax losses carried forward	-488	-2	—	37	—	-124	—	-577
Total	**34,728**	**167**	**73**	**-2,334**	**-969**	**1,800**	**638**	**34,103**

Note 20 Non-controlling interests (minority interests)

	2012	2011
Share in profit before tax	320	-578
Share in income tax expense	-32	-89
Total	**288**	**-667**

Note 21 Leasing

Leasing expenses

Equipment leased by the Group through finance leases and reported as property, plant and equipment is reported as follows:

	2012	2011
Machinery/equipment		
Cost	1,181	457
Accumulated depreciation according to plan	-549	-319
Residual value according to plan	**632**	**138**

Future payment commitments, as of 31 December 2012, for leasing contracts and rental contracts are broken down as follows:

	Finance leasing, nominal	Finance leasing, present value	Operating leasing
2013	93	89	1,029
2014	81	75	913
2015	73	64	805
2016	62	51	374
2017	63	50	315
2018 and beyond	608	431	413
Total	**980**	**760**	**3,849**

The current year's leasing expenses for Group assets amounted to SEK 1,108 million (1,200).

Leasing revenues

Certain Group companies own and operate power facilities on behalf of customers. Revenues from customers are broken down into two components – a fixed component to cover capital expenses and a variable component based on the quantity delivered.

Facilities are classified in accordance with standard leasing principles, based on the fixed revenue component.

On 31 December 2012, cost of assets reported under Operating leases amounted to SEK 2,858 million (2,870). Accumulated depreciation amounted to SEK 1,460 million (1,402) and accumulated impairment losses amounted to SEK 30 million (30).

Future payments for this type of facility are broken down as follows:

	Finance leasing	Operating leasing
2013	—	352
2014	—	344
2015	—	336
2016	—	297
2017	—	235
2018 and beyond	—	240
Total	**—**	**1,804**

Note 22 Auditors' fees

	2012	2011
Annual audit assignment		
Ernst & Young	39	52
PwC	1	20
Swedish National Audit Office	—	1
Total	**40**	**73**
Audit-related activities besides the annual audit assignment		
Ernst & Young	5	3
PwC	1	3
Total	**6**	**6**

	2012	2011
Tax consulting		
Ernst & Young	4	3
PwC	—	2
Total	**4**	**5**
Other assignments		
Ernst & Young	4	5
PwC	2	9
Total	**6**	**14**

Note 23 Intangible assets: non-current

	Development costs not yet capitalised		Capitalised development costs		Goodwill		Exploration and evaluation assets		Concessions and similar rights with finite useful lives		Renting rights, mining rights and similar rights with finite useful lives		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Cost														
Cost brought forward	36	92	2,087	2,068	39,670	40,179	—	1,635	15,664	15,411	3,994	4,180	**61,451**	**63,565**
Acquired companies	—	—	—	—	—	29	—	—	—	308	—	—	**—**	**337**
Investments	18	51	39	28	—	—	—	—	224	362	2	18	**283**	**459**
Advance payments capitalised	—	—	—	—	—	—	—	—	2	13	—	—	**2**	**13**
Transfer from development costs not yet capitalised	-4	—	4	—	—	—	—	—	—	—	—	—	**—**	**—**
Divestments/disposals	—	-2	-84	20	-120	—	—	—	-9	-50	4	-6	**-209**	**-38**
Reclassifications	—	-105	23	117	-60	—	—	—	-564	84	—	-11	**-601**	**85**
Assets held for sale	—	—	—	-135	—	—	—	—	—	24	8	-166	**8**	**-277**
Divested companies	—	—	—	—	—	-273	—	-1,638	—	-414	—	—	**—**	**-2,325**
Translation differences	—	—	-61	-11	-1,558	-265	—	3	-526	-74	-129	-21	**-2,274**	**-368**
Accumulated cost carried forward	**50**	**36**	**2,008**	**2,087**	**37,932**	**39,670**	**—**	**—**	**14,791**	**15,664**	**3,879**	**3,994**	58,660	61,451
Accumulated amortisation according to plan[1]														
Amortisation brought forward	—	—	-1,500	-1,374	—	—	—	—	-5,280	-4,157	-2,054	-1,989	**-8,834**	**-7,520**
Amortisation for the year	—	—	-128	-168	—	—	—	—	-1,373	-1,429	-160	-177	**-1,661**	**-1,774**
Divestments/disposals	—	—	-39	-20	—	—	—	—	10	41	-4	6	**-33**	**27**
Reclassifications	—	—	-1	-56	—	—	—	—	-68	34	-6	9	**-75**	**-13**
Assets held for sale	—	—	—	111	—	—	—	—	—	-20	—	85	**—**	**176**
Divested companies	—	—	—	—	—	—	—	—	—	215	—	—	**—**	**215**
Translation differences	—	—	49	7	—	—	—	—	190	36	77	12	**316**	**55**
Accumulated amortisation carried forward	**—**	**—**	**-1,619**	**-1,500**	**—**	**—**	**—**	**—**	**-6,521**	**-5,280**	**-2,147**	**-2,054**	-10,287	-8,834

	Development costs not yet capitalised		Capitalised development costs		Goodwill		Exploration and evaluation assets		Concessions and similar rights with finite useful lives		Renting rights, mining rights and similar rights with finite useful lives		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Impairment losses														
Impairment losses brought forward	—	—	-236	-195	-5,372	-5,245	—	-18	-254	-283	-527	-527	-6,389	-6,268
Impairment losses for the year	—	—	—	-9	-3,494	-155	—	—	-1	-4	—	—	-3,495	-168
Divestments/disposals	—	—	119	—	120	—	—	—	—	1	—	—	239	1
Reclassifications	—	—	2	-33	60	—	—	—	—	34	—	—	62	1
Divested companies	—	—	—	—	—	—	—	18	—	—	—	—	—	18
Translation differences	—	—	—	1	248	28	—	—	4	-2	1	—	253	27
Accumulated impairment	**—**	**—**	**-115**	**-236**	**-8,438**	**-5,372**	**—**	**—**	**-251**	**-254**	**-526**	**-527**	-9,330	-6,389
Residual value according to plan carried forward	**50**	**36**	**274**	**351**	**29,494**	**34,298**	**—**	**—**	**8,019**	**10,130**	**1,206**	**1,413**	39,043	46,228
Advance payments to suppliers													2	1
Total													39,045	46,229

1) Estimated useful lives are 3-4 years for capitalised development costs 3–30 years for concessions etc. and 3–50 years for renting rights, mining rights, etc.

Contractual commitments for acquisitions of non-current intangible assets amounted to SEK 19 million (16) as per 31 December 2012.

Goodwill is mainly allocated to the Generation operating segment, in the amount of SEK 17,040 million (21,325), and the Distribution and Sales operating segment, in the amount of SEK 12,380 million (12,896).

In the Generation operating segment, goodwill is allocated to the cash-generating units Trading, in the amount of SEK 16,543 million (17,233), and Wind Generation, amounting to SEK 497 million (504). The goodwill allocated to the Thermal Power cash-generating unit (in 2011: SEK 3,563 million) was impaired in 2012.

In the Distribution and Sales operating segment, goodwill is mainly allocated to the cash-generating units Sales B2C, in the amount of SEK 11,491 million (11,971), and Heat, in the amount of SEK 723 million (754).

Impairment testing has been conducted through calculation of the value in use for the Group's business units, which is the basis for determining the smallest cash-generating unit. The organisational changes in Vattenfall in 2012 have not changed the structure of the smallest cash-generating units. The impairment tests were conducted in the third quarter of 2012.

Goodwill is not subject to amortisation, but is tested annually for impairment. During the year, an impairment loss of SEK 3,494 million was recognised for the Thermal Power cash-generating unit in the Generation operating segment. Impairment in the preceding year, totalling SEK 155 million, was attributable to the Generation operating segment.

Earnings performance for Vattenfall's operating segments is shown in Note 8 to the consolidated accounts, Operating segments.

Generation operating segment

The main assumptions that company management has used in calculating projections of future cash flows for the Generation operating segment are – for the power-generating assets – based on forecasts of the useful life of the respective assets. In other respects, they are based on the business plan for the coming five years, after which their residual value is taken into account, based on a growth factor of 1.0% (1.5%). The calculated revenues in these forecasts are based on Vattenfall's long-term pricing projections, which are the result of a very large number of simulations. In calculations of the value of power-generating assets in the Generation operating segment, a so-called flexibility value is taken into account. Most of the power-generating assets have a technical degree of flexibility that gives the owner the opportunity to adapt generation to current prices in the market. If spot prices are low, a production plant can reduce its generation or even go off line, during the time in which generation would be unprofitable. On the other hand, a production plant can be brought back on line or be ramped up in cases where spot prices allow for positive production margins. In option valuation theory, this asymmetry in potentially earned margins results is an additional value component. This flexibility value is mainly dependent on two key elements: the volatility of energy prices, and the technical flexibility of the power plants, which affects decisions in the daily production optimisation. The main driving force behind the estimated flexibility value for the power generating assets in the Generation operating segment consists of the effects of production optimisation; however, calculation of the flexibility value is also affected by a multitude of simulation scenarios for future prices of electricity, fuel and CO_2 emission allowances. The calculation of these scenarios takes into account fundamental market dynamics, including the historical as well as the anticipated future level of volatility. Future cash flows have been discounted to value in use using a discount rate of 5.10% (5.26%) after tax. A change of the discount rate of +/– 0.5% would affect the estimated value in use of the cash-generating units in the Generation operating segment that contain goodwill by approximately SEK –/+ 13 billion. An increase in the discount rate of 0.5% would give rise to a need to recognise additional impairment of the book value of non-current assets by approximately SEK 6.5 billion in the Thermal Power cash-generating unit. The impairment loss of SEK 8,624 million reported in the Generation operating segment is mainly attributable to the Thermal Power cash-generating unit, in the amount of SEK 8,651 million, of which SEK 3,469 million pertains to goodwill and SEK 5,092 million to other assets.

Distribution and Sales operating segment

The main assumptions that company management has used in calculating the projected future cash flows for the Distribution and Sales operating segment are based on the business plan for the coming five years and residual value, based on a growth factor of 1.0% (1.5%) for the Sales business. Future cash flows have been discounted to value in use using a discount rate of 5.10% (5.26%) after tax for the Sales business. In the year's impairment testing, the calculated value in use exceeds the carrying amount, which is why no impairment has been recognised. A change of the discount rate of +/– 0.5% would affect the estimated value in use of the cash-generating units in the Distribution and Sales operating segment that contain goodwill by approximately SEK –/+ 11 billion and would not require recognition of further impairment.

Note 24 Property, plant and equipment

	Land and buildings[1]		Plants and other technical installations		Equipment, tools, and fixtures and fittings		Construction in progress[2]		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Cost										
Cost brought forward[3]	65,738	74,424	413,623	438,184	13,176	14,363	63,245	52,373	**555,782**	**579,344**
Acquired companies	—	—	—	765	—	—	—	—	**—**	**766**
Investments[4]	241	262	2,571	2,485	1,006	911	23,023	31,398	**26,841**	**35,056**
Advance payments capitalised	5	3	408	547	10	9	559	1,467	**982**	**2,026**
Capitalised/reversed future expenses for decommissioning, restoration, etc.	200	46	2,077	844	—	—	—	—	**2,277**	**890**
Transfer from construction in progress	717	1,464	20,816	17,133	255	363	-21,788	-18,960	**—**	**—**
Divestments/disposals	-486	-445	-8,119	-6,268	-713	-588	-461	-847	**-9,779**	**-8,148**
Other reclassifications	77	-5,324	5,987	-5,986	-733	-557	-4,514	-593	**817**	**-12,460**
Assets held for sale	—	-179	—	-12,221	—	-259	—	-181	**—**	**-12,840**
Divested companies	—	-4,099	—	-19,727	—	-986	-29	-1,055	**-29**	**-25,867**
Translation differences	-1,663	-414	-11,003	-2,133	-427	-81	-1,908	-357	**-15,001**	**-2,985**
Accumulated cost carried forward	**64,829**	**65,738**	**426,360**	**413,623**	**12,574**	**13,176**	**58,127**	**63,245**	**561,890**	**555,782**
Accumulated depreciation according to plan[5]										
Depreciation brought forward	-28,690	-35,966	-229,657	-241,474	-9,149	-9,523	—	—	**-267,496**	**-286,963**
Acquired companies	—	—	—	-497	—	-1	—	—	**—**	**-498**
Depreciation for the year	-1,390	-1,474	-15,619	-16,005	-986	-1,148	—	—	**-17,995**	**-18,627**
Divestments/disposals	191	327	3,919	4,928	426	551	—	—	**4,536**	**5,806**
Other reclassifications	-7	6,103	-271	5,959	620	285	—	—	**342**	**12,347**
Assets held for sale	—	65	—	6,773	—	236	—	—	**—**	**7,074**
Divested companies	—	2,033	—	9,271	—	397	—	—	**—**	**11,701**
Translation differences	877	222	6,708	1,388	300	54	—	—	**7,885**	**1,664**
Accumulated depreciation carried forward	**-29,019**	**-28,690**	**-234,920**	**-229,657**	**-8,789**	**-9,149**	**—**	**—**	-272,728	-267,496
Impairment losses										
Impairment losses brought forward	-1,248	-1,245	-9,424	-7,703	-353	-223	-409	-301	**-11,434**	**-9,472**
Impairment losses for the year	-186	-80	-687	-2,754	5	-147	-4,281	-116	**-5,149**	**-3,097**
Reversed impairment losses for the year	—	2	—	382	—	—	—	2	**—**	**386**
Divestments/disposals	101	38	2,823	583	225	1	145	—	**3,294**	**622**
Assets held for sale	—	5	—	—	—	—	—	—	**—**	**5**
Other reclassifications	-1	—	-741	28	12	13	695	—	**-35**	**41**
Divested companies	—	24	—	-9	—	—	29	—	**29**	**15**
Translation differences	45	8	340	49	10	3	56	6	**451**	**66**
Accumulated impairment losses carried forward	**-1,289**	**-1,248**	**-7,689**	**-9,424**	**-101**	**-353**	**-3,765**	**-409**	-12,844	-11,434
Residual value according to plan carried forward	**34,521**	**35,800**	**183,751**	**174,542**	**3,684**	**3,674**	**54,362**	**62,836**	276,318	276,852
Advance payments to suppliers									**2,966**	**2,593**
Total									279,284	279,445

1) Cost for land and buildings includes cost of land and water rights amounting to SEK 14,112 million (14,307), which are not subject to depreciation.

2) Interest during the construction period has been reported as an asset in the amount of SEK 1,394 million (953) for the year. The average interest rate for 2012 was 4.30% for borrowings in SEK and 4.17% for borrowings in EUR.

3) Government grants received, balance brought forward, amount to SEK 5,266 million (5,157). Accumulated interest reported as an asset totalling SEK 4,871 million (3,477) is included in cost of buildings.

4) Government grants received during the year amounted to SEK 949 million (170).

5) Estimated useful lives are 5–40 years for hydro power installations, 5–50 years for Combined Heat and Power Installations, 20–35 years for Wind power installations, 5–35 years for Electricity distribution lines, 5–20 years for Mining operations, 5–10 years for office equipment and 25–50 years for office and warehouse buildings and workshops.

At 31 December 2012, contractual commitments for the acquisition of property, plant and equipment amounted to SEK 18,657 million (25,741).

Note 25 Investment property

	2012	2011
Cost		
Cost brought forward	1,554	1,715
Investments	—	3
Divestments/disposals	-85	-153
Reclassifications	-1	—
Translation differences	-61	-11
Accumulated cost carried forward	**1,407**	**1,554**
Accumulated depreciation according to plan[1]		
Depreciation brought forward	-441	-473
Depreciation for the year	-9	-12
Divestments/disposals	38	41
Translation differences	18	3
Accumulated depreciation carried forward	**-394**	**-441**
Impairment losses		
Impairment losses brought forward	-574	-616
Impairment losses for the year	-4	-15
Divestments/disposals	31	52
Reclassifications	1	—
Translation differences	22	5
Accumulated impairment losses carried forward	**-524**	**-574**
Residual value according to plan carried forward	**489**	**539**
Estimated fair value	**595**	**669**

1) The estimated useful life for investment property is 25–50 years.

Investment property encompasses 94 (105) properties located in Berlin, Hamburg and eastern Germany. The estimated fair value has been defined as the amount at which the concerned property could be exchanged between knowledgeable, willing partners in an arm's length transaction. The fair value calculations have mainly been made by Vattenfall's own assessors.

Rental income from external customers amounted to SEK 75 million (91). Direct costs for the concerned properties amounted to SEK 159 million (153), of which SEK 58 million (40) is related to properties that did not generate rental income.

At 31 December 2012, contractual obligations to purchase, construct or develop investment property or for repairs, maintenance or enhancements amounted to SEK 268 million (173).

Note 26 Shares and participations owned by the Parent Company Vattenfall AB and other Group companies

Shares and participations owned by Parent Company Vattenfall AB

	Corporate Identity Number	Registered office	Number of shares 2012	Participation in % 2012	Carrying amount 2012	Carrying amount 2011
Sweden						
Borås Elhandel AB	556613-7765	Borås	1,000	100	100	100
Chlorout AB	556840-9253	Stockholm	500	100	—	—
Forsaströms Kraft AB	556010-0819	Åtvidaberg	400,000	100	48	48
Forsmarks Kraftgrupp AB	556174-8525	Östhammar	198,000	66	198	198
Försäkrings AB Vattenfall Insurance	516401-8391	Stockholm	200,000	100	200	200
Gotlands Energi AB	556008-2157	Gotland	112,500	75	13	13
Haparanda Värmeverk AB	556241-9209	Haparanda	200	50	1	1
Produktionsbalans PBA AB	556425-8134	Stockholm	4,800	100	5	5
Ringhals AB	556558-7036	Varberg	248,572	70	379	379
Svensk Kärnbränslehantering AB	556175-2014	Stockholm	360	36[1]	—	—
Vattenfall Biomass Liberia AB	556809-8809	Stockholm	5,000	100	—	314
Vattenfall Business Services Nordic AB	556439-0614	Stockholm	100	100	130	130
Vattenfall Elanläggningar AB	556257-5661	Sundsvall	1,000	100	1	1
Vattenfall Eldistribution AB	556417-0800	Stockholm	8,000	100	11	11
Vattenfall France Holding AB	556815-4214	Stockholm	30,500	100	11	11
Vattenfall Inlandskraft AB	556528-2562	Jokkmokk	3,000	100	4	4
Vattenfall Kalix Fjärrvärme AB	556012-9958	Kalix	1,880	94	—	—
Vattenfall Kundservice AB	556529-7065	Stockholm	100,000	100	31	31
Vattenfall Nuclear Fuel AB	556440-2609	Stockholm	100	100	96	96
Vattenfall PHEV Holding AB	556785-9383	Stockholm	100	100	—	—
Vattenfall Power Consultant AB	556383-5619	Stockholm	12,500	100	15	15
Vattenfall Power Management AB	556573-5940	Stockholm	6,570	100	12	12
Vattenfall Research & Development AB	556390-5891	Älvkarleby	14,000	100	17	17
Vattenfall Services Nordic AB	556242-0959	Luleå	26,000	100	19	19
Vattenfall Vattenkraft AB	556810-1520	Stockholm	1,000	100	1	1
Vattenfall Vindkraft AB	556731-0866	Stockholm	1,000	100	3,000	—
Vattenfall Vätter El AB	556528-3180	Motala	100	100	291	291
Västerbergslagens Energi AB	556565-6856	Ludvika	14,674	51	15	15
Övertorneå Värmeverk AB	556241-9191	Övertorneå	200	50	2	2
Denmark						
Vattenfall A/S	21 311 332	Copenhagen	10,040,000	100	3,191	10,705
Vattenfall Energy Trading A/S	3181181	Copenhagen	500	100	49	49
Finland						
Vattenfall Oy	—	—	—	—	—	1,483
Vattenfall Sähkömyynti Oy Sales B2B	1842073-2	Helsinki	85	100	—	—
Vattenfall Vamy Holding Oy	2421075-8	Helsinki	150	100	—	—
Germany						
Vattenfall GmbH	(HRB) 124048	Berlin	2	100	64,066	64,066

	Corporate Identity Number	Registered office	Number of shares 2012	Participation in % 2012	Carrying amount 2012	Carrying amount 2011
Poland						
Vattenfall IT Services Poland Sp.z.o.o	0000402391	Gliwice	58,000	100	12	12
Vattenfall Energy Trading Sp.z.o.o.	0000233066	Warsaw	80,000	100	9	9
Vattenfall Poland Sp.z.o.o.	0000270893	Warsaw	10,000	100	5	5
Netherlands						
Vattenfall Nederland B.V.	34116939	Hoofdorp	200	100	—	—
N.V. Nuon Energy	33292246	Amsterdam	87,548,782	67.04[2]	87,866	97,273
Other countries						
Aegir Wave Power Ltd, Scotland	SC367232	Edinburgh	19,129	66	7	7
Nautimus Ltd, UK	5532528	Grantham	1	100	4	4
Tonn Power Ltd, Ireland	E0461126	Maynooth	51	51	—	—
Vattenfall Reinsurance S.A., Luxembourg	(B) 49528	Luxembourg	13,000	100	111	111
Total					159,920	175,638

1) The Group owns a further 20% through Forsmarks Kraftgrupp AB.

2) The remaining 32.96% of the shares will be paid in two tranches: in July 2013 and 2015.

Larger shareholdings owned by other Group companies than the Parent Company Vattenfall AB

When calculating the participation percentages, consideration is made of the minority ownership in each company respectively.

	Registered office	Participation in % 2012
Sweden		
Barsebäck Kraft AB	Malmö	70
Vattenfall Dalälven AB	Stockholm	100
Vattenfall Göta Älv AB	Stockholm	100
Vattenfall Indalsälven AB	Bispgården	74
Vattenfall Lilla Luleälven AB	Stockholm	100
Vattenfall Nedre Luleälven AB	Stockholm	100
Vattenfall Skellefteälven AB	Stockholm	100
Vattenfall Småskalig Kraft AB	Stockholm	100
Vattenfall Stora Luleälven AB	Stockholm	100
Vattenfall Umeälven AB	Stockholm	100
Vattenfall Vindkraft Sverige AB	Stockholm	100
Vattenfall Ångermanälven AB	Stockholm	100
Denmark		
Vattenfall Vindkraft A/S	Esbjerg	100
Vattenfall Vindkraft Nørrekær Enge A/S	Esbjerg	96
Finland		
Pamilo Oy	Uimaharju	49
Vattenfall Sähköntuotanto Oy	Helsinki	100

	Registered office	Participation in % 2012
Germany		
DanTysk Offshore Wind GmbH	Hamburg	51
Fernheizwerk Neukölln AG	Berlin	81
Kernkraftwerk Brunsbüttel GmbH & Co. oHG	Hamburg	67
Kraftwerke Schwarze Pumpe GmbH	Spremberg	100
Müllverwertung Borsigstraße GmbH	Hamburg	86
MVR Müllverwertung Rugenberger Damm GmbH & Co. KG	Hamburg	55
Nuon Energie und Service GmbH	Heinsberg	100
Nuon Epe Gasspeicher GmbH	Heinsberg	100
Vattenfall Europe Business Services GmbH	Hamburg	100
Vattenfall Europe Distribution Berlin GmbH	Berlin	100
Vattenfall Stromnetz Hamburg GmbH	Hamburg	75
Vattenfall Europe Generation AG	Cottbus	100
Vattenfall Europe Kundenservice GmbH	Hamburg	100
Vattenfall Europe Mining AG	Cottbus	100
Vattenfall Europe Netzservice GmbH	Berlin	100
Vattenfall Europe New Energy GmbH	Hamburg	100
Vattenfall Europe Nuclear Energy GmbH	Hamburg	100
Vattenfall Europe Sales GmbH	Hamburg	100
Vattenfall Europe Technology Research GmbH	Cottbus	100
Vattenfall Europe Windkraft GmbH	Hamburg	100
Vattenfall Europe Wärme AG	Berlin	100
Vattenfall Wärme Hamburg	Hamburg	75
Netherlands		
Emmtec Services B.V.	Emmen	100
Feenstra Verwarming B.V.	Lelystad	100
N.V. Nuon Duurzame energie	Arnhem	100
N.V. Nuon Energy	Amsterdam	100
N.V. Nuon Energy Sourcing	Amsterdam	100
N.V. Nuon Sales	Amsterdam	100
N.V. Nuon Sales Nederland	Amsterdam	100
N.V. Nuon Warmte	Amsterdam	100
Energy Related Services Nederland N.V.	Amsterdam	100
Nuon Epe Gas Service B.V.	Amsterdam	100
Nuon Isolatie B.V.	Veendam	100
Nuon Power Generation B.V.	Utrecht	100
Nuon Power Projects I B.V.	Amsterdam	100
Nuon Renewables NSW I B.V.	Amsterdam	100
Nuon Retail Installatie Service B.V.	Amsterdam	100
Nuon Storage B.V.	Amsterdam	100
Vattenfall Energy Trading Netherlands N.V.	Amsterdam	100
Zuidlob B.V.	Ede	100
UK		
Eclipse Energy UK Plc	Grantham	100
Kentish Flats Ltd	London	100
Nuon UK Ltd	Cornwall	100
Thanet Offshore Wind Ltd	London	100
Vattenfall Wind Power Ltd	Hexham	100

Note 27 Participations in associated companies and joint ventures

	2012	2011
Balance brought forward	12,344	12,949
Acquired companies	—	2
New share issues and shareholders' contributions	231	101
Other changes	-171	-118
Profit participations and dividends	-319	-512
Translation differences	-465	-78
Balance carried forward	**11,620**	**12,344**

Shares and participations owned by the Parent Company Vattenfall AB or by other Group companies.

	Corporate Identity Number	Registered office	Participation in % 2012	Carrying amount Group 2012	Carrying amount Group 2011	Carrying amount Parent Company 2012	Carrying amount Parent Company 2011
Associated companies and joint ventures owned by the Parent Company Vattenfall AB							
Sweden							
Preem Gas AB	556037-2970	Stockholm	30	9	15	6	6
Norway							
Northconnect KS	996625001	Kristiansand	23	6	5	12	7
Northconnect AS	995878550	Kristiansand	25	1	1	2	1
Associated companies and joint ventures owned by other Group companies than the Parent Company Vattenfall AB							
Sweden							
V² Plug-In Hybrid Vehicle Partnership HB	969741-9175	Gothenburg	50	763	477	—	—
Denmark							
Ensted Havn I/S	29636223	Aabenraa	50	473	597	—	—
UK							
East Anglia Offshore Wind Ltd	06990367	Hexham	50	81	35	—	—
Germany							
DOTI Deutsche Offshore Testfeld und Infrastruktur GmbH & Co. KG	A 200395	Oldenburg	26	462	478	—	—
EHA Energie Handels Gesellschaft mbH & Co.KG	HRA 92729	Hamburg	50	67	70	—	—
GASAG Berliner Gaswerke AG	HRB 965	Berlin	32	3,075	3,543	—	—
Kernkraftwerk Brokdorf GmbH & Co. oHG	HRB 17623	Hamburg	20	1,873	1,822	—	—
Kernkraftwerk Krümmel GmbH & Co. oHG	HRB 15033	Hamburg	50	3,347	3,513	—	—
Kernkraftwerk Stade GmbH & Co. oHG	HRB 12163	Hamburg	33	668	716	—	—
Netherlands							
B.V. NEA	09018339	Dodewaard	23	13	14	—	—
C.V. De Horn	34227063	Amsterdam	42	3	3	—	—
C.V. Groettocht	37085868	Amsterdam	50	6	6	—	—
C.V. Oudelandertocht	37085867	Amsterdam	50	12	15	—	—
C.V. Waardtocht	37085866	Amsterdam	50	7	7	—	—
C.V. Waterkaaptocht	37085865	Amsterdam	50	12	14	—	—
C.V. Windpoort	34122462	Heemskerk	40	10	14	—	—
NoordzeeWind C.V.	34195602	Oegstgeest	50	724	802	—	—
V.O.F. Windpark Oom Kees	09210903	Ede	13	1	1	—	—
Wagendorp C.V.	37073928	Middenmeer	25	-2	3	—	—
Westpoort Warmte B.V.	34121626	Amsterdam	50	5	-2	—	—
Windpark Willem-Annapolder B.V.	22049359	Ede	33	4	3	—	—
Other countries							
Buchanan Renewables Fuel Group Liberia B.V.	—	—		—	192	—	—
Total				11,620	12,344	20	14

Amounts pertaining to Vattenfall-owned participation of associated companies' revenues, profit, assets and liabilities:

	Revenues 2012	Profit 2012	Assets 31 Dec. 2012	Liabilities 31 Dec. 2012
Kernkraftwerk Krümmel GmbH & Co. oHG, Kernkraftwerk Stade GmbH & Co. oHG and Kernkraftwerk Brokdorf GmbH & Co. oHG	1,424	260	19,505	13,201
Other companies	6,272	-250	8,135	4,984
Total	**7,696**	**10**	**27,640**	**18,185**

	Revenues 2011	Profit 2011	Assets 31 Dec. 2011	Liabilities 31 Dec. 2011
Kernkraftwerk Krümmel GmbH & Co. oHG, Kernkraftwerk Stade GmbH & Co. oHG and Kernkraftwerk Brokdorf GmbH & Co. oHG	5,380	-497	21,316	14,818
Other companies	6,267	173	10,034	6,217
Total	**11,647**	**-324**	**31,350**	**21,035**

Amounts relating to Vattenfall-owned participation of joint ventures' revenues, profit, assets and liabilities:

	Revenues 2012	Expenses 2012	Non-current assets 31 Dec. 2012	Current assets 31 Dec. 2012	Non-current liabilities 31 Dec. 2012	Current liabilities 31 Dec. 2012
NoordzeeWind C.V.	218	92	753	80	111	1
V² Plug-In Hybrid Vehicle Partnership HB	—	17	765	4	18	6
Total	**218**	**109**	**1,518**	**84**	**129**	**7**

	Revenues 2011	Expenses 2011	Non-current assets 31 Dec. 2011	Current assets 31 Dec. 2011	Non-current liabilities 31 Dec. 2011	Current liabilities 31 Dec. 2011
NoordzeeWind C.V.	247	70	713	87	30	96
V² Plug-In Hybrid Vehicle Partnership HB	—	38	532	20	—	75
Total	**247**	**108**	**1,245**	**107**	**30**	**171**

Note 28 Other shares and participations

	2012	2011
Balance brought forward	3,235	4,954
Investments	8	—
New share issues and shareholders' contributions	42	36
Divested companies	-16	-7
Assets held for sale	—	-35
Impairment losses[1]	-280	-1,711
Translation differences	-9	-2
Balance carried forward	**2,980**	**3,235**

1) Pertains mainly to impairment of the shareholding in Enea S.A. See also Note 4 to the consolidated accounts.

	Participation in %	Carrying amount Group		Carrying amount Parent Company	
	2012	2012	2011	2012	2011
Shares and participations owned by the Parent Company Vattenfall AB					
Enea S.A., Poland	19	2,730	3,011	3,011	3,011
Other companies		5	7	5	7
Shares and participations owned by other Group companies than the Parent Company Vattenfall AB					
Germany					
European Energy Exchange	2	13	14	—	—
GNS Gesellschaft für Nuklear-Service GmbH	6	22	22	—	—
Other companies		20	22	—	—
Netherlands					
Cuculus GmbH	17	14	14	—	—
Electrisk Verzeker-ingsmaatschappij	21	22	23	—	—
Entellos AG	21	22	19	—	—
Topell Energy B.V.	12	21	—	—	—
Tri-O-Gen Group B.V.	19	25	24	—	—
Other companies		55	49	—	—
Other countries/ companies					
ELINI (European Liability Insurance for the Nuclear Industry), Belgium	13[1]	29	29	—	—
Other companies		2	1	—	—
Total		2,980	3,235	3,016	3,018

1) The share of voting rights is 7%.

Note 29 Share in the Swedish Nuclear Waste Fund

	2012	2011
Balance brought forward	28,430	26,791
Payments	1,106	486
Disbursements	-1,012	-795
Returns	1,430	1,948
Balance carried forward	**29,954**	**28,430**

According to the Swedish Nuclear Activities Act (1984:3), any organisation in Sweden with a permit to own or run a nuclear installation is obliged to dismantle the plant in a safe manner, to manage spent fuel and other radioactive waste and to conduct necessary research and development. The permit holder shall also finance said management, etc.

The financing of future fees for spent nuclear fuel, etc., is currently ensured by the Act on the Financing of Future Expenses of Spent Nuclear Fuel, etc.. Pursuant to this law, the reactor owner is required to continue to pay a generation-based fee to the board of the Swedish Nuclear Waste Fund, which manages paid-in funds. The fund reimburses the owner of the reactor for expenses as the owner's obligations pursuant to the Swedish Nuclear Activities Act are fulfilled. According to agreements between the Swedish state, Vattenfall AB and E.ON Sverige AB, fund assets for Ringhals AB shall be managed by Vattenfall AB and fund assets for Barsebäck Kraft AB by E.ON Kärnkraft Sverige AB.

On 31 December 2012, the fair value of the Vattenfall Group's share of the Swedish Nuclear Waste Fund was SEK 30,736 million (29,546).

As stated in Note 42 to the consolidated accounts, provisions for future expenses for decommissioning, etc. within Swedish nuclear power operations amount to SEK 35,947 million (35,705).

Contingent liabilities attributable to the Swedish Nuclear Waste Fund are described in Note 51 to the consolidated accounts.

Note 30 Derivative assets and derivative liabilities

	Non-current portion, maturity 1-5 years		Non-current portion, maturity >5 years		Total non-current portion		Current portion		Total	
Derivative assetss	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Financial contracts	4,411	5,482	12,309	9,631	**16,720**	**15,113**	2,575	2,459	**19,295**	**17,572**
Commodity and commodity related contracts	6,717	5,060	319	518	**7,036**	**5,578**	9,923	6,949	**16,959**	**12,527**
Total	**11,128**	**10,542**	**12,628**	**10,149**	**23,756**	**20,691**	**12,498**	**9,408**	**36,254**	**30,099**
Derivative liabilities	2012	2011	2012	2011	**2012**	**2011**	2012	2011	2012	2011
Financial contracts	1,951	1,209	9,542	6,697	**11,493**	**7,906**	1,320	2,191	**12,813**	**10,097**
Commodity and commodity related contracts	3,669	4,684	31	—	**3,700**	**4,684**	4,292	7,673	**7,992**	**12,357**
Total	**5,620**	**5,893**	**9,573**	**6,697**	**15,193**	**12,590**	**5,612**	**9,864**	**20,805**	**22,454**

Note 31 Other non-current receivables

	Receivables from associated companies		Other receivables		Total	
	2012	2011	2012	2011	2012	2011
Balance brought forward	335	382	5,397	4,387	**5,732**	**4,769**
New receivables	3	12	163	658	**166**	**670**
Payments received	1	-22	517	30	**518**	**8**
Impairment losses	-320	—	-3	-8	**-323**	**-8**
Divested companies	—	—	—	-13	**—**	**-13**
Reclassifications	—	-37	-717	359	**-717**	**322**
Translation differences	-1	—	-126	-16	**-127**	**-16**
Balance carried forward	**18**	**335**	**5,231**	**5,397**	**5,249**	**5,732**
Breakdown of non-current receivables:						
	2012	2011	2012	2011	2012	2011
Non-current interest-bearing receivables	18	335	1,190	502	**1,208**	**837**
Non-current noninterest-bearing receivables	—	—	4,041	4,895	**4,041**	**4,895**
Total	**18**	**335**	**5,231**	**5,397**	**5,249**	**5,732**

Note 32 Inventories

	2012	2011
Inventories held for own use		
Nuclear fuel	8,661	8,354
Materials and spare parts	3,477	3,246
Fossil fuel	2,474	2,794
Other	1,089	955
Total	**15,701**	**15,349**
Inventories held for trading		
Fossil fuel	1,723	1,147
Emission allowances/certifcates	2,039	2,068
Total	**3,762**	**3,215**
Total inventories	**19,463**	**18,564**

Inventories recognised as an expense in 2011 amount to SEK 30,619 million (19,771). Inventory write-downs amounted to SEK 217 million (219) during the year. Reversed write-downs amounted to SEK 6 million (0).

Note 33 Intangible assets: current

Attributable to emission allowances and certificates held for own use.

	Emission allowances		Certificates		Total	
	2012	2011	2012	2011	2012	2011
Balance brought forward	5,284	7,307	343	1,023	**5,627**	**8,330**
Purchases	6,558	9,739	1,419	2,105	**7,977**	**11,844**
Received free of charge	—	—	284	602	**284**	**602**
Sold	-1,147	-5,710	-1,111	-1,676	**-2,258**	**-7,386**
Redeemed	-3,322	-4,942	-615	-1,366	**-3,937**	**-6,308**
Disposals	-1,100	-1,069	-51	-48	**-1,151**	**-1,117**
Impairment losses	-238	—	—	—	**-238**	**—**
Divested companies	—	-9	—	-284	**—**	**-293**
Translation differences	-221	-32	—	-13	**-221**	**-45**
Balance carried forward	**5,814**	**5,284**	**269**	**343**	**6,083**	**5,627**

Note 34 Trade receivables and other receivables

	2012	2011
Accounts receivable - trade	25,525	25,900
Receivables from associated companies	22	64
Other receivables	8,862	15,916
Total	**34,409**	**41,880**

Age analysis
The collection period is normally between 10 and 30 days.

	2012			2011		
	Receivables, gross	Receivables impaired	Receivables, net	Receivables, gross	Receivables impaired	Receivables, net
Accounts receivable – trade						
Not due	21,493	26	**21,467**	23,075	30	**23,045**
Past due 1–30 days	1,379	30	**1,349**	1,467	25	**1,442**
Past due 31–90 days	442	24	**418**	713	29	**684**
Past due >90 days	3,168	877	**2,291**	1,594	865	**729**
Total	**26,482**	**957**	**25,525**	**26,849**	**949**	**25,900**
Receivables from associated companies						
Not due	14	—	**14**	34	—	**34**
Past due 1–30 days	6	—	**6**	1	—	**1**
Past due 31–90 days	—	—	**—**	1	—	**1**
Past due >90 days	2	—	**2**	30	2	**28**
Total	**22**	**—**	**22**	**66**	**2**	**64**
Other receivables						
Not due	8,821	4	**8,817**	15,900	—	**15,900**
Past due 1–30 days	7	—	**7**	6	—	**6**
Past due 31–90 days	5	—	**5**	3	—	**3**
Past due >90 days	52	19	**33**	17	10	**7**
Total	**8,885**	**23**	**8,862**	**15,926**	**10**	**15,916**

Receivables impaired as above:

	2012	2011
Balance brought forward	961	1,646
Provision for impairment losses	495	504
Impairment losses	-343	-198
Reversed impairment losses	-108	-266
Reclassifications	9	15
Divested companies	—	-678
Translation differences	-34	-62
Balance carried forward	**980**	**961**

Note 35 Advance payments paid

	2012	2011
Margin calls paid, energy trading	5,172	5,771
Other advance payments	224	597
Total	**5,396**	**6,368**

A margin call is a marginal security (collateral) that Vattenfall pays its counterparty, i.e., to the holder of a derivative position to cover the counterparty's credit risk, either bilaterally via OTC or through an exchange. In Vattenfall's business activities, margin calls occur in energy trading and in the treasury operations.

Margin calls paid within energy trading are recognised on the balance sheet as advance payments received and are thereby recognised in the statement of cash flows as cash flows from changes in operating assets, while on the balance sheet, margin calls paid within financing activities are recognised as short-term investments (Note 37 to the consolidated accounts) and are thereby recognised in the statement of cash flows as cash flows from financing activities.

Note 36 Prepaid expenses and accrued income

	2012	2011
Prepaid insurance premiums	173	44
Prepaid expenses, other	455	534
Prepaid expenses and accrued income, electricity	3,769	2,621
Accrued income, other	3,409	3,251
Total	**7,806**	**6,450**

Note 37 Short-term investments

	2012	2011
Interest-bearing investments	27,192	16,036
Margin calls, financing activities	1,258	1,381
Total	**28,450**	**17,417**

Note 38 Cash and cash equivalents

	2012	2011
Cash and bank balances	17,864	9,973
Cash equivalents	181	1,295
Total	**18,045**	**11,268**

Note 39 Assets held for sale

For 2011, reported amounts refer to the divested Finnish electricity distribution and heat businesses.

	2012	2011
Intangible assets: non-current	—	101
Property, plant and equipment	—	5,761
Other non-current assets	—	47
Inventories	—	121
Trade receivables and other receivables	—	196
Other current assets	—	362
Total assets	**—**	**6,588**
Other interest-bearing provisions	—	2
Deferred tax liabilities	—	969
Interest-bearing liabilities	—	344
Trade payables and other liabilities	—	282
Accrued expenses and deferred income	—	262
Total liabilities	**—**	**1,859**

Note 40 Interest-bearing liabilities and related financial derivatives

Interest-bearing liabilities include Hybrid Capital and other interest-bearing liabilities, mainly bond issues and liabilities pertaining to the acquisition of Group companies.

In June 2005, Vattenfall issued Hybrid Capital, which is reported among interest-bearing non-current liabilities. Hybrid Capital has a perpetual maturity and is junior to all of Vattenfall's unsubordinated debt instruments.

There is no redemption requirement, although the intention is to repay the loan in 2015. The interest is fixed for the initial ten-year period, after which a floating rate is applied. The interest is conditional upon, among other things, Vattenfall's means of paying dividends to owners and the key ratio "Interest Coverage Trigger Ratio" amounting to at least 2.5.

Hybrid Capital is reported as follows:

	2012	2011
Balance brought forward	8,883	8,929
Discount allocation	15	15
Translation differences	-355	-61
Balance carried forward	**8,543**	**8,883**

The Interest Coverage Trigger Ratio key ratio is calculated as follows:

	2012	2011
Funds from operations (FFO)	34,419	38,256
Interest paid	3,798	4,871
FFO plus interest paid (a)	**38,217**	**43,127**
Interest expenses (b)	6,044	6,176
Interest Coverage Trigger Ratio (a/b)	**6.32**	**6.98**

Reported values for Hybrid Capital and other interest-bearing liabilities are specified as follows:

	Non-current portion, maturity 1-5 years		Non-current portion, maturity >5 years		Total non-current portion		Current portion		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Bond issues	26,897	48,124	45,958	47,744	**72,855**	**95,868**	19,375	179	**92,230**	**96,047**
Commercial paper	—	—	—	—	**—**	**—**	—	1,582	**—**	**1,582**
Liabilities to credit institutions	1,557	2,752	161	445	**1,718**	**3,197**	306	1,408	**2,024**	**4,605**
Liabilities pertaining to acquisitions of subsidiaries[1]	17,043	30,472	—	—	**17,043**	**30,472**	10,037	—	**27,080**	**30,472**
Liabilities to owners of non-controlling interests (minority owners)	189	150	10,583	9,686	**10,772**	**9,836**	1,104	404	**11,876**	**10,240**
Liabilities to associated companies	8,376	9,645	—	—	**8,376**	**9,645**	932	876	**9,308**	**10,521**
Other liabilities	1,517	323	243	261	**1,760**	**584**	7,440[2]	7,416[2]	**9,200**	**8,000**
Total interest-bearing liabilities excluding Hybrid Capital	**55,579**	**91,466**	**56,945**	**58,136**	**112,524**	**149,602**	**39,194**	**11,865**	**151,718**	**161,467**
Hybrid Capital	8,543	8,883	—	—	**8,543**	**8,883**	—	—	**8,543**	**8,883**
Total interest-bearing liabilities	**64,122**	**100,349**	**56,945**	**58,136**	**121,067**	**158,485**	**39,194**	**11,865**	**160,261**	**170,350**
Derivatives (swaps) attributable to the interest-bearing liabilities above	2,854		2,066		**4,920**		950		**5,870**	

1) According to agreement, the liability pertaining to the acquisition of the remaining 32.96% of the shares in N.V. Nuon Energy, SEK 27,080 million, is to be paid in two tranches: in July 2013 and 2015.

2) Of which, margin calls within financing activities SEK 7,170 million (7,369).

The following bonds are issued by Vattenfall. The table shows the largest issues made. No new issues were made in 2011 or 2012.

Type	Issued	Currency	Nominal amount	Coupon %	Maturity
Euro Medium Term Note	2008	EUR	850	5.750	2013
Euro Medium Term Note	2009	EUR	500	4.125	2013
Euro Medium Term Note	2009	EUR	1,350	4.250	2014
Euro Medium Term Note	2009	EUR	1,100	5.250	2016
Euro Medium Term Note	2003	EUR	500	5.000	2018
Euro Medium Term Note	2008	EUR	650	6.750	2019
Euro Medium Term Note	2009	GBP	350	6.125	2019
Euro Medium Term Note	2009	EUR	1,100	6.250	2021
Euro Medium Term Note	2004	EUR	500	5.375	2024
Euro Medium Term Note	2009	GBP	1,000	6.875	2039

Undiscounted future cash flows (including interest payments on the interest-bearing liabilities mentioned above as well as trade payables and taking into account future cash flows for derivatives) are shown in the table below, i.e., financial instruments with contractual payments on 31 December 2012. Floating interest cash flows with future interest fixing dates are estimated based on market interest rates at year-end. All future cash flows in foreign currency are translated to SEK using the rate on the balance sheet date for the annual accounts.

	Non-current portion, maturity 1–5 years		Non-current portion, maturity >5 years		Total non-current portion		Current portion		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Interest-bearing liabilities	89,111	138,963	67,516	62,797	**156,627**	**201,760**	44,892	18,029	**201,519**	**219,789**
Derivatives (swaps)	-3,914	-4,739	-8,821	-21,371	**-12,735**	**-26,110**	-1,859	-888	**-14,594**	**-26,998**
Trade payables and other financial liabilities	2,986	3,469	4,548	4,769	**7,534**	**8,238**	34,510	32,499	**42,044**	**40,737**
Total	**88,183**	**137,693**	**63,242**	**46,195**	**151,426**	**183,888**	**77,543**	**49,640**	**228,969**	**233,528**

Note 41 Pension provisions

General

Vattenfall's pension obligations in the Group's Swedish, German and Dutch companies are predominantly defined benefit pension obligations. The concerned pension plans are primarily retirement pensions, disability pensions and family pensions. The assets in these funds (the plan assets) are reported at fair value. There are also pension plans in these and other countries that are defined contribution plans.

Swedish pension plans

The Swedish pension plans supplement the Swedish social insurance system and are the result of agreements between employer and employee organisations. Almost all of Vattenfall's employees in Sweden are covered by a pension plan that is primarily a defined benefit plan, known as ITP-Vattenfall. This pension plan guarantees employees a pension based on a percentage of their salary. These benefits are chiefly secured through provisions on the balance sheet, but also in a minor part, secured in a pension trust. In late 2012 Vattenfall decided to discontinue this pension trust. See also Note 2 to the consolidated accounts, Important changes in the financial statements compared with the preceding year.

Certain of Vattenfall's obligations in the ITP plan (such as spousal benefits and disability pensions) are secured through insurance from Alecta (a Swedish mutual insurance company). According to a statement (UFR 3) issued by the Swedish Financial Reporting Board, this plan is a multi-employer defined benefit plan. As in previous years, Vattenfall has not had access to such information to make it possible to report this plan as a defined benefit plan. The ITP pension plan, which is secured through insurance from Alecta, is therefore reported as a defined contribution plan. Contributions for the year for pension insurance policies from Alecta amounted to SEK 89 million (84). Alecta's surplus can be distributed among the policyholders and/or the insureds. At the end of 2012, Alecta's surplus in the form of its so-called collective funding amounted to 129% (113%). Collective funding consists of the fair value of Alecta's assets as a percentage of the insurance obligations calculated in accordance with Alecta's actuarial calculation assumptions.

German pension plans

The pension plans in Germany are based on collective agreements in line with market terms and conditions. Substantial defined benefit plans exist in Germany.

Two pension plans exist, both secured through Pensionskasse der Bewag, a mutual insurance company. Obligations are secured through funds paid in by Vattenfall and its employees. One plan has been classified as a defined contribution plan and is reported as such since the benefit is based on paid-in contributions and Pensionskasse der Bewag's financial position. For employees who began their employment before 1 January 1984, there is a supplementary agreement providing employees working until retirement age with a pension equal to up to 80% of the salary on which the pension is based. Half of the statutory pension and the entire benefit from Pensionskasse der Bewag, including profits, are credited to the guaranteed amount. Vattenfall's obligations encompass the entire pension obligation. The plan assets attributable to personnel employed since before 1 January 1984 are reported as plan assets at fair value.

In addition, Vattenfall has pension obligations for employees in Hamburg that mainly comprise the company's obligations to personnel employed before 1 April 1991 and who have been employed for at least 10 years. The sum of the retirement pension, statutory pension and pensions from third parties normally amounts to a maximum of 65% of pensionable salary.

Dutch pension plans

In the Netherlands, Vattenfall has a number of defined benefit plans and defined contribution plans for which premiums are paid to pension funds or insurance companies. The most significant pension plans have been transferred to the ABP pension fund and the "Metaal en Techniek" pension fund. These plans can be characterised as multi-employer plans.

The pension plans offered by these funds are defined benefit plans. However, as Vattenfall does not have access to the required information, and Vattenfall's participation in the multi-employer plans exposes Vattenfall to actuarial risks that pertain to present and former employees of other entities, both pension plans are recognised as defined contribution plans. The pension premiums paid during the financial year are accounted for as pension costs in the financial statements. If there is a contractual agreement with a multi-employer plan, determining how a surplus is distributed to the participants or a deficit is to be financed, and the plan is accounted for as a defined contribution plan, a receivable or liability following from the agreement is to be recognised on the balance sheet. The resulting gains or losses are to be recognised in the income statement.

The pensions of the majority of the workforce are transferred to the ABP pension fund and the "Metaal en Techniek" pension fund. These plans do not contain the aforementioned contractual agreements. As a result, no receivable or liability has been recognised on the balance sheet.

Defined benefit pension plans

	2012	2011
Present value of unfunded obligations	25,750	20,040
Present value of fully or partly funded obligations	16,508	18,925
Present value of obligations	**42,258**	**38,965**
Fair value of plan assets	12,066	16,504
Present value of net obligations	**30,192**	**22,461**
Unrecognised actuarial gains (+)/ losses (-) of the obligations	-8,506	-4,527
Unrecognised actuarial gains (+)/ losses (-) of plan assets	204	61
Pension provisions	**21,890**	**17,995**

Changes in obligations

	2012	2011
Balance brought forward	38,965	36,701
Benefits paid by the plan	-2,029	-2,078
Service cost	606	620
Actuarial gains (-) or losses (+)	4,244	2,167
Current interest expense	1,717	1,761
Translation differences	-1,245	-206
Balance carried forward	**42,258**	**38,965**

Changes in plan assets

	2012	2011
Balance brought forward	16,504	16,709
Benefits paid by the plan	-4,916	-415
Expected return on plan assets	705	718
Difference between expected and actual return (actuarial gain (+) or loss (-))	158	-442
Translation differences	-385	-66
Balance carried forward	**12,066**	**16,504**

Plan assets consist of the following

	2012	2011
Shares and participations	1,490	3,592
Interest-bearing instruments	6,552	9,140
Property	666	650
Other	3,358	3,122
Total	**12,066**	**16,504**

Historical information

	2012	2011	2010	2009	2008
Present value of obligations	42,258	38,965	36,701	38,617	39,275
Fair value of plan assets	12,066	16,504	16,709	17,420	17,436
Present value of net obligations	**30,192**	**22,461**	**19,992**	**21,197**	**21,839**
Experience adjustments on obligations	561	498	-105	711	2,126
Experience adjustments on plan assets	158	-442	519	953	-1,057

Payments for contributions to defined benefit plans during 2012 are estimated at SEK 1,618 million.

Pension costs

	2012	2011
Defined benefit plans:		
Current service cost	563	524
Interest expense	1,717	1,761
Expected return on plan assets	-705	-718
Past service cost	37	56
Other	95	-4
Total cost for defined benefit plans	**1,707**	**1,619**
Cost for defined contribution plans	621	615
Total pension costs	**2,328**	**2,234**

Pension costs are reported in the following lines in the income statement:

	2012	2011
Cost of products sold	1,167	967
Selling expenses	59	36
Administrative expenses	90	188
Financial expenses	1,012	1,043
Total pension costs	**2,328**	**2,234**

In calculating pension obligations, the following actuarial assumptions have been made (%):

	Sweden		Germany	
	2012	2011	2012	2011
Discount rate	3.5	3.5	3.75	5.0
Expected return on plan assets	3.5	5.25	3.75	3.0-5.0
Future annual salary increases	3.0	3.5	2.4-2.9	1.6-3.4
Future annual pension increases	2.0	2.0	1.0-2.0	1.0-3.4

As described in Note 3 to the consolidated accounts under the heading "New IFRSs and interpretations not yet adopted", new accounting rules apply as of 2013 according to IAS 19 — *Employee Benefits* with respect to provisions for pensions. The reported effect due to the elimination of the corridor rule and other effects of the amended IAS 19 are estimated to have the following affects on the Vattenfall Group:

	31 December 2012 as reported according to IAS 19	31 December 2012 according to amended IAS 19 valid as of 2013	Change
Balance sheet:			
Pension provisions	21,890	30,584	8,694
Personnel-related provisions for non-pension purposes	3,141	2,455	-686
Deferred tax liabilities	34,681	32,594	-2,087
Accrued expenses[1]	15,830	15,438	-392
Equity excl. profit for the year	137,994	132,578	-5,416
Profit for the year	17,224	17,111	-113
Balance sheet total	528,364	528,364	—
Income statement for 2012:			
Operating profit (EBIT)	26,175	25,986	-189
Financial income[2]	2,636	2,671	35
Income tax expense	-1,077	-1,036	41
Profit for the year	17,224	17,111	-113
Total comprehensive income for 2012:			
Actuarial losses pertaining to defined benefit obligations	—	-3,980	-3,980
Tax attributable to acuarial losses pertaining to defined benefit obligations	—	1,277	1,277
Profit for the year	17,224	17,111	-113
Total comprehensive income for the year	16,315	13,499	-2,816

1) Change pertaining to recognition of special employer's payroll tax.

2) Including changed interest rate used to calculate the return on plan assets.

Note 42 Other interest-bearing provisions

	Non-current portion		Current portion		Total	
	2012	2011	2012	2011	2012	2011
Provisions for future expenses of nuclear operations	50,056	49,275	1,673	1,668	**51,729**	**50,943**
Provisions for future expenses of mining, gas and wind operations and other environmental measures/undertakings	10,630	11,041	1,599	1,501	**12,229**	**12,542**
Personnel-related provisions for non-pension purposes	1,858	2,137	1,283	1,838	**3,141**	**3,975**
Provisions for tax and legal disputes	3,056	1,767	692	2,061	**3,748**	**3,828**
Other provisions	2,726	2,267	361	169	**3,087**	**2,436**
Total	**68,326**	**66,487**	**5,608**	**7,237**	**73,934**	**73,724**

Discount rates used in the calculations of the provisions are described in Note 4 to the consolidated accounts, Important estimations and assessments in the preparation of the financial statements..

Provisions for future expenses of nuclear operations:
Vattenfall's nuclear power producers in Sweden and Germany have a legal obligation upon the cessation of production to decommission and dismantle the nuclear power plants and to restore the plots of land where the plants were located. Further, this obligation also encompasses the safeguarding and final storage of spent radioactive fuel and other radioactive materials used by the plants. The provisions include future expenses for the management of low- and medium-level radioactive waste.

For the Swedish operations, current assumptions indicate that all provisions will result in disbursements later than 2026.

Current plans for the decommissioning of the German nuclear power operations entail that approximately 44% of the provisions will result in cash flows relatively evenly distributed over the period 2013–2017, a further approximately 41% over the period 2018–2026, and approximately 15% thereafter.

Provisions for future expenses of nuclear operations (changes in 2012)

	Sweden	Germany	Total
Balance brought forward	35,705	15,238	50,943
Provisions for the period	44	—	44
Interest effects	1,271	705	1,976
Revaluations versus non-current assets	2,012	—	2,012
Provisions used	-1,178	-1,000	-2,178
Provisions reversed	—	-469	-469
Translation differences	—	-599	-599
Balance carried forward	37,854[1]	13,875[2]	51,729

1) Of which, approximately 30% (29%) pertains to the dismantling, etc. of nuclear power plants and approximately 70% (71%) to the handling of spent radioactive fuel.

2) Of which, approximately 68% (75%) pertains to the dismantling, etc. of nuclear power plants and approximately 32% (25%) to the handling of spent radioactive fuel.

Provisions for future expenses of mining, gas and wind operations and other environmental measures/undertakings:
Provisions are made to restore sites and for other undertakings associated with the Group's permits to conduct lignite mining in Germany, and in the Netherlands for the dismantling and removal of assets and restoration of sites where the Group conducts gas operations. Provisions are also made for restoration of sites where the Group conducts wind operations and for environmental measures/undertakings within other activities carried out by the Group.

According to current estimations, approximately 71% of the provisions will result in cash outflows later than 2015. For 2013, disbursements corresponding to 13% of the provisions are estimated, while disbursements for the years 2014 and 2015 are estimated at 10% and 6% of the provisions, respectively.

Provisions for mining operations, etc. (changes in 2012)

Balance brought forward	12,542
Provisions for the period	535
Interest effects	489
Revaluations versus non-current assets	212
Provisions used	-840
Provisions reversed	-205
Translation differences	-504
Balance carried forward	12,229

Personnel-related provisions for non-pension purposes:
Provisions are made for future costs pertaining to redundancy in the form of severance pay and other costs for giving notice to personnel.

Approximately 23% of the provisions that have been made are estimated to result in disbursements in 2013, a further approximately 48% during 2014–2016, and the remaining 19% thereafter.

Personnel-related provisions for non-pension purposes (changes in 2012)

Balance brought forward	3,975
Provisions for the period	1,726
Interest effects	194
Reclassification to current liabilities	-609
Provisions used	-1,057
Provisions reversed	-919
Translation differences	-169
Balance carried forward	3,141

Provisions for tax and legal disputes:
Provisions are made for possible future tax expenses due to ongoing tax audits and for ongoing legal disputes and actions. These include provisions related to ongoing legal actions concerning encroachment regarding cable laying on land in eastern Germany.

Approximately 35% of the provisions for tax and legal disputes are expected to result in disbursements in 2013 and 2014. The remaining provisions are estimated to result in cash flows during the years 2015–2016 (62%), and 3% thereafter.

Provisions for tax and legal disputes (changes in 2012)

Balance brought forward	3,828
Provisions for the period	414
Interest effects	106
Provisions used	-197
Provisions reversed	-247
Translation differences	-156
Balance carried forward	3,748

Other provisions:
Other provisions include, among others, provisions for losses on contracts, restructuring and guarantee commitments.

Approximately 70% of these provisions are estimated to result in disbursements in 2013 to 2014, while the remaining approximately 27% are estimated to result in disbursements during the years 2015–2033, and 3% thereafter.

Other provisions (changes in 2012)

Balance brought forward	2,436
Provisions for the period	1,207
Interest effects	38
Provisions used	-481
Provisions reversed	-44
Translation differences	-69
Balance carried forward	3,087

Note 43 Other noninterest-bearing liabilities (non-current)

Of the total liabilities of SEK 7,534 million (8,238), SEK 4,548 million (4,769) falls due after more than five years. Of the total liabilities, SEK 0 million (14) pertains to accrued expenses, SEK 5,078 million (5,562) to deferred income and SEK 2,456 million (2,662) to other liabilities.

Note 44 Trade payables and other liabilities

	2012	2011
Accounts payable - trade	22,541	21,051
Liabilities to associated companies	4,050	4,162
Other liabilities	8,628	9,895
Total	35,219	35,108

Note 45 Advance payments received

	2012	2011
Margin calls received, energy trading	1,929	776
Other advance payments	209	366
Total	2,138	1,142

A margin call is marginal security (collateral) that Vattenfall's counterparty pays to Vattenfall as the holder of a derivative position to cover Vattenfall's credit risk, either bilaterally via OTC or through an exchange. In Vattenfall's business activities, margin calls occur in energy trading and in the treasury operations.

Margin calls received within energy trading are recognised on the balance sheet as advance payments received and are thereby recognised in the statement of cash flows as cash flows from changes in operating liabilities, while margin calls received within financing activities are recognised on the balance sheet as current interest-bearing liabilities (Note 40 to the consolidated accounts) and are thereby recognised in the statement of cash flows as cash flows from financing activities.

Note 46 Accrued expenses and deferred income

	2012	2011
Accrued personnel-related costs	3,331	3,792
Accrued expenses, emission allowances	2,167	3,684
Accrued expenses, connection fees	93	97
Accrued nuclear power–related fees and taxes	202	34
Accrued interest expense	3,685	3,868
Other accrued expenses	4,294	4,132
Deferred income and accrued expenses, electricity	1,758	2,634
Other deferred income	300	266
Total	15,830	18,507

Note 47 Financial instruments by category and related effects on income

Risks arising from financial instruments are described under the heading Risks and risk management on pages 45-50 in this Annual Report.

Financial instruments by category: Carrying amount and fair value

	2012		2011	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at fair value through profit or loss				
Derivative assets	23,179	23,179	15,591	15,591
Short-term investments	27,192	27,192	16,036	16,036
Cash equivalents (Note 38)	181	181	1,295	1,295
Total	**50,552**	**50,552**	**32,922**	**32,922**
Derivative assets for hedging purposes for:				
Fair value hedges	5,463	5,463	4	4
Cash flow hedges	7,612	7,612	14,504	14,504
Total	**13,075**	**13,075**	**14,508**	**14,508**
Loans and receivables				
Share in the Swedish Nuclear Waste Fund	29,954	30,736	28,430	29,546
Other non-current receivables	5,249	5,249	5,732	5,732
Trade receivables and other receivables	34,409	34,409	41,880	41,880
Advance payments paid (Note 35)	5,172	5,172	5,771	5,771
Short-term investments	1,258	1,201	1,381	1,381
Cash and bank balances (Note 38)	17,864	17,864	9,973	9,973
Total	**93,906**	**94,631**	**93,167**	**94,283**
Available-for-sale financial assets				
Other shares and participations carried at fair value	2,730	2,730	3,011	3,011
Other shares and participations carried at cost	250	250	224	224
Total	**2,980**	**2,980**	**3,235**	**3,235**
Financial liabilities at fair value through profit or loss				
Derivative liabilities	18,866	18,866	15,589	15,589
Total	**18,866**	**18,866**	**15,589**	**15,589**
Derivative liabilities for hedging purposes for:				
Fair value hedges	71	71	36	36
Cash flow hedges	1,868	1,868	6,829	6,829
Total	**1,939**	**1,939**	**6,865**	**6,865**
Other financial liabilities				
Hybrid Capital	8,543	9,606	8,883	10,085
Other non-current interest-bearing liabilities	112,524	118,509	149,602	168,340
Other non-current noninterest-bearing liabilities	7,534	7,534	8,238	8,238
Current interest-bearing liabilities	39,194	39,421	11,865	11,654
Trade payables and other liabilities	32,581	32,581	31,723	31,723
Advance payments received (Note 45)	1,929	1,929	776	776
Total	**202,305**	**209,580**	**211,087**	**230,816**

For assets and liabilities with a remaining maturity less than three months (e.g., cash and bank balances, trade receivables and other receivables, and trade payables and other payables) fair value is considered to be equal to the carrying amount.

For other shares and participations carried at cost, in the absence of fair value, this is considered to be equal to the carrying amount.

Financial instruments that are measured at fair value on the balance sheet are described below according to the fair value hierarchy (levels) which in IFRS 7 is defined as:

Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices). In Level 2, Vattenfall reports mainly commodity derivatives and interest rate swaps.

Level 3: Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

Financial assets and liabilities that are measured at fair value on the balance sheet at 31 December 2012

	Level 1	Level 2	Level 3	Total
Assets				
Derivative assets	—	34,125	2,129	**36,254**
Short-term investments and cash equivalents	12,980	14,393	—	**27,373**
Other shares and participations	2,730	—	—	**2,730**
Total assets	**15,710**	**48,518**	**2,129**	**66,357**
Liabilities				
Derivative liabilities	—	18,539	2,266	**20,805**
Total liabilities	**—**	**18,539**	**2,266**	**20,805**

Financial assets and liabilities that are measured at fair value on the balance sheet at 31 December 2011

	Level 1	Level 2	Level 3	Total
Assets				
Derivative assets	—	27,267	2,832	**30,099**
Short-term investments and cash equivalents	12,041	5,290	—	**17,331**
Other shares and participations	3,011	—	—	**3,011**
Total assets	**15,052**	**32,557**	**2,832**	**50,441**
Liabilities				
Derivative liabilities	—	19,529	2,925	**22,454**
Total liabilities	**—**	**19,529**	**2,925**	**22,454**

Changes in level 3 financial instruments

	Financial instruments at fair value through profit or loss			
	Derivative assets		Derivative liabilities	
	2012	2011	2012	2011
Balance brought forward	2,832	2,517	2,925	2,346
Revaluations recognised in operating profit (EBIT)	-626	328	-549	600
Translation differences	-77	-13	-110	-21
Balance carried forward	**2,129**	**2,832**	**2,266**	**2,925**
Total revaluations for the period included in operating profit (EBIT) for assets and liabilities held at 31 December	1,965	2,642	1,884	2,617

Sensitivity analysis for Level 3 contracts

TGSA:

TGSA (Troll[1] Gas Sales Agreement) is a large gas supply agreement (coal price–indexed) that extends further ahead in time than liquid trading in the gas market. Valuation of the agreement is against the market price, as long as a market price can be observed. For deliveries beyond the market horizon, modelled prices are used for the relevant commodities. TGSA is hedged with OTC forward trades of underlying products. These trades are also marked against the same market and modelled prices. The modelled prices are benchmarked against reliable financial information obtained from the company Markit; this information is well-known and is used by many energy companies, which entails a fair valuation of the portion of the TGSA that cannot be valued against market prices.

The net value as per 31 December 2012 has been calculated at SEK -153 million (-366). The price of the coal price index used in the model (API#2) has a large impact on the modelled price. A change in this index of +/- 5% would affect the total value by approximately SEK -/+ 16 million (17).

CDM:

Clean Development Mechanism (CDM) is a Kyoto Protocol initiative under which projects set up in developing countries to reduce atmospheric carbon generate tradable carbon credits called CERs (Certified Emission Reductions). CERs can be used by industrialised nations to offset carbon emissions at home and meet their Kyoto Protocol reduction targets. Valuation of CERs is derived from so-called Risk Adjustment Factors (RAFs). These factors are calculated using the Carbon Valuation Tool developed by Point Carbon to quantify the risk and calculate the fair value of CDM projects or contracts. The tool is based on Point Carbon's valuation methodology, which was developed by several experienced market players. The valuation methodology is strictly empirical, and all risk parameters are extracted from Point Carbon's proprietary databases of CDM project data, which entails a correct valuation of the contracts even where market prices are not listed.

The net value as per 31 December 2012 has been calculated at SEK -414 million (-512). A change in the modelled price of CERs of +/- 5% would affect the total value by approximately SEK +/- 5 million (31).

Long-term electricity contracts:

Vattenfall has long-term electricity contracts with a customer extending until 2019 that include embedded derivatives in which the electricity price for the customer is coupled to the price development of aluminium and exchange rate movements of the Norwegian krone (NOK) in relation to the US dollar (USD). Reliable market quotations for aluminium are available for a period of 27 months forward in time. Vattenfall has estimated that the use of modelled prices provides reliable values for valuation of the period beyond 27 months, that is, the time horizon during which market quotations are not available until the contracts' expiration date.

The value as per 31 December 2012 has been calculated at SEK +430 million (+785). The price of aluminium is the factor that has the greatest bearing on the modelled price. A change in the price of aluminium of +/- 5% would affect the total value by approximately SEK +/- 148 million (175).

1) Troll is a gas field in the North Sea west of Norway.

Financial instruments: Effects on income by category

Net gains(+)/losses(-) and interest income and expenses for financial instruments recognised in the income statement:

	2012			2011		
	Net gains/ losses[1]	Interest income	Interest expenses	Net gains/ losses[1]	Interest income	Interest expenses
Derivative assets and derivative liabilities	5,120	489	-124	-924	474	13
Available-for-sale financial assets	-208	—	—	-1,505	—	—
Loans and receivables	675	1,379	—	164	2,361	—
Financial liabilities measured at amortised cost	109	—	-5,571	-424	—	-6,003
Total	**5,696**	**1,868**	**-5,695**	**-2,689**	**2,835**	**-5,990**

1) Exchange rate gains and losses are included in net gains/losses.

Note 48 Specifications of the cash flow statement

Other, incl. non-cash items

	2012	2011
Undistributed results from participation in associated companies	388	179
Unrealised foreign exchange gains	-691	-199
Unrealised foreign exchange losses	-49	30
Unrealised changes in values related to derivatives	-400	814
Changes in fair values for inventories	394	541
Changes in interest receivables	-506	-1,119
Changes in interest liabilities	2,263	1,594
Changes in the Swedish Nuclear Waste Fund	-1,524	-1,639
Changes in provisions	-991	847
Other	186	-53
Total	**-930**	**995**

Interest paid totalled SEK 3,798 million (4,871) and interest received totalled SEK 426 million (635).

Dividends received totalled SEK 537 million (420).

Other investments in non-current assets

	2012	2011
Investments in intangible assets: non-current, including advance payments	-285	-460
Investments in property, plant and equipment, including advance payments	-28,951	-34,890
Investments in investment property including advance payments	—	-3
Total	**-29,236**	**-35,353**

Divestments

	2012	2011
Divestments of shares and participations	20,873	13,553
Divestments of intangible assets: non-current	4	9
Divestments of property, plant and equipment	1,959	2,718
Total	**22,836**	**16,280**

Note 49 Specifications of equity

Share capital:

As of 31 December 2012 the registered share capital comprised 131,700,000 shares with a share quota value of SEK 50.

Reserve for cash flow hedges:

The reserve for cash flow hedges includes mostly unrealised changes in values of commodity derivatives used to hedge future sales.

Other reserves:

Other reserves chiefly comprise the translation reserve, SEK -12,141 million (-8,203), which includes all exchange rate differences arising from the translation of financial reports from non-Swedish operations that prepare their reports in a currency other than that in which the Group reports. Further, the translation reserve includes exchange rate differences arising from the reassessment of debts raised as hedges for net investments in non-Swedish operations. Other reserves also comprise revaluations of financial instruments belonging to the category available-for-sale financial assets, SEK 30 million (0).

The reserve for cash flow hedges is expected to affect the income statement and cash flow, respectively, in the periods indicated below:

	2012		2011	
	Cash flow	Income statement	Cash flow	Income statement
Within 1 year	4,499	3,678	709	305
Between 1–5 years	2,285	1,639	1,072	278
More than 5 years	—	—	53	53
	6,784	**5,317**	**1,834**	**636**
Other	-219	-1	-111	-2
Total	**6,565**	**5,316**	**1,723**	**634**

Amounts that were removed from the reserve for cash flow hedges are included in the following line items in the income statement:

	2012	2011
Net sales	1,655	-4,481
Cost of products sold	824	-2,191
Other operating income	-3	—
Other operating expenses	—	4
Total	**2,476**	**-6,668**

Amounts that were removed from the reserve for cash flow hedges are included in the following line items on the balance sheet:

	2012	2011
Property, plant and equipment	1	51
Inventories	69	146
Other assets	—	27
Total	**70**	**224**

Retained earnings including profit for the year:

Retained earnings including profit for the year include earned profits in the Parent Company and its subsidiaries, associated companies and joint ventures.

Translation exposure of equity in other currencies than SEK

	Equity		Hedging after tax		Net exposure after tax		Average net exposure after tax	
Original currency	2012	2011	2012	2011	2012	2011	2012	2011
EUR	154,265	160,190	67,347	56,506	86,918	103,684	85,673	92,685
DKK	5,224	9,476	—	—	5,224	9,476	8,448	9,635
GBP	14,277	14,136	2,694	—	11,583	14,136	13,078	9,905
Other currencies	3	3	—	—	3	3	100	9,823
Total	**173,769**	**183,805**	**70,041**	**56,506**	**103,728**	**127,299**	**107,299**	**122,048**

Note 50 Collateral

	2012	2011
Shares pledged to PRI Pensionsgaranti, as security for credit insurance in respect of pension obligations in Vattenfall's Swedish operations	6,576	—
Blocked bank funds as security for guarantees issued by bank	38	79
Blocked bank funds as security for trading on Nord Pool	58	—
Total	**6,672**	**79**

To fulfil the requirements for security in the derivative market, in its energy trading and financial operations Vattenfall has pledged security to counterparties for the negative fair value of derivative positions. As per 31 December 2012 this security amounted to SEK 5,172 million (5,771) for energy trading and SEK 1,258 million (1,381) for the financial operations. The amounts are reported as assets on the balance sheet under advance payments paid for the energy trading portion (Note 35 to the consolidated accounts) and under short-term investments for the financial operations portion (Note 37 to the consolidated accounts). The counterparties are obligated to repay this security to Vattenfall in the event the negative fair value decreases.

In a similar manner, Vattenfall's counterparties in energy trading and the financial operations have pledged security to Vattenfall. Security received as per 31 December 2012 amounted to SEK 1,929 million (776) for energy trading and SEK 7,170 million (7,369) for the financial operations. The amounts are reported as liabilities on the balance sheet under advance payments received for the energy trading portion (Note 45 to the consolidated accounts) and interest-bearing liabilities (current) for the financial operations (Note 40 to the consolidated accounts).

In connection with the change in funding for Swedish occupational pensions, Vattenfall AB has pledged shares in Vattenfall Eldistribution AB to the insurance company PRI Pensionsgaranti as security for the credit insurance that is required to fund the pensions.

Note 51 Contingent liabilities

	2012	2011
Guarantees	210	566
Other contingent liabilities	1,695	3,018
Total	**1,905**	**3,584**

In certain rivers, joint regulation facilities exist for several hydro power plants. The owners of the power plants have payment obligations for their share of these regulation costs. Vattenfall has an obligation to compensate certain owners of water rights, in rivers where hydro power stations are built, through the delivery of power. In 2012, such compensation deliveries amounted to 0.99 TWh (0.90), for a value of approximately SEK 274 million (369).

Under Swedish law, Vattenfall has strict and unlimited liability for third-party loss resulting from dam accidents. Together with other hydro power producers in the Nordic countries, Vattenfall has liability insurance that is limited to payment of a maximum of SEK 8,685 million in benefits for these types of claims.

In its Swedish operations, Vattenfall conducted a number of leasing transactions involving power plants in 2003 and 2005. The transactions are based on sale & leaseback agreements for each power plant, which were sold to French counterparties to be leased back for 15 years. Once the lease periods expire, Vattenfall has the right to purchase the plants through call options. The present value of the future lease payments, including the option amount, has been deposited with financial institutions with high credit ratings for the disbursement of the lease payments in accordance with the leases. In the event Vattenfall should wish to prematurely redeem the lease agreements, this would give rise to costs for Vattenfall. As per 31 December 2012 these costs amounted to a maximum of SEK 59 million (54). This amount is not included in the other contingent liabilities reported above.

In Germany, nuclear power operators have strict and unlimited liability to third parties. By law, nuclear power plants are required to have insurance or other financial guarantees for amounts up to EUR 2,500 million. Claims of up to EUR 256 million are covered by the German Mutual Atomic Energy Reinsurance Pool. The nuclear power plants and their German parent companies (in Vattenfall's case, Vattenfall GmbH) are liable for amounts in excess of this, in proportion to the ownership interests the respective parent companies have in the nuclear power plants. It is not until these resources are exhausted that a joint liability insurance agreement (Solidarvereinbarung) takes force between the owners of the German nuclear power plants (Vattenfall GmbH, E.ON, RWE and EnBW), for amounts up to EUR 2,500 million. Since the liability is unlimited, the nuclear power plants and their German parent companies are ultimately liable for losses that exceed this amount.

Atomic liability in Sweden is strict and limited to 300 million Special Drawing Rights (SDRs) (10,014), corresponding to SEK 3,004 million (3,189), which means that the companies that are owners of nuclear power plants are only liable for damage to the surrounding environment up to this amount. The obligatory atomic liability insurance for this amount is issued by the Nordic Atomic Insurance Pool and by the mutual company ELINI (European Liability Insurance for the Nuclear Industry).

According to the Swedish Act (2006:647) on the Financing of Future Expenses for Nuclear Waste Management, Sweden's nuclear power companies are required to pledge security to the Swedish state (the Swedish Nuclear Waste Fund) as a guarantee that sufficient funds exist to cover the future costs of nuclear waste management. The security is pledged in the form of guarantee commitments to the owners of the nuclear power companies. In a decision made on 22 December 2011, the Swedish government set new guarantee amounts for the years 2012–2014. As security for the subsidiaries Forsmarks Kraftgrupp AB and Ringhals AB, the Parent Company Vattenfall AB has made guarantee commitments for a combined value of SEK 12,025 million (8,698). Two types of guarantees have been issued. The first guarantee – so-called Financing Security, totalling SEK 6,821 million – is intended to cover the requisite need for fees that have been decided on but not yet been paid in during the so-called earnings period (25 years of operation). The second guarantee, amounting to SEK 5,204 million, pertains to future cost increases stemming from unforeseen events (so-called Complementary Security). The amounts for both of these types of security have been determined based on a probability-based risk analysis in which the former amount has been determined as such that there is a 50% probability that it, together with currently funded amounts (the median value), will provide full cost coverage. The latter amount essentially consists of the supplement that would be required if the corresponding probability was 90%. See also Note 29 to the consolidated accounts, Share in the Swedish Nuclear Waste Fund and Note 42, Other interest-bearing provisions.

In 2009 Vattenfall AB, together with its subsidiary SKB (the Swedish Nuclear Fuel and Waste Management Company) and the other part-owners of that company, signed a long-term co-operation agreement with the Östhammar and Oskarshamn municipalities. The agreement covers the period 2010 to approximately 2025 and regulates development efforts in association with the implementation of the Swedish nuclear waste programme. Through development initiatives in areas such as training, enterprise and infrastructure, over time the parties will generate value-added worth SEK 1,500 million to SEK 2,000 million. The parties are to finance the development efforts in proportion to their ownership interests. The Vattenfall Group's ownership interest is 56%. Implementation of the efforts is being carried out across two periods: a period before all necessary permits have been received (Period 1), and a period during implementation and operation of the facilities (Period 2). In 2012 Vattenfall reported a provision of SEK 121 million (156) for its share of Period 1 activities.

As a consequence of the Group's continuing business activities, companies in the Group become parties to legal processes. In addition, disputes arise in the Group's operations that do not lead to legal processes. Vattenfall's management assesses these legal processes and disputes on a regular basis and makes provisions in cases where it believes an obligation exists and this can be judged with a reasonable degree of certainty. For legal processes or disputes where at present it cannot be determined whether an obligation exists or where for other reasons it is not possible to calculate the amount of a possible provision with a reasonable degree of certainty, management makes the overall judgement that there is no risk for material impact on the Group's result of operations or financial position.

As part of the Group's business activities, in addition to the contingent liabilities stated here, guarantees are made for the fulfilment of various contractual obligations.

Note 52 Commitments under consortium agreements

Power plants are often built on a joint venture basis. Under the consortium agreements, each owner is entitled to electricity in proportion to its share of ownership, and each owner is liable, regardless of output, for an equivalent proportion of all the joint venture's costs.

Vattenfall's investments in heating companies and other businesses often entail a liability for costs in proportion to its share of ownership.

Note 53 Number of employees and personnel costs

			2012			2011
Number of employees at 31 December, full-time equivalents	Men	Women	Total	Men	Women	Total
Sweden	6,633	2,297	**8,930**	6,455	2,158	**8,613**
Denmark	573	104	**677**	544	105	**649**
Finland	24	28	**52**	221	156	**377**
Germany	13,635	4,094	**17,729**	14,886	4,522	**19,408**
Poland	71	20	**91**	76	23	**99**
Netherlands	3,872	1,245	**5,117**	4,163	1,254	**5,417**
Belgium	1	2	**3**	—	—	**—**
UK	101	60	**161**	60	41	**101**
France	12	10	**22**	3	5	**8**
Serbia	8	4	**12**	10	3	**13**
Total	**24,930**	**7,864**	**32,794**	**26,418**	**8,267**	**34,685**

			2012			2011
Average number of employees during the year, full-time equivalents	Men	Women	Total	Men	Women	Total
Sweden	6,543	2,246	**8,789**	6,591	2,188	**8,779**
Denmark	554	103	**657**	558	105	**663**
Finland	64	54	**118**	221	162	**383**
Germany	13,785	4,183	**17,968**	14,837	4,533	**19,370**
Poland	72	20	**92**	2,176	630	**2,806**
Netherlands	4,012	1,257	**5,269**	4,191	1,266	**5,457**
Belgium	1	1	**2**	70	42	**112**
UK	81	51	**132**	54	34	**88**
France	10	9	**19**	3	3	**6**
Serbia	9	4	**13**	12	3	**15**
Total	**25,131**	**7,928**	**33,059**	**28,713**	**8,966**	**37,679**

Personnel costs	2012	2011
Salaries and other remuneration	18,568	18,418
Social security costs[1]	6,580	5,835
Total	**25,148**	**24,253**

1) Pension costs are specified in Note 41 to the consolidated accounts.

Benefits to board members of Vattenfall AB and senior executives of the Vattenfall Group

TSEK	2012 Directors' fees and base salary 2012 including vacation pay	2012 Other remuneration and benefits 2012	2012 Pension and severance costs 2012	2011 Directors' fees and base salary 2011 including vacation pay	2011 Other remuneration and benefits 2011	2011 Pension and severance costs 2011
Board of Directors						
Lars G. Nordström, Chairman of the Board	625	—	—	338	—	—
Christer Bådholm, Deputy Chairman of the Board until 25 April 2012	143	—	—	392	—	—
Eli Arnstad, board member	335	—	—	310	—	—
Gunilla Berg, board member from 25 April 2012	222	—	—	—	—	—
Håkan Buskhe, board member from 25 April 2012	222	—	—	—	—	—
Håkan Erixon, board member	355	—	—	219	—	—
Lone Fønss Schrøder, board member until 25 April 2012	108	—	—	336	—	—
Jan-Åke Jonsson, board member from 25 April 2012	222	—	—	—	—	—
Patrik Jönsson, board member	—	—	—	—	—	—
Cecilia Vieweg, board member	340	—	—	320	—	—
Employee representatives	—	—	—	—	—	—
Former board members[1]	—	—	—	509	—	—
Total, Board of Directors	**2,572**	**—**	**—**	**2,424**	**—**	**—**
Executive Group Management						
Øystein Løseth, President and CEO[2]	13,560	391	3,981	12,667	389	3,770
Ingrid Bonde, CFO and Deputy CEO from 14 May 2012	4,022	3	1 264	—	—	—
Peter Smink, acting CFO until 14 May 2012, Head of Busines Sustainable Energy Projects from 1 November 2012	3,132	104	287	963	36	80
Tuomo Hatakka, Senior Executive Vice President, Head of Business Division Production[3]	10,738	12	2,393	9,927	34	2,481
Torbjörn Wahlborg, Senior Executive Vice President, Head of Business Division Distribution and Sales until 31 October 2012 , Head of Business Division Nuclear Power from 1 November 2012	6,654	63	1,939	5,664	67	1,677
Stefan Dohler, Head of Business Division Asset Optimisation and Trading from 1 April 2012	4,452	65	989	—	—	—
Harald von Heyden, Head of Business Division Asset Optimisation and Trading until 31 March 2012	2,963	8	686	4,415	82	1,355
Huib Morelisse, Head of Business Division Asset Development until 31 October 2012	5,640	—	984	6,766	171	1,138
Anders Dahl, Head of Business Division Renewables until 31 October 2012 and Head of Division Distribution and Sales from 1 november 2012	3,826	57	1,138			
Olof Gertz, Head of Staff Function Human Resources from 1 March 2012	3,461	67	1 051	—	—	—
Anne Gynnerstedt, General Counsel & Company Secretay/CEO Office from 9 January 2012	4,302	4	1,299	—	—	—
Kerstin Alfont, acting Head of Staff Function Human Resources until 29 February 2012	381	8	63	1,439	33	359
Andreas Regnell, Head of Staff Function Strategy & Environment. Member of Executive Group Management until 9 May 2012	1,563	1	440	4,013	2	1,205
Elisabeth Ström, Head of Staff Function External Relations and Communications. Member of Executive Group Management until 9 May 2012	2,269	154	9,816	4,386	147	809
Former members of Executive Group Management[1]	—	—	—	5,611	154	22,028

1) See Vattenfall's 2011 Annual Report, pages 106–107.

2) The salary increase is the first since 2010.

3) Of the total base salary, SEK 479 thousand pertains to a salary increase in 2011 paid retroactively in 2012.

TSEK	2012 Directors' fees and base salary 2012 including vacation pay	2012 Other remuneration and benefits 2012	2012 Pension and severance costs 2012	2011 Directors' fees and base salary 2011 including vacation pay	2011 Other remuneration and benefits 2011	2011 Pension and severance costs 2011
Other senior executives						
Stefan Dohler, Finance Director Vattenfall Europe AG until 31 March 2012	1,414	21	302	5,863	88	1,290
Hartmuth Zeiss, Head of Business Unit Mining & Generation, Vattenfall Europe Mining AG	4,955	179	1,016	4,961	181	513
Jan Homan, Head of Business Unit Thermal	4,474	200	801	4,567	149	350
Frank May, Head of Business Unit Heat, Vattenfall Europe Wärme AG	3,783	86	818	3,788	94	819
Peter Gango, Head of Business Unit Nuclear until 31 December 2012	3,590	50	6,495	3,558	53	541
Gunnar Axheim, Head of Business Unit Hydro	3,020	3	982	2,916	4	5,962
Helmar Rendez, Head of Business Unit Distribution	4,209	562	1,263	4,194	128	687
Huib Morelisse, CEO for N.V. Nuon Energy and country manager in the Netherlands from 1 November 2012	1,131	—	200	—	—	—
Total Executive Group Management and senior executives	**93,539**	**2,038**	**38,207**	**88,500**	**1,869**	**45,878**
Total Board of Directors, Executive Group Management and other senior executives	**96,111**	**2,038**	**38,207**	**90,924**	**1,869**	**45,878**

Board of Directors

The 2012 Annual General Meeting resolved that directors' fees for the period until the end of the next Annual General Meeting shall amount to SEK 580 thousand for the Chairman and SEK 280 thousand for each of the other AGM-elected directors.

In addition, it was resolved that for service on the Remuneration Committee, Audit Committee, and Safety and Risk Committee, a fee of SEK 60 thousand shall be paid to the respective committee chairs and SEK 45 thousand to the committee members.

The directors' fees set by the 2012 Annual General Meeting are unchanged compared with the directors' fees set by the 2011 Annual General Meeting. The fees for committee work are unchanged compared with the fees set at an extraordinary general meeting on 14 June 2011. No fees are paid to board members and committee members who are employed by Vattenfall or the Swedish Government Offices.

The fees paid to each individual board member are shown in the table above.

The board members' respective committee assignments are described in the Corporate Governance Report on pages 32–39.

President and Chief Executive Officer

Øystein Løseth (born 1958), has been employed as President and Chief Executive Officer of Vattenfall AB since 12 April 2010. In his employment as President and CEO of Vattenfall AB in 2012, Mr Løseth received a salary of SEK 13,560 thousand. In addition, he received other benefits, including a car benefit, a housing benefit, and cost-free travel home for a value of SEK 391 thousand. Mr Løseth has no variable salary component in his employment as President and CEO of Vattenfall AB.

Mr Løseth has a defined contribution pension solution. The premium for 2012 amounted to SEK 3,981 thousand, which corresponds to 30% of his 2012 salary.

Øystein Løseth's term of employment is for a set period through 31 March 2015. Prior to that date, a mutual notice period of six months applies. In the event Vattenfall serves notice, Mr Løseth is entitled to a maximum of 18 months' severance pay after the notice period, but not longer than until 31 March 2015. The amount of the severance pay shall be based on the fixed salary that applied at the time the notice was served. In the event Mr Løseth accepts new employment or earns income from other business activities, the severance pay shall be reduced by an amount corresponding to the new income or other benefit received during the period in question. Severance pay is to be paid out monthly.

Other members of the Executive Group Management

Salaries and other remuneration

For other members of the Executive Group Management – a total of 13 individuals (11) – the sum of salaries and other remuneration for 2012, including the value of company cars and other benefits, was SEK 53,949 thousand. For other persons defined as senior executives by Vattenfall, who are not members of the Executive Group Management – a total of 8 individuals (7) – the sum of salaries and other remuneration for 2012, including the value of company cars and other benefits, was SEK 27,677 thousand.

For persons who during the year changed over from being a senior executive to also being a member of the Executive Group Management (or vice versa), the sum of salaries and other remuneration has been distributed proportionately between these two classes of senior executives.

Retirement benefits

Harald von Heyden, Olof Gertz, Ingrid Bonde, Anne Gynnerstedt, Anders Dahl, Andreas Regnell, Elisabeth Ström, Torbjörn Wahlborg, Peter Gango, Tuomo Hatakka, Stefan Dohler, Frank May and Hartmuth Zeiss all have defined contribution pension solutions.

Huib Morelisse, Jan Homan and Peter Smink have pension solutions under collective agreements in the Netherlands. All pensions for these executives are in compliance with the Swedish government's guidelines.

Terms of notice on the part of the company

According to the government's guidelines, the notice period for a senior executive in the event the company serves notice shall not exceed six months. In addition, severance pay equivalent to a maximum of eighteen months' salary is payable thereafter. In the event the individual in question accepts new employment or receives income from other business activities, the severance pay shall be reduced by an amount corresponding to the new income or benefit received during the time in question. Severance pay is paid out monthly.

All senior executives have severance terms that are in compliance with the government's guidelines.

Incentive programmes

The members of the Executive Group Management and other senior executives do not receive any variable salary component.

New senior executives

Vattenfall has decided, effective 1 January 2013, by definition, to increase the classification of senior executive to also include managers of the Swedish nuclear power plants, Ringhals and Forsmark.

Note 54 Gender distribution among senior executives

	Women, %		Men, %	
	2012	2011	2012	2011
Gender distribution among board members	29	22	71	78
Gender distribution among other senior executives	22	25	78	75

Note 55 Related party disclosures

Vattenfall AB is 100%-owned by the Swedish state. The Vattenfall Group's products and services are offered to the state, state authorities and state companies in competition with other vendors under generally accepted commercial terms. In a similar manner, Vattenfall AB and its Group companies purchase products and services from state authorities and companies at market prices and otherwise under generally accepted commercial terms. No significant share of the Vattenfall Group's net sales, purchasing or earnings is attributable to the Swedish state or any of its authorities or companies.

Disclosures of transactions with key persons in executive positions in the company are shown in Note 53 to the consolidated accounts, Number of employees and personnel costs.

Disclosures of transactions with major associated companies in 2012 and associated receivables and liabilities as per 31 December 2012 are described below.

V² Plug-In Hybrid Vehicle Partnership HB

The company's business is to develop and sell technology related to hybrid electrical power of automobiles. Vattenfall has an obligation to contribute an additional SEK 25 million (90) to the company.

Ensted Havn I/S

This is a deep-sea harbour that Vattenfall uses as a coal depot. Vattenfall's sales revenue from the company amounted to SEK 0 million (1), while purchases from the company amounted to SEK 0 million (78).

Kernkraftwerk Brokdorf GmbH & Co. oHG

This is a nuclear power plant from which Vattenfall purchases electricity. Purchases amounted to SEK 894 million (940). Sales revenue from the company amounted to SEK 1 million (1). Vattenfall's interest expense to the company amounted to SEK 6 million (5). Trade liabilities and loan liabilities amounted to SEK 92 million (104) and SEK 542 million (450), respectively.

Kernkraftwerk Krümmel GmbH & Co. oHG

This is a nuclear power plant that is being decommissioned. Vattenfall's expenses to the company amounted to SEK 535 million (4,425). Sales revenue from the company amounted to SEK 454 million (449). Vattenfall's interest expense to the company amounted to SEK 93 million (99). Trade receivables amounted to SEK 5 million (23). Trade liabilities and loan liabilities amounted to SEK 3,879 million (3,836) and SEK 8,720 million (10,003), respectively.

Kernkraftwerk Stade GmbH & Co. oHG

This is a nuclear power plant that is being decommissioned. Vattenfall's sales revenue from the company amounted to SEK 0 million (0) while expenses to the compant amounted to SEK 118 million (278). Vattenfall's interest expense to the company amounted to SEK 2 million (1). Trade liabilities and loan liabilities amounted to SEK 61 million (211) and SEK 47 million (67), respectively.

GASAG Berliner Gaswerke AG

The company sells, distributes and stores natural gas in the Berlin area. Vattenfall received SEK 87 million (106) in sales revenue from the company, and purchases from the company totalled SEK 7 million (179). Trade receivables amounted to SEK 5 million (3). Vattenfall's part of contingent liabilities of the company amounted to SEK 145 million (165).

EHA Energie Handels Gesellschaft mbH & Co. KG

The company buys and sells electricity and gas. The company also provides administrative and consulting services. Vattenfall's sales revenue from EHA amounted to SEK 605 million (678), while purchases from the company amounted to SEK 87 million (70). Operating receivables amounted to SEK 2 million (4).

DOTI Deutsche Offshore Testfeldt und Infrastructure GmbH KG

DOTI conducts planning work and operates an offshore wind power test facility. Sales revenue from the company amounted to SEK 1 million (1). Purchaces from the company amounted to SEK 35 million (0). Operating liabilities amounted to SEK 9 million (0).

Note 56 Events after the balance sheet date

On 1 March 2013 Vattenfall in a press release disclosed that the company is investigating the possibility of divesting its share of the combined heat and power plant Lippendorf in Germany. No decision, however, has yet been taken, and Germany continues to be a core market for Vattenfall.

On 6 March 2013 Vattenfall in a press release disclosed that approximately 2,500 employees might leave the company when Vattenfall has to cut costs by SEK 3 billion during 2013 and by another SEK 1.5 billion 2014.

Parent Company

Parent Company Vattenfall AB

Condensed review of 2012

Sales amounted to SEK 38,250 million (31,655).

Profit before appropriations and tax totalled SEK 6,762 million (17,389).

Vattenfall AB's operating profit was approximately SEK 5,000 million lower than for the preceding year. Profit was affected by the fact that Vattenfall AB did not receive any dividends from its German subsidiaries in 2012. Profit includes an impairment loss of SEK 9,407 million for the shareholding in N.V. Nuon Energy. Additional impairment losses were recognised for Vattenfall A/S, for SEK 4,000 million, and Vattenfall Biomass Liberia AB, for SEK 1,496 million. During the year, Vattenfall divested its electricity distribution and heat business in Finland, which generated a capital gain of SEK 10,051 million. In 2012 Vattenfall repaid part of its liability to Nuon's shareholders, totalling SEK 2,631 million (EUR 300 million), which resulted in a realised foreign exchange gain of SEK 590 million in the Parent Company.

Vattenfall has decided to resume the practice of fully funding defined benefit occupational pensions in Sweden on the balance sheet under the item "Pension provisions", i.e., in accordance with the practice that applied before Vattenfall's Pension Foundation was established in 1999. As a result of this change, funds will be gradually transferred from the pension foundation to Vattenfall AB and its subsidiaries.

In 2012 Vattenfall AB made a partial change to its pension funding, whereby SEK 2,500 million has been reserved in the "Pension provisions" account. Compensation for this was received from the pension foundation in December, totalling SEK 2,800 million, of which SEK 300 million pertains to compensation for pension costs in 2011. The change in funding does not affect Vattenfall AB's obligation to pay future pensions to its employees. In connection with this change in funding, Vattenfall AB has pledged shares in Vattenfall Eldistribution AB to the insurance company PRI Pensionsgaranti as security for the credit insurance that is required to fund the pensions.

As a result of Swedish Parliament's decision in December 2012 to lower the corporate income tax rate in Sweden from 26.3% to 22%, Vattenfall AB's deferred tax liabilities have been recalculated. This led to a positive earnings impact of SEK 156 million.

The balance sheet total was SEK 314,473 million (323,251).

Investments during the year amounted to SEK 4,966 million (755).

During the year, a new share issue of SEK 3,000 million was carried out in the subsidiary Vattenfall Vindkraft AB. In addition, a shareholder contribution of SEK 1,450 million was repaid from the Finnish operations. In December, repayment of a previous capital contribution in the amount of SEK 3,514 million was received from Vattenfall A/S, which reduced the book value of the shares in the company.

In May 2012 a share dividend of SEK 4,433 million was paid to the Swedish state.

Cash and cash equivalents and short-term investments amounted to SEK 37,193 million (19,104).

Parent Company income statement

Amounts in SEK million, 1 January–31 December	Note	2012	2011
Net sales	4, 5	38,250	31,655
Cost of products sold	6	-24,126	-19,037
Gross profit		**14,124**	**12,618**
Selling expenses		-810	-739
Administrative expenses		-2,244	-2,445
Research and development costs		-341	-354
Other operating income	7	1,243	157
Other operating expenses	8	-990	-3,293
Operating profit	9, 10, 18, 19	**10,982**	**5,944**
Result from participations in subsidaries	11	-4,041	13,935
Result from participations in associated companies	12	1	1
Result from other shares and participations	13	66	-1,523
Other financial income	14	5,496	6,037
Other financial expenses	15	-5,742	-7,005
Profit before appropriations and tax		**6,762**	**17,389**
Appropriations	16	-7,680	2,312
Profit before tax		**-918**	**19,701**
Income tax expense	17	-1,122	-2,847
Profit for the year		**-2,040**	**16,854**

Parent Company statement of comprehensive income

Amounts in SEK million, 1 January–31 December	2012	2011
Profit for the year	-2,040	16,854
Total other comprehensive income	—	—
Total comprehensive income for the year	**-2,040**	**16,854**

Parent Company balance sheet

Amounts in SEK million	Note	31 December 2012	31 December 2011
Assets			
Non-current assets			
Intangible assets	20	262	206
Property, plant and equipment	21	4,339	4,086
Shares and participations	22	162,956	178,670
Other non-current receivables	23	79,859	72,495
Total non-current assets		**247,416**	**255,457**
Current assets			
Inventories	24	453	360
Intangible assets: current	25	249	334
Current receivables	26	29,160	47,431
Current tax assets	17	2	565
Short-term investments	27	24,535	12,839
Cash and cash equivalents	28	12,658	6,265
Total current assets		**67,057**	**67,794**
Total assets		**314,473**	**323,251**

Parent Company balance sheet, cont.

Amounts in SEK million	Not	31 December 2012	31 December 2011
Equity, provisions and liabilities			
Equity			
Restricted equity			
Share capital (131,700,000 shares with a share quota value of SEK 50)		6,585	6,585
Statutory reserve		1,286	1,286
Non-restricted equity			
Retained earnings		75,236	62,789
Profit for the year		-2,040	16,854
Total equity		**81,067**	**87,514**
Untaxed reserves	16	**15,185**	**10,355**
Provisions	29	**2,832**	**191**
Non-current liabilities			
Hybrid Capital	30	8,543	8,883
Other interest-bearing liabilities	30	97,716	134,970
Deferred tax liabilities	17	799	932
Other noninterest-bearing liabilities	31	6,541	5,864
Total non-current liabilities		**113,599**	**150,649**
Current liabilities			
Interest-bearing liabilities	30	72,410	50,204
Other noninterest-bearing liabilities	32	29,380	24,338
Total current liabilities		**101,790**	**74,542**
Total equity, provisions and liabilities		**314,473**	**323,251**
Collateral	34	102	79
Contingent liabilities	35	41,787	42,043
Commitments under consortium agreements	36		

Parent Company cash flow statement

Amounts in SEK million, 1 January–31 December	Note	2012	2011
Operating activities			
Profit before tax		-918	19,701
Reversal of depreciation, amortisation and impairment losses		15,369	2,473
Tax paid		-692	-3,457
Capital gains/losses, net		-10,051	-1,102
Other, incl. non-cash items	40	7,018	-4,823
Funds from operations (FFO)		**10,726**	**12,792**
Changes in inventories		-93	-92
Changes in operating receivables		5,627	-10,229
Changes in operating liabilities		-4,103	-3,104
Cash flow from changes in operating assets and operating liabilities		1,431	-13,425
Cash flow from operating activities		**12,157**	**-633**
Investing activities			
Investments in subsidiaries		-4,183	-215
Investments in associated companies and other shares and participations		-6	-38
Other investments in non-current assets		-777	-502
Total investments		**-4,966**	**-755**
Capital contributions repaid		4,964	—
Divestments		19,001	9,412
Cash flow from investing activities		**18,999**	**8,657**
Cash flow before financing activities		**31,156**	**8,024**
Financing activities			
Changes in short-term investments		-11,696	14,035
Loans raised, external		1,520	7,992
Amortisation of debt pertaining to acquisitions of subsidiaries		-2,631	-13,538
Amortisation of other debt		-11,895	-12,805
Dividend paid to owner		-4,433	-6,500
Payment from Vattenfall's Pension Foundation		2,500	—
Group contributions received/paid		1,872	1,709
Cash flow from financing activities		**-24,763**	**-9,107**
Cash flow for the year		**6,393**	**-1,083**
Cash and cash equivalents			
Cash and cash equivalents at start of year		6,265	7,348
Cash flow for the year		6,393	-1,083
Cash and cash equivalents at end of year		**12,658**	**6,265**

Parent Company statement of changes in equity

Amount i SEK million	Share capital	Statutory reserve	Non-restricted equity	Total
Balance brought forward 2011	6,585	1,286	69,289	77,160
Dividend paid to owner	—	—	-6,500	-6,500
Profit for the year	—	—	16,854	16,854
Total other comprehensive income	—	—	—	—
Balance carried forward 2011	**6,585**	**1,286**	**79,643**	**87,514**
Dividend paid to owner	—	—	-4,433	-4,433
Profit for the year	—	—	-2,040	-2,040
Group contributions	—	—	26	26
Total other comprehensive income	—	—	—	—
Balance carried forward 2012	**6,585**	**1,286**	**73,196**	**81,067**

As of 31 December 2012 the registered share capital comprised 131,700,000 shares with a share quota value of SEK 50.

Notes to the Parent Company accounts

Contents

Note		Page
1	Company information	102
2	Accounting policies	102
3	Exchange rates	102
4	Net sales	102
5	Intra-Group transactions	102
6	Cost of products sold	102
7	Other operating income	102
8	Other operating expenses	102
9	Depreciation and amortisation	103
10	Impairment losses	103
11	Result from participations in subsidiaries	103
12	Result from participations in associated companies	103
13	Result from other shares and participations	103
14	Other financial income	103
15	Other financial expenses	103
16	Appropriations and untaxed reserves	103
17	Income tax expense	103
18	Leasing	104
19	Auditors' fees	104
20	Intangible assets: non current	105
21	Property, plant and equipment	105
22	Shares and participations	106
23	Other non-current receivables	106
24	Inventories	106
25	Intangible assets: current	106
26	Current receivables	106
27	Short-term investments	107
28	Cash and cash equivalents	107
29	Provisions	107
30	Other interest-bearing liabilities and relating financial derivates	107
31	Other noninterest-bearing liabilities (non-current)	108
32	Other noninterest-bearing liabilities (current)	108
33	Financial instruments: Carrying amount and fair value	108
34	Collateral	109
35	Contingent liabilities	109
36	Commitments under consortium agreements	110
37	Average number of employees and personnel costs	110
38	Gender distribution among senior executives	110
39	Related party disclosures	110
40	Specification of the cash flow statement	110
41	Events after the balance sheet date	110

Note 1 Company information

Vattenfall AB's 2012 Annual Report was approved in accordance with a decision by the Board of Directors on 20 March 2013. Vattenfall AB, which is the Parent Company of the Vattenfall Group, is a limited liability company with its registered office in Stockholm and with the address SE–169 92 Stockholm, Sweden. The balance sheet and income statement of the Parent Company included in the Annual Report will be submitted at the Annual General Meeting (AGM) on 24 April 2013.

Note 2 Accounting policies

General

The Parent Company Vattenfall AB's accounts are prepared in accordance with the Swedish Annual Accounts Act and recommendation RFR 2 – *Accounting for Legal Entities,* issued by the Swedish Financial Reporting Board (RFR). RFR 2 entails that Vattenfall AB shall apply all standards and interpretations issued by IASB and IFRIC as endorsed by the European Commission for application within the EU. This should be done as far as possible within the framework of the Swedish Annual Accounts Act by taking into consideration the relationship between accounting and taxation.

Vattenfall AB has adopted the exemption rule regarding IAS 39 according to RFR 2, which entails that financial instruments are reported at cost.

The accounting policies and methods of calculations are unchanged from those applied in the 2011 Annual Accounts, except that group contributions are recognised as appropriations, in accordance with an alternative rule in RFR 2, where Vattenfall has chosen to apply the new rule prospectively. Comparative figures for 2011 have been recalculated.

New and amended accounting standards effective as of 2013 are expected to have no or minimal impact on Vattenfall AB's financial statements.

The accounting policies applied are stated in the applicable parts of Note 3 to the consolidated accounts with the following amendments for the Parent Company Vattenfall AB.

Depreciation and amortisation

As in the consolidated accounts, depreciation and amortisation are based on cost and are applied on a straight-line basis over the estimated useful life of the asset in question. In addition, certain accelerated depreciation/amortisation (the difference between depreciation/amortisation according to plan and depreciation/amortisation for tax purposes) in the Parent Company is reported under Appropriations and Untaxed reserves, respectively.

Pension provisions

Pension obligations in the Parent Company are calculated in accordance with generally accepted Swedish actuarial principles and are recognised according to the Act on Safeguarding of Pension Obligations, ("Tryggandelagen"). The provision reported on the balance sheet corresponds to these pension obligations, recognised net against plan assets of Vattenfall's Pension Foundation.

Foreign currency

The Parent Company applies hedge accounting for assets in a foreign currency effectively hedged by loans in a foreign currency according to the Swedish standard BFN R7 – *Measurement of assets and liabilities in foreign currency.* Effects from changes in currency rates are not recognised for loans raised for the financing of foreign subsidiaries, associated companies and joint ventures. Nonmonetary assets acquired in a foreign currency are recognised at the exchange rate at the time for the acquisition. The loans raised in connection with the acquisition of N.V. Nuon Energy are hedged, as in the consolidated accounts, from the date of the acquisition, 1 July 2009.

Other assets and liabilities in foreign currencies are recognised at the exchange rates on the balance sheet date.

Income taxes

Tax legislation in Sweden allows companies to defer tax payments by making provisions to untaxed reserves. In the Parent Company, untaxed reserves are reported as a separate item on the balance sheet that includes deferred tax. In the Parent Company's income statement, provisions to untaxed reserves and dissolution of untaxed reserves are reported under the heading Appropriations.

The recognised income tax expense of the Parent Company, Vattenfall AB, consists of income tax on profit after appropriations.

Note 3 Exchange rates

See Note 6 to the consolidated accounts.

Note 4 Net sales

	2012	2011
Sales including excise taxes:		
-sale of goods (electricity, heat, etc.)	40,134	33,771
-rendering of services	1,013	865
Excise taxes	-2,897	-2,981
Net sales	**38,250**	**31,655**

Net sales per geographical area

	2012	2011
Nordic countries	34,418	31,189
Germany and Poland	3,770	304
Other	62	162
Total	**38,250**	**31,655**

Net sales for products and services

	2012	2011
Electricity generation	11,939	6,491
Trading	4,781	1,342
Energy sales	18,214	20,676
Heat	2,394	2,241
Other	922	905
Total	**38,250**	**31,655**

Note 5 Intra-Group transactions

Of the Parent Company's total income from sales and total purchase costs, transactions with subsidiaries account for 23% (13%) of sales and 55% (38%) of purchase costs.

Note 6 Cost of products sold

Direct costs include production taxes and duties of SEK 70 million (82) and property taxes of SEK 5 million (1).

Note 7 Other operating income

Other operating income consists primarily of internally invoiced services, insurance compensation, rental income, and operationally derived foreign exchange gains.

Note 8 Other operating expenses

Other operating expenses consist primarily of internally invoiced services, operationally derived exchange rate losses and depreciation.

For 2011 Vattenfall AB recognised a capital loss of SEK 3,239 million in connection with the divestment of all hydro power operations to wholly owned, newly formed subsidiaries. The divestments were made at residual tax values.

Note 9 Depreciation and amortisation

Amortisation of non-current intangible assets and depreciation of property, plant and equipment in the income statement are broken down as follows:

	2012	2011
Other operating expenses	465	366
Administrative expenses	1	1
Total	**466**	**367**

Amortisation of non-current intangible assets is included above in Other operating expenses sold in the amount of SEK 81 million (63) and in Administrative expenses in the amount of SEK 0 million (1).

Note 10 Impairment losses

During 2011 and 2012 no impairment losses were recognised for non-current intangible assets or property, plant and equipment.

Note 11 Result from participations in subsidiaries

	2012	2011
Dividends	768	10,088
Impairment losses[1]	-14,903	-514
Capital gains/losses on divestments[2]	10,094	4,361
Total	**-4,041**	**13,935**

1) See Note 22, Shares and participations.

2) See also under the heading Condensed review of 2012 on page 98.

Note 12 Result from participations in associated companies

	2012	2011
Dividends	1	1
Total	**1**	**1**

Note 13 Result from other shares and participations

	2012	2011
Dividends	67	68
Impairment of shares in Enea S.A.	—	-1,591
Capital gains/losses on divestments	-1	—
Total	**66**	**-1,523**

Note 14 Other financial income

	2012	2011
Interest income from subsidiaries	3,399	3,091
Other interest income	313	236
Foreign exchange gains and losses, net	1,784	2,710
Total	**5,496**	**6,037**

Note 15 Other financial expenses

	2012	2011
Interest expenses to subsidiaries	251	211
Other interest expenses	5,491	6,794
Total	**5,742**	**7,005**

Note 16 Appropriations and untaxed reserves

Appropriations

	2012	2011
Group contributions paid	-4,711	-2,862
Group contributions received	1,861	1,921
Provision/dissolution of untaxed reserves, net	-4,830	3,253
Total	**-7,680**	**2,312**

Untaxed reserves

	Balance brought forward	Provision/ dissolution (-)	Balance carried forward
Accelerated depreciation	-3,219	5,658	2,439
2007 Tax allocation reserve	2,307	-2,307	—
2008 Tax allocation reserve	1,522	—	1,522
2009 Tax allocation reserve	—	—	—
2010 Tax allocation reserve	2,992	—	2,992
2011 Tax allocation reserve	4,153	—	4,153
2012 Tax allocation reserve	2,600	—	2,600
2013 Tax allocation reserve	—	1,479	1,479
Total	**10,355**	**4,830**	**15,185**

Note 17 Income tax expense

The reported income tax expense is broken down as follows:

	2012	2011
Current tax	1,255	1,498
Deferred tax	-133	1,349
Total	**1,122**	**2,847**

The income tax expense for the year attributable to previous years amounts to SEK 87 million (-862). The tax effect of the standard tax interest on tax allocation reserves amounts to SEK 42 million (68).

The difference between the nominal Swedish tax rate and the effective tax rate is explained as follows:

%	2012	2011
Swedish income tax rate at 31 December	26.3	26.3
Tax adjustment attributable to previous periods	-9.5	-4.4
Tax adjustment attributable to previous years	7.2	5.0
Capital gains, non taxable[1]	289.0	-4.3
Non-taxable income	25.8	-13.6
Impairment losses, non deductible[2]	-426.2	2.7
Non-deductible interest	-48.9	2.2
Other non-deductible expenses	-2.8	0.5
Effective tax rate before change of tax rate in Sweden	**-139.1**	**14.4**
Changed tax rate in Sweden	17.0	—
Effective tax rate after change of tax rate in Sweden	**-122.1**	**14.4**

1) Pertaining to non taxable capital gains from the divestment of Finnish companies.

2) Chiefly concerns non-deductible impairment losses for shares in N.V. Nuon Energy, Vattenfall A/S and Vattenfall Biomass Liberia AB.

	Balance brought forward		Changes via income statement		Balance carried forward	
Balance sheet reconciliation – Deferred tax	2012	2011	2012	2011	2012	2011
Non-current assets	-2	-303	—	301	-2	-2
Current assets	-171	-643	233	472	62	-171
Provisions	-35	-34	-17	-1	-52	-35
Other non-current liabilities	792	215	-213	577	579	792
Current liabilities	348	348	-136	—	212	348
Total	**932**	**-417**	**-133**	**1,349**	**799**	**932**

Not 18 Leasing

Leasing expenses

Future payment commitments, as of 31 December 2012, for leasing contracts and rental contracts break down as follows:

	Finance leasing	Operating leasing
2013	—	23
2014	—	23
2015	—	24
2016	—	6
2017	—	3
2018 and beyond	—	—
Total	**—**	**79**

Leasing expenses for the year attributable to the Parent Company amounted to SEK 22 million (19).

Leasing revenues

Vattenfall AB owns and operates energy facilities on behalf of customers. Revenues from customers are broken down into two components – a fixed component to cover capital expenses and a variable component based on the quantity delivered.

Facilities are classified in accordance with standard leasing principles, based on the fixed revenue component.

On 31 December 2012, the cost of assets reported under Operating leases amounted to SEK 563 million (662). Accumulated depreciation amounted to SEK 238 million (251), and accumulated impairment losses amounted to SEK 30 million (30).

Future payments for this type of facility break down as follows:

	Finance leasing	Operating leasing
2013	—	1
2014	—	1
2015	—	1
2016	—	1
2017	—	1
2018 and beyond	—	2
Total	**—**	**7**

Note 19 Auditors' fees

	2012	2011
Annual audit assignment		
Ernst & Young	7	18
Total	**7**	**18**
Tax consulting		
Ernst & Young	1	—
Total	**1**	**—**

Note 20 Intangible assets: non-current

	Capitalised development costs		Goodwill		Concessions and similar rights		Renting and similar rights		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Cost										
Cost brought forward	301	301	13	13	699	585	95	112	**1,108**	**1,011**
Investments	—	—	—	—	137	140	—	-6	**137**	**134**
Divestments/disposals	—	—	—	—	—	-26	—	-11	**—**	**-37**
Accumulated cost carried forward	**301**	**301**	**13**	**13**	**836**	**699**	**95**	**95**	1,245	1,108
Accumulated amortisation according to plan										
Amortisation brought forward	-185	-185	-13	-13	-561	-498	-27	-33	**-786**	**-729**
Amortisation for the year	—	—	—	—	-81	-64	—	—	**-81**	**-64**
Divestments/disposals	—	—	—	—	—	1	—	6	**—**	**7**
Accumulated amortisation carried forward	**-185**	**-185**	**-13**	**-13**	**-642**	**-561**	**-27**	**-27**	-867	-786
Impairment losses										
Impairment losses brought forward	-116	-116	—	—	—	—	—	—	**-116**	**-116**
Impairment losses carried forward	**-116**	**-116**	**—**	**—**	**—**	**—**	**—**	**—**	-116	-116
Carrying amount	**—**	**—**	**—**	**—**	**194**	**138**	**68**	**68**	262	206

At 31 December 2012 there were no contractual commitments for the acquisition of non-current intangible assets.

Note 21 Property, plant and equipment

	Buildings and land		Plants and machinery and other technical installation		Equipment tools, fixtures and fittings		Construction in progress		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Cost										
Cost brought forward	1,255	18,238	7,163	17,739	51	91	377	2,243	**8,846**	**38,311**
Investments	—	—	—	4	303	3	337	336	**640**	**343**
Grants received	—	—	—	—	—	—	—	25	**—**	**25**
Transfer from construction in progress	14	323	316	599	—	—	-330	-922	**—**	**—**
Divestments/disposals	-41	-17,306	-144	-11,179	-20	-43	—	-1,305	**-205**	**-29,833**
Reclassifications	42	—	-42	—	—	—	—	—	**—**	**—**
Accumulated cost carried forward	**1,270**	**1,255**	**7,293**	**7,163**	**334**	**51**	**384**	**377**	9,281	8,846
Accumulated depreciation according to plan										
Depreciation brought forward	-638	-6,795	-4,071	-9,307	-42	-62	—	—	**-4,751**	**-16,164**
Depreciation for the year	-30	-31	-280	-269	-75	-3	—	—	**-385**	**-303**
Divestments/disposals	29	6,188	144	5,505	18	23	—	—	**191**	**11,716**
Reclassifications	-41	—	41	—	—	—	—	—	**—**	**—**
Accumulated depreciation carried forward	**-680**	**-638**	**-4,166**	**-4,071**	**-99**	**-42**	**—**	**—**	-4,945	-4,751
Impairment losses										
Impairment losses brought forward	-1	-1	-8	-8	—	—	—	—	**-9**	**-9**
Divestments/disposals	12	—	—	—	—	—	—	—	**12**	**—**
Impairment losses carried forward	**11**	**-1**	**-8**	**-8**	**—**	**—**	**—**	**—**	3	-9
Residual value according to plan carried forward	**601**	**616**	**3,119**	**3,084**	**235**	**9**	**384**	**377**	4,339	4,086
Accumulated accelerated depreciation	—	—	—	—	—	—	—	—	**—**	**—**
Carrying amount	**601**	**616**	**3,119**	**3,084**	**235**	**9**	**384**	**377**	4,339	4,086

At 31 December 2012 there were no contractual commitments for the acquisition of property, plant and equipment.

Note 22 Shares and participations

	Participations in Subsidiaries		Participations in associated companies		Other shares and participations		Total shares and participations	
	2012	2011	2012	2011	2012	2011	2012	2011
Balance brought forward	175,638	189,449	14	6	3,018	4,609	**178,670**	**194,064**
Investments/acquisitions	—	27	—	8	—	3	**—**	**38**
Shareholder contributions	4,183	215	6	—	—	—	**4,189**	**215**
Capital contributions received[1]	-4,964	—	—	—	—	—	**-4,964**	**—**
Divestments	-34	-13,109	—	—	-2	-3	**-36**	**-13,112**
Purchase price adjustment	—	-430	—	—	—	—	**—**	**-430**
Impairment losses[2]	-14,903	-514	—	—	—	-1,591	**-14,903**	**-2,105**
Balance carried forward	**159,920**	**175,638**	**20**	**14**	**3,016**	**3,018**	162,956	178,670

1) Pertaining to capital contributions repaid from subsidiaries in Finland and Denmark.

2) Pertaining to impairment losses (non-deductible for tax purposes) for shares in N.V. Nuon Energy, Vattenfall A/S and Vattenfall Biomass Liberia AB.

For a breakdown of the Parent Company's shares and participations in subsidiaries, associated companies and other shares and participations, see Notes 26–28 to the consolidated accounts.

Note 23 Other non-current receivables

	Receivables from subsidiaries		Receivables from associated companies		Other receivables		Total other non-current receivables	
	2012	2011	2012	2011	2012	2011	2012	2011
Balance brought forward	72,157	55,508	7	7	331	384	72,495	55,899
New receivables	84,541	27,680	1	—	637	—	85,179	27,680
Payments received	-78,969	-11,031	—	—	-331	-53	-79,300	-11,084
Foreign exchange gains/ losses	-49	—	—	—	—	—	-49	—
Reclassification between non-current and current receivables	1,534	—	—	—	—	—	1,534	—
Balance carried forward	**79,214**	**72,157**	**8**	**7**	**637**	**331**	**79,859**	**72,495**

Note 24 Inventories

	2012	2011
Biofuels	89	63
Fossil fuels	322	255
Materials and spare parts	42	42
Total	**453**	**360**

Inventories recognised as an expense in 2012 amount to SEK 917 million (829). No impairment losses for inventories or reversals of impairment losses were recognised during the year.

Note 25 Intangible assets: current

Attributable to emission allowances and certificates. See Note 3 to the consolidated accounts, Accounting policies.

	Emission allowances		Certificates		Total	
	2012	2011	2012	2011	2012	2011
Balance brought forward	30	49	304	611	334	660
Purchases	47	137	1,369	1,434	1,416	1,571
Received free of charge	—	—	151	179	151	179
Sold	-23	-91	-980	-1,168	-1,003	-1,259
Redeemed	-34	-65	-615	-752	-649	-817
Balance carried forward	**20**	**30**	**229**	**304**	**249**	**334**

Note 26 Current receivables

	2012	2011
Advance payments paid	10	—
Accounts receivable – trade	2,168	1,998
Receivables from subsidiaries	20,287	30,951
Other receivables	1,556	7,251
Prepaid expenses and accrued income	5,139	7,231
Total	**29,160**	**47,431**

Age analysis of current receivables

The collection period is normally 30 days.

	2012			2011		
	Receivables gross	Receivables impaired	Receivables net	Receivables gross	Receivables impaired	Receivables net
Accounts receivable – trade						
Not due	1,989	—	1,989	1,776	—	1,776
Past due 1–30 days	129	—	129	86	—	86
Past due 31–90 days	10	—	10	13	—	13
Past due >90 days	40	—	40	123	—	123
Total	**2,168**	**—**	**2,168**	**1,998**	**—**	**1,998**
Receivables from subsidiaries						
Not due	20,287	—	20,287	30,951	—	30,951
Total	**20,287**	**—**	**20,287**	**30,951**	**—**	**30,951**
Other receivables						
Not due	1,556	—	1,556	7,188	—	7,188
Past due >90 days	—	—	—	63	—	63
Total	**1,556**	**—**	**1,556**	**7,251**	**—**	**7,251**

Note 27 Short-term investments

	2012	2011
Interest-bearing investments[1]	23,277	11,458
Margin calls, financing activities	1,258	1,381
Total	**24,535**	**12,839**

1) The increase pertains mainly to investments of proceeds from the divestments of Finnish and Polish operations.

Note 28 Cash and cash equivalents

	2012	2011
Cash and bank balances	12,615	5,641
Cash equivalents	43	624
Total	**12,658**	**6,265**

Note 29 Provisions

	2012	2011
Pension provisions	2,500	—
Personnel-related provisions for non-pension purposes	58	61
Provisions for environmental measures/ undertakings	114	124
Other provisions	160	6
Total	**2,832**	**191**

	2012	2011
Pension obligations[1,2]	3,545	3,196
Less: Plan assets, carrying amount	-1,045	-3,196
Total pension provisions at and of year	**2,500**	**—**
1) Of which, information registered by PRI	2,622	2,225
2) Of which, covered by credit insurance with FPG/PRI	3,161	2,793

The Parent Company's pension obligations are subject in their entirety to the Act on Safeguarding of Pension Obligations ("Tryggandelagen").

	2012	2011
Fair value of plan assets at start of year	3,606	3,723
Return on plan assets	247	-117
Compensation from Vattenfall's Pension Foundation	-300	—
Partial change in pension funding	-2,500	—
Vattenfall Business Services Nordic AB's pension liability taken over	311	—
Fair value of plan assets at the end of year[1]	**1,364**	**3,606**

Plan assets consist of the following:

	2012	2011
Shares and participations	—	1,089
Interest-bearing instruments	—	1,111
Other	1,364	1,406
Total	**1,364**	**3,606**

1) See also the heading Condensed review of 2012 on page 98.

Note 30 Other interest-bearing liabilities and related financial derivatives

	Non-current portion, maturity 1–5 years		Non-current portion, maturity >5 years		Total non-current portion		Current portion		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011
Bond issues	29,235	51,322	45,313	46,188	**74,548**	**97,510**	21,690	180	**96,238**	**97,690**
Commercial paper	—	—	—	—	**—**	**—**	—	1,581	**—**	**1,581**
Liabilities to credit institutions	1,002	864	137	250	**1,139**	**1,114**	107	701	**1,246**	**1,815**
Liability pertaining to acquisition of N.V. Nuon Energy[1]	21,327	36,148	—	—	**21,327**	**36,148**	12,562	—	**33,889**	**36,148**
Liability pertaining to acquisition of Vattenfall Biomass Liberia AB	—	118	—	—	**—**	**118**	—	—	**—**	**118**
Liabilities to subsidiaries	272	80	430	—	**702**	**80**	30,871	40,373	**31,573**	**40,453**
Other liabilities (margin calls, financing activities)	—	—	—	—	**—**	**—**	7,180[2]	7,369[2]	**7,180**	**7,369**
Total other interest-bearing liabilities excluding Hybrid Capital	**51,836**	**88,532**	**45,880**	**46,438**	**97,716**	**134,970**	**72,410**	**50,204**	**170,126**	**185,174**
Hybrid Capital[2]	8,543	8,883	—	—	**8,543**	**8,883**	—	—	**8,543**	**8,883**
Total interest-bearing liabilities	**60,379**	**97,415**	**45,880**	**46,438**	**106,259**	**143,853**	**72,410**	**50,204**	**178,669**	**194,057**
Undiscounted future cash flows including interest payments and derivatives associated with the liabilities specified above, excluding liabilities to subsidiaries, amount to[3]:										
Interest-bearing liabilities	67,081	110,600	67,162	69,482	**134,243**	**180,082**	41,852	49,070	**176,095**	**229,152**
Derivates (swaps)	-3,914	-4,739	-8,821	-21,371	**-12,735**	**-26,110**	-1,859	-888	**-14,594**	**-26,998**
Accounts payable – trade, and other financial liabilities	3,378	3,624	—	—	**3,378**	**3,624**	29,380	24,337	**32,758**	**27,961**
Total	**66,545**	**109,485**	**58,341**	**48,111**	**124,886**	**157,596**	**69,373**	**72,519**	**194,259**	**230,115**

1) According to agreement, the liability pertaining to the acquisition of the remaining 32.96% of the shares in N.V. Nuon Energy will be paid in two tranches: in July 2013 and 2015.

2) See Note 40 to the consolidated accounts

3) Floating interest cash flows with future interest fixing dates are estimated based on market interest rates at year-end. All future cash flows in foreign currency are translated to SEK using the rate on the balance sheet date for the annual accounts.

Note 31 Other noninterest-bearing liabilities (non-current)

	2012	2011
Liabilities to subsidiaries	6,477	5,431
Other liabilities	64	433
Total	**6,541**	**5,864**

Liabilities to subsidiaries pertain mainly to non-current liabilities to Forsmarks Kraftgrupp AB for power charges. In accordance with an agreement between the co-owners, no interest is payable on the debt. Of other liabilities, SEK 30 million (218) falls due after more than five years.

Note 32 Other noninterest-bearing liabilities (current)

	2012	2011
Advance payments received	—	44
Accounts payable – trade	626	566
Liabilities to subsidiaries	24,252	19,134
Other liabilities	840	783
Accrued expenses and deferred income	3,662	3,811
Total	**29,380**	**24,338**

Breakdown of accrued expenses and deferred income:

	2012	2011
Accrued personnel-related costs	278	231
Accrued interest	2,288	2,487
Other accrued expenses	347	335
Deferred income and accrued expenses, electricity	738	752
Other deferred income	11	6
Total	**3,662**	**3,811**

Note 33 Financial instruments: Carrying amount and fair value

The categories for assets and liabilities in Note 33 to the Parent Company accounts follow the categories of Note 47 to the consolidated accounts, Financial instruments by category and related effects on income. However, the Parent Company recognises all financial instruments based on cost according to the Swedish Annual Accounts Act, i.e., the categories do not determine how the instruments are measured or recognised. For disclosures on how fair value is calculated, see Note 3 to the consolidated accounts, Accounting policies. The column fair value in Note 33 to the Parent Company accounts is included only for information purposes.

	2012		2011	
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at fair value through profit or loss				
Derivative assets[1]	—	20,332	—	18,511
Short-term investments	24,535	24,539	12,839	12,998
Cash equivalents	43	43	624	624
Total	**24,578**	**44,914**	**13,463**	**32,133**
Loans and receivables				
Other non-current receivables	79,859	79,859	72,495	72,495
Trade receivables and other receivables	29,150	29,150	47,431	47,431
Advance payments paid	10	10	—	—
Cash and bank balances	12,615	12,615	5,641	5,641
Total	**121,634**	**121,634**	**125,567**	**125,567**
Available-for-sale financial assets				
Other shares and participations carried at cost[1]	3,036	2,756	3,032	3,032
Total	**3,036**	**2,756**	**3,032**	**3,032**
Financial liabilities at fair value through profit or loss				
Derivative liabilities[2]	—	12,545	—	11,019
Total	**—**	**12,545**	**—**	**11,019**
Other financial liabilities				
Hybrid Capital	8,543	9,606	8,883	10,085
Other non-current interest-bearing liabilities	97,716	96,993	134,970	146,190
Other non-current noninterest-bearing liabilities	6,541	6,541	5,864	5,864
Current interest-bearing liabilities	72,410	67,879	50,204	49,958
Trade payables and other liabilities	29,380	29,380	24,294	24,294
Advance payments received	—	—	44	44
Total	**214,590**	**210,399**	**224,259**	**236,435**

For assets and liabilities with a remaining maturity of less than three months (e.g. ,cash and bank balances, trade receivables and other receivables, and trade payables and other payables) fair value is considered to be equal to the carrying amount.

1) Impairment of other shares and participations accounted for at cost is not available because the decline in value is not considered to be permanent.

2) The carrying amount of derivatives is included in related items, i.e.,in the hedged items or in the interim entries, with a net value of SEK 4,528 million (3,960).

Note 34 Collateral

	2012	2011
Blocked bank funds as securityfor trading on Nord Pool	58	—
Assets pledged to the Swedish insurance company PRI Pensionsgaranti as security for credit insurance for pension obligations in Vattenfall's Swedish operations	6	—
Blocked bank funds as security for guarantees issued by bank	38	79
Total	102	79

To fulfil the requirements for security in the derivative market, in its financial operations Vattenfall has pledged security to counterparties for the negative fair value of derivative positions. As per 31 December 2012 this security amounted to SEK 1,258 million (1,381). The counterparties are obligated to repay this security to Vattenfall in the event the negative fair value decreases. The amount is reported as an asset on the balance sheet under short-term investments. See also Note 27 to the Parent Company accounts. In a similar manner, counterparties of Vattenfall have pledged security to Vattenfall in the financial operations. Security received amounted to SEK 10 million (0) for energy trading and SEK 7,170 million (7,369) for financial operations as per 31 December 2012. The amount is reported as a liability on the balance sheet under interest-bearing liabilities (short-term). See also Note 30 to the Parent Company accounts.

In connection with the change in funding for Swedish occupational pensions, Vattenfall AB has pledged shares in Vattenfall Eldistribution AB to the insurance company PRI Pensionsgaranti as security for the credit insurance that is required to fund the pensions.

Note 35 Contingent liabilities

	2012	2011
Guarantees		
of which for lending by:		
subsidiaries, associated companies and other	7,725	9,962
Swedish Nuclear Waste Fund	12,025	8,698
Contract guarantees provided by order of subsidiaries	8,943	12,754
Guarantees provided as collateral for the subsidiaries within Vattenfall Energy Trading's energy trading	5,472	5,851
Other contingent liabilities	7,622	4,778
Total	41,787	42,043

The Parent Company's contingent liabilities pertaining to subsidiaries amounted to SEK 40,633 million (41,054), which are included in the reported contingent liabilities.

In 2009 Vattenfall AB, together with its subsidiary SKB (the Swedish Nuclear Fuel and Waste Management Company) and the other part-owners of that company, signed a long-term cooperation agreement with the Östhammar and Oskarshamn municipalities. The agreement covers the period 2010 to approximately 2025 and regulates development efforts in association with the implementation of the Swedish nuclear waste programme. Through development initiatives in areas such as training, enterprise and infrastructure, over time the parties will generate value-added worth SEK 1,500 million to SEK 2,000 million. The parties are to finance the development efforts in proportion to their ownership interests. The Vattenfall Group's ownership interest is 56%. Implementation of the efforts is being carried out across two periods: a period before all necessary permits have been received (Period 1), and a period during implementation and operation of the facilities (Period 2). In 2012 Vattenfall reported a provision of SEK 121 million (156) for its share of Period 1 activities.

As security for energy trading conducted by the subsidiary Vattenfall Energy Trading GmbH, Vattenfall AB has issued guarantees for a total value of SEK 21,098 million (19,844). As per 31 December 2012, utilised guarantees totalling approximately SEK 5,422 million (5,643) are included in the reported contingent liabilities.

Atomic liability in Sweden is strict and limited to 300 million Special Drawing Rights (SDRs) (10,014), corresponding to SEK 3,004 million (3,189), which means that the companies that are owners of nuclear power plants are only liable for damage to the surrounding environment up to this amount. The obligatory atomic liability insurance for this amount is issued by the Nordic Atomic Insurance Pool and by the mutual company ELINI (European Liability Insurance for the Nuclear Industry).

According to the Swedish Act (2006:647) on the Financing of Future Expenses for Nuclear Waste Management, Sweden's nuclear power companies are required to pledge security to the Swedish state (the Swedish Nuclear Waste Fund) as a guarantee that sufficient funds exist to cover the future costs of nuclear waste management. The security is pledged in the form of guarantee commitments to the owners of the nuclear power companies. In a decision made on 22 December 2011, the Swedish government set new guarantee amounts for the years 2012–2014. As security for the subsidiaries Forsmarks Kraftgrupp AB and Ringhals AB, Vattenfall AB has made guarantee commitments for a combined value of SEK 12,025 million (8,698). The amounts are included in the reported contingent liabilities. Two types of guarantees have been issued. The first guarantee – so-called Financing Security, totalling SEK 6,821 million – is intended to cover the requisite need for fees that have been decided on but not yet been paid in during the so-called earnings period (25 years of operation). The second guarantee, amounting to SEK 5,204 million, pertains to future cost increases stemming from unforeseen events (so-called Complementary Security). The amounts for both of these types of security have been determined based on a probability-based risk analysis in which the former amount has been determined as such that there is a 50% probability that it, together with currently funded amounts (the median value), will provide full cost coverage. The latter amount essentially consists of the supplement that would be required if the corresponding probability was 90%.

On 17 September 2012 Vattenfall's German subsidiary Vattenfall Europe AG was merged with its parent company Vattenfall Deutschland GmbH, which at the same time was renamed Vattenfall GmbH. Vattenfall GmbH is 100%-owned by Vattenfall AB. As a result of the merger the domination agreement (Beherrschungsvertrag) from 2008 between Vattenfall Europe AG and Vattenfall AB no longer applies.

Note 36 Commitments under consortium agreements

See Note 52 to the consolidated accounts.

Note 37 Average number of employees and personnel costs

	2012			2011		
Average number of employees	Men	Women	Total	Men	Women	Total
Sweden	883	466	**1,349**	719	340	**1,059**

Personnel costs	2012	2011
Salaries and other remuneration	**987**	**800**
Social security expenses	**779**	**464**
(of which pension costs)[1]	**(285)**	**(201)**
Total	1,766	1,264

1) SEK 7 million (7) of the pension costs are attributable to senior executives, i.e., presidents and vice presidents and former presidents and vice presidents. The company's outstanding pension obligations attributable to these executives total SEK 3 million (3).

None of the board members receive any pension benefits in connection with their board duties.

	2012			2011		
Salaries and other remuneration	Senior executives[1]	Other employees	Total	Senior executives[1]	Other employees	Total
Sweden	22	965	**987**	18	782	**800**

1) Senior executives comprise board members and deputy board members as well as presidents and vice presidents. The term also refers to former board members and deputy board members, former presidents and vice presidents, and other senior executives who are members of the Executive Group Management.

Total salaries and other remunerations for directors and presidents include bonuses of SEK 0 million (0).
For benefits for senior executives of Vattenfall AB, see Note 53 to the consolidated accounts.

Note 38 Gender distribution among senior executives

	Women, %		Men, %	
	2012	2011	2012	2011
Gender distribution among board members	29	31	71	69
Gender distribution among other senior executives	22	20	78	80

Note 39 Related party disclosures

See Note 55 to the consolidated accounts.

Note 40 Specification of the cash flow statement

Other, incl. non-cash items

	2012	2011
Unrealised foreign exchange gains/losses	-2,055	-3,096
Changes in interest receivables	-475	-721
Changes in interest liabilities	1,329	1,310
Group contributions	2,850	941
Changes in provisions	141	-4
Changes in appropriations	4,830	-3,253
Other	398	—
Total	**7,018**	**-4,823**

Note 41 Events after the balance sheet date

See Note 56 to the consolidated accounts.

Auditor's report

To the annual meeting of the shareholders of Vattenfall AB, corporate identity number 556036-2138

Report on the annual accounts and consolidated accounts

We have audited the annual accounts and consolidated accounts of Vattenfall AB for the year 2012, except for the corporate governance statement on pages 32–39. The annual accounts and consolidated accounts of the company are included in the printed version of this document on pages 4, 7–8 and 19–110.

Responsibilities of the Board of Directors and the President for the annual accounts and consolidated accounts

The Board of Directors and the President are responsible for the preparation and fair presentation of these annual accounts in accordance with the Annual Accounts Act and of the consolidated accounts in accordance with International Financial Reporting Standards, as adopted by the EU, and the Annual Accounts Act, and for such internal control as the Board of Directors and the President determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

Auditor's responsibility

Our responsibility is to express an opinion on these annual accounts and consolidated accounts based on our audit. We conducted our audit in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. Those standards require that we comply with ethical requirements and plan and perform the audit to obtain reasonable assurance about whether the annual accounts and consolidated accounts are free from material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the annual accounts and consolidated accounts. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the annual accounts and consolidated accounts, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the company's preparation and fair presentation of the annual accounts and consolidated accounts in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the company's internal control. An audit also includes evaluating the appropriateness of accounting policies used and the reasonableness of accounting estimates made by the Board of Directors and the President, as well as evaluating the overall presentation of the annual accounts and consolidated accounts.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinions.

Opinions

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2012 and of its financial performance and its cash flows for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2012 and of their financial performance and cash flows for the year then ended in accordance with International Financial Reporting Standards, as adopted by the EU, and the Annual Accounts Act. Our opinions do not cover the corporate governance statement on pages 32–39. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the annual meeting of shareholders adopt the income statement and balance sheet for the Parent Company and the Group.

Report on other legal and regulatory requirements

In addition to our audit of the annual accounts and consolidated accounts, we have also audited the proposed appropriations of the company's profit or loss and the administration of the Board of Directors and the President of Vattenfall AB for the year 2012. We have also conducted a statutory examination of the corporate governance statement.

Responsibilities of the Board of Directors and the President

The Board of Directors is responsible for the proposal for appropriations of the company's profit or loss. The Board of Directors and the President are responsible for administration under the Companies Act and that the corporate governance statement has been prepared in accordance with the "Guidelines for external reporting by state-owned companies".

Auditor's responsibility

Our responsibility is to express an opinion with reasonable assurance on the proposed appropriations of the company's profit or loss and on the administration based on our audit. We conducted the audit in accordance with generally accepted auditing standards in Sweden.

As a basis for our opinion on the Board of Directors' proposed appropriations of the company's profit or loss, we examined the Board of Directors' reasoned statement and a selection of supporting evidence in order to be able to assess whether the proposal is in accordance with the Companies Act.

As a basis for our opinion concerning discharge from liability, in addition to our audit of the annual accounts and consolidated accounts, we examined significant decisions, actions taken and circumstances of the company in order to determine whether any member of the Board of Directors or the President is liable to the company. We also examined whether any member of the Board of Directors or the President has, in any other way, acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

We believe that the audit evidence which we have obtained is sufficient and appropriate in order to provide a basis for our opinions.

Furthermore, we have read the corporate governance statement and based on that reading and our knowledge of the company and the Group we believe that we have obtained a sufficient basis for our opinion. This means that our statutory examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

Opinions

We recommend to the annual meeting of shareholders that the profit be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the President be discharged from liability for the financial year.

A corporate governance statement has been prepared, and its statutory content is consistent with the other parts of the annual accounts and the consolidated accounts.

Stockholm, 20 March 2013

Ernst & Young AB
Hamish Mabon
Authorised Public Accountant

Combined Assurance Report

Auditor's Combined Assurance Report on the Vattenfall AB's Annual Report 2012 including Sustainability Report

To the readers of the Vattenfall AB's Annual Report 2012 including Sustainability Report

Introduction

We have been engaged by the Board of Directors of Vattenfall AB (hereafter referred to as Vattenfall) to perform an examination on the 2012 Sustainability Report. The Sustainability Report consists of information disclosed in Vattenfall's 2012 Annual Report and in the separate Sustainability Performance Report (hereafter refered to as Sustainability Report). The Board of Directors and the Executive Management are responsible for ongoing activities regarding the environment, health & safety, quality, social responsibility and sustainable development, and for the preparation and presentation of the Sustainability Report in accordance with the applicable criteria. Our responsibility is to express a conclusion on the Sustainability Report based on our examination.

Scope of the Examination

We have performed the assurance engagement in accordance with RevR 6 *Assurance of Sustainability Reports* issued by FAR. The objective of an audit is to obtain reasonable assurance that the information in the Sustainability Report is free from material misstatement. An audit includes examining, on a test basis, evidence supporting the quantitative and qualitative information in the Sustainability Report. A review is mainly limited to making inquiries of personnel responsible for sustainability issues, and applying analytical and other review procedures. Hence, the conclusion based on our review procedures does not provide the same level of assurance as the conclusion of our audit. Since this assurance engagement is combined, our conclusions regarding the audit and the review will be presented in separate sections.

Our assurance engagement includes examination of the following areas, with the purpose of either providing reasonable assurance (hereafter referred to as audit) or limited assurance (hereafter referred to as review). Our audit is limited to the following information:

- The procedures for the collection, compilation, evaluation, validation and aggregation of 2012 data from the Production, Distribution and Sales, and Nuclear Power Business Division, on:
  - CO_2 emissions from reporting units
  - Workplace safety from reporting units, including number of injuries, absentee rates and fatalities.

Further, our review included further the following information:

- The procedures for the collection, compilation, evaluation, validation and aggregation of 2012 Group-wide data on:
  - Gender equality and age diversity of governance (BoD, EGM) and in managerial levels in the Group
  - Impact of Vattenfall's operations on biodiversity
  - The role of renewables in Vattenfall's transition towards a new energy system
  - Implementation and follow-up of the Code of Conduct for Suppliers and ethical clauses
- The Group-wide systems, structures, processes and controls (e.g. quality tests and validations) for managing Health, Safety and Environment (including status of OHSAS 18001 & ISO 14001)
- The methodology and reporting/validation processes that Vattenfall at group level has put in place:
  - for the preparation of the Sustainability Report, as described in the section "About the Report", and
  - whether the information presented in the Sustainability Report meets its objectives and was set up in accordance with the Global Reporting Initiative's Reporting Guidelines at application level B+.

Our review is to verify that the information in the Sustainability Report of Vattenfall is, in all material respects, a reliable and adequate representation of the policy, activities, events and performance with respect to corporate responsibility during 2012. Our engagement does not provide any assurance relating to future information such as estimates, expectations or targets, or their achievability. The scope of the Sustainability Report including any inherent limitations that could affect the reliability of the information contained therein is set out in the section "Report profile, scope and boundaries" of the Sustainability Report.

The criteria on which our review are based are the parts of the CSR Reporting Guidelines G3, published by The Global Reporting Initiative (GRI), which are applicable to the Sustainability Report, as well as the accounting and calculation principles that Vattenfall has developed and disclosed. These criteria are presented on page 5 in the Sustainability Report. We consider these criteria suitable for the preparation of the Sustainability Report.

Review Procedures

The main procedures of our review have included the following:

a. An update of our knowledge and understanding of Vattenfall's organisation and activities
b. An assessment of suitability and application of the criteria regarding the stakeholders' need for information
c. An assessment of the outcome of the Company's stakeholder dialogue
d. An interviews with the responsible management, at Group level, subsidiary level, and at selected business units in order to assess if the qualitative and quantitative information stated in the Sustainability Report is complete, accurate and sufficient
e. Shared internal and external documents in order to assess if the information stated in the Sustainability Report is complete, accurate and sufficient
f. An evaluation of the design of the systems and processes used to obtain, manage and validate sustainability information
g. An evaluation of the model used to calculate CO_2 emissions
h. analytical procedures of the information stated in the Sustainability Report
i. A reconciliation of financial information with Vattenfall's Annual Report for the financial year 2012
j. An assessment of Vattenfall's declared application level according to GRI guidelines
k. An assessment of the overall impression of the Sustainability Report, and its format, taking into consideration the consistency of the stated information with applicable criteria

Audit Procedures

Our audit included the following procedures:

a. Identifying inherent risks relating to the reliability of the information and investigating the extent to which these risks are covered by internal controls
b. Performing tests of control to review the existence and effectiveness of internal controls aimed at reviewing the adequacy and reliability of the information
c. Following the audit trail on a test basis, from the source data to the information contained in the Sustainability Report 2012
d. Performing tests of details on a test basis aimed at reviewing the reliability of the primary information

We consider the evidence collected during our examination to be sufficient and appropriate in order to support our conclusions listed below.

Conclusion

Our conclusion based on our review

Based on our procedures performed, nothing has come to our attention that causes us to believe that the information in the Vattenfall's Sustainability Report which has been subject to our review has not, in all material respects, been prepared in accordance with the above stated criteria.

Our conclusion based on our audit

In our opinion, the information in Vattenfall's Sustainability Report which has been subject to our audit has, in all material respects, been prepared in accordance with the above stated criteria.

Stockholm, March 20, 2013
Ernst & Young AB

Hamish Mabon
Authorised Public Accountant

Dr. Sam Vaseghi

Quarterly review

	2011				2012			
Amounts in SEK million	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Income statement items								
Net sales	51,868	40,443	38,276	50,453	48,994	36,703	33,679	47,937
EBITDA	16,932	12,566	9,593	15,447	23,826	9,730	10,564	10,368
Operating profit (EBIT)	11,842	-3,239	4,447	10,159	18,956	4,775	-2,735	5,179
Underlying operating profit	12,294	5,382	5,774	7,343	11,675	4,818	4,517	6,737
Financial income	792	802	930	1,319	837	173	872	754
Financial expenses	-2,685	-2,392	-3,730	-3,947	-3,291	-3,377	-1,707	-2,135
Profit before tax	9,949	-4,829	1,647	7,531	16,502	1,571	-3,570	3,798
Profit for the period	7,203	-3,235	1,345	5,103	13,855	877	-3,951	6,443
- of which, attributable to owner of the Parent Company	7,117	-2,742	1,106	5,602	13,723	899	-4,192	6,506
- of which, attributable to non-controlling interests (minority interests)	86	-493	239	-499	132	-22	241	-63
Cash flow items								
Funds from operations (FFO)	12,156	6,125	9,855	10,120	12,717	3,947	6,172	11,583
Free cash flow	5,063	8,410	6,434	-2,270	2,041	4,543	7,928	-1,893
Balance sheet items								
Cash and cash equivalents and short-term investments	39,556	39,197	31,346	28,685	45,710	42,314	46,966	46,495
Equity	140,948	132,493	133,223	138,931	153,877	150,944	143,056	155,218
- of which, attributable to owner of the Parent Company	133,754	125,715	126,032	131,988	146,769	143,470	135,139	146,428
- of which, attributable to non-controlling interests (minority interests)	7,194	6,778	7,191	6,943	7,108	7,474	7,917	8,790
Interest-bearing liabilities	178,330	181,893	175,755	170,350	166,545	165,739	161,297	160,261
Net debt	138,282	142,153	143,808	141,089	120,597	123,207	114,143	111,907
Adjusted net debt	169,682	179,896	180,271	176,031	155,389	156,498	144,387	153,943
Provisions	84,799	93,357	93,873	91,719	92,041	90,419	88,340	95,824
Noninterest-bearing liabilities	130,671	115,447	121,637	123,558	114,040	106,531	106,843	117,061
Capital employed, average	329,962	325,285	315,428	317,799	319,236	318,561	303,896	311,594
Net assets, weighted average value	288,502	284,639	283,848	283,957	282,657	280,674	276,985	272,260
Balance sheet total	534,748	523,190	524,488	524,558	526,503	513,633	499,536	528,364

	2011				2012			
Amounts in SEK million	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
The key ratios are presented as percentages (%) or times (x)								
Operating margin, %	22.8	-8.0	11.6	20.1	38.7	13.0	-8.1	10.8
Operating margin, %[1]	23.7	13.3	15.1	14.6	23.8	13.1	13.4	14.1
Pre-tax profit margin, %	19.2	-11.9	4.3	14.9	33.7	4.3	-10.6	7.9
Pre-tax profit margin, %[1]	20.1	9.0	7.7	12.6	20.5	5.3	10.8	11.1
Return on equity, %[2]	12.6	6.6	6.3	8.6	13.4	15.7	11.7	12.1
Return on capital employed, %[2]	9.6	6.0	5.7	7.3	9.7	12.3	10.3	8.4
Return on capital employed, %[1,2]	9.7	8.8	10.3	9.7	9.6	9.5	9.3	8.9
Return on net assets, %[2]	9.9	5.7	5.3	7.1	9.6	12.5	10.0	8.5
Return on net assets, %[1,2]	10.0	9.0	10.4	9.8	9.5	9.4	9.0	9.0
EBIT interest cover, (x)[2]	4.7	3.0	2.9	2.6	3.2	3.6	3.7	3.7
EBIT interest cover, (x)[1,2]	4.8	4.3	5.1	3.3	3.1	2.8	3.4	3.9
FFO interest cover, (x)[2]	7.0	6.2	6.9	4.9	4.8	4.3	4.7	5.7
FFO interest cover, net, (x)[2]	9.0	8.1	8.6	5.8	5.7	4.9	5.7	6.6
Cash flow interest cover after maintenance investments, (x)[2]	6.1	5.0	5.1	3.0	2.6	2.1	2.5	3.0
FFO/gross debt, %[2]	23.8	20.3	22.6	22.5	23.3	22.1	20.4	21.5
FFO/net debt, %[2]	30.7	26.0	27.7	27.1	32.2	29.7	28.9	30.8
FFO/adjusted net debt,%[2]	25.0	20.5	22.1	21.7	25.0	23.4	22.8	22.4
EBITDA/net financial items, (x)	11.8	10.4	3.3	6.7	12.9	4.2	20.2	6.9
EBITDA/net financial items, (x)[1]	12.2	17.5	3.7	5.4	9.0	4.2	34.0	7.9
Equity/total assets, %	26.2	25.3	25.4	26.5	29.2	29.4	28.6	29.4
Gross debt/equity, %	126.5	137.3	131.9	122.6	108.2	109.8	112.8	103.2
Net debt/equity, %	98.1	107.3	107.9	101.6	78.4	81.6	79.8	72.1
Gross debt/gross debt plus equity, %	55.9	57.9	56.9	55.1	52.0	52.3	53.0	50.8
Net debt/net debt plus equity, %	49.5	51.8	51.9	50.4	43.9	44.9	44.4	41.9
Net debt/EBITDA, (x)	2.4	2.6	2.6	2.6	2.0	2.1	1.9	2.1
Adjusted net debt/EBITDA, (x)	3.0	3.2	3.3	3.2	2.5	2.7	2.4	2.8
Other information								
Investments	6,199	7,854	9,122	12,575	5,772	6,200	7,611	9,998
Electricity generation, TWh	49.8	37.7	35.5	43.7	48.4	41.1	39.7	49.7
Average number employees	37,768	37,524	37,540	34,685	33,104	33,104	33,071	32,794

1) Based on Underlying operating profit, i.e., Operating profit excl. items affecting comparability.
2) Last 12-month values.

Comments
Vattenfall's earnings vary sharply during the year. Normally, the large part of annual profit is generated during the first and fourth quarters, when demand for electricity and heat is at its highest.

Several-year overview

	Swedish GAAP		IFRS								
Amounts in SEK million	2003	2004	2004	2005	2006	2007	2008	2009	2010	2011	2012
Income statement items											
Net sales	111,935	111,016	111,016	123,794	135,802	143,639	164,549	205,407	213,572	181,040	167,313
EBITDA	24,450	31,347	33,161	43,175	43,938	45,821	45,960	51,777	60,706	54,538	54,488
Operating profit (EBIT)	14,868	19,501	17,887	28,363	27,821	28,583	29,895	27,938	29,853	23,209	26,175
Underlying operating profit	14,605	18,682	20,102	25,377	27,448	28,497	30,220	31,294	36,838	30,793	27,747
Financial income	2,267	1,772	2,969	3,810	3,839	2,276	3,412	2,814	2,514	3,843	2,636
Financial expenses	-5,203	-4,020	-6,297	-6,013	-6,135	-6,926	-9,809	-13,018	-10,944	-12,754	-10,510
Profit before tax	11,932	17,253	14,559	26,160	25,525	23,933	23,498	17,734	21,423	14,298	18,301
Profit for the year	9,529	12,348	9,604	20,518	19,858	20,686	17,763	13,448	13,185	10,416	17,224
- of which, attributable to owner of the Parent Company	9,123	11,776	8,944	19,235	18,729	19,769	17,095	12,896	12,997	11,083	16,936
- of which, attributable to non-controlling interests (minority interests)	406	572	660	1,283	1,129	917	668	552	188	-667	288
Cash flow items											
Funds from operations (FFO)	18,804	24,159	24,302	31,386	35,673	34,049	30,735	36,700	40,108	38,256	34,419
Free cash flow	11,606	15,684	15,684	14,341	23,178	19,650	18,963	27,566	23,846	17,637	12,619
Balance sheet items											
Cash and cash equivalents and short-term investments	14,647	13,616	13,616	14,074	22,168	22,659	40,236	56,940	43,873	28,685	46,495
Equity	64,328	73,947	85,551	90,909	107,674	124,132	140,886	142,404	133,621	138,931	155,218
- of which, attributable to owner of the Parent Company	54,949	64,759	75,437	80,565	96,589	111,709	129,861	135,620	126,704	131,988	146,428
- of which, attributable to non-controlling interests (minority interests)	9,379	9,188	10,114	10,344	11,085	12,423	11,025	6,784	6,917	6,943	8,790
Interest-bearing liabilities	85,631	73,013	73,013	78,663	71,575	67,189	107,347	213,494	188,277	170,350	160,261
Net debt	66,890	55,411	55,411	64,343	49,407	43,740	66,000	154,987	144,109	141,089	111,907
Adjusted net debt	—	—	—	—	—	—	—	—	—	176,031	153,943
Provisions	—	—	61,941	65,123	66,094	73,985	89,799	91,100	87,822	91,719	95,824
Noninterest-bearing liabilities	115,006	109,955	64,700	90,373	77,823	72,930	107,795	155,129	131,712	123,558	117,061
Capital employed, average	—	—	—	—	—	—	—	—	—	317,799	311,594
Net assets, weighted average value	124,229	123,423	134,125	143,001	151,155	157,252	179,114	245,016	293,298	283,957	272,260
Balance sheet total	264,965	256,915	285,205	325,068	323,166	338,236	445,827	602,127	541,432	524,558	528,364

	Swedish GAAP		IFRS								
Amounts in SEK million	2003	2004	2004	2005	2006	2007	2008	2009	2010	2011	2012
The key ratios are presented as percentages (%) or times (x)											
Operating margin, %	13.3	17.6	16.1	22.9	20.5	19.9	18.2	13.6	14.0	12.8	15.6
Operating margin, %[1]	13.0	16.8	18.1	20.5	20.2	19.8	18.4	15.2	17.2	17.0	16.6
Pre-tax profit margin, %	10.7	15.5	13.1	21.1	18.8	16.7	14.3	8.6	10.0	7.9	10.9
Pre-tax profit margin, %[1]	10.4	14.8	15.1	18.7	18.5	16.6	14.5	10.2	13.3	12.9	12.5
Return on equity, %	19.2	21.4	12.2	23.2	19.1	17.6	13.6	9.5	10.0	8.6	12.1
Return on capital employed, %	—	—	—	—	—	—	—	—	—	7.3	8.4
Return on capital employed, %[1]	—	—	—	—	—	—	—	—	—	9.7	8.9
Return on net assets, %	12.0	15.8	12.2	18.4	17.1	16.6	15.1	10.0	9.1	7.1	8.5
Return on net assets, %[1]	11.8	15.1	13.9	16.3	16.8	16.6	15.3	11.4	11.4	9.8	9.0
EBIT interest cover, (x)	3.3	5.3	4.4	7.6	7.2	6.7	4.5	3.1	4.1	2.6	3.7
EBIT interest cover, (x)[1]	3.2	5.1	5.0	6.9	7.1	6.7	4.6	3.4	5.0	3.3	3.9
FFO interest cover, (x)	4.6	7.0	6.6	8.9	9.7	8.6	5.4	4.8	6.2	4.9	5.7
FFO interest cover, net, (x)	7.4	11.7	8.9	15.1	15.9	12.2	7.1	5.6	7.5	5.8	6.6
Cash flow interest cover after maintenance investments, (x)	3.2	4.9	5.5	5.5	7.9	6.4	4.1	4.3	4.6	3.0	3.0
FFO/gross debt, %	22.0	33.1	30.0	39.9	49.8	50.7	28.6	17.2	21.3	22.5	21.5
FFO/net debt, %	28.1	43.6	43.9	48.8	72.2	77.8	46.6	23.7	27.8	27.1	30.8
FFO/adjusted net debt,%	—	—	—	—	—	—	—	17.9	23.1	21.7	22.4
EBITDA/net financial items, (x)	8.3	13.9	10.8	19.3	18.4	15.1	9.1	6.5	9.8	6.9	8.8
EBITDA/net financial items, (x)[1]	8.2	13.6	11.5	18.0	18.2	15.0	9.2	6.9	11.0	7.9	9.1
Equity/total assets, %	24.4	28.8	30.0	28.0	33.3	36.7	31.6	23.7	24.7	26.5	29.4
Gross debt/equity, %	133.0	98.7	85.3	86.5	66.5	54.1	76.2	149.9	140.9	122.6	103.2
Net debt/equity, %	104.0	74.9	64.8	70.8	45.9	35.2	46.8	108.8	107.8	101.6	72.1
Gross debt/gross debt plus equity, %	57.1	49.7	46.0	46.4	39.9	35.1	43.2	60.0	58.5	55.1	50.8
Net debt/net debt plus equity, %	51.0	42.8	39.3	41.4	31.5	26.1	31.9	52.1	51.9	50.4	41.9
Net debt/EBITDA, (x)	2.7	1.8	1.7	1.5	1.1	1.0	1.4	3.0	2.4	2.6	2.1
Adjusted net debt/EBITDA, (x)	—	—	—	—	—	—	—	4.0	2.9	3.2	2.8
Other information											
Dividend to owner of the Parent Company	2,400	5,600	5,600	5,800	7,500	8,000	6,900	5,240	6,500	4,433	6,774[2]
Investments	11,356	12,601	12,731	24,497	17,220	18,964	42,296	102,989	41,794	35,750	29,581
Electricity generation, TWh	155.8	167.1	167.1	169.1	165.4	167.6	162.1	158.9	172.4	166.7	178.9
Average number employees	35,296	33,017	33,017	32,231	32,308	32,396	32,801	36,593	38,459	37,679	33,059

1) Based on Underlying operating profit, i.e., Operating profit excl. items affecting comparability.

2) Proposed dividend.

Definitions and calculations of key ratios

Figures for the Group in 2012. Amounts in SEK million unless otherwise stated.

EBIT = Earnings Before Interest and Tax.

EBITDA = Earnings Before Interest, Tax, Depreciation and Amortisation. Also other close-down costs than impairment losses pertaining to the close-down of German nuclear power plants during 2011 are here treated as Amortisation.

Items affecting comparability = Capital gains and capital losses from shares and other non-current assets, impairment losses and impairment losses reversed pertaining to non-current assets, and other non-recurring items. Also included here are unrealised changes in the fair value of energy derivatives, which according to IAS 39 can not be recognised using hedge accounting, and unrealised changes in the fair value of inventories.

Underlying operating profit = Operating profit (EBIT) excluding items affecting comparability.

FFO = Funds From Operations.

Free cash flow = Cash flow from operating activities less maintenance investments.

Hybrid Capital = Perpetual subordinated securities, junior to all Vattenfall's unsubordinated debt instruments. Reported as interest-bearing non-current liabilities.

Capital employed = Balance sheet total less financial assets and noninterest-bearing liabilities

Net assets = Balance sheet total less noninterest-bearing liabilities, provisions, interest-bearing receivables, funds in the Swedish Nuclear Waste Fund, cash and cash equivalents, short-term investments.

Net debt = Interest-bearing liabilities less loans to non-controlling interests (minority owners) in foreign subsidiaries, cash and cash equivalents, short-term investments.

Adjusted net debt = For calculation, see page 55.

The key ratios are presented as percentages (%) or times (x).

Key ratios based on full year amounts 2012:

Operating margin, % $= 100 \times \frac{\text{Operating profit}}{\text{Net sales}} = \frac{26{,}175}{167{,}313} =$ 15.6

Operating margin excl. items affecting comparability, % $= 100 \times \frac{\text{Underlying operating profit}}{\text{Net sales}} = \frac{27{,}747}{167{,}313} =$ 16.6

Pre-tax profit margin, % $= 100 \times \frac{\text{Profit before tax}}{\text{Net sales}} = \frac{18{,}301}{167{,}313} =$ 10.9

Pre-tax profit margin excl. items affecting comparability, % $= 100 \times \frac{\text{Profit before tax excl. items affecting comparability}}{\text{Net sales}} = \frac{20{,}963}{167{,}313} =$ 12.5

Return on equity, %	= 100 x	Profit for the period attributable to owner of the Parent Company	16,936	=	12.1
		Average equity for the period attributable to owner of the Parent Company excl. the Reserve for cash flow hedges	140,318		
Return on capital employed, %	= 100 x	Operating profit (EBIT)	26,175	=	8.4
		Capital employed, average	311,594		
Return on capital employed excl. items affecting comparability, %	= 100 x	Underlying operating profit	27,747	=	8.9
		Capital employed, average	311,594		
Return on net assets, %	= 100 x	Operating profit (EBIT) + discounting effects attributable to provisions	23,051	=	8.5
		Weighted average of net assets for the period	272,260		
Return on net assets excl. items affecting comparability, %	= 100 x	Underlying operating profit + discounting effects attributable to provisions	24,623	=	9.0
		Weighted average of net assets for the period	272,260		
EBIT interest cover, (x)	=	Operating profit (EBIT) + financial income excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	27,381	=	3.7
		Financial expenses excl. discounting effects attributable to provisions	7,386		
EBIT interest cover excl. items affecting comparability, (x)	=	Underlying operating profit + financial income excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	28,953	=	3.9
		Financial expenses excl. discounting effects attributable to provisions	7,386		
FFO interest cover, (x)	=	Funds from operations (FFO) + financial expenses excl. discounting effects attributable to provisions	41,805	=	5.7
		Financial expenses excl. discounting effects attributable to provisions	7,386		
FFO interest cover, net, (x)	=	Funds from operations (FFO) + net financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	40,599	=	6.6
		Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	6,180		
Cash flow interest cover after maintenance investments, (x)	=	Cash flow from operating activities less maintenance investments + financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	18,993	=	3.0
		Financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	6,374		
FFO/gross debt, %	= 100 x	Funds from operations (FFO)	34,419	=	21.5
		Interest-bearing liabilities	160,261		
FFO/net debt, %	= 100 x	Funds from operations (FFO)	34,419	=	30.8
		Net debt	111,907		
FFO/adjusted net debt, %	= 100 x	Funds from operations (FFO)	34,419	=	22.4
		Adjusted net debt	153,943		
EBITDA/net financial items, (x)	=	Operating profit before depreciation and amortisation (EBITDA)	54,488	=	8.8
		Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	6,180		
EBITDA excl. items affecting comparability/ net financial items, (x)	=	Operating profit before depreciation and amortisation (EBITDA) excl. items affecting comparability	56,060	=	9.1
		Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	6,180		

Key ratios based on the balance sheet per 31 December 2012:

Equity/total assets, %	= 100 x	Equity	155,218	=	29.4
		Balance sheet total	528,364		
Gross debt/equity, %	= 100 x	Interest-bearing liabilities	160,261	=	103.2
		Equity	155,218		
Net debt/equity, %	= 100 x	Net debt	111,907	=	72.1
		Equity	155,218		
Gross debt/gross debt plus equity, %	= 100 x	Interest-bearing liabilities	160,261	=	50.8
		Interest-bearing liabilities + equity	315,479		
Net debt/net debt plus equity, %	= 100 x	Net debt	111,907	=	41.9
		Net debt + equity	267,125		
Net debt/EBITDA, (x)	=	Net debt	111,907	=	2.1
		Operating profit before depreciation and amortisation (EBITDA)	54,488		
Adjusted net debt/EBITDA, (x)	=	Adjusted net debt	153,943	=	2.8
		Operating profit before depreciation and amortisation (EBITDA)	54,488		

Facts about Vattenfall's markets

	Sweden		Finland		Denmark		Germany		Poland		Netherlands		Belgium		UK		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011[1]
Installed capacity electricity, MW																		
Hydro power[2]	8,194	8,215	126	126	–	–	2,880	2,880	–	–	24	24	–	–	–	–	11,224	11,245
Nuclear power	6,852	6,815	–	–	–	–	–	–	–	–	–	–	–	–	–	–	6,852	6,815
Fossil-based power	1,212	1,212	–	–	1,309	1,333	11,444	11,006	–	878	3,357	3,680	–	–	–	–	17,322	18,109
of which, gas	–	–	–	–	–	–	1,729	1,777	–	–	2,474	2,797	–	–	–	–	4,203	4,574
of which, lignite	–	–	–	–	–	–	7,766	7,123	–	–	–	–	–	–	–	–	7,766	7,123
of which, hard coal	–	–	–	–	1,309	1,333	1,318	1,318	–	878	883	883	–	–	–	–	3,510	4,412
of which, oil	1,212	1,212	–	–	–	–	631	788	–	–	–	–	–	–	–	–	1,843	2,000
Wind power	241	245	–	–	411	415	12	13	–	30	311	276	–	5	612	581	1,587	1,565
Biomass, waste	189	185	–	65	128	104	124	123	–	–	2	2	–	–	–	–	443	479
Total electricity	**16,688**	**16,672**	**126**	**191**	**1,848**	**1,852**	**14,460**	**14,022**	**–**	**908**	**3,694**	**3,982**	**–**	**5**	**612**	**581**	**37,428**	**38,213**
Installed capacity heat, MW	**2,313**	**2,255**	**–**	**965**	**1,646**	**1,632**	**10,148**	**10,034**	**–**	**4,707**	**2,472**	**2,987**	**–**	**–**	**–**	**–**	**16,579**	**22,580**
Generated electricity, TWh																		
Hydro power[2]	38.7	31.5	0.6	0.3	–	–	2.8	2.6	–	–	0.1	0.1	–	–	–	–	42.2	34.5
Nuclear power	48.9	42.5	–	–	–	–	–	–	–	–	–	–	–	–	–	–	48.9	42.5
Fossil-based power	0.2	–	–	–	4.1	4.9	64.5	63.3	–	3.7	12.9	13.1	–	–	–	–	81.7[3]	85.0
of which, gas	–	–	–	–	–	–	3.5	3.7	–	–	8.0	8.8	–	–	–	–	11.5	12.5
of which, lignite	–	–	–	–	–	–	55.3	53.5	–	–	–	–	–	–	–	–	55.3	53.5
of which, hard coal	–	–	–	–	4.0	4.9	5.3	6.1	–	3.7	4.9	4.3	–	–	–	–	14.2	19.0
of which, oil	0.2	–	–	–	0.1	–	0.4	–	–	–	–	–	–	–	–	–	0.7	–
Wind power	0.7	0.8	–	–	1.0	1.0	–	–	–	0.1	0.2	0.2	–	–	1.7	1.3	3.6	3.4
Biomass, waste	0.3	0.4	–	0.2	0.6	0.2	1.5	0.4	–	–	0.1	0.1	–	–	–	–	2.5[3]	1.3
Total electricity	**88.8**	**75.2**	**0.6**	**0.5**	**5.7**	**6.1**	**68.8**	**66.3**	**–**	**3.8**	**13.3**	**13.5**	**–**	**–**	**1.7**	**1.3**	**178.9**	**166.7**
Heat sales, TWh																		
Fossil-based power	0.5	0.2	–	0.6	4.9	4.1	14.8	14.4	–	10.3	4.3	3.9	–	–	–	–	24.5	33.5
of which, gas	–	–	–	0.6	–	0.5	4.8	5.0	–	–	4.2	3.9	–	–	–	–	9.0	10.0
of which, lignite	–	–	–	–	–	–	5.0	4.0	–	–	–	–	–	–	–	–	5.0	4.0
of which, hard coal	–	0.1	–	–	4.8	3.6	4.5	5.4	–	10.3	–	–	–	–	–	–	9.3	19.4
of which, oil	0.5	0.1	–	–	0.1	–	0.5	–	–	–	0.1	–	–	–	–	–	1.2	0.1
Biomass, waste	3.6	3.7	–	0.9	0.9	1.7	1.3	0.8	–	0.4	–	–	–	–	–	–	5.8	7.5
Total heat	**4.1**	**3.9**	**–**	**1.5**	**5.8**	**5.8**	**16.1**	**15.2**	**–**	**10.7**	**4.3**	**3.9**	**–**	**–**	**–**	**–**	**30.3**	**41.0**
Gas sales, TWh	–	–	–	0.2	–	–	1.3	1.0	–	–	51.1	49.4	–	3.2	–	–	52.4	53.8

	Sweden		Finland		Denmark		Germany		Poland		Netherlands		Belgium		UK		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011[1]
Sales of electricity, TWh	81.4	67.2	9.9	9.9	8.1	8.0	76.2	82.4	—	7.9	26.6	22.5	—	4.7	0.1	0.4	202.3	203.0
Number of retail customers, electricity	947,000	964,000	362,000	354,000	–	–	2,788,000	2,756,000	–	1,012,000	2,147,000	2,267,000	–	342,000	–	–	6,244,000	7,695,000
Electricity volume, TWh, retail customers	8.7	8.4	2.8	2.6	–	–	8.5	8.8	–	2.8	9.5	9.9	–	1.5	–	–	29.5	34.0
Electricity volume, TWh resellers	3.8	5.1	1.1	1.4	1.6	1.3	15.5	20.2	–	0.7	–	–	–	–	–	–	22.0	28.7
Electricity volume, TWh, industries	34.6[4]	33.7[4]	5.4	5.6	–	–	23.3[5]	19.9[5]	–	4.1	8.0	8.4	–	3.1	–	–	71.3	74.8
Number of network customers	927,000	922,000	–	393,000	–	–	3,401,000	3,240,000	–	1,133,000	–	–	–	–	–	–	4,328,000	5,694,000
Number of gas customers	–	–	–	400	–	–	75,200	11,700	–	–	1,854,700	1,943,100	–	204,800	–	–	1,929,900	2,160,000
Electricity network																		
Transited volume, TWh[6]	73.4	71.1	–	6.1	–	–	26.5	27.0	–	14.6	–	–	–	–	–	–	99.9	118.8
Distribution network, km	179,000	176,000	–	75,000	–	–	136,000	137,000	–	71,000	–	–	–	–	–	–	315,000	459,000
Number of employees (full-year equivalents)																		
Countries	8,931	8,613	52	377	677	649	17,728	19,408	91	99	5,117	5,417	3	–	161	101	32,760	34,664
Group total[7]																	32,794	34,685
CO_2 emissions per country, mtonnes	0.4	0.4	-	0.2	4.0	4.4	70.7	67.8	-	5.8	8.4	8.1	–	–	–	–	83.5	86.7
CO_2 emission allowances in mtonnes CO_2/year, trading period 2008–2012	–	–	0.2	0.2	2.7	2.7	44.1	44.1	–	6.1	7.9	7.9	–	–	–	–	54.9	61.0

1) Certain values for 2011 have been adjusted compared with previously published information.

2) In Germany, mainly pumped storage power.

3) Values have been adjusted compared with previously published information (year-end report 2012)

4) 5.0 TWh (5.5) to Norwegian business customers.

5) 10.7 TWh (6.7) to French business customers.

6) Excluding transited production.

7) There are 34 employees (21) in other countries.

8) Pro rata values for Poland on page 122 include Vattenfall's share of the Polish energy company Enea S.A. The values for 2011 have been adjusted compared with previously published information.

Pro rata — Generation data corresponding to Vattenfall's ownership of the respective facilities

	Sweden		Finland		Denmark		Germany		Poland[8]		Netherlands		Belgium		UK		Total	
	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011	2012	2011[1]
Installed capacity electricity, MW																		
Hydro power[2]	7,800	7,803	126	126	–	–	2,880	2,880	11	11	24	24	–	–	–	–	10,841	10,844
Nuclear power	4,687	4,661	–	–	–	–	282	282	–	–	–	–	–	–	–	–	4,969	4,943
Fossil-based power	1,212	1,212	–	–	1,309	1,333	11,362	11,006	542	1,419	3,480	3,680	–	–	–	–	17,905	18,650
of which, gas	–	–	–	–	–	–	1,696	1,777	–	–	2,597	2,797	–	–	–	–	4,293	4,574
of which, lignite	–	–	–	–	–	–	7,766	7,123	–	–	–	–	–	–	–	–	7,766	7,123
of which, hard coal	–	–	–	–	1,309	1,333	1,269	1,318	542	1,419	883	883	–	–	–	–	4,003	4,953
of which, oil	1,212	1,212	–	–	–	–	631	788	–	–	–	–	–	–	–	–	1,843	2,000
Wind power	241	245	–	–	324	351	28	28	10	31	234	230	–	5	612	581	1,470	1,471
Biomass, waste	189	185	–	65	128	104	101	100	32	32	2	2	–	–	–	–	452	488
Total electricity	**14,129**	**14,106**	**126**	**191**	**1,782**	**1,788**	**14,653**	**14,296**	595	**1,493**	**3,740**	**3,936**	–	**5**	**612**	**581**	**35,637**	**36,396**
Installed capacity heat, MW	**2,183**	**2,118**	–	**961**	**1,646**	**1,632**	**9,685**	**9,946**	–	**4,699**	**3,020**	**2,987**	–	–	–	–	**16,628**	**22,438**
Generated electricity, TWh																		
Hydro power[2]	36.5	29.5	0.6	0.4	–	–	2.8	2.6	–	–	0.1	0.1	–	–	–	–	40.0	32.6
Nuclear power	33.4	28.9	–	–	–	–	2.0	2.1	–	–	–	–	–	–	–	–	35.4	31.0
Fossil-based power	–	–	–	–	4.1	4.4	62.5	62.8	2.2	5.7	12.6	13.2	–	–	–	–	81.4	86.1
of which, gas	–	–	–	–	–	–	3.4	3.8	–	–	7.7	8.8	–	–	–	–	11.1	12.6
of which, lignite	–	–	–	–	–	–	53.6	53.4	–	–	–	–	–	–	–	–	53.6	53.4
of which, hard coal	–	–	–	–	4.0	4.4	5.1	5.6	2.2	5.7	4.9	4.4	–	–	–	–	16.2	20.1
of which, oil	–	–	–	–	0.1	–	0.4	–	–	–	–	–	–	–	–	–	0.5	–
Wind power	0.7	0.8	–	–	1.0	0.8	0.1	0.1	–	0.1	0.5	0.5	–	–	1.7	1.3	4.0	3.6
Biomass, waste	0.3	0.4	–	0.2	0.7	0.7	1.4	1.1	0.1	0.2	0.1	0.1	–	–	–	–	2.6	2.7
Total electricity	**70.9**	**59.6**	**0.6**	**0.6**	**5.8**	**5.9**	**68.8**	**68.7**	2.3	**6.0**	**13.3**	**13.9**	–	–	**1.7**	**1.3**	163.4	156.0
Heat sales, TWh																		
Fossil-based power	0.4	0.2	–	0.7	4.2	4.1	17.1	14.3	0.2	10.4	3.8	4.4	–	–	–	–	25.7	34.1
of which, gas	–	–	–	0.6	–	0.5	5.6	4.9	–	–	3.7	4.4	–	–	–	–	9.3	10.4
of which, lignite	–	–	–	–	–	–	5.9	4.1	–	–	–	–	–	–	–	–	5.9	4.1
of which, hard coal	–	0.1	–	–	4.1	3.6	5.1	5.3	0.2	10.4	–	–	–	–	–	–	9.4	19.4
of which, oil	0.4	0.1	–	0.1	0.1	–	0.5	–	–	–	0.1	–	–	–	–	–	1.1	0.2
Biomass, waste	3.3	3.6	–	0.9	0.8	1.7	1.1	0.6	–	0.4	–	–	–	–	–	–	5.2	7.2
Total heat	**3.7**	**3.8**	–	**1.6**	**5.0**	**5.8**	**18.2**	**14.9**	0.2	**10.8**	**3.8**	**4.4**	–	–	–	–	30.9	41.3
Gas sales, TWh	–	–	–	0.2	–	–	1.7	1.0	–	–	51.9	49.4	–	3.2	–	–	53.6	53.8
CO_2 emissions per country, mtonnes	**0.4**	**0.4**	-	**0.2**	**4.0**	**4.4**	**70.2**	**67.7**	**2.0**	**7.8**	**8.4**	**8.1**	–	–	–	–	85.0	88.6

Footnotes: For explanations, see page 121.

GRI Index

Vattenfall reports in accordance with the Global Reporting Initiative's (GRI) G3 sustainability reporting guidelines in order to measure performance and achieve transparency and international comparability in sustainability performance reporting. Vattenfall has reported in accordance with the GRI guidelines since 2003 and has chosen to report in accordance with Level B since 2011, instead of level A as previously, entailing that the company limits the number of reported indicators and instead focuses on matters that are relevant and important. For further information, see www.globalreporting.org.

Following is a content index for indicators and sector supplements. It includes indicator names and GRI identification numbers and provides references to the pages where relevant information can be found. In addition, relevant UN Global Compact Principles are indicated for each indicator. Statements of status and boundaries are provided in the respective indicator reporting text.

GRI index

Page reference

PR Sustainability Performance Report 2012
AR Annual Report 2012 including Sustainability Report
IFC Inside Front Cover

Indicator		Page	Related UN Global Compact Principles[1]
Profile			
Strategy and analysis			
1.1	CEO statement	AR 5–6	
1.2	Sustainability vision, including key impacts, risks and opportunities	AR 16-22	
Organisational profile			
2.1	Name of the organisation	AR 33	
2.2	Primary brands, products, and/or services	AR 3	
2.3	Operational structure of the organisation	AR 3	
2.4	Location of organisation's headquarters	AR 33	
2.5	Countries where the organisation operates	AR 3	
2.6	Nature of ownership and legal form	AR 3	
2.7	Markets served	AR 3	
2.8	Scale of the reporting organisation	AR 3	
2.9	Significant changes during the reporting period	AR 7–8	
2.10	Awards received	PR 5	
EU1	Installed capacity	AR120	
EU2	Net energy output	AR 120	
EU3	Number of customer accounts	AR 121	
EU4	Length of transmission and distribution lines by voltage	AR 121	
EU5	Allocation of CO_2 emission certificates	AR 121	
Report profile, scope and boundaries			
3.1	Reporting period	PR 5	
3.2	Date of most recent previous report	PR 5	
3.3	Reporting cycle	PR 5	
3.4	Contact point for questions	IFC	
3.5	Process for defining report content	PR 5	
3.6	Boundary of the report	PR 5	
3.7	Limitations on the scope or boundary of the report	PR 5	
3.8	Basis for reporting	PR 5	
3.9	Data measurement techniques, assumptions and estimations	PR 5	
3.10	Explanation of restatements	PR 5	
3.11	Significant changes in scope and boundaries	PR 5	
3.12	GRI content index	AR 123 PR 3–4	
3.13	Combined Assurance Report	AR 112	
Governance and Sustainability management			
4.1	Governance structure	PR 6	
4.2	Highest governance body	PR 6	
4.3	Number of independent and/or non-executive board members	AR 35	
4.4	Recommendations to highest governance body	AR32	
4.5	Compensation to members of the highest governance body	AR 35	
4.6	Board processes to ensure conflicts of interest are avoided	PR 6	
4.7	Procedures for determining the qualifications of the board	AR 34	
4.8	Sustainability principles and status of implementation	PR 6	
4.9	Board procedures for management of sustainable performance	PR 6	
4.10	Procedures for evaluating the board's performance	AR 34	
4.11	Precautionary principle	PR 6	
4.12	Sustainability initiatives and principles endorsed	PR 6	
4.13	Principal memberships in associations and organisations	PR 6	
4.14	Stakeholder groups	PR 7	
4.15	Identification of stakeholders	PR 7	
4.16	Approaches to stakeholder engagement	PR 7	
4.17	Topics and concerns raised by stakeholders	PR 7	
Environmental performance			
	Management approach	PR 8	
	Performance indicators		
EN1	Materials used	PR 9	8
EN2	Materials used that are waste	PR 9	8–9
EN3	Direct energy consumption	PR 9	8–9
EN4	Indirect energy consumption	PR 9	8
EN5	Energy efficiency improvements	PR 9	8–9
EN6	Energy-efficient and renewable energy–based products	PR 9	8–9
EN7	Initiatives to reduce indirect energy consumption	PR 9	8–9
EN8	Water withdrawal	PR 10	8
EN9	Water sources	PR 10	8
EN11	Land of high biodiversity value	PR 10	8
EU13	Biodiversity of replacement habitats	PR 10	8
EN12	Impacts on biodiversity	PR 10	8
EN13	Habitats protected or restored	PR 10	8
EN14	Managing impacts on biodiversity	PR 10	8
EN16	Direct and indirect greenhouse gas emissions	PR 12	8
EN17	Other relevant indirect greenhouse gas emissions	PR 12	8
EN18	Initiatives to reduce greenhouse gas emissions	PR 12	7–9
EN20	Emissions to air	PR 13	8
EN21	Water discharge	PR 10	8
EN22	Waste and mineral by-products	PR 14	8
EN23	Spills and contamination	PR 14	8
EN25	Biodiversity value of water bodies	PR 10	8

Indicator		Page	Related UN Global Compact Principles[1]
EN28	Fines and incidents	PR 14	
Social performance			
	Management approach	PR 15	
EU14	Ensuring availability of skilled workforce	PR 16	
EU15	Employees eligible to retire	PR 16	
EU16	Health and safety of contractors	PR 16	
	Performance indicators		
LA1	Workforce	PR 15	
LA2	Employee turnover	PR 16	6
EU17	Work by contractors	PR 15	
EU18	Health and safety training for contractors	PR 16	
LA4	Collective bargaining agreement coverage	PR 16	1, 3
LA5	Operational changes	PR 16	3
LA6	Health and safety committees	PR 17	1
LA7	Injuries, absentee rates and fatalities	PR 17	1
LA8	Support regarding serious diseases	PR 17	1
LA9	Health and safety and union agreements	PR 17	1
LA10	Training of employees	PR 18	
LA11	Skills management and learning	PR 18	
LA12	Performance and career development reviews	PR 18	
LA13	Composition of governance bodies	PR 19	1, 6
Human rights			
	Management approach	PR 20	
	Performance indicators		
HR1	Human rights investment agreements	PR 20	
HR2	Human rights screening of suppliers	PR 20	1–6
HR3	Human rights training	PR 21	1–6
HR4	Discrimination incidents	PR 21	1–2, 6
HR5	Freedom of association and collective bargaining	PR 21	1–3
HR6	Child labour	PR 21	1–2, 5
HR7	Forced labour	PR 21	1–2, 4
Impact on society			
	Management approach	PR 22	
EU19	Including stakeholders in decision-making processes	PR 22	
EU20	Managing impacts of displacement	PR 22	
EU21	Emergency management and contingency planning	PR 24	
	Performance indicators		
SO1	Managing impacts of operations and displacements	PR 21	
EU22	Assessment of impacts of operations	PR 22	
SO2	Risks related to corruption	PR 23	10
SO3	Anti-corruption policies, procedures and training	PR 23	10
SO4	Actions against corruption	PR 23	10
SO5	Public policy positions and development	PR 23	1–10
SO6	Political contributions	PR 23	10
SO7	Legal actions pertaining to anticompetitive behaviour	PR 24	
SO8	Sanctions	PR 24	
Product responsibility			
	Management approach	PR 25	
	Performance indicators		
EU25	Number of injuries and fatalities to the public	PR 25	
PR1	Health and safety impacts	PR 25	
PR3	Product and service information	PR 25	8
PR5	Customer satisfaction	PR 26	
PR6	Responsibility in marketing communications	PR 26	
PR7	Non-compliance with regulations and codes	PR 26	
PR8	Customer privacy and customer data	PR 26	1
PR9	Laws and regulations on products and services	PR 26	
Economic performance			
	Management approach	PR 27	
EU6	Approach to ensure availability and reliability	PR 29	
EU8	Research and development activities	PR 29	
EU9	Provisions for decommissioning of nuclear power sites	PR 29	
	Performance indicators		
EC1	Economic value generated and distributed	PR 28	
EC2	Financial implications due to climate change	PR 28	7
EC3	Coverage of benefit plan obligations	PR 28	
EC4	Government financial assistance	PR 29	
EC6	Spending on locally-based suppliers	PR 29	
EC7	Local workforce and management	PR 29	6
EC8	Investments and services for public benefit	PR 29	

Indicator	
Vattenfall does not report on the following core and sector supplement indicators	
EN19	Ozone-depleting substances – *Not material, ozone depleting substances are used only to a very limited extent*
EN26	Mitigation of environmental impact of products – *Not material due to the nature of our products*
EN27	Percentage of products sold and packaging materials reclaimed – *Not material due to the nature of our products*
LA14	Ratio of salary of men to women – *data not available*
EU7	Demand side management – *Not material, Vattenfall operates in a deregulated market*
EU10	Planned capacity (MW) against projected electricity demand – *Not applicable, Vattenfall operates in a deregulated market*
EU11	Average generation efficiency by energy source – *Data not available*
EU12	Transmission and distribution losses – *Data not available at Group level*
EU23	Programmes that improve access to electricity – *Not material at Vattenfall's markets*
EU24	Provision of information – *Data not available at Group level*
EU26	Percentage of population unserved – *Not material at Vattenfall's markets*
EU27	Number of residential disconnections for non-payment – *Data not available at Group level*
EU28	Power outage frequency - *Data not available at Group level*
EU29	Power outage duration – *Data not available at Group level*
EU30	Average plant availability – *No data available. Data considered confidential*

1) The UN Global Compact is an initiative to encourage businesses worldwide to adopt sustainable business practices and comprises ten principles in the areas of human rights, labour, environment and anti-corruption. Vattenfall adopted the principles in 2002 and became a signatory to the UN Global Compact in July 2008. For further information, see Glossary in the Performance Report.

Vattenfall AB (publ)
SE-169 92 Stockholm, Sweden
Corporate Identity Number 556036-2138

T +46 8 739 50 00

www.vattenfall.com
www.vattenfall.se