

ANNUAL REPORT 2008

# MAKING ELECTRICITY CLEAN

# VATTENFALL AT A GLANCE

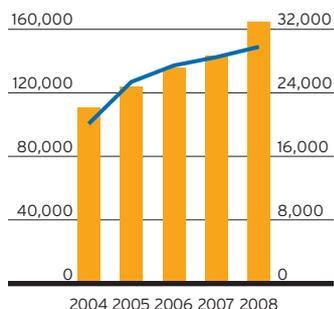
Vattenfall is Europe's fifth largest generator of electricity and the largest producer of heat. Consolidated sales in 2008 amounted to SEK 164,549 million. Vattenfall's vision is to be a leading European energy company, and its main products are electricity and heat. Vattenfall works in all parts of the electricity value chain: generation, transmission, distribution and sales, and generates, distributes and sells heat. Vattenfall also conducts energy trading and lignite mining. The Group has approximately 33,000 employees. The Parent Company, Vattenfall AB, is 100%-owned by the Swedish state. Operations in 2008 were conducted in Sweden, Denmark, Finland, Germany, Poland and the UK. Through the planned acquisition<sup>1</sup> of the Dutch energy company Nuon, starting in 2009 Vattenfall will also have operations in the Netherlands and Belgium.

1) Read more on page 70.

## Sales and operating profit

Sales, SEK million      Operating profit, SEK million

200,000      40,000



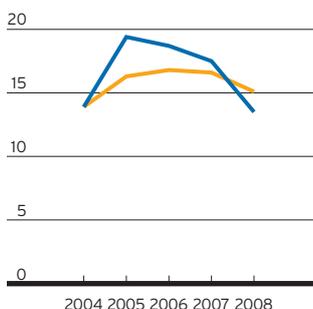
■ Sales  
■ Operating profit<sup>1</sup>

1) Excl. items affecting comparability.

## Profitability

%

25



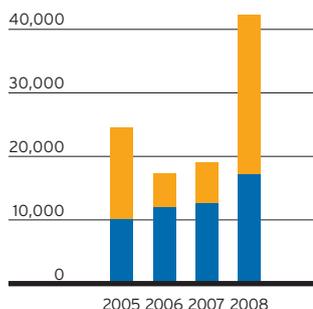
■ Return on equity (IFRS)<sup>1</sup>  
■ Return on net assets<sup>1</sup>

1) Excl. items affecting comparability.

## Investments

SEK million

50,000

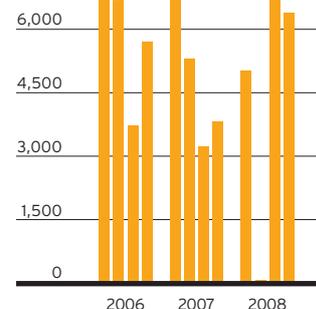


■ Maintenance investments  
■ Growth investments

## Free cash flow<sup>1</sup>, quarterly

SEK million

7,500



1) Cash flow from operating activities less maintenance investments.

## Key data

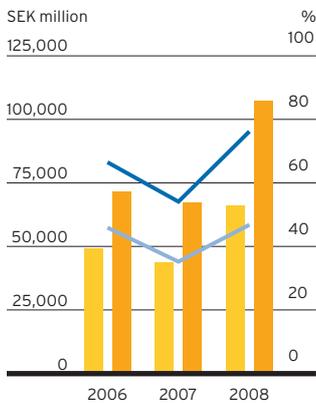
	2008	2007	Change, %	2008, EUR m <sup>1</sup>	2007, EUR m <sup>1</sup>
Net sales, SEK million	164,549	143,639	14.6	15,041	13,130
Operating profit before depreciation/amortisation (EBITDA), SEK million	45,960	45,821	0.3	4,201	4,188
Operating profit, SEK million	29,895	28,583	4.6	2,733	2,613
Operating profit excl. items affecting comparability, SEK million	29,797	28,497	4.6	2,724	2,605
Profit before tax, SEK million	23,498	23,933	-1.8	2,148	2,188
Profit for the year, SEK million	17,763	20,686	-14.1	1,624	1,891
Earnings per share, SEK	129.80	150.11	-13.5	11.86	13.72
Return on equity, %	13.6	17.6			
Return on net assets, %	15.1	16.6			
Total assets, SEK million	445,827	338,236	31.8	40,752	30,917
Equity/total assets, %	31.6	36.7			
Funds from operations (FFO), SEK million	30,735	34,049	-9.7	2,809	3,112
Free cash flow, SEK million	18,963	19,650	-3.5	1,733	1,796
Investments, SEK million	42,296	18,964	123.0	3,866	1,733
Electricity generation, TWh	163.1	167.6	-2.7		
Heat sales, TWh	35.6	36.2	-1.7		
Average number employees, full time equivalents	32,801	32,396	1.3		

1) Exchange rate SEK 10.94=EUR 1.



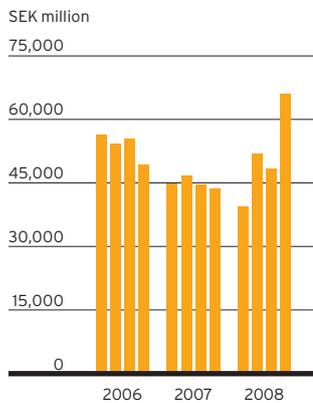
1) As a result of the planned acquisition of the Dutch energy company Nuon, starting in 2009 Vattenfall will also have operations in the Netherlands and Belgium (read more on page 70).

### Debt/equity ratio

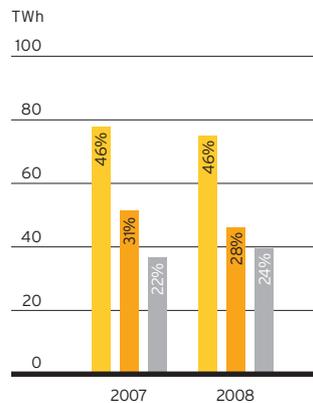


■ Net debt  
 ■ Total interest-bearing liabilities  
 ■ Gross debt/equity ratio, %  
 ■ Net debt/equity ratio, %

### Net debt, quarterly

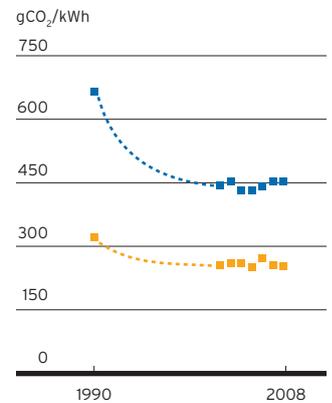


### Total electricity generation<sup>1</sup>



■ Fossil-based power  
 ■ Nuclear power  
 ■ Hydro power  
 1) Wind power, biomass and waste amounted to 2.4 TWh for 2008 and 1.9 TWh in 2007, corresponding to approximately 1–2% of Vattenfall's total electricity generation.

### CO<sub>2</sub> emissions per generated unit



■ Heat production  
 ■ Electricity generation  
 Specific CO<sub>2</sub> emissions from Vattenfall's total electricity and heat production, incl. acquired companies. Approximate values for 1991–2002.

## Business Group Nordic

Vattenfall is the leading energy group in the Nordic region, with a market share of approximately 20% in electricity generation. Operations cover Sweden, Finland and Denmark as well as Vattenfall's wind power investments in the UK. Vattenfall produces, distributes and sells both electricity and heat. Hydro and nuclear power are the base of electricity generation, while wind power, biomass, waste and fossil fuels are also used. Vattenfall sells district heating and has a substantial volume of heat production, largely based on biomass, and is the fourth-largest supplier of heat in the Nordic countries. Vattenfall also conducts consulting and contracting activities, mainly in the energy sector.

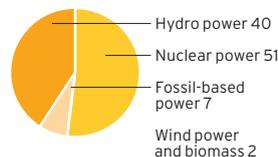
Share of Group's external net sales<sup>1</sup>, 33%



Share of Group operating profit<sup>1</sup>, 56%



Production mix, generated electricity, %



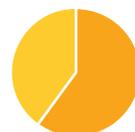
1) The segment Other reported external net sales of SEK 10,635 million (7%) and an operating loss of SEK -2,005 million (-7%).

## Business Group Central Europe

Business Group Central Europe comprises operations in Germany and Poland. In Germany Vattenfall produces, distributes and sells electricity and heat and is currently the country's third-largest producer of electricity and the largest supplier of district heat. Production is based mainly on lignite. Operations include open-cast lignite mines in Lausitz, power plants in eastern and northern Germany, the transmission grid in eastern Germany, and local distribution networks in Berlin, Hamburg and Mecklenburg Vorpommern.

In Poland, heat production and heat sales are the largest part of operations, where Vattenfall has a market share of approximately 12%. Electricity and heat production are based primarily on coal. Vattenfall also owns and operates electricity networks, and distributes and sells electricity, mainly in south-west Poland.

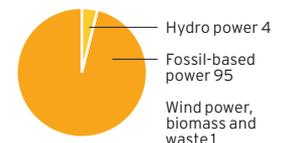
Share of Group's external net sales<sup>1</sup>, 60%



Share of Group operating profit<sup>1</sup>, 51%



Production mix, generated electricity, %<sup>2</sup>



2) In the German operations, Vattenfall normally generates electricity also from nuclear power. However, in 2008 two of the German nuclear power plants were off-line (see page 2).

# CONTENTS

Events during the year	2-3
CEO's message	4-5
Making electricity clean	6-7
Strategic ambitions	8-11
Renewable energy	12-15
CCS	16-19
Nuclear power	20-23
CSR reporting	24
Improving energy efficiency	25
Europe's energy markets	26-27
Wholesale prices	28-29
Competitive situation	30-33
Employees and competence	34-35
Chairman's statement	36
Corporate Governance Report, incl. Board of Directors and Executive Group Management	37-49
Financial targets and outcomes	50-51
Administration report, incl. Risk management	52-75
Consolidated accounts	76-79
Notes to the consolidated accounts	80-109
Parent Company accounts, incl. notes	110-119
Proposed distribution of profit	120
Audit Report	120
Quarterly review	121
Ten-year review	122-123
Facts about Vattenfall's markets	124-125
Definitions and calculations of key ratios	126-127
Glossary and abbreviations	128
Vattenfall's history	129

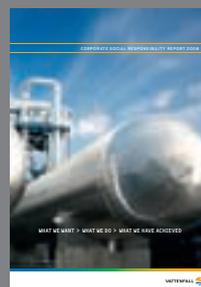
## Financial calendar 2009

12 February	Year-end report
31 March	Annual Report 2008
29 April	Interim report January-March
29 April	Annual General Meeting
30 July	Interim report January-June
27 October	Interim report January-September

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## Other publications



Vattenfall's CSR report describes Vattenfall's operations from a sustainability perspective.

Reports can be ordered from  
Vattenfall AB, SE-162 87 Stockholm  
Tel. +46 8 739 50 00,  
e-mail [info@vattenfall.com](mailto:info@vattenfall.com)

## Additional information can be found on Vattenfall's websites

[www.vattenfall.com](http://www.vattenfall.com) (English)  
[www.vattenfall.se](http://www.vattenfall.se) (Swedish)

## Cover photo

The carbon dioxide that is captured at Vattenfall's Schwarze Pumpe pilot plant is stored in two large tanks while waiting for transport to a permanent storage site.

The English version of Vattenfall's Annual Report is a translation of the Swedish original, which is the binding version and shall prevail in case of discrepancies.

## MAKING ELECTRICITY CLEAN

“Making electricity clean” – three words that summarise Vattenfall’s strategy, climate vision and promise to its customers and society. By 2050, Vattenfall’s operations shall be climate-neutral, and the work on achieving that goal is already in full swing. Powerful investments in renewable energy, nuclear power and the new Carbon Capture and Storage (CCS) technology are Vattenfall’s most important contributions in the battle against global warming. Achieving this climate vision requires profitable growth, both through expansion of own generation and through acquisitions.



# IMPORTANT EVENTS 2008



## Starting shot for world's first CCS pilot plant

On 9 September Vattenfall inaugurated the world's first coal-fired CCS power plant based on oxyfuel technology. CCS, which stands for Carbon Capture and Storage, entails the capture and underground storage of the carbon dioxide that is created in the combustion of fossil fuels. The investment sum for the Schwarze Pumpe pilot plant is approximately EUR 70 million (read more on pages 16–19).



## Vattenfall's climate vision: climate-neutral by 2050

During the year Vattenfall laid out its strategic direction, which is summarised in three words: Making electricity clean. Vattenfall's climate vision is to be climate-neutral by 2050 (read more on pages 6–7).

## Redemption of minority shares in Vattenfall's German subsidiary

In April the redemption of the outstanding minority shares (3.19%) in Vattenfall's German subsidiary Vattenfall Europe AG was completed, and the company was delisted from the German stock exchanges.

## Active safety work at nuclear power plants

Vattenfall has conducted a thorough review of safety work in consultation with the pertinent authorities, and internationally renowned experts have also performed independent, in-depth analyses of Vattenfall's work on nuclear safety. To further strengthen the Group's safety work, in February 2008 Vattenfall appointed a Chief Nuclear Officer (CNO), who reports directly to the CEO on nuclear safety issues and serves as the Executive Group Management's nuclear power expert. Vattenfall also established a Nuclear Safety Council.

In early 2008 the UN's International Atomic Energy Agency (IAEA) performed a three-week review of the Forsmark nuclear power plant. The IAEA concluded that Forsmark maintains a good international level in its



safety standards. A number of suggested improvements were identified, which Forsmark will be implementing.

The two German nuclear power plants, Brunsbüttel and Krümmel, which were both shut down in June 2007 independently of each other, are

still not operating. The reasons for the shutdowns were corrected in 2007, however, as a result of time-consuming controls and verification work as well as new demands that have been raised, the plants have not yet been able to be restarted (read more on pages 20–23).



### Major investments in wind power in the UK

During the autumn Vattenfall acquired several British wind power companies:

- AMEC Wind Energy Ltd, one of the UK's foremost developers of commercial wind farms, with current projects corresponding to 500–750 MW.
- Eclipse Energy UK Plc, which is working with six wind power proj-

ects in the UK with combined capacity of more than 200 MW.

- Thanet Offshore Wind Ltd, which with 300 MW under construction is the UK's largest wind power project.

At the end of the year, Vattenfall also entered into a partnership with ScottishPower Renewables, to participate in the

third round of tender bids to develop offshore wind power in the UK. The joint goal is to establish 6,000 MW of wind power by 2020 (3,000 MW each), corresponding to enough renewable electricity for 4 million homes. ScottishPower Renewables is a subsidiary of Iberdrola, the world's largest wind power operator (read more on pages 12–15).



Photographic model illustration of the Moorburg CHP plant.

### Go-ahead for Moorburg combined heat and power plant in Hamburg

On 30 September, the Hamburg State Ministry of Urban Development and the Environment (BSU) granted Vattenfall approval to build the Moorburg coal-fired combined heat and power plant in Hamburg, Germany. The permission to build the plant is coupled with a number of new restrictions that will affect operation of the plant. Vattenfall has therefore requested a judicial review of the authorities' decision.

### Acquisition of stake in Polish energy company

In November Vattenfall acquired 18.7% of the Polish energy company ENEA S.A. The company, which is one of four state-owned energy companies in Poland, has 2.3 million customers and accounts for approximately 8% of the country's total energy generation. ENEA S.A. has a mixed portfolio that relies predominantly on coal-based electricity generation but also includes small-scale hydro power plants and planned investments in wind power development projects. Vattenfall today is the largest foreign energy company in Poland, and the acquisition further strengthens Vattenfall's position in the Polish energy market.

# STRONG YEAR IN 2008

2008 was yet another good year for Vattenfall. In view of the general economic decline in Europe, the fact that the Brunsbüttel and Krümmel nuclear power plants were at a standstill during the entire year, and considerably higher costs for CO<sub>2</sub> emission allowances, I feel we have reason to be satisfied with the result for the year. Vattenfall's net sales increased by 14.6% to SEK 164,549 million (143,639), and operating profit rose 4.6% to SEK 29,895 million (28,583). The return on equity decreased to 13.6% (17.6%). However, this decline is mainly attributable to a positive, nonrecurring effect on the preceding year's earnings due to the reduction in the German company tax rate.

The financial crisis has affected Vattenfall, but to a considerably lesser extent than many other companies. Electricity and commodity prices rose steadily during the first half of the year, but then fell back sharply during the autumn as a result of the financial crisis. However, sharply falling electricity prices during the autumn had only a limited impact on earnings due to Vattenfall's price hedging.

Vattenfall's stable finances are a strength, which became apparent in November 2008 when the company's bond issue was oversubscribed nearly four times. These uncertain times are also giving rise to opportunities, where Vattenfall can benefit from its financial strength to advance its positions. During the year, Vattenfall carried out three acquisitions in the UK and acquired a stake in a large energy company in Poland. After the end of the financial year, in early 2009, Vattenfall made an offer for 100% of the shares in the Dutch energy group Nuon. Nuon will form a third regional Business Group of Vattenfall. After the acquisition, Vattenfall will have combined electricity generation of approximately 185 TWh. We have clearly pointed out the Benelux countries and the UK as highly attractive regions, and I am very pleased to note that we are now establishing a strong position in Benelux and have begun our establishment in the UK.

In 2008 our work on giving our customers better offers and service continued to generate results. In the Nordic countries, our Customer Satisfaction Index (CSI) score improved from 62 to 69 compared with a year ago, and we are one of the companies that is gaining the most customers in the market. In Germany, where Vattenfall lost many customers in 2007, we reversed the trend in 2008, and customer numbers are increasing once again. Customer confidence is Vattenfall's most important asset, and even though much work remains to be done until we have

achieved a satisfactory level of customer satisfaction, we are on the right path.

Safe operation of our plants is the foundation of our business and a prerequisite both for profitability and earning the trust of people in our business environment. Work is being conducted throughout the Group on continuous improvement and building a strong safety culture. In 2008 the company's two nuclear power plants in Germany were off-line as a result of inspections and technical improvements. They will be restarted as soon as this work is completed, which is being conducted in close dialogue with the German authorities.

## On track to a climate-neutral operation

In many respects, 2008 was the year of wind power at Vattenfall. In June the Lillgrund wind farm in the Oresund Strait was inaugurated by His Majesty Carl XVI Gustaf, King of Sweden, and Sweden's Deputy Prime Minister, Maud Olofsson. During the autumn, Vattenfall acquired the companies AMEC Wind Ltd and Eclipse Energy UK Plc, as well as the Thanet Offshore Wind Ltd wind farm – all in the UK, where we already own the Kentish Flats offshore wind farm. In addition, in partnership with ScottishPower Renewables, Vattenfall will be participating in the tendering process for the continued expansion of offshore power in Britain.

The wind power investments in the UK are one of many examples of how Vattenfall is working actively and methodically in accordance with our strategic direction, which we summarise in the three words Making electricity clean. These three words embody our promise to customers and society, and an integral part of this strategic direction is our climate vision: to make Vattenfall's operations climate-neutral by 2050.

The climate vision is Vattenfall's answer to the gigantic challenge presented by the major emissions of greenhouse gases and the accelerating warming of Earth's climate. The world's leaders are in agreement that this perilous trend must be slowed and, over time, reversed. Responsibility for this rests with all of us. In December 2008 the EU adopted binding climate targets that entail that CO<sub>2</sub> emissions must be reduced by 20% by 2020, that the share of renewable energy shall be 20%, and that energy consumption shall be reduced by 20% by 2020. Vattenfall supports these goals and is committed to being one of the European companies that makes the greatest contribution toward them. European

leadership on the climate issue is a key to success in the international negotiations set to take place in Copenhagen in December 2009, which Vattenfall hopes will lead to a global climate accord.

Of course, the journey to a climate-neutral Vattenfall does not follow a single path, but several different ones. Up until 2020, the expansion of renewable energy sources such as wind power and biomass will be our most visible contribution to Europe's climate goals. Total carbon emissions can be reduced by combining biomass with fossil fuels in conventional power plants. Further development of existing nuclear power is also a vital step. Most important over time will be the adoption of the emerging CCS technology, which makes it possible to capture and store carbon dioxide instead of emitting it into the atmosphere. In September 2008 Vattenfall inaugurated a pilot CCS plant at Schwarze Pumpe, Germany, and it is our ambition to participate in the EU's programme for demonstration plants on a larger scale. Due to the world's dependence on coal today and in the future, CCS technology can play a key role as a bridge to future energy systems.

One step in the work toward sustainable development involves increasing the share of electricity in total energy use. If more areas were to change over from other forms of energy to electricity, this would contribute to the solution to the climate issue. Heating and cooling buildings with heat pumps, powering energy-intensive industries and – perhaps not the least – powering private cars, are a few areas in which electricity will be gaining considerably in use.

This year Vattenfall's annual report is being published on the same day as the company's Corporate Social Responsibility report. Together these two documents are designed to provide a comprehensive picture not only of the company in 2008, but also in the future as we see it. 2009 is a landmark year for Vattenfall. It was namely 100 years ago that Sweden's parliament made the decision to establish the State Power Board of Sweden, Vattenfall AB's predecessor. We are proud of our long heritage, which coincides with the development of modern society in Sweden. Several of the companies that are today part of the Vattenfall Group are in fact more than 100 years old, and when we celebrate our jubilee and look ahead, it is important that we think not only about what we will be doing in the future, but how we do it. This is why we have chosen to celebrate our 100 years under the banner Making electricity clean.

It is with favourable prospects and with the strength



of good earnings in 2008 that we now face the challenges in 2009 and forward. Long-term profitability is a prerequisite for achieving our climate vision. But the converse also applies: We are convinced that active climate work is a successful business strategy. The energy companies that are first to succeed in adapting to the new demands from their operating environment will be the most profitable. Vattenfall has a good starting position.

A handwritten signature in blue ink, which appears to read 'Lars G. Josefsson'. The signature is fluid and cursive, written over a light blue background.

Lars G. Josefsson  
President and CEO

# MAKING ELECTRICITY CLEAN

Vattenfall's strategic direction is clear, and can be summed up in three words: Making electricity clean. In a nutshell, these three words express Vattenfall's climate vision: to be a climate-neutral company by 2050. The path forward is lined with a number of major challenges. Vattenfall must reduce its emissions of carbon dioxide from existing operations while dramatically increasing its production of electricity with minimal CO<sub>2</sub> emissions – at the same time that the economic conditions are created that will allow the company to finance major investments. Vattenfall is also promoting the use of electricity in new application areas at the expense of other, less climate-friendly and less efficient types of energy, such as oil.

### An ambitious – but realistic – climate vision...

Vattenfall's climate vision calls for the company's operations to be climate-neutral by 2050. This vision is entirely in line with Vattenfall's five strategic ambitions – Number One for the Customer, Number One for the Environment, Profitable Growth, Benchmark for the Industry, and Employer of Choice.

[Read more about Vattenfall's investments in renewable energy on pages 12–15...](#)



[...CCS technology on pages 16–19...](#)

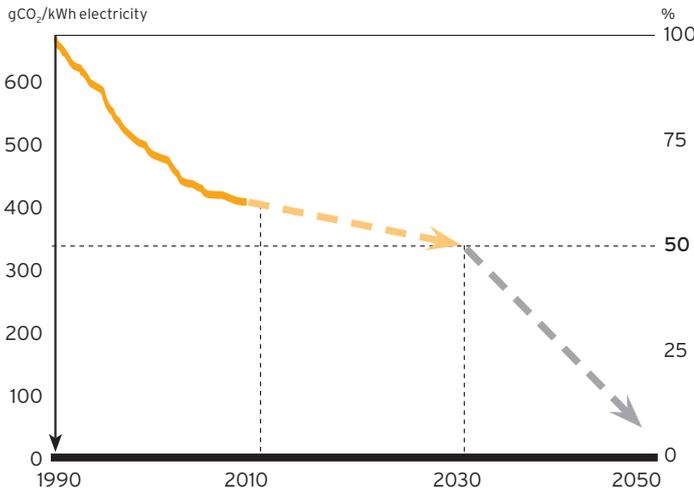


[...and nuclear power on pages 20–23.](#)



### Vattenfall's ambitious – yet realistic – climate vision...

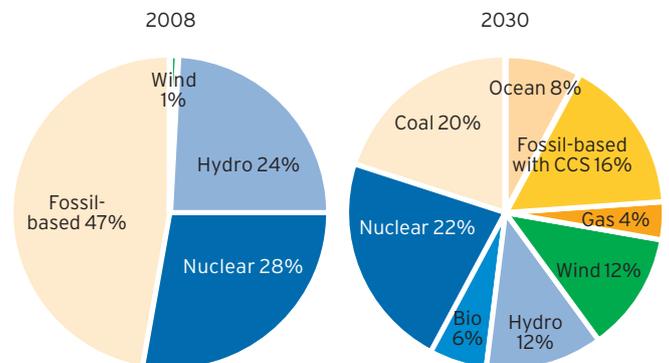
Vattenfall's goal by 2030 is to achieve a halving of specific emissions from existing operations from 1990<sup>1</sup> levels. The Group's climate vision is to be climate-neutral by 2050.



1) 1990 is the base year for the Kyoto Treaty as well as for the EU's emission targets.

### ...requires substantial production growth

Realising the climate vision will require a dramatic increase in electricity generation with very low CO<sub>2</sub> emissions. Growth of new generation capacity is taking place both organically and through acquisitions.



as wind power, bioenergy, ocean energy, coal power using the new CCS technology, and nuclear power.

**Growth requires investment**

Growth in new capacity for electricity generation is taking place both organically and through acquisitions. Vattenfall plans to build new power plants as well as improve and increase the capacity of existing generation facilities. A key part in this work will be to gradually introduce CCS technology in the Group's coal-fired power plants in Germany, Denmark and Poland.

Company acquisitions play a key role in achieving the Group's growth targets. Vattenfall is currently concentrating its efforts on acquiring operations in its existing markets, the UK and the Benelux countries. Other priority growth markets are France and Central Europe. In the UK, Vattenfall carried out three acquisitions in 2008 – all in wind power. In early 2009, Vattenfall made an offer for Nuon<sup>1</sup>, the second-largest energy company in the Netherlands, with approximately 3 million customers and slightly more than 6,000 employees.

Decisions on acquisitions must be in line with Vattenfall's overall strategy. Acquisitions must be judged to support Vattenfall's environmental objectives and contribute to reliable energy supply and stable prices for society at large. In addition, any acquisitions must meet set requirements for risk profile and profitability, while making a positive contribution to Vattenfall's mix of various types of energy.

**Cash flow must be strengthened to handle expansion**

To be able to finance the major investments needed to achieve the Group's planned growth target, Vattenfall will need not

only continued high profitability, but even more so, a strong and improved cash flow. Strengthening cash flow will require that all processes are capital-efficient and that the right investments are made at the right time. The Operational Excellence programme plays a vital role in this regard, as it focuses on productivity improvements and better utilisation of synergies across national borders. Success in these areas will be necessary if Vattenfall is to be able to achieve one of its strategic ambitions – to be a Benchmark for the Industry.

**Shift to electricity more energy-efficient**

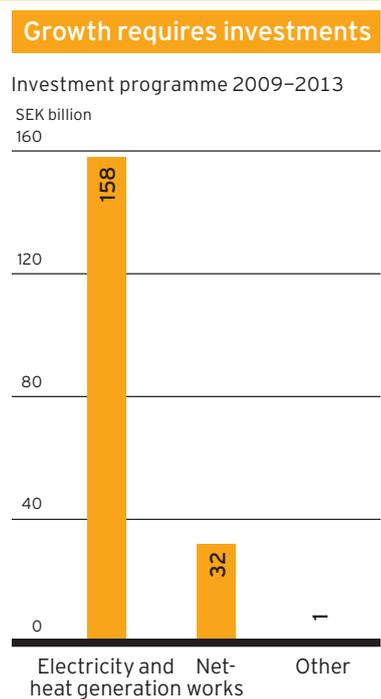
Electricity is an efficient conveyor of energy and often the most cost-efficient alternative. In many areas a shift to electricity can lead to an overall decrease in energy consumption. If a growing number of society's processes can be run with electricity, the migration to climate-neutral energy generation can be accelerated. Vattenfall sees major opportunities for electricity to take the place of other forms of energy in the heating and cooling of buildings, in the transport sector and in industry. In the coming decade, new technologies will create a host of new application areas for electricity, such as electric cars, which will lead to further growth in demand for electricity. Read about new application areas for electricity on page 25.

1) The offer pertains to Nuon's unregulated businesses (generation and supply). Nuon's grid company Alliander is not included in the deal.



**Cash flow**

Cash flow must be strengthened to keep pace with the Group's expansion.



# VISION AND STRATEGIC AMBITIONS

Vattenfall's vision is to be a leading European energy company. Vattenfall strives to enhance its customers' competitiveness, environment and quality of life by providing efficient energy solutions and world-class service. Vattenfall aspires to be the customers' first choice – that is, the energy supplier that customers prefer, and it strives to be the energy company that manages its assets best, environmentally as well as financially. The Group's financial targets and its five strategic ambitions are the foundation of this undertaking, which should be guided by **Vattenfall's core values: openness, accountability and effectiveness.**

Vattenfall aspires to provide energy solutions that meet its customers' needs and contribute to sustainable development in society. Continuously creating value is a fundamental prerequisite for the Group's long-term ability to invest in new electricity and heat generation with low environmental impact. How this is achieved is set out by the Group's five strategic ambitions: Number One for the Customer, Number One for the Environment, Profitable Growth, Benchmark for the Industry and Employer of Choice. These ambitions interact with each other and are interdependent.

If Vattenfall can contribute to sustainable growth of society by offering energy solutions that meet its customers' needs and a high environmental standard, Vattenfall will also win the trust of its customers and the general public.

If Vattenfall has the public's trust, it can more easily attract the right competence.

With the right competence, good leadership and committed employees, Vattenfall can be a model for the industry.

If Vattenfall is a model for the industry, focusing on operational efficiency and value creation, it can continue to expand with good profitability, which is a basic prerequisite for its ability to contribute to sustainable growth of society and work according to the strategic direction of Making electricity clean and the climate vision of being climate-neutral by 2050.

## Vattenfall's five strategic ambitions

### Number One for the Customer

Having satisfied customers is a basic prerequisite for Vattenfall's continued success and trust in Vattenfall's operations. Increased satisfaction over time leads to greater loyalty, a larger customer base and higher profitability. Moreover, having a large base of satisfied customers will enable trustworthy relationships with a wider group of stakeholders, which in turn is needed to gain an understanding and acceptance for Vattenfall's business and secure the licence to operate, grow and create long term value.

### Number One for the Environment

The energy industry is increasingly expected to contribute to a sustainable development in society. Growing environmental knowledge and awareness, combined with globalisation and technological development, is leading to more stringent legislation. The ambition to be Number One for the Environment and meet the environmental requirements of tomorrow is essential for instilling trust and earning the licence to operate and grow.

### Profitable Growth

Profitable growth is vital for Vattenfall's future competitiveness and ability to create sustained economic value. Size carries a number of strategic advantages, such as market position, financial strength and ability to spread risks. Added to these are operational advantages, such as more cost-efficient purchasing and leaner administration, which also enhance profitability.

### Benchmark for the Industry

Intensifying competition and price pressures will be an enduring trend in the European energy market. To address this challenge with sustained profitability, Vattenfall must continue to focus on operational excellence. As a company operating across several markets and within different areas of activity, Vattenfall has great opportunities to share experiences and realise cross-border synergies in its efforts to improve overall efficiency within the organisation.

### Employer of Choice

Vattenfall's success depends on good leadership, the right competence and committed employees. Vattenfall is facing a generation shift that presents major challenges. Competition for top talent is rising as experienced employees with unique know-how are headed for retirement at the same time that a demographic shift is taking place in society. It is therefore imperative that Vattenfall is perceived as an attractive employer.

## Strategies

### **Increase customer orientation and market shares while boosting cost effectiveness**

- Increase customer orientation in all areas of Vattenfall's operations.
- Make sure that Vattenfall has products and services that best meet the needs of the respective customer segments.
- Increase awareness about and strengthen the Vattenfall brand.
- Continue growing the customer base and market shares.
- Ensure reasonable profitability and maintain competitive strength through continuous improvements in cost effectiveness.

### **Develop the generation portfolio towards clean energy**

- Significantly increase investments in low-emitting energy generation (renewables, nuclear power and coal using CCS technology).
- Increase the efficiency of existing electricity and heat production as well as of distribution networks.
- Accelerate R&D activity, such as in CCS technology.
- Actively work for global and market-oriented climate solutions to provide incentives for investment in low-emitting technologies.

### **Drive growth through organic expansion and business development combined with acquisitions in priority markets**

- Increase investments in organic expansion.
- Continue M&A activities, primarily emphasising entry to new markets.
- Pursue business development as a complement.

### **Strive for operational excellence through higher productivity and better utilisation of Group synergies**

- Continuously execute performance efficiency programmes (benchmarking, benchlearning, improved processes).
- Measure, follow up and reward improved performance.

### **Attract, retain and develop people and competencies for the future**

- Strengthen talent management.
- Attract, retain and develop excellent leaders.
- Continue to develop the organisation by fostering greater employee commitment.

## Important activities in 2008

### Number One for the Customer

Vattenfall's "Trygghetsavtal" in Sweden – a three-year fixed-price electricity contract with a renewal right – is still one of the market's most popular contracts.

Success for the "Easy" electricity contract in Germany, which is sold online to customers nationwide in Germany.

In the Nordic market, Vattenfall has established long-term relationships with industrial customers, such as Outokumpo, Hydro, Stora Enso, Smurfit Kappa and Borealis.

Continued development of online energy guides that help retail customers use energy more efficiently.

Vattenfall's Group-wide customer satisfaction index was implemented, followed by the first joint-Group measurement.

### Number One for the Environment

The pilot plant employing CCS technology began operating in Schwarze Pumpe, Germany.

Declaration of Vattenfall's climate vision – to be climate-neutral by 2050.

Continued construction of coal- and lignite-fired power plants in Germany with a high level of efficiency and environmental performance. The plants will competitively force out older capacity and lead to lower CO<sub>2</sub> emissions. (Read more on page 14 in the CSR report.)

Construction of new biomass-fired plants in Denmark, Germany, Poland, Sweden and Finland.

Increase co-combustion of coal and biomass.

Upgrades of hydro power plants.

Major investments in wind power in the UK (read more on pp. 14–15).

Co-operation with ScottishPower Renewables in the development of offshore wind farms.

Construction of a new hydro power plant (4.6 MW) in Abelvattnet, Sweden.

Venture with BMW on electric cars in Berlin.

Pilot plant for wave power.

### Profitable Growth

Acquisition of wind power companies in the UK: Eclipse Energy UK Plc, AMEC Wind Energy Ltd and Thanet Offshore Wind Ltd.

Acquisition of 18.7% stake in the Polish energy company ENEA S.A.

Permit to proceed with construction of a combined heat and power plant in Hamburg (Moorburg).

For the three-year period 2009–2011, Vattenfall plans to invest approximately SEK 58 billion in growth investments in electricity and heat production.

February 2009 – offer made for the Dutch energy company Nuon (read more on page 70).

### Benchmark for the Industry

A programme for productivity improvements of 11% is being conducted during the period 2008–2010.

The CCS pilot plant began operating at Schwarze Pumpe, Germany. It is the first of its kind in the world.

### Employer of Choice

Annual "My Opinion" employee survey.

Rotation programme for development of Young Talents.

Student job fairs.

New leadership model and joint evaluation process for managers.

## Goal achievement 2008

## Business plan target 2009–2011 Long-term target

**64** Customer Satisfaction Index score of 64 for retail customers.

Business plan target for 2008–2010: CSI score of 63 for retail customers.

**69** Customer Satisfaction Index score of 69 for retail customers by 2011.

**70** Customer Satisfaction Index score of 70 for retail customers.

**1.8** 1.8% increase in CO<sub>2</sub> emissions<sup>1</sup> per kWh compared with 2002–2006.

Business plan target for 2008–2010: 3% decrease in CO<sub>2</sub> emissions in 3 years (corresponding to 1 million tonnes/year).

1) The increase is attributable to the outages in nuclear generation in Germany as well as Sweden, which increased the share of fossil-based generation in the production mix. It is expected that future targets can still be met.

**-2** Reduce CO<sub>2</sub> emissions by 2%, corresponding to 2 million tonnes, in own operations from 2009 to 2011.

**-50** 50% reduction in CO<sub>2</sub> emissions per produced unit of electricity and heat in own operations by 2030, compared with 1990 levels.

**0.6** 0.6 TWh increase in normalised annual generation<sup>1</sup> of electricity and heat from 2007 to 2008.

Business plan target for 2008–2010 reformulated to: 17 TWh increase in normalised annual generation of electricity and heat from 2008 to 2011.

1) Planned generation assuming normalised values for weather and plant status.

**17** 17 TWh increase in normal annual generation of electricity and heat from 2008 to 2011.

**10** 10% market share in the future, integrated European energy market.

**1.5** Productivity improvement of approximately 1.5% from 2006 to 2008, corresponding to a cost reduction of SEK 0.7 billion.

**11** Productivity improvement of 11% from 2006 to 2010, corresponding to a cost reduction of SEK 5 billion.

**+** Vattenfall will belong to the upper quartile of the industry.

**70** Commitment score of 70. Business plan target for 2008–2010: Commitment score of 75.

**76** Commitment score of 76 by 2011.

**81** Commitment score of 81.

# CONTINUED STRONG INVESTMENT IN RENEWABLE ENERGY

Vattenfall continues to invest heavily in wind power, and during the year it made a series of significant acquisitions in the UK. New investments are also being made in biomass and hydro power. Vattenfall's goal is to substantially increase its electricity generation derived from wind power, hydro power and biomass-based power.

Vattenfall is investing heavily to increase the share of renewable energy in its production. Vattenfall's strategic direction of Making electricity clean goes hand in hand with its ambition to be Number One for the Environment and take a leading role in the renewable generation of electricity and heat where the environmental, technological and commercial conditions exist. Vattenfall's ambition is to substantially increase its electricity generation derived from wind power, hydro power and biomass-based power.

## Renewable energy increasingly important

At present, renewable sources of energy account for a small part of the world's electricity generation, but they are growing increasingly important against the backdrop of the major climate challenge the world is facing.

According to the International Energy Agency (IEA), approximately 18% of the world's total energy generation is based on renewable sources (2006 figures), of which hydro power accounts for nearly 90%. Most of the world's total electricity generation is based on fossil fuels which accounted for nearly two-thirds of generation in 2006, while nuclear power accounted for approximately 15%.

The EU's target is that 20% of total energy supply will be derived from renewable sources by 2020, compared with today's level of slightly more than 8%.

In the Nordic countries Vattenfall has a comparatively high percentage of renewable energy in its electricity generation mix due to an abundance of hydro power.

In 2008 Vattenfall invested SEK 1,529 million (1,015) in R&D, of which SEK 143 million (77) pertained to research on renewable energy. Vattenfall is participating in national

and European research programmes in the area of ocean energy, black liquor gasification and geothermal energy.

## Continued strong expansion for wind power

At year-end 2008 Vattenfall had a total of 611 MW of installed wind power capacity. Most of this capacity is in Denmark and Sweden, including the Lillgrund wind farm outside Malmö and Horns Rev, the world's largest offshore wind farm off the coast of Esbjerg in Denmark, which is 60%-owned by Vattenfall. The Group's goal is to have 49 TWh of wind power on stream by 2030.

During the year, Vattenfall made a series of acquisitions in the UK in the area of wind power and also entered into a partnership with ScottishPower Renewables to establish new offshore wind power. Read more on pages 14–15.

Vattenfall is continuing its planning work on the Taggen and Trolleboda wind farms, comprising just under 100 turbines and combined capacity of 400–450 MW. Pre-planning and site surveying at Kriegers Flak in the southern Baltic Sea also continued in 2008. The plan is to erect 130 turbines, which will generate enough electricity to meet the needs of 400,000 homes.

## Co-operation with Sveaskog

Vattenfall continues its work on identifying suitable locations to build land-based wind power capacity in Sweden and Denmark. Toward this end, Vattenfall is working together with Swedish forest company Sveaskog in the aim of erecting more than 500 wind power turbines with combined capacity of 1,500 MW, corresponding to the electricity needs of 800,000 homes.

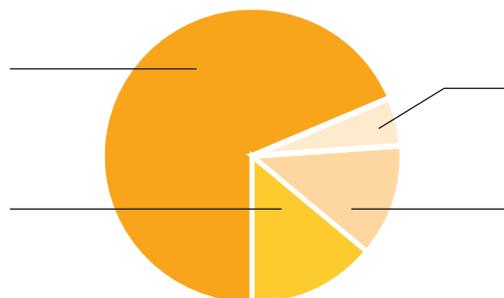
## Planned investments in wind power, hydro power, waste- and biomass-based energy 2009–2013: SEK 54.3 billion<sup>1</sup>

### Wind power: SEK 37.2 billion

An extensive and broad-based investment package to increase wind power generation is in progress in all regions in which Vattenfall conducts operations. Most investments are focused on new generation.

### Hydro power: SEK 7.1 billion

Most investments in this area will be used to upgrade existing hydro power plants, so that they can achieve a higher degree of efficiency and generate more energy. In addition, certain investments are planned in replacement and new capacity.



### Waste: SEK 3.3 billion

Most of the investments pertain to maintenance of existing plants.

### Biomass: SEK 6.7 billion

Vattenfall is continuously upgrading its plants to increase the share of biomass and reduce the share of fossil fuels. Some new construction is also included.

1) Vattenfall's total investment programme for 2009–2013 amounts to SEK 191 billion. Read more on page 58.

In Denmark, work is under way to repower older wind power plants with larger, more efficient turbines. Slightly more than 30 new turbines with combined capacity of 100 MW will replace 120 older turbines with combined capacity of approximately 40 MW.

At the Borkum site off Germany's North Sea coast, Vattenfall is participating in the Alpha Ventus development and demonstration project, Germany's first offshore wind farm, which is expected to be operating in 2009. A total of 12 turbines (5 MW each) are being erected. Upscaling turbine size is essential for the profitability of wind power.

Vattenfall's success at managing this strong expansion of wind power depends on its ability to secure deliveries of equipment and components. During the year, Vattenfall signed framework agreements with the suppliers Vestas and Siemens for deliveries of wind power turbines.

### One of the world's largest users of biomass

Vattenfall has more than 30 biomass-fired heat and combined heat and power (CHP) plants and is one of the world's largest buyers of biomass. The goal is to increase the use of biomass as much as possible within the confines of responsible use.

At Midt fynsværket in Odense, Denmark, a straw-burning CHP boiler generating 35 MW electricity and 84 MW heat is currently being built. And at Amagerværket in Copenhagen, a coal-fired CHP station is being converted to accommodate straw.

Vattenfall is also continuously upgrading its plants to increase the share of biomass-based generation and reduce the share of fossil fuels. In Finland, Vattenfall is investing EUR 29.9 million (approx. SEK 283 million) to increase the use of biomass at the Vanaja power plant in Tavastehus. A new biomass station at Vanaja has increased the share of biomass in electricity and heat production from 13% to 19%, and this share will grow to 36% by 2010.

In the Group's German and Polish operations, attempts are being made to enable co-combustion of biomass and coal in coal-fired plants. For several years, a few German plants have been employing co-combustion technology of lignite and digested sludge – another form of biomass.

In southern and central Europe, biomass is currently in short supply, and the market price is steered by gas and oil prices. To address this problem, in Poland Vattenfall has decided to establish a position in the domestic biomass market to mitigate the effects of biomass shortages and be active throughout the value chain.

### Stable access to hydro power

Vattenfall owns and operates 112 hydro power stations in the Nordic countries – mostly in Sweden and a few in Finland. The Group's Swedish hydro power plants generate 30–40 TWh per year, depending on water levels. Vattenfall has an ambitious investment programme for its hydro power operations – some 30 of the Group's hydro power stations will be upgraded by 2013.

In September Vattenfall began construction of the Abel-

## Renewable energy generation in Nordic countries

### Key ratios – energy generation in the Nordic countries that qualifies for electricity certificates, 2008<sup>1</sup>

	Wind	Hydro <sup>2</sup>	Heat	Total
Operating profit, SEK million	243.5	316.2	415.5	975.2
Investments, SEK million	4,719.0 <sup>3</sup>	15.4	1,410.2	5,959.6
Property, plant and equipment <sup>4</sup> , SEK million	7,451.6	317.6	6,072.8	13,842.0
Return on property, plant and equipment, %	3.3	99.5	6.8	7.0

1) Pertains to electricity and heat generation in the Nordic countries according to the official rules that apply for electricity certificates in Sweden.

2) Small-scale hydro power + increases in capacity.

3) Value adjusted compared with previously published information in Vattenfall's 2008 year-end report. A total of SEK 2,525 million pertains to investments in wind power plants and SEK 2,194 million to acquisitions of wind power companies in the Nordic countries and in the UK. The British wind power companies AMEC Wind Ltd and Thanet Offshore Wind Ltd were reported in 2008 under Business Group Nordic.

4) The value of property plant and equipment is calculated as an average over the year.

### Vattenfall's renewable energy generation in the Nordic countries, GWh

	2002	2003	2004	2005	2006	2007	2008
<b>Electricity</b>							
Hydro power <sup>1</sup>	34,309	25,625	30,111	36,155	30,626	33,246	36,086
<b>Electricity generation that qualifies for electricity certificates<sup>2</sup></b>							
Hydro power <sup>3</sup>	156	150	211	214	250	339	440
Wind power	51	54	58	46	534	1,200	1,466
Biomass	525	503	497	547	384	355	446
<b>Total electricity</b>	<b>35,041</b>	<b>26,332</b>	<b>30,877</b>	<b>36,962</b>	<b>31,794</b>	<b>35,140</b>	<b>38,438</b>
<b>Heat</b>							
Biomass	4,020	3,844	4,506	4,577	4,138	4,099	3,912

### Vattenfall's renewable energy generation in Sweden, GWh

	2002	2003	2004	2005	2006	2007	2008
<b>Electricity</b>							
Hydro power <sup>1</sup>	33,996	25,324	29,618	35,801	30,306	32,787	35,564
<b>Electricity generation that qualifies for electricity certificates<sup>2</sup></b>							
Hydro power <sup>3</sup>	156	150	211	214	250	339	440
Wind power	46	47	52	46	75	162	417
Biomass	375	353	347	290	263	164	279
<b>Total electricity</b>	<b>34,573</b>	<b>25,874</b>	<b>30,228</b>	<b>36,351</b>	<b>30,894</b>	<b>33,452</b>	<b>36,700</b>
<b>Heat</b>							
Biomass	3,480	3,144	3,791	3,869	3,452	3,095	2,922

1) Hydro power that does not qualify for electricity certificates.

2) By electricity generation that qualifies for electricity certificates is meant electricity and heat production in the Nordic countries according to the official rules that apply for electricity certificates in Sweden.

3) Small-scale hydro power + capacity increases.

For information about Vattenfall's total electricity and heat generation volumes, see pages 124 and 125.

vattnet hydro power plant, with installed capacity of 4.6 MW, in the municipality of Swedish Storuman. This will be Vattenfall's first newly built hydro power plant in more than 15 years.

## BRITISH WINDS STRENGTHEN VATTENFALL

From just over 1.5 TWh to 49 TWh by 2030 – that is no modest figure for Vattenfall's investment plans when it comes to wind power. 49 TWh corresponds to the electricity needs of 10 million households.

The acquisitions that Vattenfall carried out in the UK in autumn 2008 signify an important step toward achieving this goal. The acquisitions included the wind power companies AMEC Wind Ltd, Eclipse Energy UK Plc, and Thanet Offshore Wind Ltd, a construction-ready offshore wind farm which upon completion in 2010 will be the country's largest. In addition, Vattenfall signed a co-operation agreement with ScottishPower Renewables, a subsidiary of Iberdrola Renovables, the world's largest wind power operator.



"If all of these projects come to fruition, we will be able to generate approximately 15 TWh of wind-powered electricity in the UK," says Anders Dahl, head of wind power operations at Vattenfall.

### Why the UK?

"It is one of the key markets where we want to develop as a part of our ambition to be the fastest growing wind power company in northern Europe. Added to that, the investment climate in the UK is favourable for foreign investors and for support systems for renewable energy."

Plus, the winds blow hard and steady along the coast, which anyone who has ever visited Britain can testify to.

The principle for Vattenfall's investments in the UK is similar to the approach taken for Lillgrund, Vattenfall's largest offshore wind farm in the Oresund Strait between Sweden and Denmark. As was the case for Lillgrund, for the Thanet Offshore wind power project Vattenfall has bought a portfolio of ready permits and far-advanced project plans along with existing suppliers tied to the project, thereby creating a local organisation for construction of the wind farm.

"Expertise is crucial in the UK with respect to administration, permits and environmental reviews," says Dahl. "What we can add as owner from the central level is our technological expertise."

In addition to the planned wind farms, the collaboration with ScottishPower Renewables will result in projects totalling 6,000 MW along Britain's coast, of which Vattenfall will account for half.

"Vattenfall and ScottishPower Renewables will be a formidable constellation with considerable financial muscle and extensive experience in wind power. It is important to enter into strategic alliances of this kind when competing for licences," says Dahl.

Wind power is growing in leaps and bounds, and the industry has periodically been suffering from a shortage of capacity.

"But more suppliers are entering the market, and we are encouraging more players to get positioned. As part of our effort to secure supply for our Nordic projects, we have signed a framework agreement with Siemens and Vestas for 270 MW of capacity," says Dahl. "This corresponds to roughly a hundred wind power turbines, depending on the size."

Apart from its investments in the UK, Vattenfall is pursuing several other wind power projects, including a partnership with forest company Sveaskog which may result in the erection of more than 500 wind power turbines throughout Sweden.

"To be sure, we are currently in the midst of a very exciting period of development right now," Dahl concludes.





### Wind power investments in the UK

- Thanet Offshore Wind Ltd – the UK's largest wind farm project, which is set for construction and scheduled for commissioning in 2010. Capacity 300 MW.
- AMEC Wind Energy Ltd – Nine projects, of which one is ready for construction to begin. If all of these are realised it will result in 500–750 MW.
- Eclipse Energy UK Plc. – Six projects. If all projects are realised it will result in 210 MW.
- Partnership with ScottishPower Renewables – The goal is to establish 6,000 MW (3,000 MW each) by 2020.

# CCS – THE FIRST STEP TOWARDS CLEAN COAL POWER

Carbon Capture and Storage (CCS) – involving the capture and storage of carbon dioxide from fossil-fuel combustion – is emerging as one of the most important energy technologies for the future. With the inauguration of its pilot CCS plant at Schwarze Pumpe, Germany, Vattenfall has further established its reputation as a world leader in this area.

Climate change caused by emissions of carbon dioxide and other greenhouse gases is one of the greatest environmental challenges of our time.

The world's energy needs are expected to rise, and most of this increase will be met with fossil fuels. Even within the EU27 countries, use of fossil fuels is expected to increase. According to the International Energy Agency (IEA), 51% of electricity generation in the EU27 countries will still be based on fossil fuels in 2030, compared with slightly more than 55% in 2006. This means that the use of fossil fuels will be increasing, since total electricity generation will be at a higher level in 2030 than in 2006.

From this perspective, the capture and storage of the carbon dioxide produced from fossil fuel combustion is a vital instrument for reducing climate impact. The potential is great; however, the technology must be scaled up and costs lowered to enable a commercial debut by 2020.

## Vattenfall's CCS project started in 2001

As one of Europe's largest electricity producers, Vattenfall is also one of the largest emitters of carbon dioxide. Vattenfall thus has a major obligation to reduce environmentally affecting emissions from its electricity and heat production. Toward this end, since 2001 Vattenfall has been conducting a large-scale Carbon Capture and Storage (CCS) project. Vattenfall has earmarked more than SEK 11 billion for development of CCS technology by 2013.

Vattenfall is working to develop safe, cost-effective and feasible CCS technologies in the aim of achieving substantial reductions in CO<sub>2</sub> emissions. The aim is to have a fully developed commercial concept ready by 2020.

## From pilot project to demonstration plants

The pilot plant at Schwarze Pumpe, Germany, for testing the so-called oxyfuel technology (see page 17), is an important

milestone in Vattenfall's CCS technological development and is an investment worth EUR 70 million. The 30 MW plant – the first of its kind in the world – was inaugurated on 9 September 2008 (read more on page 19).

The next step will be to build demonstration power plants that are large enough to be able to evaluate the commercial prospects. Plans and pre-studies are currently being conducted in various parts of the Vattenfall Group.

## Nordjyllandsværket

In Vedsted, in northern Denmark, Vattenfall is looking into opportunities to store carbon dioxide in a geological formation at a depth of 1–2 km underground. In connection with this, block 3 at the Nordjyllandsværket facility is currently being fitted with a full-scale plant for capturing carbon dioxide using post-combustion technology (see page 17). After combustion, the liquefied carbon dioxide will be transported from the power plant to the storage site via a pipeline. If a positive result is obtained from the geological surveys, an investment decision may be made in 2010. In such case, a 300 MW CCS demonstration plant could be in operation at Nordjyllandsværket by 2013.

## Jänschwalde

Vattenfall is also studying the prospects of building a 500 MW CCS demonstration plant in Germany. In Jänschwalde, Vattenfall has a lignite-fired power plant comprising six blocks. A pre-study is currently looking into the possibility of rebuilding one of these units. The plan is to build a new oxyfuel boiler (see page 17) and retrofit one of the two existing boilers with postcombustion equipment. This double-demo project can be realised by 2015 at the earliest.

## Here's how CCS technology works



CCS technology consists of three parts: capture, transport and storage of carbon dioxide. Each part relies on various technological solutions.

### Capture

The principle of CCS is to capture carbon dioxide after combustion and compress it into liquid form for further transport and permanent storage in bedrock. Today there are three main methods of capturing carbon dioxide:

**Oxyfuel** – the fuel is pre-burned in pure oxygen and recirculated flue gases. Carbon dioxide is the only residual product.

**Postcombustion** – the flue gases are scrubbed after conventional combustion, leaving a purer form of carbon dioxide.

**Precombustion** – carbon is separated from the fuel through gasification, and the resulting hydrogen gas (H<sub>2</sub>) is burned.

The challenges for all three concepts include reducing the higher need of fuel required by the separation process, and the higher investment cost.

### Transport

A large-scale CCS system must have capacity to handle carbon dioxide from several power plants. A single coal-fired plant with a capacity of 1,600 MW produces about 10 million tonnes of CO<sub>2</sub> per year. Transport via pipeline or by ship are the most suitable alternatives for moving large volumes of liquefied carbon dioxide.

### Storage

Carbon dioxide exists in a natural state in underground geological formations around the world, where it is trapped in the same type of geological formations of sedimentary rock as those in which oil and natural gas are found. The idea is that geological storage will resemble these natural carbon dioxide deposits. Three storage forms are of interest:

**Existing oil and gas fields** where carbon dioxide can be injected to increase the volume of oil and gas extracted. The oil industry has extensive experience with this technique.

**Depleted oil and gas fields** that have shown an ability to sequester oil and gas for millions of years.

**Saltwater aquifers** – the same formations as above, but which have not held oil or gas and can be found at a minimum of 800 metres underground.

Vattenfall is currently working on locating and evaluating suitable storage sites. Studies indicate that there is more storage capacity in Europe than what is needed to store all of the carbon dioxide that is produced from existing coal-fired power plants.





## A MILESTONE FOR CLEAN ELECTRICITY IN EUROPE

It may look like a conventional industrial plant, but seen here in the background behind Hubertus Altmann is one of the most important keys to the climate challenge in the future: two tanks of liquefied carbon dioxide that has been captured from the combustion process at the coal-fired plant.

At Schwarze Pumpe – home of the world's first pilot plant based on oxyfuel technology for CCS (Carbon Capture and Storage) in a coal-fired power plant – initial tests are currently being conducted on a slightly larger scale of the technology that the EU and large parts of the energy world have pinned their hopes on for reducing CO<sub>2</sub> emissions.

The technology is much-discussed by now: carbon dioxide is captured in the combustion process, cooled and converted to liquid form, where it is then transported for final storage underground in geological formations.

"I am very proud of this accomplishment. We have now taken a giant leap forward in energy development," says Hubertus Altmann, head of the plant that had its official unveiling on 9 September 2008.

It's a mammoth testing programme that has now got under way at the pilot plant in which Vattenfall has invested EUR 70 million. All processes are tested meticulously.

"Before we can build any plants of a larger scale, we will need answers to all our questions," explains Altmann. "We are going through every process to optimise production. Along the way we encounter many minor challenges, but that's to be expected in a project of this magnitude."

The pilot plant has a capacity of 30 MW. Nine tonnes of carbon dioxide are captured every hour, or 200 tonnes a day. Starting in spring 2009, the carbon dioxide will be transported to a depleted gas field in Altmark.

"Due to the small volumes, we will initially be using trucks to transport the carbon dioxide to the storage site," says Altmann. "But in the next development stage, the CO<sub>2</sub> will be transported via pipeline. Some of it can also be sold to the chemical industry."

Vattenfall's CCS development work began in 2001 in close collaboration with universities and colleges in Dresden and Gothenburg, among other places.

Hubertus Altmann is comfortable with the technology, although he is a bit concerned about public opinion.

"The big challenge is to gain acceptance among the general public for the distribution and storage of the carbon dioxide," he says. "Many people are positive, but there are also sceptics."

"At the same time, we have received very good media publicity around the world. We host study visits here every week from delegations interested in learning more about the technology."

The Schwarze Pumpe pilot plant will be test-run for three years. This will give the engineers time to thoroughly study the technology. By then Vattenfall will be ready for the next phase of CCS development: in 2013 a full-scale demonstration plant with capacity of slightly more than 300 MW will be ready at Nordjyllandsværket in Aalborg, Denmark.

# NUCLEAR POWER AN IMPORTANT PART OF MAKING ELECTRICITY CLEAN

Interest in building new nuclear power capacity has been revived around the world. Today nuclear power is viewed as a viable component in the effort to reduce climate impact and pursue sustainable development. At Vattenfall, nuclear power is a vital part of the company's strategic direction of Making electricity clean.

Approximately 440 nuclear reactors are currently in operation in more than 30 countries and account for roughly 15% of the world's energy generation. In the EU, nuclear power accounts for 28% of total energy generation. In Sweden, nuclear power accounts for nearly half of all electricity used in the country, while in Germany it accounts for about a fourth.

The revival of interest in new nuclear power is attributable in part to the climate threat. Nuclear power is reliable and efficient, and has competitive production costs. It is also virtually free from climate-affecting emissions. Calculated over a life cycle – from construction to dismantling, including fuel production, operations and waste – nuclear power emits about as much carbon dioxide per produced kWh electricity as hydro power or wind power (based on Vattenfall's LCA, life cycle analysis). The disadvantages are that it takes a long time to build a nuclear power plant, and the technology is advanced, which entails a high investment cost. Moreover, in most countries, final storage of spent nuclear fuel is a matter that has not yet been fully resolved.

Toward the end of 2008, 36 reactors were under construction around the world – most of which are in India, China, Russia and South Korea. New nuclear power plants are also being built in Canada, Finland, France, Japan and Slovakia. In addition, many other countries have plans for the continued expansion of nuclear power. The UK, for example, wants to replace ten older reactors with new ones, which is being motivated by the need to secure access to electricity and reduce CO<sub>2</sub> emissions.

## Long-term investment programme in Sweden

Nuclear power accounts for roughly a third of Vattenfall's electricity generation. In Sweden Vattenfall operates seven reactors – three in Forsmark and four in Ringhals. Since 2003 Vattenfall has, together with other owners, invested approximately SEK 10 billion in a major, long-term investment programme in the Swedish facilities. The programme covers measures for improving the level of safety, extending the plants' useful life, and increasing capacity. The goal is to maintain world-class nuclear safety and generation. Together with other owners, Vattenfall plans to invest approximately SEK 50 billion in its Swedish nuclear power plants 2003–2030.

In Germany Vattenfall operates the Brunsbüttel and Krümmel nuclear power plants. These two plants have been off-line since summer 2007, but according to plans will be restarted in 2009. Read more in the box below.

Vattenfall works within the political framework in the markets in which it is active.

## High safety requirements

In early 2008 the International Atomic Energy Agency (IAEA) conducted a review of operations at Forsmark. The IAEA concluded that Forsmark maintains a good international level in its safety work.

Safety standards at Vattenfall's nuclear power plants are very high. All safety work aims to ensure safe operation with a comfortable margin. Vattenfall conducts active safety

## Shutdowns disrupted production

During the year, Vattenfall's nuclear power generation was disrupted a number of times. Forsmark 2 was manually shut down in June after lightning struck a power line and caused a short circuit outside of the plant. However, as a result of a malfunction in certain non-safety technical equipment, the Forsmark 1 and 2 reactors have to be operated at slightly lower capacity until the next fuel exchange.

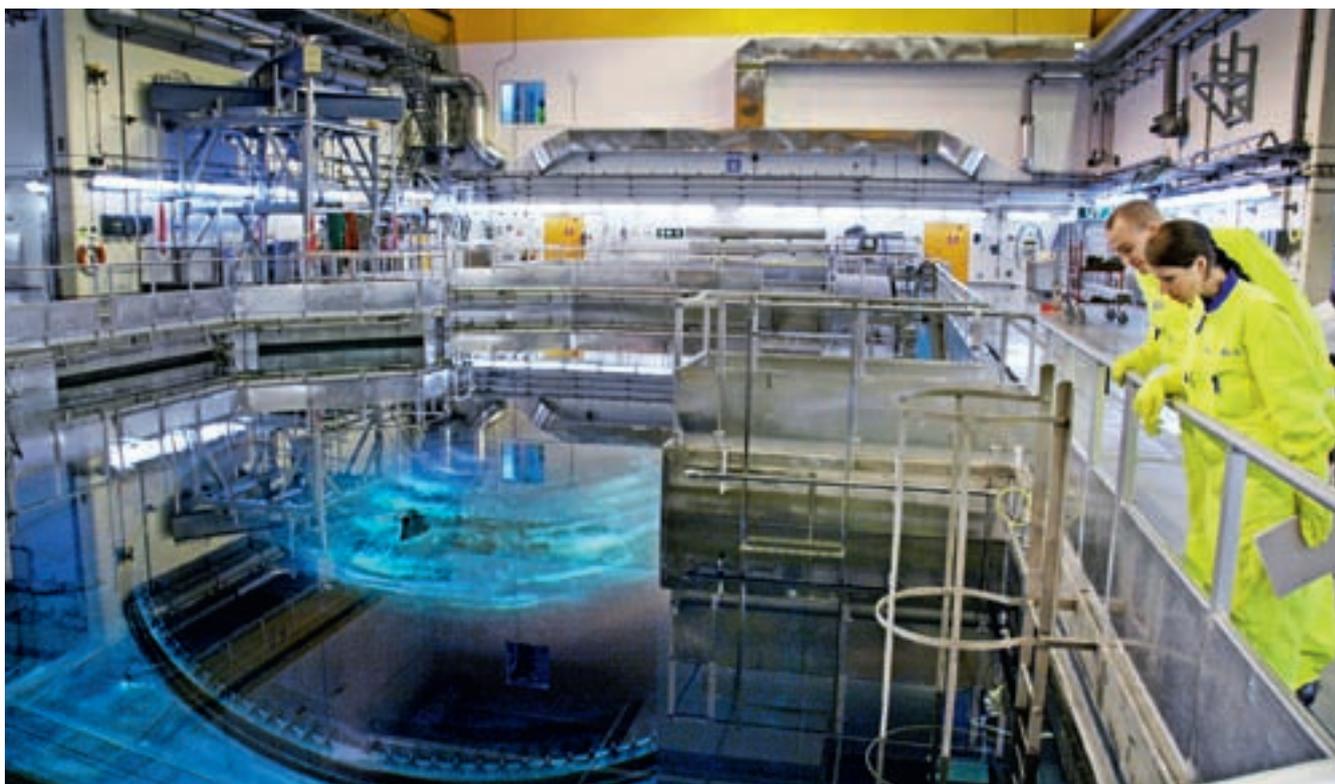
In mid-October the Forsmark 3 reactor was shut down due to an experience from an inspection of Oskarshamn 3 – which is the same type of reactor. The inspection at Oskarshamn 3 showed a fracture in one of 169 control rod shafts. All control rods at Forsmark 3 were checked, and a fracture was detected in one rod, while the formation of cracks was discovered on a fourth of the rods. After replacement of the defective rods, the reactor was restarted on 1 January 2009.

In connection with the restart following annual overhaul outages, both Ringhals 1 and Ringhals 2 were affected by operating problems that led to a loss of generation. During the outage of Ringhals 1, minor rebuilding work was performed on one of the plant's cooling systems. In conjunction with the tests prior to restarting the reactor, problems

were discovered with pressure variations. After corrective measures were taken, the reactor was restarted on 6 January 2009. At the Ringhals 2 reactor, it was found that two water pumps in the cooling system had insufficient flow, entailing that the reactor must be run at a slightly reduced capacity until the overhaul outage in 2010.

In June 2007, the Brunsbüttel and Krümmel nuclear power plants in Germany were shut down in response to two separate events – at Brunsbüttel due to a short circuit in a switchyard outside the plant, and at Krümmel due to a fire in a transformer outside of the reactor building. Safety was never jeopardised. During the time that the reactors were shut down for maintenance, other equipment was also inspected after shortcomings were discovered at other reactors. During these inspections, fractures were discovered in certain valves at the Krümmel reactor, and weaknesses in expander bolts were discovered at Brunsbüttel. Repairs were conducted in 2008 and will be completed in 2009. The standstills of the German nuclear power plants hurt earnings for 2008 by approximately SEK 5.5 billion.

## Safety work at Forsmark



In early 2008 the International Atomic Energy Agency (IAEA) conducted a review of operations at Forsmark. The IAEA concluded that Forsmark maintains a good international level in its safety work. Vattenfall conducts active safety work focusing on strong safety

management, a good safety culture and continuous improvements. Together with the other owners, Vattenfall will be investing a total of approximately SEK 50 billion 2003–2030 in raising safety and extending the useful life of its plants.

work focusing on strong safety management, a good safety culture and continuous improvements. A major effort is currently under way to regain a world-leading position in nuclear power safety.

Vattenfall has clearly emphasised the importance of safety in its organisation. Vattenfall's newly appointed Chief Nuclear Officer (CNO) serves as the Executive Group Management's nuclear power expert and reports directly to the CEO on matters concerning nuclear safety. In addition, Vattenfall has a Nuclear Safety Council that is chaired by the Group CEO. Further, Vattenfall is an active participant in international nuclear power organisations in order to ensure that the entire body of global experience is taken advantage of in the Group's safety work. The nuclear power companies bear full operational responsibility for operations of the nuclear power plants.

### Swedish site location for final storage 2009

The Swedish Nuclear Fuel and Waste Management Company (Svensk Kärnbränslehantering AB – SKB) is responsible for managing and disposing of radioactive waste from Sweden's nuclear power plants and ensuring it is stored in an environmentally safe manner. In 2009 SKB will be choosing a site for final storage of spent nuclear fuel. This choice follows 20 years of studies, site surveys and pre-studies in eight municipalities. In 2010 SKB will submit an application to build the final repository for spent nuclear fuel, and the repository is expected to be ready for use in 2018.

Spent nuclear fuel is currently being stored in SKB's central interim storage facility for spent nuclear fuel in Oskarshamn, where it is submerged in large water pools that cool and shield radiation for a period of approximately 30 years.<sup>1</sup>

In Germany, the federal government has studied the possibility of using the salt mine in Gorleben as a final repository for highly radioactive waste, however, a moratorium has been in place for this work since 2000.

1) Source: SKB



## Forsmark, 2008

Energy availability: 85.2%

Net generation: 23.4 TWh

Number of employees: 860

Forsmark accounts for roughly 18% of Sweden's electricity generation. Since the commissioning of the first reactor in 1980, Forsmark has generated more than 530 TWh, or 530 billion kilowatt hours, of electricity.



## THE ART OF COOLING A NUCLEAR POWER PLANT

The Forsmark nuclear power plant is idyllically situated on Sweden's Uppland coast. And the Baltic Sea waters play an important role in the plant's function. The cooling process for the safety switches is one example.

When the reactor is to be shut down, Baltic Sea water is flooded in to each of the Forsmark reactors' cooling systems. The water cools down another, closed water system, which transports the heat when the reactor has to be turned off.

In the two oldest reactors, Forsmark 1 and 2, this system has been modernised to enhance safety.

"The facilities are already very safe, but now we are raising the bar further and making sure these two reactors are updated in accordance with the new regulations that have been issued by the regulatory body (SSM) during the 2000s," explains Ulf Sandberg, reactor safety engineer at the Forsmark plant.

For the cooling systems, this means that Forsmark 1 and 2 are now moving from two to four process subdivisions. This entails that the pumps and heat exchangers that take in sea water are situated in four parallel and independent subdivisions, instead of two.

"This is called redundancy," says Sandberg. "Two of the four subdivisions are needed to shut down the reactor. We can thus have a malfunction in two subdivisions and still be able to safely shut down the reactor. It is part of what we call 'deep defence'."

The work on expanding the cooling system to four channels is just one of hundreds of measures that are now being taken at Vattenfall's Swedish nuclear power plants in Forsmark and Ringhals. In all, Vattenfall is investing – together with the other owners – approximately SEK 50 billion in a programme 2003–2030 to raise the plants' safety and extend their useful life. It involves everything from power feed-in and modernisation of control equipment to diversification measures in the cooling systems.

"The cooling system at Forsmark 1 was refurbished in 2005, while at Forsmark 2 we began work in 2006 and are almost finished. Not replacing all the subdivisions at once is also a safety aspect, since if something were to go wrong, we can correct it in due time," Sandberg explains.

Although a modern heat exchanger in a nuclear power plant is no larger than 3x3x3 metres, replacing the components is no easy process.

"We can't shut down everything – part of the plant must always be in operation. And there are hundreds of metres of pipe that have to be replaced and welded."

Replacing and upgrading the plant is actually an everyday matter for Forsmark's safety engineers. Updates are continuously being made to the reactors, and new components have to be installed.

"We are constantly raising our level of ambition with respect to safety," says Sandberg. "Our plants will be even better at withstanding unforeseen events – everything must still be operational."

# HOLISTIC VIEW OF SUSTAINABLE DEVELOPMENT

Vattenfall takes an active role in sustainable development of society by helping shape energy solutions for the future. Such solutions must include consideration for the environment, customers, employees and society at large.

Vattenfall's ambition is to meet society's energy needs in a responsible manner. The guiding principle in this endeavour is that meeting the needs of the present may not compromise the ability of future generations to meet their needs.

Access to energy is a prerequisite for a well-working society and sustainable development. At the same time, all energy generation has an impact on the environment. Determining what is an acceptable impact must be done in dialogue with society within the framework of rules and market mechanisms. Vattenfall believes that market-based solutions are the best way of striking a balance between diverging interests. A well-thought-out rule system is needed to achieve fair conditions and arrive at shared goals and ambitions.

## Holistic view important

Vattenfall underscores the importance of taking a holistic view to sustainable development, which is an ongoing process involving economics, the environment and society. Naturally, Vattenfall must be successful in all these areas, but financial strength is a prerequisite for the company's ability to achieve true success in the areas of society and the environment.

In its efforts to create long-term value, Vattenfall has adopted five strategic ambitions: Number One for the Customer, Number One for the Environment, Profitable Growth, Benchmark for the Industry, and Employer of Choice. These five strategic ambitions are Vattenfall's interpretation of and contribution to sustainable development – both for society and for the company. Vattenfall is striving to live up to all five ambitions, and by striking a balance between them, the company is taking its social responsibility. Value creation makes it possible to invest in

sustainability, while access to energy is a prerequisite for sustainable development.

## Vattenfall's CSR report

Every year Vattenfall publishes a separate Corporate Social Responsibility (CSR) report. In its work on environmental and social responsibility, Vattenfall puts great emphasis on listening and communicating. The CSR report is therefore an important tool for carrying on a dialogue with people in the company's operating environment on how it is living up to the expectations that are put on it as an energy company and on its role in society. The report describes important sustainability issues and how they are being addressed. The 2008 report focuses on future challenges: Vattenfall's planned electricity generation portfolio for 2030 and the path forward, the current investment in the coal-fired power plant in Hamburg (Moorburg), potential technologies for reducing emissions, greater effectiveness in nuclear fuel utilisation, and the work on diversity from a human resources perspective.

Since 2003 Vattenfall's CSR report has adhered to the guidelines of the Global Reporting Initiative (GRI). These guidelines consist of a set of indicators that measure the company's impact on the environment, society and the economy. The GRI is an independent institution whose mission is to develop and disseminate sustainability reporting guidelines on a global basis. These guidelines are voluntary and are currently used by approximately 1,000 companies around the world. Starting in 2008, all state-owned companies in Sweden are required to publish an annual sustainability report based on the GRI guidelines.

For more information, visit [www.vattenfall.com/csr](http://www.vattenfall.com/csr).



Vattenfall's 2008 CSR report focuses on future challenges, such as Vattenfall's planned electricity generation portfolio for 2030 and the roadmap for achieving this, the impending investment in the coal-fired plant

in Hamburg (Moorburg), possible technologies for reducing emissions, increased efficiency in nuclear fuel utilisation, and the work on diversity from a human resources perspective.

# MORE EFFICIENT USE OF ENERGY CREATES NEW OPPORTUNITIES

Electric cars, heat pumps, cooling, and new lighting technologies. Services and advice on using energy more efficiently. Vattenfall is becoming actively involved in a variety of areas in an effort to reduce total energy consumption.

Electricity is an effective conveyor of energy, and by switching to electricity, total energy use can be reduced. Vattenfall has taken an active involvement in a number of areas regarding the applications for electricity.

## Electric cars for reduced CO<sub>2</sub> emissions

Motor vehicles are one example, where a shift in favour of electricity is reducing the use of fossil fuels as well as total energy consumption, since electric motors are more efficient than combustion engines. A changeover to electric cars would result in a dramatic reduction in CO<sub>2</sub> emissions from the transport sector.

The limitations of electric cars today are in battery technology, which is still in its infancy. However, dramatic progress has been made in this technology through the growth of mobile telephones and their dependence on batteries. This is an emerging, major application area that the motor vehicle industry will build further upon through continued battery development.

Vattenfall has been collaborating with Volvo for a number of years on the development of plug-in hybrid cars. And in late 2008 Vattenfall began co-operating with BMW on a project focusing on electric cars in Berlin.

## Strong growth in heat pumps

Various types of heat pumps are another good example of efficient use of electricity. The use of heat pumps is a major and important shift towards renewable energy. It is also an area in which Sweden is at the forefront. Although the conditions are not the same in every country, the potential is nevertheless great. Vattenfall will be working to spread this technology, which can also be used for cooling, and will be actively promoting the exchange of knowledge in the countries in which it is active.

## Lighting and intelligent meters

Lighting is an area in which technological development can contribute to more efficient energy use and greater user comfort. Vattenfall offers solutions for street and outdoor lighting that lower energy use, improve lighting comfort and contribute to lower maintenance costs.

Vattenfall is also working with “intelligent” electricity meters that are read remotely. In Sweden and Finland, 1.35 million intelligent meters have already been installed for customers in the electricity network. With these meters in place, Vattenfall can offer customers new services that also promote more efficient use of energy. In time, intelligent



In November 2008, German carmaker BMW and Vattenfall joined together in a project to test 50 electric cars in Berlin. Vattenfall will provide the charging stations used by cars in the project.

meters will be installed in all countries in which Vattenfall has electricity network operations.

## Energy efficiency improvements important

Vattenfall is upgrading and continuously increasing the efficiency of its own plants, and is replacing older ones with modern and more energy-efficient facilities. Vattenfall helps corporate customers with custom-tailored energy and process efficiency improvements. Some 25 major Nordic corporate customers, including Holmen, Höganäs and Korsnäs, have hired Vattenfall to analyse their energy use and help them improve the efficiency of energy use in their manufacturing processes.

In Germany, Vattenfall is working together with the City of Berlin to improve energy efficiency in public buildings. Vattenfall also has a long-standing co-operation with several hospitals in Berlin to help them reduce their energy consumption.

Vattenfall has long provided advice to households on how they can use energy more efficiently. In Sweden and Finland, Vattenfall offers online energy guides to help consumers calculate their energy use. In 2008, an interactive online guide called “Use energy wisely” was launched, providing individual energy advice and general tips on the use of energy in the home.

In Germany, too, Vattenfall has an online energy savings guide where retail customers can obtain information on how to reduce their energy use via a schematic “energy house”. In Poland, during the year Vattenfall started an energy efficiency-improvement programme directed at the general public. This campaign, which is based on an online energy savings guide, provides energy advice and offers to buy low-energy light bulbs at a discounted price. And in co-operation with the university in Silesia, Vattenfall offers industrial customers an energy efficiency improvement service.

# CLIMATE ISSUE STEERS ENERGY INVESTMENTS

Tougher climate standards and a major need for investment. Europe's energy market is currently in an intensive phase in its transformation to an energy system that can meet the environmental demands of the future while supporting sustainable development of society. Incentives to invest in renewable energy, nuclear power and Carbon Capture and Storage (CCS) technology have risen dramatically, among other things as a result of trading in emission allowances.

In 2008 the climate issue became even more important in the energy markets. The framework for energy supply today and in the future is set by various EU directives. The EU's ambitious targets can be summarised with the formula 20–20–20: by 2020, CO<sub>2</sub> emissions shall be reduced by 20%, the share of renewable energy shall be 20% (compared with today's level of slightly more than 8%), and energy efficiency shall be improved by 20% – with 2005 as the base year. By 2050 the standards will be even higher, when CO<sub>2</sub> emissions are to be reduced by 60%–80%.

At the same time, there is a major need to build new power plants in large parts of the EU in order to replace older plants and meet rising demand for electricity, especially in eastern Europe. In all, more than 800 MW will be needed by 2030. About half of this is entirely new capacity, while the rest concerns replacing older power plants. It is mainly coal-fired plants and nuclear power plants that will have served their useful lives in the coming decades.

Parallel with this, electricity use is expected to increase throughout the EU. Between 2005 and 2020, demand for electricity is projected to grow by slightly more than 20%. The rate of growth is highest in southern and eastern Europe, while Germany and the Nordic countries are expected to have only marginal growth.

## Gradually higher electricity prices

The energy markets are also characterised by ever-higher costs. A key reason for this is trading in emission allowances, which is one of the most important regulatory tools for reducing CO<sub>2</sub> emissions in the EU. During 2008 the average price of CO<sub>2</sub> emission allowances was approximately EUR 23/tonne. During the year, commodity prices – oil, coal and natural gas – were also periodically very high, even though they fell back again during the autumn due to the financial crisis.

The carbon dioxide issue is becoming increasingly central to investment decisions. The challenge for energy companies will be to create growth and at the same time meet the climate requirements in a market that is characterised by price pressure, regulation and growing demands from customers and the operating environment.

All things considered, this development has resulted in a sharp increase in incentives to invest in renewable energy. Several of the major European energy companies have

therefore increased their investment in wind power, which has become increasingly more profitable as a result of subsidies, more effective technology and larger volumes.

The market trend towards sustainable energy has also led to a stronger focus on Carbon Capture and Storage (CCS) technology. Both the EU and the International Energy Agency (IEA) believe that CCS will be one of the most powerful tools for reducing CO<sub>2</sub> emissions over time. In January 2008 the European Commission presented a proposal for a legal framework for the expansion of CCS technology within the EU. In September, as the first company in the world, Vattenfall inaugurated a pilot CCS plant based on oxyfuel technology at Schwarze Pumpe in eastern Germany (read more on page 19).

Interest in nuclear power has also had a resurgence in the shadow of the climate issue, since it is virtually free from climate-affecting emissions. Construction of the third generation of nuclear power plants has now been started in a few countries, such as France and Finland. Plans are also being drawn in the UK for new nuclear power plants to secure electricity supply and enable the country to phase out the older generation of power plants (read more on page 20).

## Regional electricity markets

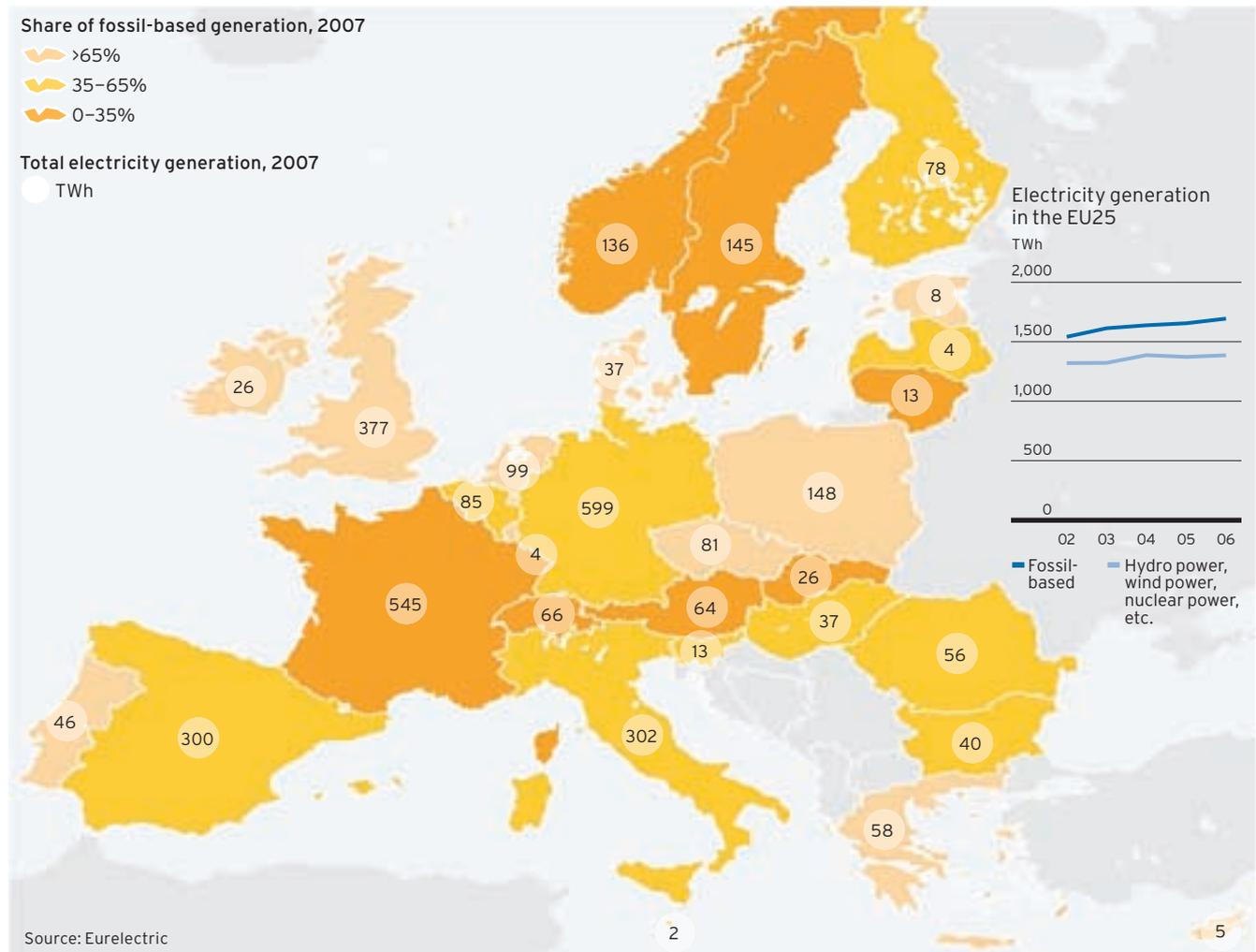
The opening of the EU's electricity and gas markets to competition was completed in July 2007. One aim of this is to create effective price mechanisms and incentives to invest in new generation. But there is still a long way to go before there can be any talk about a uniform European electricity market. In practice, the EU consists of a number of national electricity markets plus one regional market – the Nordic – with the Nord Pool electricity exchange in Norway as the most highly developed.

Being able to build a uniform European electricity market will require expanded transmission capacity between countries. Today only a very small, but gradually growing share, of electricity trading is conducted across EU nation borders. Strengthening the electricity connections and removing transmission bottlenecks is a priority issue in the EU. As part of this work, in 2008 the new NorNed cable between Norway and the Netherlands was inaugurated, with transmission capacity of 700 MW.

## Margins under pressure for grid operators

For companies with transmission and distribution operations,

## Europe's electricity market



Total electricity generation in the EU27 amounts to approximately 3,200 TWh and has risen steadily by a couple per cent per year since 2002. Germany, France and the UK are clearly the largest producers and account for nearly half of total electricity generation in the EU.

Fossil-based energy still dominates electricity generation in the EU: oil, coal and gas account for 55% of generation. But production varies widely from country to country. For example, in Sweden,

hydro power and nuclear power together account for nearly 90% of electricity generation. In France, nuclear power is dominant and accounts for approximately 77% of generated electricity, while in Austria, hydro power accounts for nearly 60% of all generated electricity. On the other end of the scale are the UK and Italy, for example, whose energy is about 80% fossil-based.

their margins for these operations have come under continued pressure as a result of stricter network regulations.

The European Commission has proposed a system of ownership unbundling, entailing the separation of grid ownership and operation from generation and sales. As an alternative, it has been proposed that companies can be allowed to retain ownership of their grids if operations and planning are transferred to an Independent System Operator (ISO). In most countries, including Sweden, ownership and operation of the grid are already separated from generation and sales. Germany, however, has four transmission companies that are each owned by one of the four largest power companies, including Vattenfall. In France the grid company is owned by EDF.

A group of countries has voiced opposition to the Commission's proposal. As a result, the Commission proposed yet

another alternative, where the power companies can continue to own the transmission companies but under considerably stronger oversight by the regulatory authorities. Which of these three alternatives is chosen in the various countries remains to be seen. In Germany, Vattenfall as well as E.ON are considering selling their respective transmission companies to an Independent System Operator. For electricity distribution, i.e., the transmission of electricity from the grid to households and companies, various types of regulation are in place from country to country, such as cost-based regulation and incentive-based regulation. The grid companies have also had higher demands put on them to ensure reliable deliveries. In the Nordic region, an extensive investment programme is currently in progress to strengthen the distribution network in order to withstand storms, for example.

# ELECTRICITY MARKET AFFECTED BY FLUCTUATING COMMODITY PRICES

Average prices on Europe's electricity exchanges were higher in 2008 than in 2007. However, turbulence in the financial market and falling commodity prices during the autumn led to falling prices on the spot and futures markets.

Even though the European electricity market has been de-regulated, it is not uniform. Prices are still steered primarily by local production conditions, while the price correlation between different countries has increased. The Nordic countries and certain eastern European countries are characterised by relatively low prices, while Germany, France and Switzerland are usually characterised as areas with medium-high prices. The highest prices are generally found in the Benelux countries, Italy and the UK.

In the Nordic countries, water levels are a key pricing factor: a weak hydrological balance (i.e., low water levels) leads to higher prices and vice versa. In many other countries it is commodity prices that are decisive – for example, the price of coal and natural gas. Trading in emission allowances in the EU has also had an increasingly noticeable impact on electricity prices.

A growing share of Europe's electricity trading is con-

ducted on electricity exchanges, where producers, retailers, major industrial companies and financial players conduct trading. Trading is done either through direct delivery on the spot market, or for future delivery in the futures market. The Nordic electricity exchange, Nord Pool, and the European Energy Exchange (EEX) in Germany are clearly the largest exchanges in terms of volume and the number of market participants.

## Effective pricing on the electricity exchanges

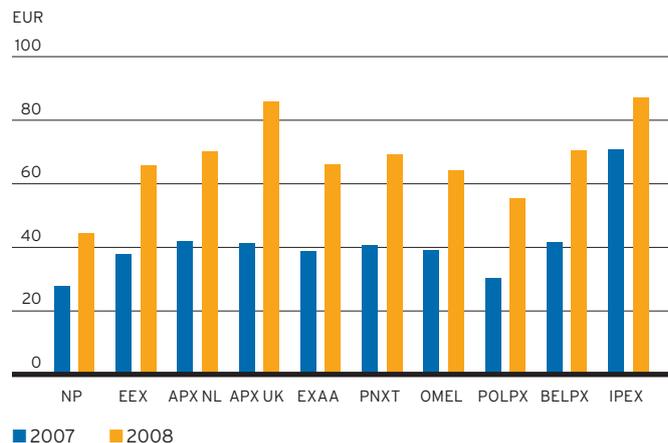
Prices on the electricity exchanges are determined by supply and demand, and also serve as a benchmark for other electricity trading. Generation facilities are utilised by merit order, which means that the plants with the lowest variable costs are put in operation first<sup>1</sup>. As demand rises, more expensive forms of generation are put into operation. Customer demand determines which type of generation is the last

Spot market volumes, TWh

	2008	2007
NP, Nord Pool, Nordic countries	298	292
EEX, European Energy Exchange, Germany	154	124
APX NL, Amsterdam Power Exchange, Netherlands	25	21
APX UK, Amsterdam Power Exchange, UK	14	11
EXAA, Energy Exchange Austria, Austria	3	2
PNXT, Powernext, France	52	44
OMEL, Spanish Power Exchange, Spain	222	179
POLPX, Polish Power Exchange, Poland	2	2
BELPX, Belgian Power Exchange, Belgium	11	8
IPEX, Italian Power Exchange, Italy	233	231

Volumes traded on Nord Pool's spot market are considerably higher than corresponding volumes in most of Europe's other electricity spot markets.

Average spot prices on Europe's electricity exchanges



Compared with other European exchanges, prices on Nord Pool, the Nordic electricity exchange, were significantly lower in 2008 than prices on the Continent. In the UK (APX UK) and Italy (IPEX), average spot prices in 2008 were roughly twice as high as on Nord Pool.

producing unit, and based on this, the price of all electricity is determined. This enables generation resources to be used more efficiently and also sends clear signals for future investment decisions. Customers receive fair pricing, while electricity producers receive the same price and compete on equal terms.

The EU's goal of increasing the share of renewable energy in generation – from slightly more than 8% today to 20% by 2020 – is also having an effect on prices. Many countries have introduced economic incentives to stimulate investment in renewable energy, and these costs are ultimately passed on the consumers. For example, Germany subsidises electricity from renewable sources through a fixed level of compensation for generated electricity. Sweden has a system based on electricity certificates, where electricity generators receive one electricity certificate for each MWh of electricity generated from renewable energy sources that is delivered to the grid. Electricity generators can sell these electricity certificates on the market at the market price. This system is made possible by the fact that electricity trading companies are obligated to buy a certain amount of elec-

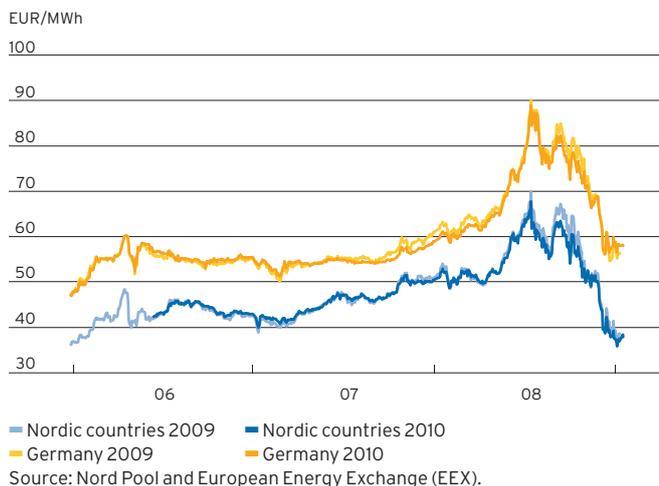
tricity certificates. The difference between the Swedish and German support systems is that in the Swedish system, the desired volume of renewable energy is set, and the certificate market sets the price, while in the German system, the price is set in such a way so as to generate the desired volume.

### Sharply fluctuating wholesale prices

Spot prices for electricity rose gradually during the first half of the year in pace with rising commodity prices and higher prices for CO<sub>2</sub> emission allowances. Oil and coal prices rose during the first half of the year to record levels, but fell back dramatically during the autumn as a result of the financial crisis. Despite sharply lower commodity prices during the second half of 2008, on average they were higher for the year than in 2007. Electricity spot and forward prices also fell during the autumn, while the average price level for the full year was higher than corresponding prices in 2007.

1) Hydro power has a so called "water value", which affects the order in which it is utilised.

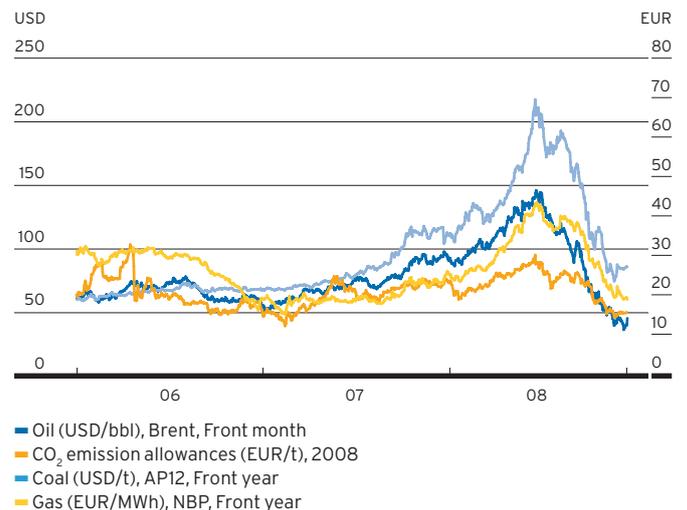
German and Nordic electricity futures prices



Nordic forward contracts for 2009 and 2010 closed on 30 December 2008 at EUR 30.60/MWh and 37.90/MWh, respectively, compared with EUR 51.70/MWh and EUR 50.88/MWh, respectively at year-end 2007. However, the closing price for the 2009 contract (annual average) was EUR 54.70/MWh, which is nearly EUR 9/MWh higher than in 2007, when the corresponding figure was EUR 45.72/MWh.

Forward prices for the 2009 and 2010 contracts in Germany closed on 30 December 2008 at EUR 56.21/MWh and EUR 58.02/MWh, respectively, compared with EUR 61.50/MWh and EUR 59.39/MWh, respectively, at year-end 2007. The annual average value of closing prices for the 2009 contract was EUR 70.10/MWh, which is EUR 14.23/MWh higher than in 2007, when the corresponding figure was EUR 55.85/MWh.

Price trend for oil, coal, gas and CO<sub>2</sub> emission allowances



At year-end 2008, prices of coal, oil, gas and CO<sub>2</sub> emission allowances were below the corresponding prices at year-end 2007. Following a long period of rising prices, the price of oil (Brent) peaked at USD 148.06/barrel in July, and thereafter fell sharply towards the year's bottom quotation of USD 36.61/barrel, on 24 December. This price level has not been seen since 2004. Similarly, the price of coal fell from USD 217.50/tonne to USD 74.76/tonne. Prices of gas and CO<sub>2</sub> emission allowances also fell sharply during the second half of the year. Despite the dramatic fall in commodity prices during the second half of 2008, on average they were higher than in 2007.

# CONTINUED STRONG EARNINGS IN ELECTRICITY SECTOR DESPITE ECONOMIC DOWNTURN

Continued consolidation and continued major investment programmes. Power companies have been relatively unaffected by the financial crisis, and most have reported strong year-end results for 2008. Cash, liquidity and financing were key issues during the second half of the year.

Thousands of companies operate in the various national and regional energy markets in Europe – everything from local, municipal companies to very large international companies with operations spanning the entire value chain: generation, distribution, electricity trading and sales to end customers. Several companies also have substantial sales of gas and are actively striving to integrate their electricity and gas operations.

Ever since the local energy markets began opening up to competition in the 1990s, a sweeping structural transformation has taken place across national borders. Since electricity companies lacked opportunities to export, they instead focused on acquiring market shares in other countries. Europe's electric utilities are striving to achieve economies of scale, spread their risk and establish a pan-European presence. The trend has moved toward fewer, but larger, international players. For example, France's EDF has grown through major acquisitions in the UK, Germany, Italy and eastern Europe. Germany's E.ON has acquired companies in the Nordic countries, Spain, Italy, eastern Europe and Russia, among other markets. Two "mega-deals" were initi-

ated in 2005 and 2006: In Spain, Gas Natural made a bid for Endesa, which was followed by a competing bid from E.ON, and a merger between the French companies Suez and Gaz de France (GDF) was announced. Both deals proved to be very difficult to carry out, and it was not until some time into 2008 that any outcome could be seen. Neither Gas Natural nor E.ON succeeded in taking over Endesa. Instead, Endesa was jointly acquired by the Italian company Enel and Spain's Acciona, while E.ON acquired power assets in Endesa and Enel worth nearly EUR 12 billion.

The merger between GDF and Suez, which includes the Belgian company Electrabel, was completed in July 2008. The new, combined GDF Suez is now one of the three largest electricity and gas companies in Europe.

In the Netherlands, plans to merge Essent and Nuon failed and both companies began seeking other development options. In January 2009 Germany's RWE announced that it had reached an agreement to acquire Essent, and in February 2009 Vattenfall announced that it has made an offer for Nuon. Back in 2007, Spain's Iberdrola acquired Scottish Power in the UK and the US company Energy East. In July 2008 Spain's Gas Natural announced that it had reached an agreement to buy ACM's controlling stake in Spain's integrated electricity company Union Fenosa. The motive for the deal was to achieve convergence and take advantage of synergies between electricity and gas. In September 2008 EDF announced that it had acquired British Energy, the owner and operator of Britain's nuclear power plants.

## Two groups of power companies

After these deals, six major international players have emerged in Europe: EDF, Enel, E.ON, GDF Suez, Iberdrola and RWE. Several of these also have substantial operations outside Europe, mainly in North and South America. The opportunities for these companies to continue growing through acquisitions in Europe are limited due to a lack of potential acquisition candidates. However, they are expected to make complementary acquisitions – in Russia and eastern Europe, for example. In addition, a number of asset swaps will most likely be initiated as a result of the EU's demands for asset divestments to promote competition in the market.

The second group of European power companies consists of more regionally based companies: Centrica, CEZ, Dong,

## Major acquisitions in last two years

Acquiring company	Acquisition target	Currency, amount (billions)
EDF, France	British Energy, UK	12.5 GBP
EDP, Portugal	Horizon Wind Energy, USA	2.9 USD
E.ON Germany	Parts of Endesa's and Enel's assets	11.9 EUR
E.ON Germany	OGK, Russia	3.3 EUR
E.ON Germany	Outstanding 44.6% in E.ON Sweden from Statkraft	Asset swap
Enel (Italy) and Acciona (Spain), jointly	Endesa, Spain	43.4 <sup>1</sup> EUR
Enel, Italy	OGK5, Russia	2.6 EUR
Fortum, Finland	TGK10, Russia	2.7 EUR
Gas Natural, Spain	Union Fenosa, Spain	26.1 EUR
Gaz de France and Suez, France	Fusion	–
Iberdrola, Spain	Scottish Power, UK	11.6 GBP
Iberdrola, Spain	Energy East, USA	6.4 EUR
National Grid, UK	KeySpan, USA	6.2 EUR
Scottish & Southern Energy	Airtricity, Ireland	1.5 EUR

1) Enterprise value.

EnBW, Energias de Portugal (EDP), Essent, Fortum, Gas Natural, Nuon, Scottish & Southern Energy, Statkraft and Verbund. Some of these companies are generally regarded as acquisition candidates, while others are actively striving to grow through mergers or acquisitions. Germany's municipal-owned Stadtwerke companies are frequently singled out as acquisition targets. There are more than 700 such Stadtwerke companies in Germany – a few of which are of a substantial size and with operations in several different business segments.

Vattenfall today is positioned between these two groups – it is smaller than the companies in the first group with pan-European operations, but has considerably broader market positions than regional companies such as Fortum and Nuon. In addition, Vattenfall has explicitly stated its strategy to double its market share in Europe, from 5% today to 10% by 2030.

A relatively new trend is the ambition by oil and gas companies to integrate electricity activities. Dong, BP and Total are examples of such companies. Conversely, certain electricity companies are seeking to acquire positions in gas production by acquiring stakes in gas fields. Due to the crisis in the financial markets, opportunities to carry out continued acquisitions will be more difficult. On the other hand, falling prices may enable financially strong players to acquire assets at bargain prices.

### Major investment programmes

In 2007 most energy companies in Western Europe shifted their focus from acquisitions to organic growth and launched extensive investment programmes, ranging from construction of entirely new power plants to upgrading and renewal of existing plants, to expansion and strengthening of their electricity networks. According to the Credit Outlook 2009 report, published by Société Générale in November 2008, the following investment programmes have been announced by some of the larger companies:

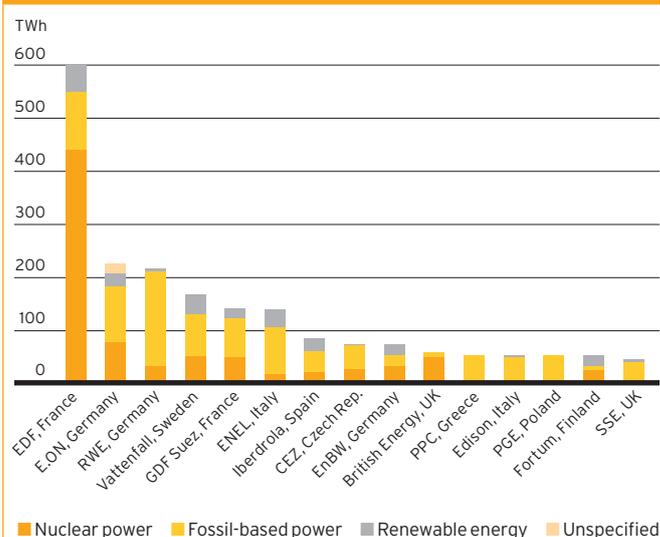
Company	Amount, EUR billion	Year
E.ON	60	2007–2010
EDF	30	2008–2010
GDF Suez	30	2008–2010
Enel	37	2008–2012
RWE	25	2007–2011
Iberdrola	18	2008–2010
Vattenfall	18	2008–2012 <sup>1</sup>

1) For the period 2009–2013, the investment programme amounts to SEK 191 billion.

Due to the financial crisis and economic downturn, a few companies have indicated that they will be reducing or delaying some investments if the negative market conditions persist. Investments in renewable energy – mainly wind power – have increased dramatically. Several companies have set ambitious targets for reducing their CO<sub>2</sub> emissions.

A number of companies have concentrated their investments in renewable energy in separate subsidiaries or business areas, such as E.ON Renewables, Iberdrola Renewables and RWE Innogy. In a few cases, such subsidiaries have become listed on the stock market. Effective 1 January

### Europe's largest electricity generators, 2007



Taking into account Enel's acquisition of Endesa, Vattenfall is the fifth largest electricity generator. This is not reflected in the diagram above, since Enel did not consolidate Enesa until October 2007.

2009, Vattenfall has gathered its wind power assets in the new Wind Power business unit of the newly formed Business Group Pan-European.

Investments in nuclear power are also expected to increase. New nuclear power plants are currently being built in Finland and France, and in the UK the British government is encouraging companies to build new nuclear power plants. The bulk of investment is still being made in fossil-based energy (coal and gas). With the new Carbon Capture and Storage (CCS) technology, electricity can be generated from coal and gas plants with virtually no CO<sub>2</sub> emissions, and several companies are planning major investments in this area. Vattenfall has taken a leading role in this area and in September inaugurated the world's first CCS pilot plant based on so-called oxyfuel technology.

### Strong operating profits in 2008 but substantially higher focus on liquidity issues

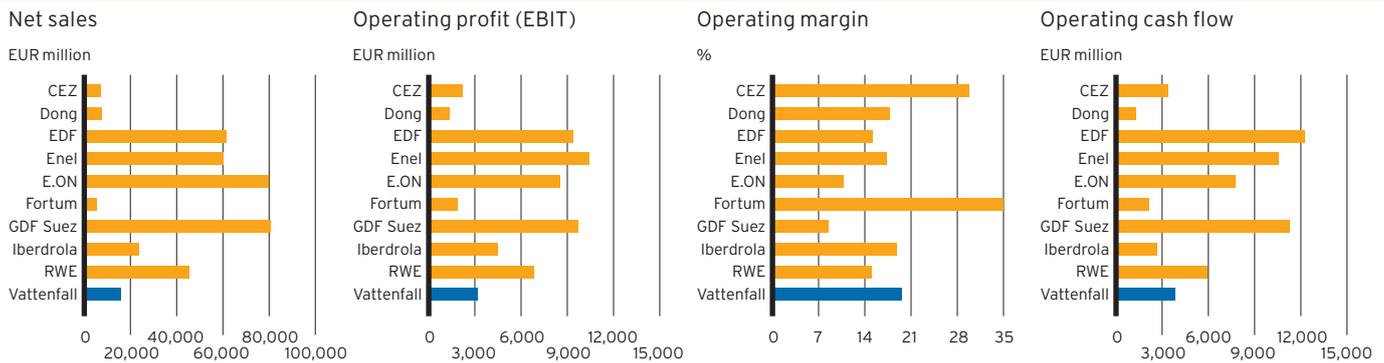
Owing to high electricity prices caused by rising prices for commodities and emission allowances during the first half of the year, most companies in the electricity sector managed to post continued strong financial results in 2008. By year-end the strong economic decline during the second half of 2008 had not yet had any negative impact on sales or cash flow. However, the financial crisis has generally led to financing problems and considerably higher borrowing costs. Companies as well as investors have therefore increased their focus on liquidity issues. As a result of recent years' acquisitions, increased investment programmes and large loan redemptions in 2009, companies in the electricity sector have very large borrowing needs. Therefore, at the end of 2008 many companies chose – when the opportunity arose – to issue bonds in order to prefund and strengthen their cash positions, even

though interest expenses had risen considerably compared with the first half of the year. This sharper focus on liquidity issues marked a clear break in trend compared with the situation in recent years, when companies consciously opted to increase their debt and lower their credit rating targets. Now companies are once again communicating their ambitions to defend a high credit rating in the “single A” category. Only

a few companies have lower rating targets or no rating commitments whatsoever.

Commodity and electricity prices generally have a large impact on earnings, although this impact can vary widely, depending on the company’s specific situation. A company’s product mix also affects its earnings. Companies with fixed-cost generation, such as nuclear or hydro power, are not

**Comparison of selected European energy utilities** (Data as per 30 September 2008, unless indicated otherwise)



	CEZ	Dong	EDF	Enel	E.ON
<b>Country</b>	Czech Republic	Denmark	France	Italy	Germany
<b>Listing info</b>	Listed (66%-owned by Czech state)	Unlisted (73%-owned by Danish state)	Listed in 2005 (approx. 85%-owned by French state)	Listed (31.2%-owned by Italian state)	Listed (Free float: 91%)
<b>Electricity sales 2007, TWh</b>	81	20 (generation)	652	196 (of which, Europe 189)	471 (of which, Europe 435)
<b>Number of customers, millions</b>	Electricity: 6.8	Electricity: 1.1 Gas: 0.1	Electricity: 41 (of which, Europe 38). Gas: 2.2	Electricity: 49 Gas: 3.3	Electricity: 25 (of which, Europe 24) Gas: 8
<b>Primary products</b>	Electricity, heat	Gas, oil, electricity	Electricity, gas	Electricity, gas	Electricity, gas
<b>Primary markets</b>	Czech Republic, Bulgaria, Romania, Poland	Denmark, (Sweden, Germany, Netherlands)	France, UK, Germany, Italy, Central and Eastern Europe (Asia, USA and Africa)	Italy, Spain, France, Russia, Portugal, Central and Eastern Europe, North and South America	Germany, Central and Eastern Europe, UK, Benelux, Nordic countries, Italy, Spain, Russia, USA
<b>Strategies</b>	<ul style="list-style-type: none"> <li>To become a leading energy company in Central and South-eastern Europe</li> <li>Take advantage of synergies through vertical integration of activities</li> <li>Upgrade existing generation assets and build new plants</li> <li>Reduce CO<sub>2</sub> and NO<sub>x</sub> emissions</li> </ul>	<ul style="list-style-type: none"> <li>Integrate and consolidate newly acquired units</li> <li>Secure gas supply</li> <li>Expand electricity operations</li> <li>Integrate gas and electricity</li> <li>International growth (Sweden, Germany, Netherlands)</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen position in Western and Central Europe</li> <li>Take advantage of global nuclear revival</li> <li>Invest in gas in order to be able to offer customers both electricity and gas</li> </ul>	<ul style="list-style-type: none"> <li>Create value in newly acquired companies (Endesa, companies in Russia)</li> <li>Seek out targeted growth opportunities in existing geographic markets and operating areas</li> <li>More focus on South America</li> <li>Continued growth in renewables and nuclear generation</li> </ul>	<ul style="list-style-type: none"> <li>Strengthen position in Europe</li> <li>Strengthen gas supply position through own gas production and LNG</li> <li>Integrate assets in Spain, Italy and France</li> <li>USA a long-term growth opportunity</li> </ul>

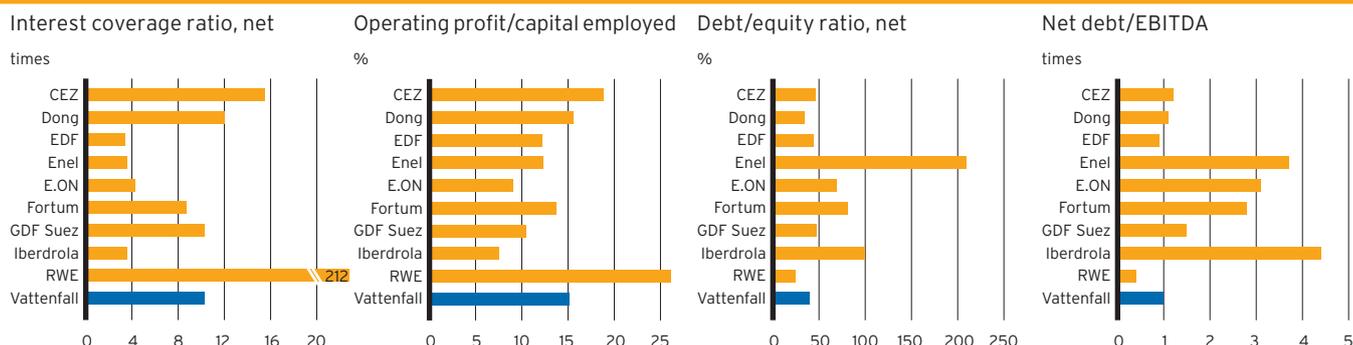
Exchange rates: EUR 1/SEK 9.76 (Vattenfall), EUR 1/CZK 24.78 (CEZ), EUR 1/DKK 7.46 (Dong).

**Sources:**

Graph values: Barclay’s Capital. Last 12-month values as per 30 September 2008 for all companies except EDF and GDF Suez, which are reported as per 30 June 2008. Electricity sales, number of customers, main products, main markets, strategies: Vattenfall research, various analyst reports, and the companies’ annual reports, interim reports and websites.

affected by rising fuel prices and therefore achieve higher margins. This applies, for example, for EDF and the Nordic power companies. Nor do higher commodity prices affect companies that own fuel assets, such as companies with own coal mines, like RWE, Endesa and Vattenfall. On the other hand, power companies with high CO<sub>2</sub> emissions are affected by higher costs for emission allowances.

Following is a comparison of the major European utilities with respect to size, operations, strategies and a number of key ratios. The presentation is not exhaustive, nor are the various companies ranked in any way. Compared with the corresponding comparison in Vattenfall's 2007 Annual Report, the companies have generally shown stable development.



Fortum	GDF Suez	Iberdrola	RWE	Vattenfall
Finland	France	Spain	Germany	Sweden
Listed (50.8%-owned by Finnish state)	Listed (French state owns 35.7%. Free float: 59%)	Listed (Free float: 84%)	Listed (Free float: 78%)	Unlisted 100%-owned by Swedish state
60	314 (of which, Europe 168)	159 (of which, Europe 130)	306	189 (206 incl. deliveries to minority owners)
Electricity: 1.6	Electricity: 5 (Europe) Gas: 17 (Europe)	Electricity: 23 (of which, Europe 14) Gas: 3 (of which, Europe 2)	Electricity: 14 Gas: 6	Electricity: 4.8 5.6 network customers
Electricity, heat	Electricity, gas, LNG, Energy services	Electricity, gas, engineering and construction	Electricity, gas	Electricity, heat, gas (starting in 2009)
Nordic countries, Baltic countries, Russia, Poland	France, Benelux, Germany, Italy, Spain, Portugal, Central and Eastern Europe, North and South America. Gas business worldwide	Spain, Portugal, UK, South America, USA	Germany, UK, Benelux, Central and Eastern Europe	Nordic countries, Germany, Poland, UK, Benelux (starting in 2009)
<ul style="list-style-type: none"> <li>Be a leading power and heat company in the Nordic region through profitable growth</li> <li>Proceed with integration of Russian TGC-10</li> <li>Expand in Nordic countries, Baltic countries, Poland and Russia</li> </ul>	<ul style="list-style-type: none"> <li>Consolidate leadership positions and leverage complementary aspects between GDF and Suez</li> <li>Growth in upstream gas</li> <li>Growth in upstream electricity with special emphasis on nuclear and renewables</li> </ul>	<ul style="list-style-type: none"> <li>Maintain world-leading position in renewable energy</li> <li>Growth in North and South America</li> <li>Repowering and environmental investments in traditional generation</li> <li>Divest non-core businesses</li> </ul>	<ul style="list-style-type: none"> <li>Grow current business in gas and electricity, with focus on Germany and the UK</li> <li>Assess privatisation opportunities within the EU as well as in Russia and south-eastern Europe, incl. Turkey</li> <li>Expand the renewable energy business. Substantially reduce CO<sub>2</sub> emissions</li> <li>Expansion in midstream gas and strengthen upstream gas position</li> </ul>	<ul style="list-style-type: none"> <li>Making electricity clean –Vattenfall's operations shall be climate-neutral by 2050</li> <li>Five strategic ambitions:                             <ul style="list-style-type: none"> <li>Number One for the Customer</li> <li>Number One for the Environment</li> <li>Profitable Growth</li> <li>Benchmark for the Industry</li> <li>Employer of Choice</li> </ul> </li> </ul>

**Definitions:**

Capital employed = Interest-bearing liabilities + equity including minority interests. Operating cash flow = FFO +/- change in working capital.

Net debt/EBITDA pertains to reported net debt.

Free float = The proportion of a company's shares that are freely available for trading.

# GENERATION SHIFT REQUIRES STRONG TALENT MANAGEMENT PROGRAMME

Vattenfall's success is dependent on good leadership, the right competence and strongly committed employees. Vattenfall is facing a generation shift that presents a major challenge. At the same time, competition is rising for the most qualified employees. As a result, it is essential that Vattenfall has resources and strategies in place to attract, develop and retain competence for the future.

In the years ahead it will be increasingly difficult to recruit highly competent employees. A large share of Vattenfall's work force is soon approaching retirement age. At the same time that experienced employees with unique knowledge will be retiring, as a result of demographic changes, competition for top talent increases. Major investment projects and the need to transfer knowledge are also affecting recruitment.

## Profitable growth

International expansion has increased the complexity of Vattenfall's organisation, which is putting new demands on the Group's mix of competence.

## Talent management

Talent management is the foundation of Vattenfall's efforts to attract, develop and retain competence for the future. This process includes both leadership development and competence planning.

## Competence planning

Vattenfall needs to have a clear picture of the company's competence succession. Accordingly, a couple of years ago Vattenfall adopted an annual competence succession process in which all business units, as part of the business planning process, plan for their human resource needs in the short and long term. All units draw up action plans to ensure that they have the competence needed in their activities. These action plans cover such areas as efficiency improvement, implementation of new technology, new recruitment,

rotation programmes, trainee programmes and the use of consultants.

Vattenfall Business Institute (VBI) has special development programmes for certain functions, such as Control, IT, HR, Purchasing and Communication. In 2008 Vattenfall carried out both an international trainee programme and an international rotation programme.

## Excellent leadership

Effective leadership is crucial for Vattenfall's success. The annual management succession process is a central part of Vattenfall's leadership development, where managers and potential managers are evaluated on the basis of performance reviews. This process is also part of the work on further developing a performance culture at Vattenfall.

Vattenfall Management Institute (VMI) is responsible for designing and conducting leadership and management development programmes that meet a high international standard of quality. The goal is to support the company's managers in their role as flexible leaders in an international, multicultural environment. VMI's activities include basic management training as well as advanced programmes at the strategic level for senior managers.

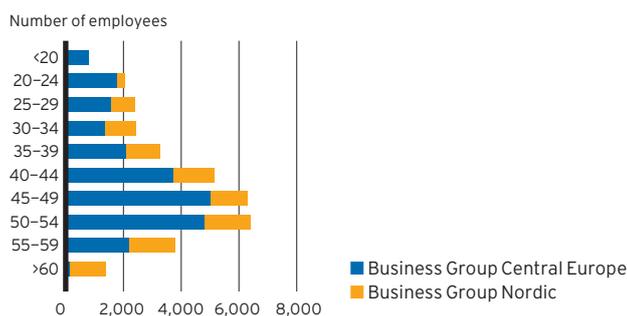
## Committed employees

Every year Vattenfall conducts the My Opinion employee survey, which is a tool for developing the organisation and strengthening employee commitment. The results are used as a platform for dialogue and action plans in all areas of the organisation. Based on a number of questions in the My Opinion survey, a Commitment score is extrapolated. Despite a slightly higher response rate in 2008 than in 2007, the survey fell short of its goal of a Commitment Score of 72 (2007: 69; 2008: 70).

## High ranking among engineers

Vattenfall is investing heavily in employer branding as part of its ambition to be an Employer of Choice. The company's aim is to be among the top ten ranked employers in its main markets. In 2008 a benchmark study was conducted by Universum, an external survey company, in which Vattenfall was ranked number 6 among engineering students in Sweden. In its other main markets as well, Vattenfall receives high scores from engineering students.

### Age distribution at year-end 2008



## Vattenfall International Trainee Programme (VITP)



### Keen interest in Vattenfall's trainee programme

Vattenfall participates on a regular basis in student job fairs to present the company. Interest has been keen, as evidenced by the large number of new graduates applying to Vattenfall's trainee programme.

In 2008, 19 trainees were accepted to Vattenfall's International Trainee Programme (VITP), which is conducted every second year.

The VITP offers trainees a job combined with leadership training. Through the programme, trainees gain deeper insight into Vattenfall's broad base of operations and strategies. The programme combines theory with practice and includes two internship periods abroad. One positive effect of the programme has been an increase in international co-operation within the company.

### Diversity

Vattenfall's international expansion and continued ambition to grow is leading to a need for diversity within the Group. It is important that the company has a broad mix with respect to cultural/ethnic background, age and gender. This creates even greater opportunities to be a more profitable, efficient and attractive company. The company is striving to establish diversity as a natural part of day-to-day work and to create equal opportunity and rights for all employees.

### Health and safety

Vattenfall's goal is to ensure that no employee is injured or becomes ill because of his or her work situation. To create the best possible conditions for achieving this goal, Vattenfall has established a number of preventive health and safety programmes. The company also sponsors a variety of fitness

activities for employees and provides favourable offers in the area of health and rehabilitation.

### Salaries and benefits

Attractive salaries and benefits – including performance-based compensation – are a prerequisite for being able to recruit and retain competent employees. Vattenfall offers competitive salary and benefit packages and strives to be perceived as an employer that focuses on potential and applies flexible solutions that facilitate employees in their work. The company has policies and routines in place for foreign assignments, and the number of employees stationed abroad is steadily increasing. Mobility across national borders plays an important role in Vattenfall's work on being a truly international company.

Dear readers,

I took office as Chairman of the Board of Vattenfall at the Annual General Meeting on 29 April 2008. Leading the board work for one of Sweden's largest companies and the fifth largest energy producer in Europe is an important and honourable assignment that I gladly accepted. The fact that Vattenfall is a Swedish limited liability company that is run entirely in accordance with professional business principles, adheres to the same laws and playing rules as other, major corporations in Sweden, and which has a professionally composed board of directors, was an important precondition for me to take on this assignment. Vattenfall is a very well managed company, which in only a few years' time has developed from a national, Swedish electric utility to a large and financially strong European energy company with major potential for continued growth and value creation.

The importance of energy issues for social development, the environment and the climate can hardly be overestimated. In this context Vattenfall has a major responsibility to meet profitability requirements while working for sustainable development on both the local and global planes. We are the first energy company in the world to set the goal of being climate-neutral in our operations by 2050. This will require enormous investments in new plants and in work on converting all power plants to generation of electricity and heat with low emissions of carbon dioxide. I am proud to note that Vattenfall has taken a world-leading position in the development of new CCS technology and that we are a world leader in offshore wind power.

We can and must finance some of these investments with our own cash flow. However, a large part must also be financed through borrowing in the credit market. Attracting debt financing requires a high and stable credit rating, a position of trust, and a highly transparent presentation of the company's financial performance. As this is being written,

the financial market is experiencing a very difficult situation, and many companies are having a hard time obtaining any financing at all at reasonable terms. Vattenfall has a relatively favourable position as a result of its stable ownership situation and its open and consistent communication with the financial markets. Vattenfall's objective is to be equally as transparent as the major listed companies in the market.

Vattenfall's board, executive management and owner are unanimous in their support of Vattenfall's strategic direction – Making electricity clean – with profitable growth and value creation as the overarching goals. So despite the current difficult conditions in the world economy, I am highly optimistic about Vattenfall's future.

In closing, I would like to express my great thanks to the Board, the Executive Management and all of Vattenfall's employees for their hard work during the past year.



A handwritten signature in blue ink that reads "Lars Westerberg". The signature is written in a cursive, slightly slanted style.

Lars Westerberg  
Chairman of the Board

## CORPORATE GOVERNANCE AND DECISION-MAKING

### Governance of Vattenfall's operations

The Parent Company of the Vattenfall Group, Vattenfall AB, is a Swedish public limited liability company with registered office in Stockholm. The Swedish Companies Act thus applies for Vattenfall AB, which entails that the company shall have a board of directors that is elected by the Annual General Meeting. 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.

Corporate governance within the Group is based on Swedish and foreign legal rules as well as on the company's Articles of Association, the Board's Rules of Procedure and other internal documents, such as the Group's management system. Where applicable, Vattenfall also adheres to the stipulations that apply for companies registered on Nasdaq OMX Stockholm, in Sweden.

Vattenfall applies the Swedish Code of Corporate Governance ("the Code") and considers it as one of several important sets of governing systems for external reporting and communication. Vattenfall also adheres to the Swedish state's ownership policy. The departures that Vattenfall makes from the Code are mainly due to the company's ownership structure – Vattenfall is 100%-owned by the Swedish state, while the Code is written primarily for listed companies with broad ownership.

Information on corporate governance according to the Code for the 2008 financial year is provided below. For information already provided in the Annual Report, reference will be made to the appropriate section.

### Annual General Meeting

According to the company's Articles of Association, the Annual General Meeting (AGM) shall be held yearly within six months after the end of the financial year. The AGM elects, on the recommendations of the owner, the Board and auditors, adopts the income statement and balance sheet,

and deals with other matters of business that are incumbent upon the Meeting pursuant to the Swedish Companies Act or the company's Articles of Association.

Vattenfall's Annual General Meeting was held on 29 April 2008, in Stockholm. The AGM adopted the annual report and consolidated financial statements for 2007 submitted by the Board of Directors and Group CEO, resolved to distribute the company's profit and discharged the members of the Board and the CEO from liability.

At the AGM, all directors were present, including the new directors elected to the Board. As in previous years, the meeting was open to the general public, and an open question and answer session was arranged, in accordance with the state's ownership policy. Members of Parliament were given the right to ask questions, as stipulated in Vattenfall's Articles of Association. The meeting was broadcast live via the Internet. A recorded version of the AGM can be viewed via Vattenfall's website, along with the minutes and other material from the AGM.

Due to Vattenfall's ownership structure, no application process is available via e-mail or the company's website for shareholders to attend the AGM; nor is information about shareholders' opportunity to submit items of business for the AGM provided on the company's website. The Code's stipulations about this are thus not directly applicable for Vattenfall.

### The Board's composition and work

#### Appointment of the Board

For enterprises that are wholly owned by the Swedish state, uniform and joint principles for a structured nomination process are applied, which take the place of the Code's rules on the appointment of directors and auditors. The nomination process is co-ordinated by the State Enterprises Division of the Ministry of Enterprise, Energy and Communications. A work group analyses qualification needs based on the company's operations and the current situation as well as the Board's composition. Thereafter, any recruitment needs are determined and recruitment work is initiated. Board members are chosen from a broad recruitment base. Once this process has been completed, any nominations are to be made public in accordance with the Code's guidelines. The

### Departures from the Code

Vattenfall's corporate governance for the 2008 financial year departs from the requirements stipulated in the Swedish Code of Corporate Governance in its wording as per 1 July 2008, on the following points. The corresponding stipulation in the previously applicable Code is indicated in parentheses.

Code requirement	Description	Chosen solution and justification
1.4 (1.4.1) 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 Meeting in accordance with the stipulations of the Swedish Companies Act. This is also in line with the Swedish state's ownership policy.
2. (2) Nomination committee	The company shall have a nomination committee.	Due to its ownership structure, Vattenfall has no nomination committee. The nomination process is instead conducted in accordance with the Swedish state's ownership policy.
2.6 (2.2.3) Proposal of board members	The proposal shall be presented in the notice of the Annual General Meeting and on the company's website in connection with issuance of the notice.	At the latest possible date for issuance of the notice of the AGM, the nomination work was not fully completed. The proposal was instead presented on Vattenfall's external website as soon as it was available for Vattenfall.

directors elected by the Annual General Meeting receive orientation training provided by Vattenfall.

#### Composition of the Board of Directors

According to Vattenfall's Articles of Association, the Board shall have of a minimum of five and a maximum of ten members, in addition to the directors and deputies appointed pursuant to other laws than the Swedish Companies Act. Vattenfall's board has eight AGM-elected directors, plus three directors and three deputies elected by the unions. No members of the Executive Group Management (EGM) are board members. Thus in accordance with the Swedish state's ownership policy, nor is the Group CEO a member of the Board. Of the board members, four are women and three are foreign citizens. The average age of board members is 55.

At the 2008 AGM, Christer Bådholm, Hans-Olov Olsson, Lone Fønss Schröder, Tuija Soanjärvi and Anders Sundström were re-elected, and Lars Westerberg, Viktoria Aastrup and Eli Arnstad were elected as new directors. The AGM appointed Lars Westerberg as Chairman of the Board and Hans-Olov Olsson as Vice Chairman. The unions appointed Carl-Gustaf Angelin, Johnny Bernhardsson and Ronny Ekwall as employee representatives, with their deputies Lars Carlsson, Lars-Göran Johansson and Per-Ove Lööv, respectively. For further information on the Board of Directors, see pages 46–47.

#### Directors' fees

Directors' fees are set by the AGM. For information on directors' fees for 2008, see Note 47 to the consolidated accounts.

#### Directors' independence

The Swedish state's ownership policy stipulates that nomination of directors is to be made public in accordance with the guidelines of the Code. However, no account is provided of the independence of the board members in relation to the state as a major owner. Of the company's directors, Viktoria Aastrup, Eli Arnstad, Christer Bådholm, Hans-Olov Olsson, Lone Fønss Schröder, Tuija Soanjärvi, Anders Sundström and Lars Westerberg are independent in relation to the company and the EGM.

#### The duties and delegation of work on the Board

The matters reserved for the Board are prescribed primarily by the Swedish Companies Act and the Board's Rules of Procedure. The main duties of the Board, apart from appointing the CEO and executive vice presidents, are to establish the strategic direction of operations, approve major investments, acquisitions and substantial organisational changes in the Group, and to set central policies and instructions. In addition, the Board monitors the company's financial development and has ultimate responsibility for

internal control and risk management.

Each year the Board establishes its Rules of Procedure. Apart from mandatory items pursuant to the Swedish Companies Act, the Rules of Procedure regulate such things as the Chairman's duties, information to the Board, the form of board meetings, the establishment of board committees, and evaluation of the work of the Board and the CEO.

The Chairman's duties are outlined in the Swedish Companies Act and the Board's Rules of Procedure. The Chairman heads the work of the Board and is responsible for ensuring that other board members receive adequate information. The Chairman participates when necessary in important external contacts. In the event the Chairman is prevented from fulfilling his duties, the Board's work is headed by the Vice Chairman.

The Board has established within itself an audit committee and a compensation committee. In addition, the Board can, where necessary, establish other committees to look into matters in more defined areas. In other respects, the Board shall not delegate any special areas of responsibility or duties among its members.

#### The Board's risk management process

Operational risk management is regulated by Group instructions with special focus on risks associated with energy and commodity trading, and financial, insurance and credit risks. The Board decides on overall risk limits for the Group in all these areas. Operational risks are monitored and reported on a regular basis within the respective Business Groups. At each board meeting the Board is informed about the Group's financial position, and any outstanding guarantees and risks are reported. The Board also holds an annual risk management seminar, which conducts a more thorough review of the Group's financial and operational risks.

For more detailed information about Vattenfall's risks and risk management, see pages 71–75 and Note 35 to the consolidated accounts.

#### Description of the Board's work

The Board's Rules of Procedure stipulate that seven regular meetings are to be held each year. In addition to the regular meetings, the Board is summoned to further meetings if the need arises.

The Rules of Procedure stipulate, among other things, that the following items must be included on the agenda once a year:

- The Group's strategic plan
- The Group's total risk exposure
- Safety and environmental issues within the Group's nuclear power operations
- Review of strategic personnel issues within the Group, including competence succession
- Research and development activities within the Group

In addition, at every meeting important business events since the previous meeting are reported on, as well as the monthly report and a report on the financing situation. Investments are followed up and analysed by the Board three years after the Board's decision to invest.

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

The Board adhered to the plan in the Rules of Procedure in 2008. In all, the Board met 17 times, including the statutory meeting. According to the Rules of Procedure, at least one meeting every year is to be held at another location than the head offices. In 2008 a meeting was held in Cottbus, Germany. This meeting was combined with a visit to the open-cast mine in Jämschwalde and the plant Schwarze Pumpe, including the pilot CCS plant.

### Matters handled by the Board appointed by the 2007 AGM

Meeting date	Focus and important matters discussed
21 January 2008	<ul style="list-style-type: none"> <li>• The National Audit Office's audit of governance at Vattenfall</li> <li>• Safety status of the nuclear power operations and the appointment of a Chief Nuclear Officer</li> <li>• Review of strategic personnel matters</li> <li>• Ongoing acquisition activities</li> </ul>
6 February 2008	<ul style="list-style-type: none"> <li>• Year-end report</li> <li>• Report on corporate governance and internal control</li> </ul>
26 February 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> </ul>
13 and 17 March 2008	<ul style="list-style-type: none"> <li>• Year-end book-closing, Annual Report and Audit Report</li> <li>• Grid issues</li> <li>• Safety status of the nuclear power operations</li> <li>• Vattenfall's R&amp;D activities</li> <li>• The Group's total risk exposure</li> <li>• Fundamental principles for terms of employment for senior executives</li> <li>• Acquisition activities</li> </ul>
20 April 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> </ul>
28 April 2008	<ul style="list-style-type: none"> <li>• Vattenfall's three-month interim report</li> <li>• Financial targets for Vattenfall AB</li> <li>• Report from the Safety Committee and decision to dissolve the Safety Committee</li> <li>• District heat issues</li> <li>• Investment activities</li> <li>• Acquisition activities</li> </ul>

### Matters handled by the Board appointed by the 2008 AGM

Meeting date	Focus and important matters discussed
Statutory board meeting 29 April 2008	<ul style="list-style-type: none"> <li>• The Board's Rules of Procedure, instructions and delegation of duties between the Board and CEO and instructions on financial reporting to the Board</li> <li>• Members of the Audit Committee</li> <li>• Routines for approval of quarterly reports</li> <li>• Members of the Compensation Committee</li> </ul>
20 May 2008	<ul style="list-style-type: none"> <li>• Audit Committee's rules of procedure</li> <li>• Instructions for managing and reporting of the Group's business risks and instructions for managing energy and commodities risks</li> <li>• Follow-up of investments made during the first half of 2005</li> <li>• Moorburg project</li> <li>• Current investments and divestments</li> <li>• Safety status of nuclear power operations</li> <li>• The company's strategic direction</li> </ul>
29 July 2008	<ul style="list-style-type: none"> <li>• Vattenfall's half-year interim report</li> </ul>
26–27 August 2008	<ul style="list-style-type: none"> <li>• Strategy seminar</li> <li>• Strategic plan</li> <li>• Group structure for crisis management</li> <li>• Finance instructions and policy</li> <li>• Wind power activities</li> <li>• Safety status of nuclear power operations</li> <li>• Report on the German nuclear power operations</li> <li>• Moorburg project</li> <li>• Routines for reporting on disputes</li> <li>• Acquisition activities</li> </ul>
30 September 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> <li>• Vattenfall's climate work</li> </ul>
23–24 October 2008	<ul style="list-style-type: none"> <li>• Vattenfall's strategies</li> <li>• Emission allowance trading system</li> <li>• General update on acquisitions</li> <li>• Wind power activities</li> <li>• Moorburg project</li> <li>• Ongoing efficiency-improvement programme</li> <li>• Follow-up of investments made during the third quarter of 2005</li> <li>• Grid issues</li> <li>• Safety status of nuclear power operations</li> <li>• Communication issues</li> <li>• Evaluation of Board and CEO</li> <li>• Acquisition activities</li> </ul>
30 October 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> </ul>
6 November 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> </ul>
8 December 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> </ul>
15 December 2008	<ul style="list-style-type: none"> <li>• Vattenfall's strategies</li> <li>• Vattenfall's organisation</li> <li>• Business plans</li> <li>• Investment plan and investment programme</li> <li>• Liquidity situation</li> <li>• Evaluation of the Board</li> <li>• CCS project</li> <li>• Group borrowings and pledging of security</li> <li>• Risk mandate</li> <li>• General update of acquisitions</li> <li>• Acquisition activities</li> </ul>
19 December 2008	<ul style="list-style-type: none"> <li>• Acquisition activities</li> </ul>

## Directors' attendance at board meetings

Board appointed by 2007 AGM											
	21/1/08	6/2/08	26/2/08	13/3 and 17/3/08	20/4/08	28/4/08					
Dag Klackenber	X	X	X	X X	X	X					
Carl-Gustaf Angelin (E)	X	X	X	X X	X	X					
Johnny Bernhardsson (E)	X	-	X	X X	X	X					
Christer Bådholm	X	X	X	X X	X	X					
Ronny Ekwall (E)	X	-	X	- -	X	X					
Lone Fønss Schrøder	X	X	X	X X	X	X					
Greta Fossum	X	X	X	X X	X	X					
Jonas Iversen	X	-	-	X X	X	X					
Hans-Olov Olsson	X	X	-	- X	X	X					
Tuija Soanjärvi	-	X	X	X X	X	X					
Anders Sundström	X	X	X	X X	X	X					
Lars Carlsson* (E)	X	X	X	X X	X	X					
Stig Lindberg* (E)	X	X	X	X X	X	X					
Per-Ove Lööv* (E)	X	X	X	X X	X	X					
Board appointed by 2008 AGM											
	29/4/08	20/5/08	29/7/08	26-27/8/08	30/9/08	23-24/10/08	30/10/08	6/11/08	8/12/08	15/12/08	19/12/08
Lars Westerberg	X	X	X	X	X	X	X	X	X	X	X
Viktorija Aastrup	X	X	X	X	X	X	X	-	X	X	X
Carl-Gustaf Angelin (E)	X	X	X	X	X	X	X	X	X	X	X
Eli Arnstad	X	X	X	X	X	-	-	X	X	X	X
Johnny Bernhardsson (E)	X	X	X	X	X	-	X	X	X	X	X
Christer Bådholm	X	X	X	X	X	X	X	-	X	X	X
Ronny Ekwall (E)	X	X	X	X	X	X	X	X	X	X	X
Lone Fønss Schrøder	-	X	X	X	X	-	X	X	X	X	X
Hans-Olov Olsson	X	X	X	X	X	-	X	-	X	X	X
Tuija Soanjärvi	X	X	X	-	X	X	-	X	X	X	X
Anders Sundström	X	X	X	X	X	X	X	-	X	X	X
Lars Carlsson* (E)	X	X	-	X	X	X	X	X	X	X	X
Lars-Göran Johansson* (E)	X	X	X	X	X	X	X	X	X	X	X
Per-Ove Lööv* (E)	X	X	X	X	X	X	X	X	X	X	X

X Present - Not present \*) Deputy (E) Employee representative

### Evaluation of the Board's and CEO's work

The Board evaluates its own work and the CEO's work once a year through a systematic and structured process in the aim of developing the Board's work forms and effectiveness. This evaluation is headed by the Chairman and is reported to the Board. The most recent evaluation was presented at the board meeting on 15 December 2008.

### Committees

#### Audit Committee

The Audit Committee is a board committee tasked with

assisting the Board on matters pertaining to financial risk and reporting, external audit, and assisting the owner in the choice of auditors. The Audit Committee does preparatory work for the Board in quality assuring Vattenfall AB's financial reporting, draws up guidelines for determining which other services than auditing that Vattenfall AB and the Group may purchase from the company's auditors, and evaluates the company's audit work. The Audit Committee has special responsibility for ensuring application of the Code and for preparing required reports. The Group CFO and head of internal audit make presentations at Audit Committee meetings. In addition, the company's auditors report their observations regarding the audit.

The Board of Directors has authorised the Audit Committee to – on behalf of the Board – approve the quarterly reports for Q3 2008 and Q1 2009, i.e., the reports that are not formally reviewed by the auditors. However, the Board as a whole shall be convened for a review and approval of these reports if the Audit Committee is of the opinion that this should be done.

The Board has adopted rules of procedures for the Audit Committee. The committee reports its work to the Board by submitting meeting notes to the Board and through reports presented at Board meetings by the Audit Committee chair.

At the board meeting on 29 April 2008, Christer Bådholm, Lone Fønss Schrøder and Tuija Soanjärvi were re-elected as members of the Audit Committee, and Viktorija Aastrup was elected as a new member of the committee. Christer Bådholm was elected to chair the committee. Among non-AGM-elected board members, Per-Ove Lööv participated on the Audit Committee. With respect to fees paid the committee's members, see Note 47 to the consolidated accounts in the annual report. The respective committee members' attendance at Audit Committee meetings is shown below.

### Attendance at Audit Committee meetings in 2008

	6/2/08	28/4/08	29/7/08	29/10/08	4/12/08
Viktorija Aastrup	-	-	X	X	X
Christer Bådholm	X	X	X	X	X
Lone Fønss Schrøder	X	X	X	X	X
Tuija Soanjärvi	X	X	X	X	X
Per-Ove Lööv (employee representative)	X	X	X	X	X

In addition, the auditor in charge was present at all meetings.

#### Nomination Committee

Vattenfall AB has no nomination committee. This is in accordance with the state's ownership policy. For more de-

tailed information on the Board's nomination process, see the section "Appointment of the Board" on page 37.

### Safety Committee

From 8 February 2007 through 28 April 2008, the Board had a safety committee that was tasked with closely monitoring and overseeing nuclear safety within the Group. The Safety Committee focused on conducting analyses of management systems, safety, reporting and management functions at Vattenfall's nuclear power plants. The committee conducted oversight of safety work and reported its observations to the Board. This was done by submitting meeting notes to the Board as well as through reports presented to the Board by the committee chair and by the safety expert who was appointed to perform an analysis of the Group's nuclear power plants. The Safety Committee had no formal decision-making authority.

In 2008, until 28 April, the committee had the following members: Christer Bådholm, Dag Klackenberg and Anders Sundström. Among non-AGM-elected directors, Johnny Bernhardsson participated on the Safety Committee. The Safety Committee had one meeting in 2008, on 27 April, at which Dag Klackenberg, Christer Bådholm and Johnny Bernhardsson were present. At the board meeting on 28 April 2008, the Safety Committee presented its conclusions to the Board. The committee noted that the formation of the Safety Committee had been a temporary measure and that the committee had fulfilled its purpose since the recommended actions had been implemented, especially through the appointment of a Chief Nuclear Officer. In accordance with the Safety Committee's recommendation, the Board decided that the committee would be dissolved.

### Compensation Committee

The Compensation Committee prepares ongoing matters regarding executive compensation, including matters pertaining to annual salary reviews and other terms of employment for the CEO. In addition, a going-rate principle is adhered to regarding the salaries and remuneration of all executive vice presidents and heads of the Group functions. The committee reviews current levels of compensation, fixed and variable salaries, and other compensation where applicable, including significant pension terms, for all such executives. The committee also conducts drafting work on principles regarding salary and remuneration.

At the board meeting on 29 April 2008, Anders Sundström was re-elected as a member of the Compensation Committee, and Viktoria Aastrup, Hans-Olov Olsson and Lars Westerberg were elected as new members of the committee. Hans-Olov Olsson was elected to serve as committee chair. Among non-AGM-elected directors, Carl-Gustaf Angelin participated on the Compensation Committee.

The head of Human Resources and deputy head of Human Resources make presentations at the committee's meetings. The Compensation Committee has adopted rules of procedure for its work. The committee reports its work to the Board, whereby the committee chair informs the Board about the committee's positions and by submitting meeting notes to the Board. The Board as a whole must decide on matters concerning the CEO's employment and decide on the CEO's terms of employment.

The Compensation Committee held one meeting in 2008, on 23 January, which was attended by Dag Klackenberg, Anders Sundström and Carl-Gustaf Angelin.

### Offer Committee

On 26–27 August 2008, in accordance with the British City Code on Takeovers and Mergers, the Board resolved to establish an Offer Committee for the purpose of handling the public offer for the company Eclipse Energy UK Plc. The Board has authorised the committee to make decisions on and take necessary actions to handle 100% of the shares in the company. In 2008 the committee's members were Lars Westerberg (committee chair) and Viktoria Aastrup. The committee reports its work to the Board and by submitting meeting notes to the Board. The committee had three meetings in 2008, on 17 September, 9 October and 2 December. Lars Westerberg and Viktoria Aastrup were present at all meetings.

### Executive compensation

The Annual General Meeting has approved a programme that conforms with the Swedish government's guidelines on terms of employment for persons in executive positions in state companies.

According to these guidelines, salaries and other benefits shall be competitive but not leading in terms of salary in relation to peer companies. Neither variable salary components nor bonuses are payable to the Group CEO. For other executives in the Swedish part of the operation, the variable salary component shall amount to a maximum of 16.7% of their normal fixed salary. For certain executives, the normal fixed salary can also be reduced by 16.7%, depending on outcomes. Local practice applies in other countries.

The owner's long-term demand for improvements in value creation shall be a joint goal. Starting in 2008, this includes – in addition to financial value creation – also goals within the five strategic ambitions that Vattenfall works with. For members of the Executive Group Management, except for the CEO, and for the business unit managers (approx. 20 individuals in all), the long-term targets are set for a three-year period, 2008–2010, with the opportunity for that period to earn a total of four additional months' salary upon achievement of the targets in the strategic areas.

There are no share- or share price-related incentive

programmes for the Board or Executive Group Management. Due to Vattenfall's ownership structure, no such programmes will be possible, either. More detailed disclosures about taxable salaries, benefits and pension costs for the Chairman of the Board, company directors, the CEO and other senior executives are provided in Note 47 to the consolidated accounts in the Annual Report.

**Assuring the quality of financial reporting**

In its separate report on internal control (page 45), the Board has reported on the company's internal control structure in the financial reporting routines. The Audit Committee's work is a part of this control exercised by the Board. Through the Audit Committee, a more detailed quality audit can be performed than what would be possible for the entire board to do. At all Audit Committee meetings in 2008, external and internal auditors presented their observations concerning the full-year and half-year book-closing, among other things. In conjunction with planning work for the annual audit, discussions are held between the external auditors and the internal audit unit concerning Vattenfall's risk situation.

**Auditors**

The Swedish state's ownership policy states that responsibility for election of auditors of state-owned companies

shall always rest with the owner by decision of the Annual General Meeting. Pursuant to the Act on Audits of State Enterprises, etc., the Swedish National Audit Office can appoint one or more auditors to participate in the annual audit. Vattenfall's Articles of Association stipulate that a minimum of one and maximum of three auditors are to be appointed at the Annual General Meeting, along with a minimum of one and a maximum of three deputies, and that a chartered auditing firm can be appointed as auditor or deputy auditor.

The 2008 Annual General Meeting appointed the auditing firm Ernst & Young AB as auditor, with Authorised Public Accountant Hamish Mabon as the new auditor-in-charge. This appointment applies for a term until the 2012 AGM. Apart from his assignment for Vattenfall, Hamish Mabon serves as auditor for the following companies: Hexagon AB, Relacom Holding AB, Scania Sverige AB and Softronic AB. Hamish Mabon has no assignments with companies that affect his independence as auditor of Vattenfall.

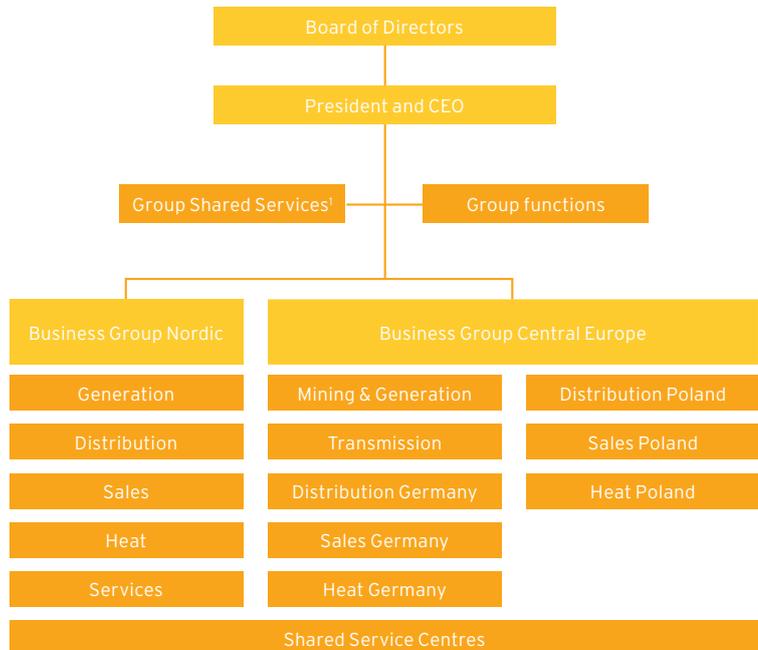
The Swedish National Audit Office has appointed Authorised Public Accountant Per Redemo to serve until the 2012 AGM, with Authorised Public Accountant Göran Selander as deputy during the same time period. Per Redemo has held this position since 2004. Per Redemo is the National Audit Office's auditor for the following companies: Posten AB,

**Vattenfall's management system and organisation**

**Building blocks of management system**



**Vattenfall's organisation 2008**



1) Vattenfall Trading Services, Vattenfall Treasury, Vattenfall Insurance, Vattenfall Research and Development, and Vattenfall IT Infrastructure Services.

Sveriges Television AB and Chalmers Tekniska Högskola AB, and he is auditor-in-charge for the following authorities/state enterprises: the Swedish Tax Agency, the Swedish National Board of Student Aid (CSN), and Swedish State Railways. Per Redemo has no assignments for companies that affect his independence as an auditor of Vattenfall.

The auditors reported on their audit of the year-end book-closing to the entire board at the board meetings on 6 February 2008 and 13 March 2008. In connection with the report on 13 March 2008, the Board met the auditor without the presence of the CEO or other person from management. The auditors also provided more detailed reports at meetings of the Audit Committee. In addition, the auditors meet Vattenfall's CEO and CFO on a number of occasions during the year.

In cases where more extensive consulting activities are to be performed by the elected auditors, the assignment must first be discussed and approved by the Audit Committee or CFO. The Audit Committee has approved guidelines for how procurement of other services than auditing shall take place. These guidelines apply for all of the Group's external auditors. The Group's auditing costs are described in more detail in Note 50 to the consolidated accounts and Note 39 to the parent company accounts in the Annual Report. Consulting provided by Ernst & Young AB from

2006–2008 pertained primarily to taxation and accounting issues, as well as to project routines and management.

## The Group's management system

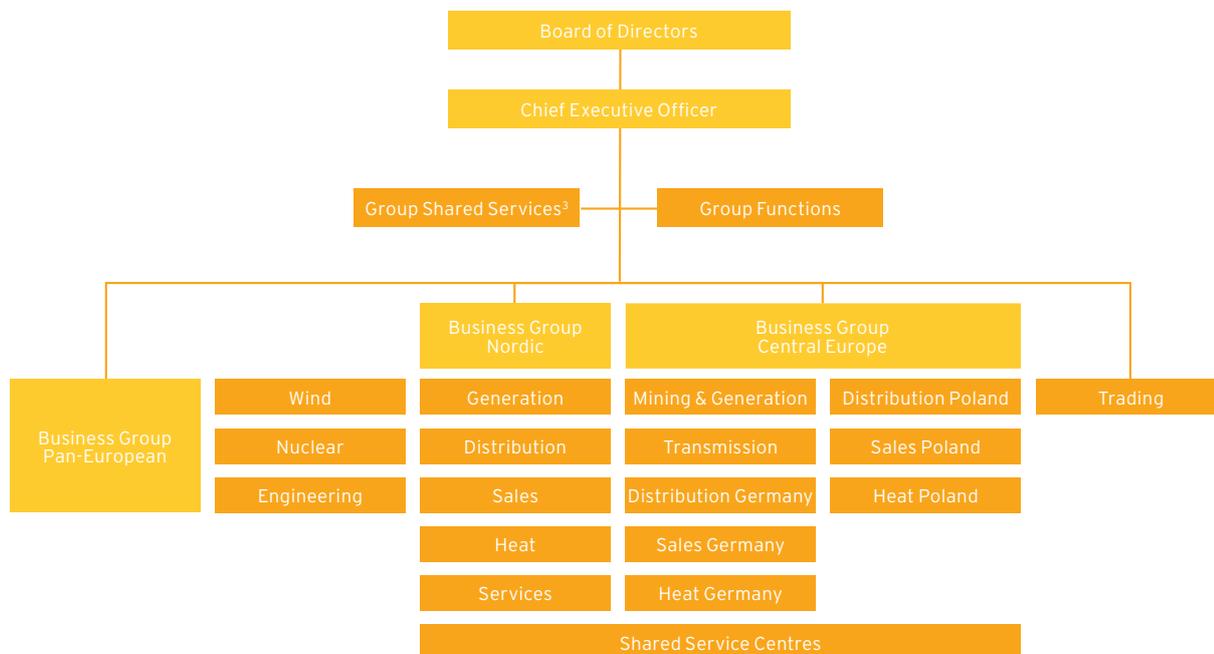
### Governing business ethics

*Vattenfall's core values are Openness, Accountability and Effectiveness.*

Vattenfall's joint-Group Code of Conduct and company philosophy stipulate that all employees shall adhere to and work in accordance with Vattenfall's core values, policies and instructions. The stipulations of the Code of Conduct are concretised in other parts of the management system, such as in instructions for general legal and business ethics principles, and competition matters. Further information on guiding business ethics is provided in Vattenfall's CSR Report.

In 2008 work was begun on updating Vattenfall's Code of Conduct. As a first step, a special Code of Conduct for suppliers was adopted by the Executive Group Management. In connection with this updating, a Group-wide "whistle-blowing function" is being established, where employees, consultants, entrepreneurs and suppliers can turn to regarding violations of applicable laws, etc. This system is fully operating in the German organisation, and implementation is currently being completed in other parts of Vattenfall's organisation.

### Vattenfall's organisation – January 2009<sup>2</sup>



2) Provided that Vattenfall's offer pertaining to the acquisition of Nuon in the Netherlands is approved and completed, a new Business Group – Benelux – will be established in Vattenfall's organisation (read more on page 70).

3) Vattenfall Treasury, Vattenfall Insurance, Vattenfall Research and Development, and Vattenfall IT Infrastructure Services.

### General information on the Vattenfall Management System (VMS)

The Group is governed with a focus on value creation and long-term overarching goals and requirements for the Business Groups and business units. The Business Groups propose short-term goals for each business unit, which are subsequently approved by the CEO and the Executive Group Management (EGM).

To ensure that Vattenfall develops in the intended direction and lives up to ethical and legal requirements, the CEO has established the Vattenfall Management System (VMS – previously called the Group Management System). Integrated with the VMS is an Environmental Management System. The VMS is available to all employees on the Group's intranet. The VMS consists of a number of building blocks (see illustration on page 42) and is documented in governing documents, consisting of Group policies, instructions, directives and other documents. The Group policies describe the intentions for action on matters of major importance for the Group, while Group instructions provide more detailed and operative control, and lay down binding rules.

The Group's management processes for strategic planning, business planning and follow-up are central governance tools for the Executive Group Management. The Group functions are responsible for proposing, developing and following up Group policies and instructions. The Group's Quality function is charged with co-ordinating the management system and is assisted in this work by a committee that is tasked with establishing adherence and improvements to the VMS. Governing documents at the Group level are submitted to the EGM for approval. Certain central documents are also approved by Vattenfall AB's board. All units within Vattenfall are obligated to comply with the management system's governing documents.

### Implementation and follow-up of the Vattenfall Management System

Special routines are in place to ensure that the Vattenfall Management System is also applied by subsidiaries. With respect to subsidiaries in the Nordic countries, this is done in part through special owner statements at Annual General Meetings which specify that the management systems shall also apply for the respective subsidiaries within the framework of applicable laws, etc.

With respect to the German subsidiaries, since June 2008 a special agreement (*Beherrschungsvertrag*) has been in place between Vattenfall AB and the German holding company, Vattenfall Europe AG. Under this agreement, the board (*Vorstand*) of the holding company is subordinate to Vattenfall AB, and Vattenfall AB has the right to issue directives regarding governance. Vattenfall AB has issued

such a directive specifying that the holding company shall comply with the VMS. It is then the duty of the board of the holding company to ensure that the VMS is implemented in its original structure by the entire holding company and in other German subsidiaries.

Instructions in the VMS shall contain follow-up points. In 2008 such points began to be introduced at the Group level. The Quality function responsible for handling the VMS documents is responsible for ensuring that such follow-up takes place. Internal Audit is responsible for reviewing follow-up routines and for reviewing and evaluating compliance with the Group's management systems.

### Organisation and processes

Vattenfall's organisational model is based on the value chain for electricity – generation, transmission, distribution and sales – and for heat – production, distribution and sales. Reporting and follow-up of the business activities are conducted with full transparency in accounting, control, profitability and value creation.

In terms of governance, Vattenfall's operations are broken down into three categories:

- Business activities are handled by the Business Groups and their business units.
- Functions that support their respective management teams.
- Shared Service units, which provide and develop services that support the business units and other users' efforts to optimise their business activities. Shared Service activities operate at both the Group (Group Shared Services) and Business Group levels.

A number of important governance processes have been established. Each process is managed by a process owner, usually a member of the EGM, who is responsible for developing the process. At present, the following Group processes exist: strategy and business planning, reporting and follow-up, risk management, mergers & acquisitions, investments, communications, management planning and capacity management.

The strategy and business planning process culminates in yearly strategy and business plans. This process includes the analysis, evaluation and assessment of strategic issues with decisions made by the EGM on selection, formulation and priorities. Strategy planning includes the Group's long-term operations as well as its financial performance. Each year a five-year strategic plan is drafted for decision by Vattenfall's board. Based on the directives of the strategic plan, the Business Groups and business units draw up three-year business plans that are ultimately approved by the EGM. The investment plan for the following calendar year is then adopted by the Board.

### Organisational change

On 15 December 2008, Vattenfall AB's board approved a change in Group structure. The change entails that, in addition to the geographical breakdown of operations that has applied to date, consisting of a Business Group for the Nordic region and one for Central Europe, a Pan-European Business Group has been established for wind power, nuclear power and technological development in all countries in which Vattenfall has operations. This Business Group will also be responsible for European business development with focus on efficient use of energy and biomass. The aim of the organisational change is to further improve the Group's ability to carry out major investment programmes, to achieve the Group's climate and growth ambitions, and to better utilise opportunities for cross-border co-operation. The new organisational structure applies with effect from 1 January 2009, but will be fully implemented on 1 July 2009.

### Audit of the Corporate Governance Report

The Corporate Governance Report and the description below of the company's internal control of financial reporting have not been audited by the company's auditors.

### The Board's report on internal control of financial reporting

This report has been prepared in accordance with the Swedish Code of Corporate Governance.

### Control environment

The formal decision-making structure in the Group is based on the division of responsibility between the Board and CEO, which is stipulated in the Board's Rules of Procedure. The Board has established Vattenfall's Group-wide Code of Conduct, which defines the obligation of all employees to adhere to Vattenfall's company philosophy, Code of Conduct, core values, policies and rules. The Executive Group Management has implemented the Vattenfall Management System (VMS) along with governing documents which specify Group instructions for – among other things – decision-making, delegation, payment authorisation, governance of subsidiaries, risk management and internal control.

### Risk analysis

The rules and outcome of the Group's risk assessment and risk management processes are reviewed by the Board each year. The Group's risk management and reporting are coordinated by a risk committee that is headed by Vattenfall's CFO. The Board evaluates and monitors risks and the quality of financial reporting via the Audit Committee, which maintains continuous and regular contact with the Group's internal and external audit functions in order to evaluate

risk in the financial reporting. The Vattenfall Management System includes a framework that identifies and defines risks related to financial reporting. The Finance Compliance function within the Group's Accounting and Finance Group function performs yearly analyses of risks related to financial reporting and is responsible for updating this framework.

### Control activities and follow-up

The Board receives monthly financial reports, and the Parent Company's and Group's financial position are discussed at every board meeting. The EGM has regular follow-up meetings on the financial outcome with the management and finance functions of the various business areas. Vattenfall's management system contains governing documents for the essential financial reporting processes. The management system serves as a platform for internal control for all units within the Group. The Finance Compliance function within the Accounting and Finance Group function is responsible for overseeing self evaluations, follow-up, reporting and improvements in the control activities for financial reporting. The Finance Compliance function reports to the head of Finance and Accounting, Vattenfall's CFO and the Audit Committee. Internal Audit's work involves, among other things, evaluating and reviewing risk management, compliance with policies, rules and instructions, and the effectiveness of internal control in the financial reporting. Internal Audit reports to the Executive Group Management, to the management teams in the various countries and units, and to Vattenfall's Audit Committee.

### Information and communication

Information about the Group's policies, instructions, guidelines and manuals are available on Vattenfall's intranet, which is accessible to all employees in the Group. Updates and changes in accounting and reporting principles are communicated on a continuous basis via regular meetings held by the Group's finance and control functions.

# BOARD OF DIRECTORS

**Lars Westerberg** (born 1948), Chairman of the Board since 2008. Lars Westerberg has an M.Sc. in Engineering from the Royal Swedish Institute of Technology and a B.Sc. Econ. from Stockholm University. He began his career in 1972 with an engineering internship at ASEA, where he stayed until 1984, when he was Sales Manager for ASEA Robotics. In 1984 he joined Esab, where he served as President and CEO from 1991 to 1994. From 1994 to 1999 he was President and CEO of Gränges AB, and thereafter President and CEO of Autoliv AB until April 2007. Since 2007 he has been Chairman of Autoliv AB and Husqvarna AB, and a director on the boards of SSAB and AB Volvo.

**Hans-Olov Olsson** (born 1941) is Vice Chairman of the Board and was elected as a director in 2004. He has an M. Sc. in Political Science from the University of Gothenburg with a focus on Economics and Information Management. He has completed a management programme at Harvard Business School. In 2006 he received an honorary doctorate in economics from the University of Gothenburg School of Economics, Business and Law. He began his career at Volvo in 1966 as a systems engineer, followed by a number of management positions. He was President and CEO of Volvo Car Corporation from 2000 to 2005 and Chairman of the Board in 2006. In 2006 he was responsible for global branding and marketing strategy at Ford Motor Company and a member of Ford's executive management. He is currently Chairman of the industry and employer organisation Teknikföretagen, Vice Chairman of the Confederation of Swedish Enterprise, and a member of the Royal Swedish Academy of Engineering Sciences (IVA). He is also a director of AB SKF, Lindab International AB, Elanders AB, the Anna Lindh Memorial Fund and the IQ initiative.

**Viktoria Aastrup** (born 1971) was elected as a director in 2008. She has an M.Sc. Econ. degree from Linköping University (1995) and a Financial Analyst diploma from the Stockholm School of Economics (2002). In 1995 she began working for the Swedish Road Administration, and starting in 1998 she served for the Swedish government Ministry of Communications and the Ministry of Enterprise, Energy and Communications. She is currently assistant unit manager of the State Enterprises Division of the Ministry of Enterprise, Energy and Communications, where she has worked since 2000. Viktoria Aastrup is a director of Lernia AB, CEO of Förvaltningsaktiebolaget Stattum, and Nomination Committee Chair for TeliaSonera AB and Nordea AB.

**Carl-Gustaf Angelin** (born 1951) is an employee representative (for Akademikerrådet) and was elected to the Board in 2003. He has an M.Sc. in Engineering from the Royal Institute of Technology in Stockholm. Between 1977 and 1988 he worked at AB Svenska Fläktfabriken, and has since held various positions within the Vattenfall Group. He is currently active in Nordic Sales.

**Eli Arnstad** (born 1962) was elected as a director in 2008. She studied public law and political science at the University of Oslo and received an M.Sc. degree from HiNT (Høskolen i Nord-Trøndelag). She was employed by Stiklestad Nasjonale Kultursenter in 1999 and by Stjørdal Naeringsforum in 2000. From 2001 to 2007 she served as CEO of Enova SF. Eli Arnstad is Vice Chairman of Sparebank 1 Midt-Norge and a director of Senter for økonomisk forskning at NTNU, Stiftelsen Nidarosdomens Restaureringsarbeider, AF-gruppen, Sparebankforeningen Norway, and Posten Norway.

**Johnny Bernhardsson** (born 1952) is an employee representative (for Unionen) and was elected to the Board in 1995. He received his education as an engineer and has completed complementary coursework in economics. He has held various positions within the Vattenfall Group since 1970.

**Christer Bådholm** (born 1943) is a director and was elected to the Board in 2002. He has an M.Sc. in Engineering from Chalmers University of Technology (Gothenburg) and has also completed courses in Corporate and Group Management at IFL and in International Management at MiL. He has a long record of experience as a CEO for various companies in the transport industry, including ABV Southern Region, NCC International AB, ABB Traction AB, Adtrans GmbH and Bombardier Transportation GmbH. He has had his own consultancy business since 2002. He is also a director of Icomera AB and Svevia AB, and is Chairman of Bombardier Transportation Sweden AB and Balfour Beatty Rail AB.

**Lars Carlsson** (born 1951) is an employee representative (for Unionen) and was elected to the Board in 1991. He received his education in engineering from Katrineholm Technical College. He has held various positions within the Vattenfall Group since 1972.

**Ronny Ekwall** (born 1953) is an employee representative for the Union of Service and Communication Employees (SEKO) and was elected to the Board in 1999. He received his education in electrical engineering from the Stora Kopparberg Vocational College. From 1969 to 1977 he served as principal electrician at Stora Kopparberg, and has since then worked as an electrician within the Vattenfall Group.

**Lone Fønss Schrøder** (born 1960) is a director and was elected to the Board in 2003. She has an Master's in Law from the University of Copenhagen, and a Master's in Economics from the Copenhagen Business School. From 1982 to 2003 she held various executive positions at A.P. Møller/Maersk A/S, and since 2003 she has been serving as Managing Director of Wallenius Lines AB. She is a director of DSB, NKT A/S and Yara ASA, Chairman of Bioneer A/S and WWL A/S, and Vice Chairman of Aker ASA.

**Lars-Göran Johansson** (born 1953) is an employee representative for the Association and Management and Professional Staff (Ledarna) and was elected to the Board in 2008. He has a secondary school education and has worked as a technician and work leader within the Vattenfall Group since 1971.

**Per-Ove Lööv** (born 1961) is an employee representative for the Union of Service and Communication Employees (SEKO) and was elected as a deputy director in 1999. He received his education in Business Economics from the Luleå University of Technology, and has a degree in Engineering from Midskogsskolan Luleå. He has held various positions within the Vattenfall Group since 1987.

**Tuija Soanjärvi** (born 1955) is a director as was elected to the Board in 2007. She has a Master's in Economics from the Helsinki School of Economics and Business Administration and is CFO of Itella Abp (formerly Posten Finland Abp). She worked for Kesko Abp from 1981 to 1986, and thereafter held various positions for TietoEnator Abp. She was CFO of Elisa Abp from 2003 to 2005.

**Anders Sundström** (born 1952) is director and was elected to the Board in 2004. He has a degree in Social Sciences from Umeå University. He served as Municipal Commissioner for the Municipality of Piteå from 1980 to 1994, Chairman of the Norrbotten Chapter of the Swedish Social Democratic Party from 1989 to 1999, and was a member of the Social Democratic party board and executive committee from 1990 to 2005. He has also held several minister posts in the Swedish government: Minister of Labour 1994–1996, Minister of Enterprise, Energy and Communications 1996–1998, and Minister of Health and Social Affairs in 1998. From 1999 to 2002 he was President of Sparbanken Nord. He is currently Managing Director of Folksam Liv and Folksam Sak, Chairman of the Luleå University of Technology, and a director of Boliden AB and ALKA Forsikring A/S.



Lars Westerberg



Hans-Olov Olsson



Viktoria Aastrup



Carl-Gustaf Angelin



Eli Arnstad



Johnny Bernhardsson



Christer Bådholm



Lars Carlsson



Ronny Ekwall



Lone Fønss Schrøder



Lars-Göran Johansson



Per-Ove Lööv



Tuija Soanjärvi



Anders Sundström

# EXECUTIVE GROUP MANAGEMENT

**Lars G. Josefsson** (born 1950) has been serving as President and CEO since 2000. He has an M.Sc. in Engineering from the Chalmers University of Technology in Gothenburg and began his career at Ericsson in 1974, where he held several positions until 1993 in the Radar Section and Surface Sensor Division. From 1993 to 1997 he was Managing Director of Schrack Telecom AG, Vienna, and thereafter served as Managing Director of Celsius until 2000. He is a director of ESKOM Holdings Ltd, Chairman of Eurelectric, Chairman of the German–Swedish Chamber of Commerce, and a member of the Swedish government’s Commission for Sustainable Development. At year-end Lars G. Josefsson did not have any material shareholdings in companies with which Vattenfall has business dealings.

**Dag Andresen** (born 1964) took office as First Senior Executive Vice President and Chief Financial Officer of Vattenfall AB in October 2008. He is a certified Ship’s Master and senior officer from Luftkrigsskolen in Norway and has an M.Sc. Econ. degree from the Norwegian School of Economics and Business Administration (NHH). He has an Executive MBA from the Helsinki School of Economics and Business Administration. In addition, Dag Andresen has completed coursework at Harvard Business School and the Stanford Graduate School of Business. He has held various senior officer positions in the Royal Norwegian Navy and Royal Air Force. From 1993 to 2000 he held various management positions with Nordiska Investeringsbanken (NIB) in Helsinki and Den norske Bank (DnB), as well as in shipping and industry. From 2001 to 2008 he held various executive management positions with Nordea AB, most recently as Head of the Transaction & Finance Banking business area.

**Hélène Biström** (born 1962) served as Vice Head of Business Group Nordic from 2007 to 2008. Starting on 1 January 2009 she is Senior Executive Vice President and Head of Business Group Pan-European. She has an M.Sc. in Engineering from the Royal Institute of Technology in Stockholm. From 1983 to 2000 she held various positions at Vattenfall AB. From 2001 to 2002 she was President of REGA Energiplanering AB, and from 2004 to 2007 she served as Head of the Nordic Heat business unit. She is a director of Svensk Energi and Stella Plastic Holding AB.

**Tuomo Hatakka** (born 1956) has been serving as Senior Executive Vice President of Vattenfall AB since 2005 and Head of Business Group Central Europe since 1 January 2008. He was Head of Business Group Poland from 2004 to December 2007. He studied economics at the Helsinki School of Economics and Business Administration and the Instituto de Estudios Superiores de la Empresa, in Barcelona, Spain. His professional experience includes work as a consultant at Bain & Company, London, Executive Vice President and partner at Enterprise Investors in Warsaw, Poland, and President and CEO of Elektrim Kable SA, Warsaw, Poland.

**Hans-Jürgen Meyer** (born 1957) is CFO of Vattenfall Europe AG since 2005. He has a Dr. Jur. degree from the University of Tübingen Law School, and a Master of Laws degree from Harvard University Law School, USA. He served as a Law Clerk with the Federal Administrative Court of Germany, in Berlin, from 1983 to 1985, and from 1987 to 1991 he worked as a judge. From 1991 to 2000 he worked for Treuhandanstalt/ BVS (a Federal Agency) in Berlin, and was named Vice President in 1993. He joined Bewag AG in 2000 as its Chief Financial Officer. From 2002 to 2005 he was Head of Control and Finance for Vattenfall Europe AG.

**Helmar Rendez** (born 1962) took office as Senior Vice President and Head of Group Function Strategies in August 2007. He has a Ph.D. from the Berlin University of Technology (TU). He was a project manager at Zentrum für Logistik und Unternehmensplanung GmbH in Berlin from 1989 to 1993, Managing Director of Kienbaum Management Consultants GmbH’s Berlin office from 1993 to 1998, and head of group development at VEAG (Vereinigte Energiewerke AG), Berlin, from 1998 to 2001. He was also responsible for the integration process within Vattenfall Europe and head of Company Development from 2001 to 2003. He was a director of WEMAG AG, Schwerin, from 2004 to 2007, and Managing Director of Vattenfall Europe Business Services GmbH, Berlin, from 2006 to 2007.

**Hans von Uthmann** (born 1958) has been serving as Senior Executive Vice President of Vattenfall AB and Head of Business Group Nordic since 2003. He attended the Stockholm School of Economics. From 1984 to 1994 he held various management positions with the Shell Group. He then served as Head of Business and Strategy Consulting for Shell International in London until 1996, when he was appointed as Managing Director of AB Svenska Shell. In 2000 he was named President and CEO of Duni AB, a post he held until 2003. He is a director of the Confederation of Swedish Enterprise, DF AB and Fryshuset, and Chairman of EFA (EnergiFöretagens Arbetsgivaröreförening).

**Jan Erik Back** (born 1961) served as First Senior Executive Vice President and Chief Financial Officer until 15 August 2008, when he left Vattenfall.

**Ann-Charlotte Dahlström** (born 1952) served as Senior Vice President and Head of Group Function Human Resources until 10 September 2008, when she left Vattenfall.

**Knut Leman** (born 1950) was Senior Vice President and Head of Group Function Communications until 1 February 2008, when he left Vattenfall.

**Carolina Wallenius** (born 1968) served as Senior Vice President and Head of Group Function Communications until 6 February 2009, when she left Vattenfall.

## New EGM members 2009

**Christopher Eckerberg** (born 1971) is acting head of Group Function Communications, since 6 February 2009. He has an M. Sc. Econ. degree from Lund University. He has worked for Vattenfall since 2003, most recently as head of Public Affairs, since 2007. Prior to joining Vattenfall, he worked for Enron Europe and NetCircle AB, among other companies.

**Lars Gejrot** (born 1954) is Senior Vice President and Head of Group Function Human Resources as from 2 February 2009. He has a regimental officer’s degree from Karlberg, has completed university studies in sociology, psychology and education, and has completed several leadership training courses. He spent 18 years with IKEA, where he held several foreign assignments and management positions, mainly in HR. Prior to that, he served four years as a consultant with Mercuri Urval, and 10 years as a regimental officer.



Lars G Josefsson



Dag Andresen



H  lene Bistr  m



Christopher Eckerberg



Lars Gejrot



Tuomo Hatakka



Hans-J  rgen Meyer



Helmar Rendez



Hans von Uthmann



Jan Erik Back  
(left the EGM on  
15 August 2008)



Ann-Charlotte Dahlstr  m  
(left the EGM on  
10 September 2008)



Knut Leman  
(left the EGM on  
1 february 2008)



Carolina Wallenius  
(left the EGM on  
6 February 2009)

# FINANCIAL TARGETS AND PERFORMANCE

Vattenfall's vision to be a leading European energy company is conditional upon economic value creation and profitable growth. These are the starting points for the Group's financial targets, which in turn are the platform for the business planning process at the business unit level. The financial targets are long-term, which means that they are to be evaluated as averages over a business cycle (approx. 5–7 years).

## Main objective is long-term sustainable economic value creation

Creating economic value by generating a competitive return over time is Vattenfall's overriding financial objective, since the Group's other strategies are based on a requisite level of financial strength. The owner's required rate of return is used as the basis for setting targets for profitability, the dividend and financial risk. The Board reviews the proposed targets and makes decisions on their proposal to the Annual General Meeting, where the owner then makes the final decision. For a compilation of Vattenfall's four current financial targets and goal fulfilment, see page 51.

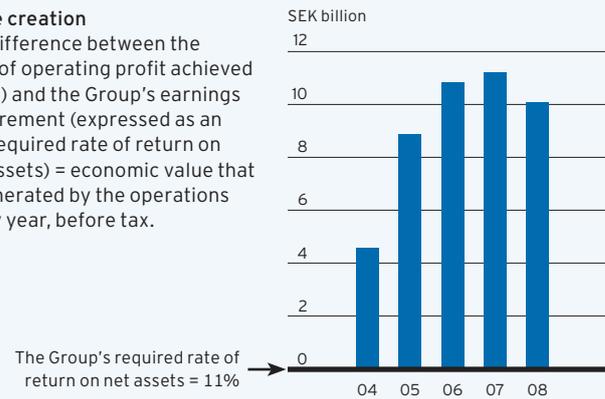
## Goals for the business units

Vattenfall's management has defined a Group-wide return target based on a balanced consideration of the financial targets that have been set by the owner at the Annual General Meeting. Since Vattenfall works in an exceptionally plant-intensive industry, this target is expressed as the return on net assets (operating profit as a percentage of average net assets). Since Vattenfall's various operations have varying conditions, the Group-wide target is broken down into individual targets for each business unit, according to which operations are conducted. The basic principle for target formulation at the business unit level is that asset-intensive operations are evaluated according to the return on the asset base, while service operations are measured according to operating margin. If a business unit exceeds its target, it can seek profitable growth opportunities.

Vattenfall has identified a number of important external factors which together are putting pressure on profitability in the industry in the near and medium term perspectives, including rising prices for CO<sub>2</sub> emission allowances, higher fuel costs, and lower transmission and distribution tariffs in Germany. This is putting higher demands on productivity improvements and efficiency in order to ensure sustained economic value creation.

## Value creation

The difference between the level of operating profit achieved (EBIT) and the Group's earnings requirement (expressed as an 11% required rate of return on net assets) = economic value that is generated by the operations every year, before tax.



## Management of the Vattenfall Group's equity

The Vattenfall Group's equity consists of reported equity including minority interests, which at year-end amounted to SEK 140,886 million (124,132). The owner's long-term target for return on equity attributable to shareholders in the Parent Company is 15% after tax. In addition, the owner has defined a cash flow-based target for interest coverage and the goal of maintaining a single A credit rating. The rating is a balanced assessment of Vattenfall's creditworthiness and replaces more specific targets, such as equity ratio, debt/equity ratio, and so on. Execution of the company's strategy, the company's financial position and other financial targets are taken into account when making the annual dividend decisions.

## Other goals

In addition to Vattenfall's financial targets, in 2007 Vattenfall defined a set of quantitative goals for the Group's five strategic ambitions. The priorities and goals for each strategic ambition are described in detail on pages 8–11.

**Financial target: Profitability**

The owner's long-term return target is that profit after tax should amount to 15% of average equity. Translated to the Group's long-term required level of profitability, and expressed as the return on net assets, this corresponds to a return of approximately 11% before tax.

**Outcome**

- Return on equity after tax in 2008 was 13.6% (17.6%).
- Return on net assets<sup>1</sup> was 15.1% (16.6%).
- Return on equity after tax<sup>1</sup>, last 12 months (Sw. GAAP)
- Return on equity after tax<sup>1</sup>, last 12 months (IFRS)
- Return on equity after tax<sup>1</sup>, moving four year basis (Sw. GAAP through Q3 2004)
- Return target, 15%

1) Excl. items affecting comparability.

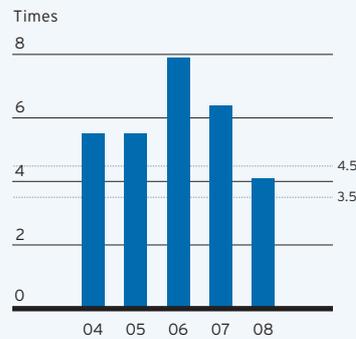


**Financial target: Cash flow interest coverage**

The cash flow interest coverage target was redefined in April 2006. The owner's previous target that the cash flow interest coverage ratio based on operating profit should amount to 3.5–5.0 times was replaced with the target that "the cash flow interest coverage ratio after maintenance investments" should amount to 3.5–4.5 over the long term. For a complete definition, see page 127.

**Outcome**

Cash flow interest coverage ratio after maintenance investments



**Financial target: Ratings**

It is Vattenfall's intention to maintain a long-term credit rating in the single A category from both Moody's and Standard & Poor's.

Vattenfall's current ratings are A-/A-2 from Standard & Poor's and A2/P-1 from Moody's. Both Moody's and Standard & Poor's changed their outlook from positive to stable during the third quarter of 2006 due to Vattenfall's stepped up investment plans, stricter requirements from the network regulators and higher political risk, among other factors.

**Outcome**

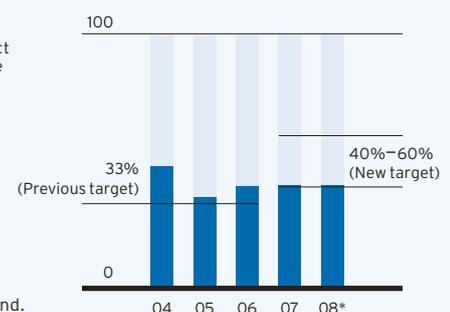
	Long-term Moody's	Long-term S&P	Short-term Moody's	Short-term S&P
2008	A2	A-	P-1	A-2
2007	A2	A-	P-1	A-2
2006	A2	A-	P-1	A-2
2005	A2	A-	P-1	A-2
2004	A3	A-	P-2	A-2
2003	A3	A-	P-2	A-2
2002	A3	A-	P-2	A-2
2001	A3	A-	P-2	A-2
2000	A1	A+	P-1	A-1

**Financial target: Dividend**

The aim is that the dividend over the long-term shall amount to 40%–60% of profit after tax. However, the yearly decisions on the dividend shall take implementation of the company's strategy, financial position and other economic targets into account. The dividend target was changed in April 2006. Previously it was 33%.

**Outcome**

Dividend, %  
Per cent of profit for the year. Exact dividend amounts are shown in the 10-year review on page 123.



\*) Proposed dividend.

# ADMINISTRATION REPORT

The Board of Directors and President of Vattenfall AB (publ), Swedish corporate identity number 556036-2138, herewith submit the annual accounts and consolidated accounts for 2008, encompassing pages 52-120, which have been translated from the Swedish original.

## Group operations and structure

Vattenfall's vision is to be a leading European energy company, and its main products are electricity and heat. Vattenfall works in all parts of electricity value chain – generation, transmission, distribution and sales – and produces, distributes and sells heat. Vattenfall also conducts energy trading and lignite mining. Operations in 2008 were conducted

in Sweden, Denmark, Finland, Germany, Poland and the UK. At year-end Vattenfall had 4.8 million electricity customers and 5.6 million network customers. In 2008 the Group had approximately 33,000 employees. Vattenfall AB is 100%-owned by the Swedish state. The company is domiciled in Stockholm.

## Reporting structure

The Group's operations in 2008 were conducted primarily in two operating segments (Business Groups) with different geographical areas of responsibility. These primary segments (operating segments) are Business Group Nordic and Business Group Central Europe. In addition to these is the Other segment, which includes Energy Trading, Treasury activities and other Group functions. In 2008, Business Group Nordic comprised operations in Sweden, Finland and Denmark, and Vattenfall's wind power investments in the UK. Business Group Central Europe included operations in Germany and Poland. Operating profit for the primary segment Other includes changes in market value for electricity trading. These are reported by Energy Trading until the amounts are realised. When the amounts are realised, they affect other segments.

In terms of business segments (secondary segments), the Group's operations are broken down into Electricity Generation, Electricity Markets (sales and energy trading), Electricity Networks (electricity trans-

mission and distribution), and Heat (production, distribution and sales of heat). The Other segment includes Vattenfall's Treasury activities and Other Group functions. Operating profit of the secondary segment Electricity Markets includes changes in market values for electricity trading. These are reported by Energy Trading until the amounts are realised. When the amounts are realised, they affect mainly the Electricity Generation segment.

A new Group organisation is being introduced as from 1 January 2009. A third Business Group, Pan-European, is being established, comprising three new Group-wide business units: Wind Power, Nuclear Power and Engineering (read more on page 45). Provided that Vattenfall's offer on 23 February 2009 pertaining to the acquisition of the Dutch company Nuon is approved and completed, a new Business Group, Benelux will be established (read more on page 70).

## Sales and operating profit per segment, 2008

	External net sales, SEK m	Net sales, SEK m	Operating profit, SEK m	Share of Group operating profit, %	Operating margin, %
<b>Primary segments</b>					
Business Group Nordic	54,732	48,851	16,760	56.1	34.3
Business Group Central Europe	99,182	142,260	15,140	50.6	10.6
Other	10,635	44,849	-2,005	-6.7	-4.5
Eliminations	-	-71,411	-	-	-
<b>Total</b>	<b>164,549</b>	<b>164,549</b>	<b>29,895</b>	<b>100</b>	<b>18.2</b>
<b>Secondary segments</b>					
Electricity Generation	48,389	78,952	24,318	81.3	30.8
Electricity Markets	80,130	89,090	-1,363	-4.6	-1.5
Electricity Networks	45,644	61,208	4,654	15.6	7.6
Heat	13,593	22,514	3,689	12.3	16.4
Other	3,367	12,653	-1,403	-4.7	-11.1
Eliminations	-26,574	-99,868	-	-	-
<b>Total</b>	<b>164,549</b>	<b>164,549</b>	<b>29,895</b>	<b>100</b>	<b>18.2</b>

## IMPORTANT EVENTS 2008

### Substantially expanded investment programme

In February 2008 Vattenfall announced an investment programme worth SEK 173 billion for the period 2008–2012, an increase of SEK 29 billion compared with the five-year period 2007–2011. On 12 February 2009 Vattenfall announced an investment programme for the period 2009–2013 worth SEK 202 billion. In connection with Vattenfall's announcement on 23 February 2009 of its offer to acquire the Dutch company Nuon (read more on page 70), it was disclosed that a reprioritisation would be made in the investment programme for 2009–2013, to SEK 191 billion (read more on page 58). The reprioritisation in the investment programme is a consequence of the planned acquisition of Nuon.

### Redemption of minority shareholdings in Germany

In April the redemption of the outstanding minority shares in Vattenfall's German subsidiary Vattenfall Europe AG was completed, and the company was delisted from the German stock exchanges.

### Status of nuclear power in Nordic countries

Vattenfall has conducted a thorough review of safety work in its nuclear power operations in consultation with the pertinent authorities, and internationally renowned experts have performed independent, in-depth analyses of the company's work on nuclear safety. In February Vattenfall appointed a Chief Nuclear Officer (CNO), who reports directly to the CEO on nuclear safety issues and serves as the Executive Group Management's nuclear power expert. Vattenfall also established a Nuclear Safety Council which is chaired by the Group CEO. In addition, Vattenfall is participating actively in international nuclear power organisations in order to ensure that the entire body of global experience is taken advantage of in the Group's safety work.

In early 2008 the UN's International Atomic Energy Agency (IAEA) performed a three-week review of the Forsmark nuclear power plant. The IAEA concluded that Forsmark maintains a good international level in its safety standards. A number of suggested improvements that were identified are now being implemented.

### Continued outages at German nuclear power plants

The two German nuclear power plants, Brunsbüttel and Krümmel, which were both shut down in June 2007 independently of each other, are still not operating. The reasons for the shutdowns were remedied back in 2007, however, as a result of time-consuming controls and verification work as well as new demands that have been raised, the plants have not yet been able to be restarted. The earnings impact in 2008 for these standstills is estimated to have amounted to EUR 573 million (SEK 5,540 million). The earnings impact in 2007 was EUR 201 million (SEK 1,900 million).

### Possible sale of Vattenfall's German high-voltage grid

In late July Vattenfall contacted a number of potential investors regarding the possible sale of Vattenfall's high-voltage transmission grid in Germany. Interest has been great, and a number of indicative offers were received in October. No decision on the sale has been made.

### World's first pilot CCS plant, Schwarze Pumpe, inaugurated

After two years of construction, on 9 September Vattenfall inaugurated the world's first coal-fired CCS power plant based on oxyfuel technology. CCS, which stands for Carbon Capture and Storage, entails the capture and underground storage of the carbon dioxide that is created in the combustion of fossil fuels. The investment sum for the pilot plant amounts to EUR 70 million (read more on pages 18–19).

### Planning of CCS demonstration plant

In May Vattenfall announced its plans to build a large demonstration plant at the Jämschwalde power plant in Germany. Vattenfall is also conducting planning work for a CCS plant in Aalborg, Denmark. The final investment decision will require support from national authorities in Germany and Denmark and at the EU level. The EU underlined its commitment to CCS in the climate package in December 2008 when it reserved 300 million allowances in the coming ETS trading period for financial support for CCS demonstration plants. In January 2009, the European Commission also proposed to provide EUR 250 million each in support to five mature demonstration projects in the European Economic Recovery Programme. The European Council has not yet handled the proposal. Jämschwalde was one of 11 projects found eligible.

### Go-ahead for construction of Moorburg CHP plant in Germany

On 30 September, the Hamburg State Ministry of Urban Development and the Environment (BSU) granted Vattenfall approval to build the Moorburg coal-fired combined heat and power plant in Hamburg, Germany. The permission to build the plant is coupled with a number of new restrictions that will affect operation of the plant. Vattenfall has therefore requested a judicial review of the authorities' decision.

### Long-term electricity contracts with energy-intensive industrial companies

Several major, long-term contracts were signed during the year with industrial companies in the Nordic region, including Stora Enso, Smurfit Kappa, Vargön Alloy, Outokumpu, Hydro and Borealis. Vattenfall has a good working relationship with electricity-intensive industries, and the newly signed contracts are a testimony of the confidence that companies have in Vattenfall as an electricity provider.

### New CFO

On 1 October, Dag Andresen took office as new First Senior Executive Vice President and CFO after Jan Erik Back, who left Vattenfall.

### Vattenfall's climate vision – to be climate-neutral by 2050

During the autumn Vattenfall clearly laid out its strategic direction, which is summarised in three words: Making electricity clean. An integral part of this strategy is Vattenfall's climate vision: to be a climate-neutral company by 2050. Growth in generation with low CO<sub>2</sub> emissions is the platform for Making electricity clean.

### Vattenfall launches Climate Manifesto

In late September Vattenfall went public with its Climate Manifesto in Brussels and invited the general public to sign a manifesto via Vattenfall's website and thereby urge politicians around the world to take necessary measures to improve the climate issue. The manifesto identifies the following three points:

- We need a global price for CO<sub>2</sub> emissions.
- We need more support for climate-friendly technologies.
- We need to implement climate requirements for products.

More than 238,000 people have signed the manifesto.

### Greater number of customers

During the year Vattenfall continued to win market shares in the Nordic countries, while customer satisfaction index scores improved. In September Vattenfall and Göteborg Energi AB signed an agreement on the takeover of part of the customer base in the jointly owned electricity supply company Plusenergi AB. Under the agreement, Vattenfall will gain approximately 150,000 new customers, further boosting its market share. Vattenfall has also achieved sales successes in Germany. By marketing electricity sales online nationwide in Germany, Vattenfall has increased its customer numbers. By year-end 2008 Vattenfall had more customers than at the start of the year.

### Wind power acquisitions in the UK

During the autumn, Vattenfall acquired several British wind power companies:

- AMEC Wind Energy Ltd, one of the UK's foremost developers of commercial wind farms, with current projects corresponding to 500–750 MW.
- Eclipse Energy UK Plc, which is developing six wind power projects in the UK with combined capacity of more than 200 MW.
- Thanet Offshore Wind Ltd, which with 300 MW under construction is the UK's largest wind power project.

At the end of the year, Vattenfall also entered into a partnership with ScottishPower Renewables, a subsidiary of the Spanish company Iberdrola, to participate in the third round of tender bids to develop offshore wind power in the UK. The joint goal is to establish 6,000 MW of wind power (3,000 MW each). (Read more on pages 14–15.)

### Acquisition of stake in Polish energy company

In November Vattenfall acquired 18.7% of the Polish energy company ENEA S.A. The company, which is one of four state-owned energy companies in Poland, has 2.3 million customers and accounts for approximately 8% of Poland's total energy generation. ENEA S.A. has a mixed portfolio of small-scale hydro power plants as well as planned investments in wind power development projects, but relies predominantly on coal-based generation. Vattenfall today is the largest foreign energy company in Poland, and the acquisition strengthens Vattenfall's position in the Polish energy market.

### EUR 1.5 billion bond issues

In November Vattenfall issued two benchmark bonds in the Euro market totalling EUR 1.5 billion through the Group's internal bank, Vattenfall Treasury AB. The bonds have maturities of five and ten years, and the size is EUR 850 million and EUR 650 million, respectively. The purpose of the issues was to take advantage of the prevailing window in the credit markets in order to prefund a significant portion of estimated borrowing needs in 2009. The issue met strong demand from investors, and the bonds were oversubscribed nearly four times.

### New Group structure

A new Group organisational structure has been implemented with effect on 1 January 2009. A third Business Group, Pan-European, has been established, comprising three new Group-wide business units: Wind Power, Nuclear Power and Engineering. Business Group Pan-European will also be responsible for European business development, focusing on efficient use of energy and biomass. The new organisational model will make Vattenfall better equipped to further improve its ability to reach its ambitious climate and growth targets and take advantage of cross-border co-operation opportunities (read more on page 44).

Provided that Vattenfall's offer for the Dutch company Nuon is approved and completed, a new Business Group, Benelux, will be established in Vattenfall's organisation.

## GROUP, FINANCIAL OVERVIEW AND ANALYSIS

### Condensed income statement<sup>1</sup>

Amounts in SEK million unless stated otherwise	2008	2007	Change, %
1 Net sales	164,549	143,639	14.6
Profit before depreciation/amortisation (EBITDA)	45,960	45,821	0.3
2 Operating profit (EBIT)	29,895	28,583	4.6
3 Financial items, net	-6,397	-4,650	-37.6
Profit before tax	23,498	23,933	-1.8
4 Income tax expense	-5,735	-3,247	-76.6
Profit for the year	17,763	20,686	-14.1

1) See complete income statement on page 76.

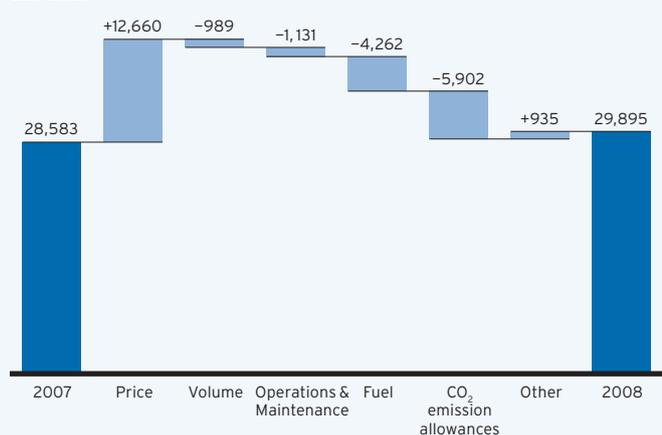
#### 1 Net sales

The increase in net sales is mainly attributable to higher electricity prices received. Approximately SEK 5.5 billion is attributable to currency effects. Excluding intra-Group transactions, net sales for Business Group Central Europe increased by SEK 12.4 billion, of which SEK 10.8 billion pertains to operations in Germany. For Business Group Nordic the increase was SEK 10.3 billion. For the primary segment "Other", which includes Energy Trading, net sales decreased by SEK 1.8 billion.

#### 2 Operating profit (EBIT)

Operating profit rose 4.6%. Factors that affected the change in operating profit are shown in the chart below. In addition, it can be noted that profit for 2007 was charged with impairment losses of SEK 1,850 million, compared with SEK 423 million for 2008. Operating profit for 2008 was favourably affected by currency effects of approximately SEK 800 million as a result of the weaker Swedish krona. The earnings impact in 2008 for the continued outages at the German nuclear power plants, Krümmel and Brunsbüttel, is estimated to have amounted to EUR 573 million (SEK 5,540 million). The earnings impact for 2007 was EUR 201 million (SEK 1,900 million).

Factors that affected the change in operating profit (EBIT)  
SEK million



#### 3 Financial items, net

Net financial items amounted to SEK -6,397 million (-4,650), a deterioration by 37.6%. The drop is mainly attributable to the fair valuation of derivatives. Net interest income averaged SEK -202 million per month (-166). The increase in interest expense for loans is attributable to higher borrowings and higher interest rates.

Interest income from financial investments, and interest expenses for loans and received/paid interest affecting cash flow are broken down as follows:

Amounts in SEK million	2008	2007	Change, %
Interest income from financial investments	1,692	1,331	27.1
Interest expenses for loans	-4,151	-3,325	-24.9
Cash interest received	1,679	1,420	18.2
Cash interest paid	-3,846	-2,902	-32.5

See also Notes 13 and 14 to the consolidated accounts.

#### 4 Income tax expense

The tax expense increased by SEK 2,488 million to SEK 5,735 million (3,247). The effective tax rate as per the income statement was 24.4% (13.6%). In December 2008 the Swedish government decided to reduce the company income tax rate for companies in Sweden from 28.0% to 26.3%, with effect from 1 January 2009. Based on Vattenfall's balance sheet as per 31 December 2008, the deferred tax expense in the income statement for 2008 has been reduced by SEK 749 million. Profit for 2007 was affected by a nonrecurring positive tax effect of SEK 3,800 million in Germany as a result of the German government's decision to reduce the company tax rate by approximately 10 percentage points.

## Condensed balance sheet<sup>1</sup>

Amounts in SEK million unless indicated otherwise	31 Dec. 2008	31 Dec. 2007	Change, %
1 Non-current assets	317,912	264,864	20.0
2 Current assets	127,915	73,372	74.3
Total assets	445,827	338,236	31.8
3 Non-current liabilities	192,578	148,322	29.8
3 Current liabilities	112,363	65,782	70.8
Total equity and liabilities	445,827	338,236	31.8
4 Equity incl. minority interests	140,886	124,132	13.5

1) See complete balance sheet on page 77.

### 1 Non-current assets

Total non-current assets increased by 20%, or SEK 53,048 million, to SEK 317,912 million (264,864). Property, plant and equipment increased by SEK 41,869 million, to SEK 256,077 million (214,208) as a result of higher investments.

### 2 Current assets

Short-term investments, cash and cash equivalents increased by 77.6% to a combined total of SEK 40,236 million (22,659). The increase is mainly due to new borrowings by Vattenfall in 2008. In addition to short-term investments and cash and cash equivalents totalling SEK 40,236 million, as per 31 December Vattenfall had SEK 15,416 million (9,574) in committed credit facilities and SEK 13,327 million (11,413) in other credit facilities at its disposal.

### Compilation of the Group's liquidity and credit facilities as per 31 December 2008

#### The Group's liquidity

Amounts in SEK million	
Cash and cash equivalents	20,904
Short-term investments	19,332
<b>Total</b>	<b>40,236<sup>1</sup></b>

#### Confirmed credit facilities (unutilised)

Revolving Credit Facility (maturity 2013)	EUR 1,000 m	10,940
364-day bilateral credit line (maturity 2009)	EUR 400 m	4,376
Bank overdraft facility	SEK 100 m	100
<b>Total</b>		<b>15,416</b>

1) SEK 3,724 million consists of Vattenfall Europe AG's share of the liability insurance agreement (*Solidarvereinbarung*), SEK 3,744 million consists of the minority owners' share of cash positions in Vattenfall's German nuclear power companies, SEK 7,439 million pertains to a Credit Support Annex (Margin Calls), and SEK 1,897 million pertains to Other.

### 3 Non-current and current liabilities

Total non-current liabilities increased by 59.8% to SEK 107,347 million (67,189). This includes SEK 10,811 million (9,341) in Capital Securities issued in June 2005. The rating agencies classify a large part of these Capital Securities as equity (Moody's 75% and Standard & Poor's 50%). Total interest-bearing liabilities also include SEK 16,881 million (11,083) in loans from Vattenfall's minority-owned German nuclear power companies, and SEK 6,683 million (5,791) in loans from minority owners in Vattenfall's Swedish nuclear power plants, among others. The Group's net debt increased by SEK 22,260 million. The increase is mainly attributable to higher borrowing associated with the substantial increase in investments. Net debt increased by SEK 7,136 million as a result of currency effects. However, this was largely offset by positive changes in value, which are reported under "Derivatives" on the balance sheet. Effects attributable to the fair valuation of loans, which are included in fair value hedges, increased net debt by SEK 1,847 million.

#### Net assets

Amounts in SEK million	31 Dec. 2008	31 Dec. 2007
Business Group Nordic	111,263	91,122
Business Group Central Europe	92,344	78,714
Other <sup>1</sup>	6,800	-5,750
Eliminations	1,616	2,034
<b>Total net assets</b>	<b>212,023</b>	<b>166,120</b>
Net assets, weighted average value	179,114	157,252

1) Includes Energy Trading, Treasury operations and Other Group functions.

#### Net debt

Amounts in SEK million	31 Dec. 2008	31 Dec. 2007
Capital Securities	-10,811	-9,341
Other interest-bearing liabilities <sup>1</sup>	-96,536	-57,848
Cash and cash equivalents	20,904	10,563
Short-term investments	19,332	12,096
Loans to minority owners in foreign subsidiaries	1,111	790
<b>Total net debt</b>	<b>-66,000</b>	<b>-43,740</b>
1) Of which, loans from minority-owned German nuclear power companies.	-16,881	-11,083

### Adjusted gross debt and net debt

When rating agencies and analysts assess a company's credit ratings, as a rule they make a number of adjustments of various balance sheet items in order to come up with an adjusted figure for gross debt and net debt. The items that are usually subject to adjustment are cash and cash equivalents, short-term investments, and various provisions (asset retirement obligations). The table below shows adjusted figures for gross and net debt calculated by Vattenfall, but according to the principles applied by analysts in the market. However, it should be emphasised that there is no uniform method for such adjustment, which is why analysts and rating agencies could very well arrive at another amount. The calculation presented by Vattenfall here can be considered to be conservative.

Adjusted gross debt and net debt		
Amounts in SEK million	31 Dec. 2008	31 Dec. 2007
Interest-bearing liabilities <sup>1</sup>	-107,347	-67,189
Present value of pension obligations	-21,839	-17,073
Provisions for mining operations and other environment-related provisions	-14,604	-11,975
50% of Capital Securities	5,406	4,671
Cross currency swaps with positive/negative fair values <sup>2</sup>	3,131	-574
Hedging of net investments in foreign operations <sup>3</sup>	3,337	438
<b>Adjusted gross debt</b>	<b>-131,916</b>	<b>-91,702</b>
Cash and cash equivalents and short-term investments	40,236	22,659
Liability agreement for German nuclear power operations ( <i>Solidarvereinbarung</i> )	-3,724	-3,224
Minority owner's share of cash positions in Vattenfall's German nuclear power companies	-3,744	-3,531
<b>Adjusted cash and cash equivalents and short-term investments</b>	<b>32,768</b>	<b>15,904</b>
<b>Adjusted net debt</b>	<b>-99,148</b>	<b>-75,798</b>

1) Due to the weakening of the Swedish krona, interest-bearing liabilities increased in the accounting by SEK 10.8 billion as a result of translation of Vattenfall's loans in foreign currencies at the year-end exchange rate. However, Vattenfall has no currency exposure in its foreign debt portfolio. Loans in foreign currencies are either hedged through currency swaps or booked as equity hedges. The positive currency effects are reported under other items in the balance sheet. Some of these positive effects are described in footnotes 2 and 3.

2) A substantial share of loans in foreign currencies have been hedged through currency derivatives (cross currency swaps). The positive currency effect of these, SEK 3,131 million (-574) is reported under the items "Derivatives with positive/negative fair values" on the balance sheet.

3) These items pertain to loans that have been earmarked for currency hedging of net investments in foreign operations (equity hedges).

### 4 Equity

The Group's risk capital, i.e., equity attributable to shareholders of the Parent Company and to minority interests, increased by 13.5% to SEK 140,886 million (124,132). Equity attributable to shareholders of the Parent Company increased by 16.2%, while equity attributable to minority interests decreased by 11.3%. The decrease is mainly attributable to the redemption of minority shares in Vattenfall's Germany subsidiary, Vattenfall Europe AG, in April 2008. The equity/total assets ratio decreased to 31.6% (36.7%). The reserve for cash flow hedges changed by SEK 2,331 million to SEK -4,054 million (-6,385). (For further information, see Note 42 to the consolidated accounts.) As a result of the weakening of the Swedish krona, translation differences increased by SEK 9,537 million to SEK 15,393 million (5,856).

## Condensed cash flow statement<sup>1</sup>

Amounts in SEK million unless indicated otherwise	31/12/2008	31/12/2007	Change, %
<b>1</b> Funds from operations (FFO)	30,735	34,049	-9.7
Cash flow from changes in operating assets and operating liabilities	5,459	-1,718	n.a.
<b>1</b> Cash flow from operating activities	36,194	32,331	11.9
<b>2</b> Cash flow from investing activities	-41,273	-18,037	128.8
<b>3</b> Cash flow from financing activities	14,294	-18,662	n.a.
Cash flow for the year	9,215	-4,368	n.a.
Free cash flow <sup>2</sup>	18,963	19,650	-3.5

1) See complete Cash flow statement on page 78.

2) Free cash flow = Cash flow from operating activities less maintenance investments.

### 1 Cash flow from operating activities

Cash flow from operating activities improved by SEK 3,863 million, which is due to a decrease in funds from operations by SEK 3,314 million and an improvement in operating capital by SEK 7,177 million. The decrease in funds from operations is mainly attributable to a slightly lower profit compared with 2007 and lower depreciation for nuclear power operations. The increase in operating capital for 2008 includes a positive effect from the time delay in payment of CO<sub>2</sub> emission allowances for 2008 pertaining to the Mining & Generation business unit in Germany.

#### Funds from operations (FFO)

Amounts in SEK million	2008	2007
Profit before taxes	23,498	23,933
Depreciation, amortisation and impairment losses	16,060	17,252
Tax paid	-8,203	-8,132
Undistributed results from participation in associated companies	-359	-125
Unrealised foreign exchange gains	-392	-86
Unrealised foreign exchange losses	5,720	1,254
Unrealised items related to derivatives	-4,778	-1,253
Capital gains	-202	-541
Capital losses	78	444
Change in interest receivables	-380	-226
Change in interest liabilities	1,108	607
Change in the Swedish Nuclear Waste Fund	-1,108	-822
Change in provisions	-307	1,744
<b>Total</b>	<b>30,735</b>	<b>34,049</b>

Cash interest paid totalled SEK 3,846 million (2,902), and cash interest received totalled SEK 1,679 million (1,420). Dividends received totalled SEK 1,140 million (952).

### 2 Cash flow from investing activities

Investments in 2008 are broken down as follows: 42% Business Group Central Europe, 36% Business Group Nordic and 22% for the segment "Other".

Maintenance investments in 2008 are broken down as follows: Business Group Central Europe SEK 9.5 billion, Business Group Nordic SEK 7.4 billion, and Other SEK 0.3 billion. Growth investments are broken down as follows: Business Group Central Europe SEK 8.4 billion, Business Group Nordic SEK 7.5 billion, and Other SEK 9.1 billion. Of these investments, investments in equities consisted pri-

marily of: ENEA S.A. SEK 4.6 billion (18.7% stake), the redemption of minority shares in Vattenfall Europe AG SEK 3.9 billion, and a number of British wind power companies (AMEC Wind Ltd SEK 1.6 billion, Eclipse Wind Energy UK Plc SEK 0.6 billion, and Thanet Offshore Wind Ltd SEK 0.4 billion). During the year Vattenfall made divestments of SEK 865 million (925). (For further information, see Note 42 to the consolidated accounts.)

### Investment programme 2009–2013

As a result of the announcement of Vattenfall's offer for the Dutch company Nuon on 23 February 2009, a reprioritisation of the investment programme for 2009–2013 has been made, from SEK 202 billion previously, to SEK 191 billion.

However, compared with the five-year period 2008–2012, when the investment programme amounted to SEK 173 billion, this entails an increase of SEK 18 billion. The total investment amount is broken down as follows: Business Group Nordic SEK 81 billion and Business Group Central Europe SEK 110 billion. Investments of SEK 158 billion are planned in generation (2008–2012: SEK 133 billion), and investments of SEK 32 billion are planned in the network operations (2008–2012: SEK 40 billion). The expanded investment programme is mainly attributable to higher investment costs in all markets as well as new CO<sub>2</sub> emission-related investments and greater investments in renewable energy. The lower investment amount for the electricity network operations is mainly due to the fact that Vattenfall plans to sell its German high-voltage transmission grid in 2009. No decision on the sale has been made yet.

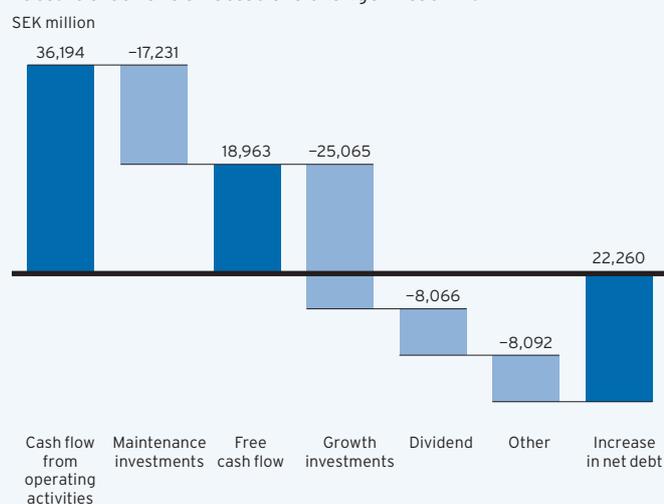
### 3 Cash flow from financing activities

Total interest-bearing liabilities, including Capital Securities, increased by 59.8% to SEK 107,347 million (67,189). The rating agencies classify a large part of the Capital Securities as equity (Moody's 75% and Standard & Poor's 50%). For further information on Capital Securities, see Note 33 to the consolidated accounts on page 97. In 2008 loans were amortised in the amount of SEK 4,457 million, while new borrowing amounted to SEK 31,797 million (of which Vattenfall Treasury accounted for SEK 24,291 million in long-term

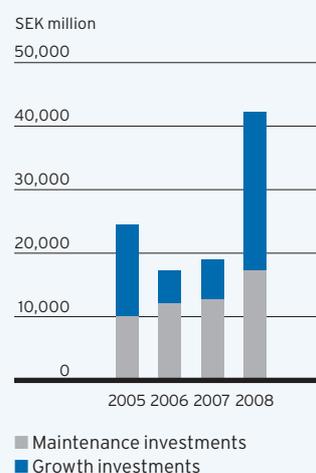
loans and SEK 1,843 million in the form of a Credit Support Annex (CSA)). In addition, Vattenfall's majority-owned nuclear power companies Forsmark and Ringhals increased their shareholder loans by SEK 816 million, which is reported as external borrowings. (Loans raised include Vattenfall's loans from minority-owned Germany nuclear power companies, totalling SEK 4,283 million.) New borrowing consisted primarily of several small private placements and two large Eurobond issues totalling EUR 1.5 billion under Vattenfall's EMTN programme, with maturities of 5 and 10 years, respectively.

The Group's net debt increased by 50.9% to SEK 66,000 million (43,740). As per 31 December 2008, the average duration was 2.9 years (3.3), and the average remaining maturity for net debt was 6.5 years (6.7). Excluding Capital Securities, the average fixed-interest period was 2.4 years and the average maturity was 6.5 years. All public funding is normally conducted via Vattenfall Treasury AB under guarantee from Vattenfall AB.

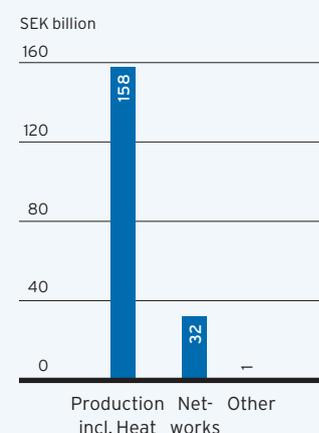
#### Factors that have affected the change in cash flow



#### Investments



#### Investment programme 2009–2013



#### Specification of investments in 2008 and 2007

SEK million	Nordic		Central Europe		Other	Total	2008	2007
	2008	2007	2008	2007				
<b>Electricity generation</b>								
Hydro power	1,095	1,038	165	191	-	-	1,261	1,229
Nuclear power	3,499	2,935	84	82	-	-	3,583	3,017
Fossil-based power	8	15	8,032	1,408	-	-	8,040	1,423
Wind power	2,525	997	49	1	-	-	2,574	998
Biomass, waste	-	-	488	706	-	-	488	706
Other	-	-	-	-	-	-	-	-
<b>Total Electricity Generation</b>	<b>7,127</b>	<b>4,985</b>	<b>8,818</b>	<b>2,388</b>	-	-	<b>15,945</b>	<b>7,373</b>
<b>Heat</b>								
Fossil-based power	998	1,357	1,181	1,110	-	-	2,179	2,467
Biomass, waste	693	187	13	20	-	-	706	207
Other	279	227	447	381	-	-	726	608
<b>Total Heat</b>	<b>1,970</b>	<b>1,771</b>	<b>1,641</b>	<b>1,511</b>	-	-	<b>3,611</b>	<b>3,282</b>
<b>Electricity networks</b>								
Electricity networks	3,306	3,417	3,008	1,809	-	-	6,314	5,226
Other	-	-	-	-	-	-	-	-
<b>Total Electricity Networks</b>	<b>3,306</b>	<b>3,417</b>	<b>3,008</b>	<b>1,809</b>	-	-	<b>6,314</b>	<b>5,226</b>
Purchases of shares	2,236 <sup>1</sup>	-82	445	195	9,139 <sup>2</sup>	-	11,820	113
Other, excl. shares	346	716	4,002	2,214	258	40	4,606	2,970
<b>Total</b>	<b>14,985</b>	<b>10,807</b>	<b>17,914</b>	<b>8,117</b>	<b>9,397</b>	<b>40</b>	<b>42,296</b>	<b>18,964</b>
<b>Per cent of total investments</b>	<b>36</b>	<b>57</b>	<b>42</b>	<b>43</b>	<b>22</b>	<b>-</b>	<b>100</b>	<b>100</b>

1) SEK 2,194 million pertains to acquisitions of wind power companies in the UK. The acquisitions of the British companies AMEC Wind Ltd and Thanet Offshore Wind Ltd were reported in 2008 under Business Group Nordic.

2) SEK 592 million pertains to the acquisition of the British wind power company Eclipse Wind Energy UK Plc, SEK 4.6 billion pertains to 18.7% of the Polish energy company ENEA S.A., and SEK 3.9 billion pertains to the redemption of minority shares in Vattenfall Europe AG.

## BUSINESS GROUP NORDIC

Vattenfall is the leading energy group in the Nordic region, with a market share of approximately 20% in electricity generation. Operations in 2008 covered Sweden, Finland and Denmark as well as Vattenfall's wind power investments in the UK. Vattenfall produces, distributes and sells both electricity and heat. Hydro and nuclear power are the base of electricity generation, while wind power, biomass, waste and fossil fuels are also used. Vattenfall sells district heating and has a substantial volume of heat production, largely based on biomass, and is the fourth-largest supplier of heat in the Nordic countries. Vattenfall also conducts consulting and contracting activities, mainly in the energy sector.

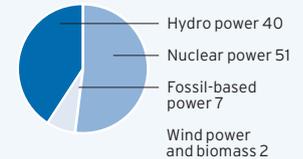
Share of Group's external net sales, 33%



Share of Group operating profit, 56%



Production mix, generated electricity, %



### Nordic

	2008	2007	Change, %
<b>1</b> Net sales, SEK million	48,851	46,713	4.6
External net sales, <sup>1</sup> SEK million	54,732	44,429	23.2
<b>2</b> Operating profit, SEK million	16,760	12,591	33.1
Net assets, SEK million	111,263	91,122	22.1
Return on net assets, %	15.1	13.7	n.a.
Installed capacity electricity, MW	18,621	18,902	-1.5
Installed capacity heat, MW	4,354	4,987	-12.7
<b>3</b> Electricity generation, TWh	90.7	91.1	-0.4
<b>3</b> Heat production, TWh	10.4	10.7	-2.8
Number of electricity customers <sup>2</sup>	1,120,000	1,034,000	8.3
Number of network customers	1,299,000	1,302,000	-0.2
Average number of employees, full-time equivalents	9,507	9,489	0.1

1) Excluding intra-Group transactions.

2) Retail customers and small and medium-sized corporate customers.

### 1 Net sales

External net sales increased by SEK 10,303 million, mainly due to higher prices on the spot market and for hedged volumes.

### 2 Operating profit

The improvement in operating profit is mainly attributable to higher electricity prices. The Generation business unit accounted for most of the increase (85%), with an improvement

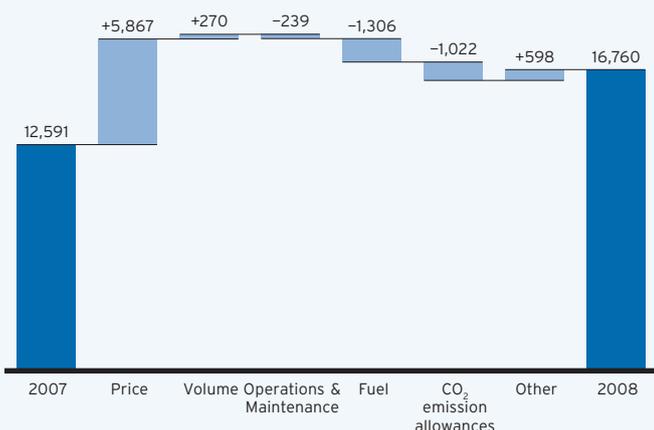
in operating profit by SEK 3,535 million. This improvement is mainly attributable to higher prices received on the spot market and hedged volumes (SEK 5,721 million). Excluding the preceding year's restructuring costs and costs for the storm "Per", operating profit for the Distribution business unit improved by SEK 209 million, mainly due to improved tariffs. Operating profit for the Heat business unit improved by SEK 173 million. This is mainly explained by the effect on 2007 profit of a large impairment charge for a combined heat and power plant in Finland.

### 3 Electricity and heat generation

Despite the increase in hydro and wind power generation, total electricity generation was slightly lower than in 2007. This is due to a decrease in nuclear power generation caused by shutdowns and planned outages at the end of the year and to lower fossil-based generation in Denmark. The problems with control rods at the Forsmark 3 reactor were corrected, and the reactor was restarted on 1 January 2009. Wind power generation increased by 25% to 1.5 TWh (1.2), mainly due to the new Lillgrund wind farm and favourable wind conditions. Biomass-based generation amounted to 0.5 TWh (0.4). Heat production decreased slightly compared with 2007, which is attributable to warm weather and the divestment of a number of small production units in 2007.

Factors that affected the change in operating profit (EBIT)

SEK million



### Wholesale price trend

The average spot price (EURSYS base load) on Nord Pool was approximately 60% higher than a year ago – EUR 44.73/MWh, compared with EUR 27.93/MWh. The higher price is mainly attributable to higher prices for CO<sub>2</sub> emission allowances and a weaker hydrological balance. The average hydrological balance in the Nordic region showed a surplus of 5.8 TWh in 2008, compared with a surplus of 12.7 TWh in 2007.

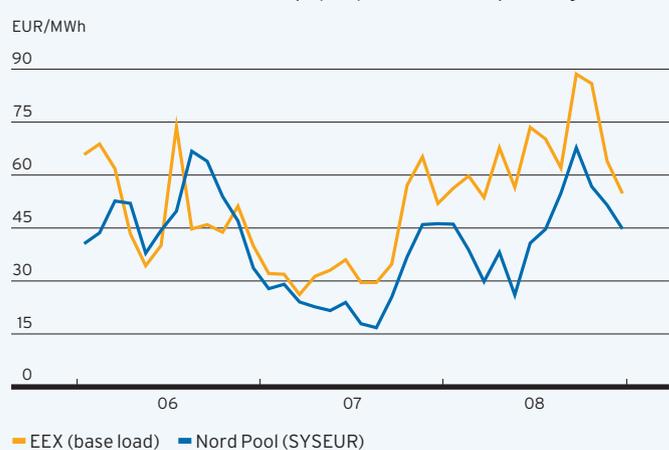
Sharply rising oil and coal prices characterised the price trend for forward contracts during the first part of the year, with a top quotation of EUR 69.75/MWh reached on 1 July for the 2009 contract. During the second half of the year, commodity prices showed a sharply falling trend as a result of the generally mounting financial anxiety, which had a dramatic effect on Nordic financial contracts. The 2009 contract hit its lowest point on 18 December, at EUR 36.3/MWh, which was nearly a halving compared with the top quotation a few months earlier. Nordic forward contracts for 2009 and 2010 closed on 30 December 2008 at EUR 30.60/MWh and 37.90/MWh, respectively, compared with EUR 51.70/MWh and EUR 50.88/MWh, respectively at year-end 2007. The closing price for the 2009 contract was EUR 54.70/MWh, which is nearly EUR 9/MWh higher than in 2007, when the corresponding figure was EUR 45.72/MWh.

### Network regulation

In Sweden, regulation of network tariffs has historically been conducted retroactively (ex post). In 2003, the so-called network performance assessment model was adopted for this ex post assessment. In June 2003 the European Parliament's electricity market directive was adopted, which stipulates that network tariffs are to be set in advance (ex ante). Based on this, the Swedish government has proposed in a bill that, starting in 2012, the distribution operators' revenues should be set in advance for four-year oversight periods. In addition, it has been proposed that the current network performance assessment model, which is based on a fictive electricity network, be replaced by regulations that are based on the distribution operators' actual electricity networks.

In 2006 the network regulator decided to demand repayment of SEK 236.4 million, pertaining to the former Vattenfall Sveanät for the 2003 tariff year. Following an appeal made by Vattenfall to the county administrative court, the network regulator decided in December 2008 to withdraw its demand for repayment. For the 2004–2008 tariff years, Vattenfall shall repay a combined sum of SEK 0.5 million. A planned increase in electricity network prices for 2009 will be reduced by this amount.

German and Nordic electricity spot prices, monthly averages



As per 31 December 2008 Source: Nord Pool and European Energy Exchange (EEX)

### Long-term electricity contracts with energy-intensive industrial companies

Several major, long-term contracts were signed during the year with industrial companies in the Nordic region, including Stora Enso, Smurfit Kappa, Vargön Alloy, Outokumpu, Hydro and Borealis. Vattenfall has a good working relationship with electricity-intensive industries, and the newly signed contracts are a testimony to the confidence that companies have in Vattenfall as an electricity provider.

### Greater number of customers

Vattenfall's focus on improved offerings and attractive contract terms has yielded results. Vattenfall continues to win market shares in the Nordic countries, and Vattenfall's market share in the Swedish retail market grew from 15.1% to 16.7%. Customer Satisfaction Index (CSI) scores improved compared with 2007, from 62 to 69. Growing numbers of customers are choosing to purchase their electricity contracts online. Online sales have increased from fewer than 1,000 in 2006 to approximately 20,000 new customers in 2008. Among the contract forms that has gained the most appreciation among customers is "Trygghetsavtalet" – a fixed-price three-year contract that gives customers the right to take out a new contract if electricity prices fall. As a result of an agreement with Göteborg Energi AB on the takeover of part of the customer base of the jointly owned electricity trading company Plusenergi AB, Vattenfall will gain approximately 150,000 new customers, which will further boost its market share in 2009.

### Investments

The following major investment projects are in progress or in the planning stages:

- Vattenfall is co-operating with Swedish forest company Sveaskog on a project that aims to build more than 500 wind power turbines with combined capacity of 1,500 MW, which is enough electricity to meet the needs of 800,000 homes. Upon completion this would be the largest wind power investment in Sweden to date.
- In Denmark, work is under way on repowering older wind power plants with larger, more efficient plants. Approximately 30 new plants with combined capacity of 100 MW will replace 120 older plants with combined capacity of approximately 40 MW.
- At Midfynsværket in Odense, Denmark, a straw-fired combined heat and power boiler is being installed, with 35 MW of electricity and 84 MW of heat.
- At Amagerværket in Copenhagen, conversion is under way of a coal-fired combined heat and power plant to co-combustion using straw.
- Implementation of the major investment programmes in hydro power, nuclear power and the network operations continues. Since 2003 Vattenfall – together with the other owners – has invested approximately SEK 10 billion in major, long-term investment programmes in the Swedish nuclear power facilities. These include measures to improve the level of safety, extend useful life and raise capacity.
- In September Vattenfall began construction of a new hydro power plant – Abelvattnet, in the municipality of Storuman – with a capacity of 4.6 MW. This will be Vattenfall's first newly built hydro power plant in more than 15 years.
- In Finland, an investment of EUR 29.9 million (approx. SEK 283 million) is being made to increase the use of biomass at the Vanaja power plant in Tavastehus.

### Nuclear power

In mid-October the Forsmark 3 reactor was shut down after an inspection of Oskarshamn 3 – which is the same type of reactor – showed a fracture in a control rod. After corrective measures and controls, the reactor was restarted on 1 January 2009.

In connection with the restart following the annual overhaul outages, both Ringhals 1 and Ringhals 2 were affected by operating problems that led to loss of generation. After corrective measures were taken, the reactor was restarted on 6 January 2009. At the Ringhals 2 reactor, it was found that two water pumps in the cooling system had insufficient flow, entailing that the reactor will have to be run at a slightly reduced capacity until the overhaul shutdown in 2010.

In early 2008 the UN's International Atomic Energy Agency (IAEA) performed a three-week review of the Forsmark nuclear power plant. The IAEA concluded that Forsmark maintains a good international level in its safety standards. A number of suggested improvements were identified, which Forsmark will be implementing.

## BUSINESS GROUP CENTRAL EUROPE

Business Group Central Europe comprises operations in Germany and Poland. In Germany, Vattenfall produces, distributes and sells electricity and heat and is currently the country's third-largest producer of electricity and the largest supplier of heat. Generation is based primarily on lignite. Operations include open-cast lignite mines in Lausitz, power plants in eastern and northern Germany, the transmission grid in eastern Germany, and local networks in Berlin, Hamburg and Mecklenburg Vorpommern.

In Poland, heat production and heat sales are the largest part of operations, where Vattenfall has a market share of approximately 12%. Electricity and heat production are based primarily on coal. Vattenfall also owns and operates its own electricity network, and distributes and sells electricity, mainly in southwest Poland.

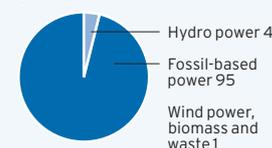
Share of Group's external net sales, 60%



Share of Group operating profit, 51%



Production mix, generated electricity, %<sup>1</sup>



1) In the German operations, Vattenfall normally generates electricity also from nuclear power. However, in 2008 two of the German nuclear power plants were off-line.

Central Europe			
	2008	2007	Change, %
1 Net sales, SEK million	142,260	122,256	16.4
External net sales, <sup>1</sup> SEK million	99,182	86,736	14.3
2 Operating profit, SEK million	15,140	16,430	-7.9
Net assets, SEK million	92,344	78,714	17.3
Return on net assets, %	16.4	20.9	n.a.
Installed capacity electricity, MW	15,951	15,951	0.0
Installed capacity heat, MW	13,518	13,483	0.3
3 Electricity generation, TWh	72.4	76.6	-5.5
3 Heat production, TWh	25.3	25.5	-0.8
Number of electricity customers <sup>2</sup>	3,673,000	3,668,000	0.1
Number of network customers	4,290,000	4,427,000	-3.1
Average number of employees, full-time equivalents	22,387	22,396	-0.0

1) Excluding intra-Group transactions.  
2) Retail customers and small and medium-sized corporate customers.

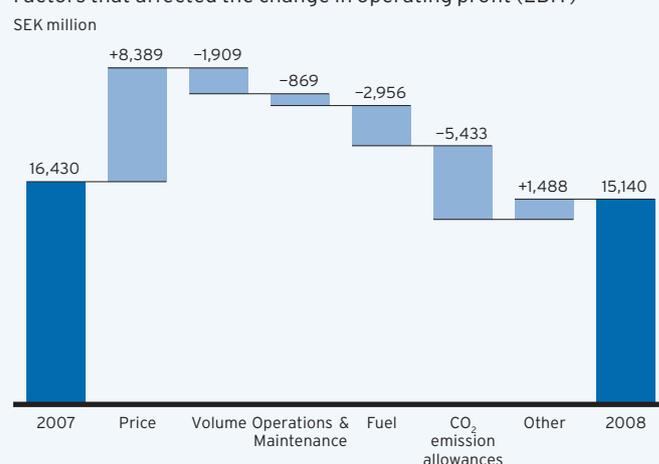
### 1 Net sales

External net sales increased by SEK 12,446 million, of which nearly 90% is attributable to Germany. The increase is mainly attributable to higher prices received in both Germany and Poland, but also to currency effects.

### 2 Operating profit

The drop in operating profit is entirely attributable to the German operations, and almost exclusively to the Mining and Generation business unit. This is mainly due to higher costs for CO<sub>2</sub> emission allowances (SEK 5,255 million) and lower volumes resulting from lower availability of coal-fired plants, and planned maintenance work. The impact on 2008 earnings of the continued outages of the Krümmel and Brunsbüttel nuclear power plants is estimated to have amounted to EUR 573 million (SEK 5,540 million). The earnings impact in 2007 was EUR 201 million (SEK 1,900 million). The Heat business unit reported a drop in operating profit due to higher fuel costs. The Polish operation showed an improvement in its operating profit, mainly attributable to the Distribution business unit, due to higher tariffs and slightly higher volumes in 2008, among other things. Operating profit for the Heat business unit decreased, largely

Factors that affected the change in operating profit (EBIT)



due to higher fuel costs. However, these could be partly compensated by slightly higher prices received for sales of electricity.

### 3 Electricity and heat generation

Total electricity generation decreased by 5.5% to 72.4 TWh (76.6), which is attributable to the outage of the Brunsbüttel

nuclear power plant in Germany and to lower fossil-based generation as a result of lower availability and planned outages at coal-fired plants in Germany. The outage at the half-owned Krümmel nuclear power plant has not affected consolidated generation volumes, since the plant is not consolidated in Vattenfall's accounts. Fossil-based generation in Poland was unchanged during the year. Heat sales decreased slightly due to warmer weather.

**Wholesale price trend**

**Germany**

The average spot price (base load) on the European Energy Exchange (EEX) in Germany was 73% higher than in 2007 – EUR 65.75/MWh, compared with EUR 38.00/MWh. The higher price is attributable to considerably higher electricity generation costs, with (average) higher fuel prices in 2008 than in 2007.

Forward prices for the 2009 and 2010 contracts in Germany closed on 30 December 2008 at EUR 56.21/MWh and EUR 58.02/MWh, respectively, compared with EUR 61.50/MWh and EUR 59.39/MWh, respectively, at year-end 2007. The annual average value of closing prices for the 2009 contract was EUR 70.10/MWh, which is EUR 14.23/MWh higher than in 2007, when the corresponding figure was EUR 55.85/MWh.

**Poland**

The average spot price (base load) on the Polish electricity exchange (POLPX) was 69% higher than in 2007 – PLN 194.7/MWh (115.3). The average spot price in Poland (peak load) was even higher – PLN 229.0/MWh (125.7).

Trading on the Polish electricity exchange, especially in the futures market, is still low compared with Nord Pool and the EEX. However, liquidity improved compared with 2007. Forward prices for the 2009 and 2010 contracts in Poland closed on 30 December 2008 at PLN 16.1/MWh and PLN 16.6/MWh, respectively, which was 29% lower than the prices quoted for the same contracts at year-end 2007.

The annual average value for the 2009 forward contract was EUR 57.90/MWh, with a top quotation of EUR 67.78/MWh in October and a low quotation of EUR 42.90/MWh at the beginning of the year.

**Market conditions**

**Germany**

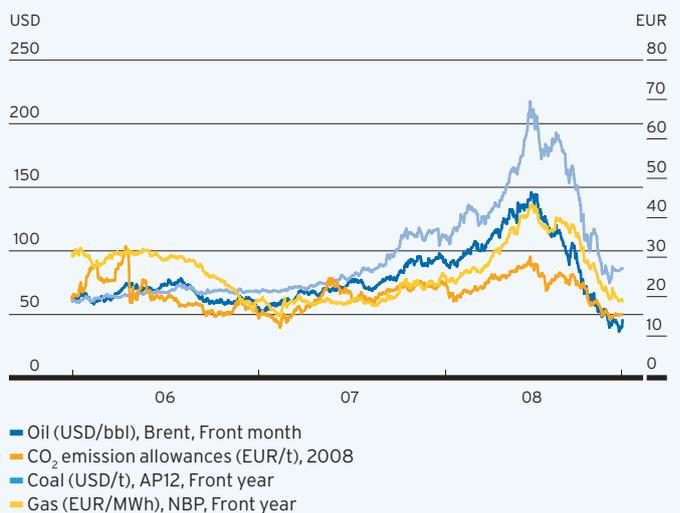
Competition in the German electricity market, especially in the retail market, has risen sharply. After losing customers and market shares in Germany in 2007, in 2008 Vattenfall achieved sales successes and increased its customer numbers. To counteract customers' increasing propensity to switch

Polish electricity prices 2006–2008, monthly averages



Source: Gielda Energii SA (Polish Power Exchange, PolPX).  
As per 31 December 2008.

Price development of oil, coal, gas and CO<sub>2</sub> emission allowances



electricity suppliers, Vattenfall refrained from price increases in 2008. Vattenfall also introduced an online product for retail customers, called Easy, which was a success and generated 50,000 new customers. An independent survey institution, “Deutsches Institut für Service-Qualität”, named Vattenfall Europe as a Best in Class Supplier in 2008.

#### Poland

During the autumn the Polish regulatory authority (URE) decided not to deregulate tariffs for the retail segment, as previously indicated. In late December the tariff level was set far below the market price for this segment. Neither Vattenfall's nor RWE's tariffs for the retail segment have been approved by URE.

### Investments

#### Germany

The following major investment projects are in progress or are currently in the planning stages:

- In Hamburg (Moorburg), the Hamburg State Ministry of Urban Development and the Environment (BSU) granted Vattenfall approval to build a 1,640 MW coal-fired combined heat and power station.
- Together with external parties, Vattenfall is building the Alpha Ventus offshore wind power test facility, which is

scheduled to be operating in 2009. A total of twelve 5 MW turbines are being erected.

- In May Vattenfall announced its plans to build a CCS demonstration plant at the Jämschwalde power plant in Brandenburg. However, the investment decision is dependent on support from the authorities in Germany and the EU. It is expected that the plant can be commissioned in 2015 at the earliest.
- The Boxberg lignite-fired power plant in Sachsen is being expanded with a new 675 MW station. In addition, lignite mining operations will be restarted at the nearby Reichwalde open-cast mine.

#### Poland

- In November, Vattenfall acquired 18.7% of the Polish energy company ENEA S.A. (Read more on page 54.)

### Organisational changes

Vattenfall adopted a new company management structure in Germany, with effect on 1 July 2008. The executive management (*Vorstand*) has been reduced from six to three persons. At the same time, the business unit managers have been given greater responsibility for their respective operations. The organisational change has brought the operating activities closer to management.

German and Nordic electricity futures prices



Source: Nord Pool and European Energy Exchange (EEX).

For exchange rates, see page 87.

## NON-FINANCIAL DISCLOSURES

*Following are material non-financial disclosures that are judged to be of importance for Vattenfall's earnings, position and development.*

### Research and development (R&D)

Research & Development (R&D) is an important part of the work on meeting the demands and expectations of customers and others in Vattenfall's business environment.

Vattenfall's governance model entails that responsibility for operative activities is fully delegated to the Business Groups and business units. Responsibility for specific R&D and matters that are directly coupled to the Group's own operations rests with the operative business units. R&D is also conducted in such areas that are long-term and visionary as well as in areas that are of importance to the Group as a whole.

Vattenfall's R&D is clearly focused on supporting the Group's plans with respect to reducing CO<sub>2</sub> emissions and increasing the share of renewable energy in the production mix. The company's R&D also encompasses energy efficiency-improvements in the entire value chain for energy supply, from fuel extraction to consumers' use of electricity, heat, gas and vehicle fuel. A key part of the company's R&D encompasses activities that are intended to meet previously made obligations, such as the final storage of spent nuclear fuel from the company's nuclear power plants in Sweden.

### Growing R&D budget in support of the company's strategic ambitions

In support of the company's strategic ambitions, the R&D budget has been expanded in recent years at the same time that the content of R&D programmes has been refined to cover six main areas: renewable sources of energy, Carbon Capture and Storage (CCS), nuclear power, operational efficiency improvement, more efficient use of energy, and new energy transformation technologies. In 2008 Vattenfall invested a total of SEK 1,529 million (1,015) in R&D in the Group. Of this, SEK 352 million (336) pertains to Vattenfall's share of the work on developing a safe and approved method for final storage of spent nuclear fuel, which is conducted by the subsidiary SKB. SEK 143 million (77) pertains to R&D on renewable energy, and SEK 687 million (280) pertains to development of technology to capture and store carbon dioxide from fossil-based generation.

### Research and development (R&D)

- Refinement of Vattenfall's R&D programme in 2008 to cover six main areas: renewable energy, Carbon Capture and Storage (CCS), nuclear power, operational efficiency improvement, more efficient use of energy, and new energy transformation technologies.
- Vattenfall's large-scale CCS project is the Group's largest single R&D project.
- Several different development projects are currently being conducted in the area of renewable energy.

Calculated in proportion to the Group's sales, costs for joint-Group R&D amounted to 0.9% (0.7%), which is in parity with Vattenfall's competitors. This share is reasonable considering that Vattenfall is a technology-using, rather than product-developing company.

### Development projects for renewable electricity generation

Vattenfall is investing heavily to increase the share of renewable sources in its generation. Investment in renewable energy sources is a vital part of the strategy to dramatically lower the company's CO<sub>2</sub> emissions. Parallel with these activities, R&D is being conducted on how existing hydro power plants can be further developed.

Vattenfall plans to invest major sums in new wind power plants. Increasing the value and reducing the risks associated with these are important objectives in Vattenfall's R&D work. In preparation for future investments in major offshore wind farms, several development projects are currently in progress in which new technologies are being tested. Parallel with this, investments are being made in both commercial wind farms and demonstration plants in the operative activities (read more on pages 12–15).

In 2008 Vattenfall increased its investment in ocean energy, mainly focusing on wave power. Wave power has immense potential, but the technology is a number of years behind wind power in terms of development. Vattenfall is actively involved in two pilot plants in Ireland and Sweden and has acquired exploration rights in several locations in the UK and Ireland. In addition, Vattenfall is monitoring developments in other countries, including Norway and Portugal. Based on an evaluation of more than ten different technologies, Vattenfall has given priority to four and is actively supporting two.

### Continued greater investment in CCS technology

Vattenfall's large-scale Carbon Capture and Storage (CCS) project has grown to become the largest programme area in 2009. The programme, which stretches over many years, is based on developing, scaling up and demonstrating cost effective technology for capturing and permanently storing the carbon dioxide that is produced in the combustion of lignite, among other things. The project has direct importance for Vattenfall's ability to achieve its goal of reducing CO<sub>2</sub> emissions by 2030 and the climate vision that Vattenfall's operations will be climate-neutral by 2050. Vattenfall is aiming to have a fully developed commercial concept for CCS by 2020.

In 2008 a CCS pilot plant based on oxyfuel technology was put in operation at Schwarze Pumpe, Germany. The plant is an important link in the upscaling of this technology from test to commercial scale.

Parallel with the planning work for a demonstration plant at Nordjyllandsværket in Denmark, in 2008 pre-plan-

ning work was also started for a second demonstration plant in Jämschwalde, Germany. This plant can be operating by 2015 at the earliest.

During the year, seismic surveys were conducted for CO<sub>2</sub> storage in an aquifer outside Aalborg, Denmark. The facility can be put in operation by 2013 at the earliest.

In 2007 Vattenfall signed an agreement with the German company EEG (a subsidiary of Gaz de France) on co-operation surrounding the storage of carbon dioxide in the depleted gas field in Altmark. Preparatory activities were conducted in 2008. Test storage of carbon dioxide from the pilot plant in Schwarze Pumpe can begin in spring 2009 at the earliest (read more on pages 16–19).

#### More efficient use of energy

Vattenfall's R&D has been assigned a clearer focus on projects concerning more efficient uses of energy.

Co-operation with Volvo on plug-in cars continues. Since late 2008 Vattenfall has also been participating together with BMW on an electric car project in Berlin. Vattenfall's role is to provide the electricity via a network of electricity stations. Most activities in the area of energy systems analysis are continuing in the aim of determining how the roles of various installations in major, connected energy systems can be changed in order to improve total energy efficiency.

#### Impact of environmental issues on the Group

The importance of environmental issues in society today has such an impact that the Group's earnings and financial position are affected or can be affected depending on how the company chooses to act. The strong stance taken by European politicians for a sound environment, the shift to long-term sustainable development in society and limitations posed by climate change have affected and will continue to affect the conditions for Vattenfall's future operations.

As a result of new environmental findings, customers and other stakeholders have an expectation that the company will act. Initially the impact of this on Vattenfall's position and earnings is indirect. In pace with ever-stronger demands on environmental considerations and a growing sentiment by the general public in favour of an aggressive environmental stance, environmental standards are evolving to become statutory requirements that must be met. In recent years, economic policy instruments have also been introduced which have a direct coupling to the company's cash flow.

Vattenfall therefore works proactively in its efforts to stay abreast of new environmental findings at an early stage in order to be able to formulate its own conclusions to the problems and thereby be in a position to predict tomorrow's customer demands, laws and economic environmental policy instruments.

The European system for trading in CO<sub>2</sub> emission allowances, sulphur taxes imposed in certain countries and the fee system for emissions of nitrogen oxides in Sweden are examples of economic environmental policy instruments that affect the Group's operations. Most other environmental issues are regulated through bans or restrictions. Many more stringent demands are being implemented within the framework of the permit-issuing process in environmental legislation in the respective countries.

Economic environmental policy instruments and the issuance of permits for operations subject to a permit requirement are the factors that have the greatest bearing on Vattenfall's earnings and position. Vattenfall believes that the trading system for CO<sub>2</sub> emission allowances is the environmental policy issue that has the greatest impact on the company's position in both the long and short term.

#### Operations requiring permits

The Group conducts operations that require permits pursuant to national legislation in Sweden, Finland, Denmark, Germany, Poland and the UK. A considerable level of such activity involves the generation of electricity and heat, and in Germany also lignite mining at four open-cast mines.

The Group conducts considerable network activities, including distribution of electricity under concessions held in Sweden, Finland, Germany and Poland, and transmission via the high voltage grid in Germany. The Group also conducts its own rail operations in association with lignite mining in Germany.

The Parent Company conducts operations that require permits in accordance with the Swedish Environmental Code. These consist primarily of combustion plants for electricity and heat generation, and wind power plants. The Parent Company has electricity and heat generation plants that require permits and/or registration. The Parent Company also has wind power turbines that are located separately as well as in groups; all of these require permits and/or registration. Further, the Parent Company has hydro power plants with associated water regulation facilities that are subject to review outside of the jurisdiction of the Swedish Environmental Code. The Parent Company conducts fish farming requiring permits.

The terms for a few of the Parent Company's small heat plants were subject to review in 2008. The company's earnings and financial position are not dependent on the outcome of these reviews.

The Group's Swedish subsidiaries also conduct operations requiring permits in accordance with the Swedish Environmental Code. Forsmarks Kraftgrupp AB and Ringhals AB generate electricity in nuclear power plants. SKB operates an installation for the final storage of low- and medium-level nuclear waste in Forsmark and an installa-

tion of intermediate storage of spent fuel in Oskarshamn. In several subsidiaries, electricity and heat are generated primarily in combustion plants. The Group conducts network activities via Swedish subsidiaries for the distribution of electricity, in accordance with concessions.

Along with the network activities, generation of electricity in hydro and nuclear power plants constitutes a central part of the Parent Company's and the Swedish operations. Generation of electricity in hydro power plants is conducted primarily by the Parent Company. Other significant operations are conducted primarily by subsidiaries.

### Electricity and heat generation affect the environment

The greatest environmental impact of the Vattenfall Group's operations is made by the generation of electricity and heat and, in Germany, by coal mining in open-cast mines. The main environmental impact of Vattenfall's nuclear power plants is the creation of radioactive waste, while for combustion plants the main environmental impact is from emissions of climate-affecting carbon dioxide and acidic compounds. The main environmental impact of hydro power, wind power and the network activities, as well as of open-cast lignite mines, is land use. Other environmental impact includes the production of waste and solid residuals, and the use of water for cooling at power plants.

National and European goals for the changeover of energy supply, with a higher share of renewable energy, affect the Group. The same applies for goals for reducing CO<sub>2</sub> emissions.

The aggregate environmental impact of operations in 2008 was essentially unchanged compared with a year earlier, since the scope and character of operations did not change significantly. For a more detailed account of the environment impact of Vattenfall's operations, see the 2008 CSR report, pages 46–57. Trends in environmental impact between two years are overshadowed by fluctuating energy demand caused primarily by outdoor temperatures and socioeconomic conditions. Viewed over longer periods of time, the trends become clearer. Specific emissions

of carbon dioxide (per kWh) from plants currently owned by Vattenfall are 25% lower today than in 1990 for both electricity and heat. Emissions of other compounds have decreased even more. Vattenfall's ambition is to continue reducing its emissions. In 2008 the Group adopted the climate vision of becoming climate-neutral by 2050. The previous goal according to which Vattenfall shall cut its CO<sub>2</sub> emissions in half by 2030, compared with 1990 levels, remains.

Electricity generation is conducted in numerous large and small hydro power plants, nuclear power facilities, wind power plants and in combustion facilities. Some of the hydro power plants are pumped storage plants. The Group also has an ownership stake in the Stade nuclear power plant in Germany, which was decommissioned in 2003.

Heat production is conducted in numerous large and medium-sized combustion plants primarily in Germany, Denmark and Poland, but also in Sweden and Finland. In Germany, construction continued in 2008 of a new lignite-fired power plant for electricity generation (Boxberg) at an existing power plant. This new lignite-fired power station will entail resumed lignite mining in a nearby open-cast mine. The necessary permits to resume mining have been obtained. In Hamburg, a new coal-fired CHP plant, Moorburg, is being built to replace existing and previously decommissioned power plants.

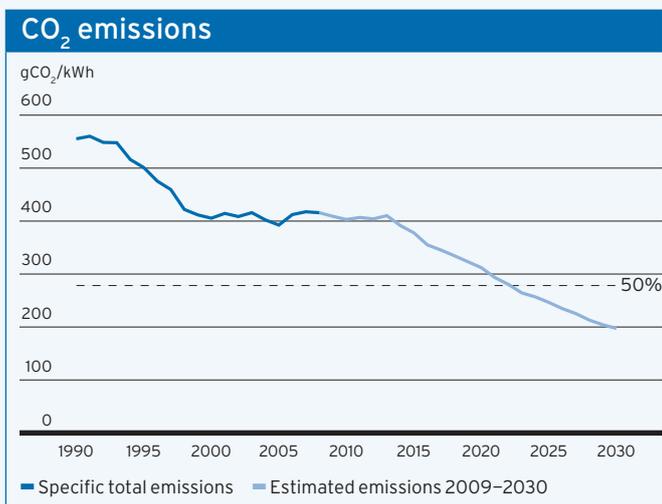
In 2008 the Schwarze Pumpe pilot plant that employs the capture of fossil-based CO<sub>2</sub> was inaugurated in Germany. The intention is to permanently store the captured carbon dioxide in bedrock. The power station, CHP plant and pilot plant have all been granted permits under German legislation.

In Denmark, construction of a new biomass-fired boiler in Odense continued. The plant is expected to be commissioned in 2009. Test operation of a previously coal-fired boiler in Copenhagen that has been converted to coal and biomass co-combustion was begun in December 2008. Both of these plants have been granted permits under Danish legislation.

In 2008 Vattenfall acquired the UK-based companies AMEC Wind Energy Ltd, Eclipse Energy UK Plc and Thanet Offshore Wind Ltd. These acquisitions are part of Vattenfall's ambition to increase the share of wind power. Additional offshore wind farms are planned at the Kriegers Flak site in the southern Baltic Sea and at the Trolleboda and Taggen sites in the south-east part of the Baltic Sea.

Also in 2008, Vattenfall acquired 18.7% of the shares in ENEA S.A., a Polish company that operates a large coal-fired plant but which also has hydro power assets and a programme for developing new wind power.

Poland's accession to the EU in 2004 has entailed the adaptation of the country's national environmental laws to EU legislation. As a result, Vattenfall's plants in Warsaw that require permits will become subject to review in the years ahead in accordance with transitional rules for existing plants. Preparations are currently in progress to ensure compliance with the new regulations on time.



## HR statistics



## Human resources

### Talent management

Vattenfall works according to a yearly, strategic competence succession process to ensure that the company will continue to have access to the competence that is needed for its operations. This annual process, which is used throughout the organisation, couples business plans with future competency needs. Deviations are analysed and action plans are drawn up. Talent management is conducted primarily in the day-to-day activities and through participation in various projects. In addition to this, development activities are conducted at both the Group and local levels. At the Group level, Vattenfall has a Group-wide leadership development programme. The aim of this programme is to spread knowledge about the Group's strategies and values, and to promote a shared understanding of Vattenfall's company philosophy and leadership criteria. The goal is to support managers in their role as leaders and in their personal development, and to stimulate network-building in an international environment. These programmes are offered to managers at various levels. In addition, managers are offered a Group-wide function-focused programme.

### Employee turnover

Employee turnover in 2008, defined as the number of employees who have left their positions within the Group on their own initiative or due to lack of work in relation to the total number of employees, was 3.3% (3.9%).

### Collective agreements

The right to co-determination is regulated primarily at the country level and is based on the respective countries' labour market laws. In all Business Groups and at the Group level, Vattenfall works with employee representatives and local unions. At the Group level this work is conducted primarily via the European Works Council (EWC-Vattenfall). Collective bargaining agreements are entered into locally in the respective countries as needed.

## The work of the Board of Directors in 2008

The Board's Rules of Procedure stipulate that seven regular meetings shall be held every year. In addition to the regular meetings, board meetings can be summoned if the need arises.

The Rules of Procedure also stipulate that the following items of business shall be included on the agenda of at least one board meeting per year:

- The Group's strategic plan
- The Group's total risk exposure
- Safety and environmental issues within the Group's nuclear power operations.
- Review of strategic human resource matters, including competence succession
- Research and Development activities within the Group.

In addition, reports are presented at every meeting on important business events since the last meeting, as is a monthly report and a report on the financing situation. Investments are followed up 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 each year. At these seminars the Board receives more detailed information about and discusses Vattenfall's long-term development, strategy, competitive scenario and risk management.

In 2008 the Board adhered to the meeting plan as stipulated in the Rules of Procedure. In all the Board met 17 times, including the statutory meeting. According to the Rules of Procedure, at least one meeting each year is to be held at a place other than the head office. In 2008 a meeting was held in Cottbus, Germany. This meeting was combined with a visit to the open-cast mine in Jämschwalde and the plant Schwarze Pumpe, including the pilot CCS plant. For further information on the work of the Board, see the Corporate Governance Report on pages 36–49.

## AGM PROPOSALS

### Proposed distribution of profits

See page 120.

### Compensation of senior executives, other managers and employees

The Board proposes that the AGM approve the following principles, which encompass the government's new guidelines as laid out below. In other respects, these principles are essentially unchanged compared with the principles approved by the 2008 AGM.

- The starting point for compensation and other terms of employment for members of the executive management who are employed in Sweden consists of the government's guidelines (3 July 2008) on terms of employment for senior executives of companies with state ownership.
- Salaries and other benefits shall be competitive but not leading with respect to amount compared with peer companies.
- No variable salary component or bonus is payable to the Group CEO. For other managers and employees in the Swedish operations, a maximum variable salary component corresponding to 16.7% of the employee's normal base salary shall be applied. For certain managers, the normal base salary can also be reduced by 16.7%, depending on outcomes.

All executives with employment in Sweden shall be covered by an incentive programme that is based on the performance of the employee's own unit and/or personal performance.

The owner's long-term demand for improvements in value creation shall be a joint goal. Starting in 2008, this includes – in addition to economic value creation – also goals within the five strategic ambitions that Vattenfall works with. For members of the Executive Group Management, except for the CEO, and for the business unit managers (approx. 25 individuals in all), long-term targets have been set for a three-year period, 2008–2010, with the opportunity for that period to earn a total of four additional months' salary upon achievement of the targets in the strategic areas. However, the sum of variable salary components broken down per year for the period 2008–2010 for persons with Swedish employment, may not exceed two months' salaries.

For further information, please refer to the Corporate Governance Report and the section on executive compensation, as well as to Note 47 to the consolidated accounts in the 2008 Annual Report.

## PARENT COMPANY

Sales amounted to SEK 31,844 million (25,233).

Profit before appropriations and tax was SEK 35,034 million (5,532). The earnings improvement is attributable to an intra-Group tax-exempt capital gain on the sale of shares from the Parent Company to a wholly owned subsidiary. The capital gain amounted to SEK 30,582 million and is eliminated at the Group level.

Investments for the year amounted to SEK 10,459 million (1,113).

Cash and cash equivalents amounted to SEK 375 million (352). Funds in the Group account managed by Vattenfall Treasury AB amounted to SEK 16,525 million (22,667).

## EVENTS AFTER THE BALANCE SHEET DATE

On 23 February 2009 it was announced that Vattenfall has made an all cash offer of EUR 8.5 billion enterprise value for 100% of the shares in the Dutch energy company N.V. Nuon Energy. Nuon's grid company Alliander is not included in the transaction. The partners have agreed that Vattenfall will initially acquire 49% of the shares. The remaining 51% of the shares will be acquired in the coming six years under fixed terms. Following the initial acquisition of 49%, Vattenfall will have operational control over Nuon. The transaction is subject to the approval of at least 80% of Nuon's shareholders as well as merger control clearance by the European Commission. Nuon and Vattenfall expect to complete the closing of the transaction at mid-year 2009.

# RISKS AND RISK MANAGEMENT

Achieving Vattenfall's strategic ambitions requires economic value creation and profitable growth. This is to take place within the framework of safe energy generation in all respects. These ambitions are important guiding points in Vattenfall's continued work on being competitive, creating value, being a positive force in the industry and contributing to sustainable development in society. Vattenfall creates economic value when it exceeds the required rate of return on net assets with a set level of balanced risk.

## Risk organisation

Vattenfall's operations are exposed to a number of risks that affect earnings and the balance sheet. To address these risks, Vattenfall has established a risk management organisation and process. Governance takes place through a set strategy and established body of rules. To be able to effectively manage risks, methods and models are being continuously being developed to measure and evaluate risks.

The Board of Directors has overarching responsibility for internal control and risk management at Vattenfall. The Board, in turn, has given Vattenfall's management a risk mandate. Management delegates this mandate to Vattenfall's business units. Each unit manages its own risks and has some room to manoeuvre within its respective mandate, and is responsible for ensuring compliance with reliable methods for measuring risks. The results achieved by the units are followed up on a continuous basis and reported to the executive management in accordance with set reporting routines. Risk reporting and the utilisation of mandates are conducted by an independent risk control function.

The Group's risk management is co-ordinated by a Risk Committee (VRC) under the direction of the CFO. This committee is tasked with reviewing principles and mandates, and approving risk instructions. The committee is also responsible for ensuring that uniform definitions of risks are used within the Group. In addition to the VRC, Vattenfall has several local risk committees and risk-specific committees; for example, environmental risks are co-ordinated and evaluated by the Group's Environmental Committee.

To further improve risk management and governance within the company, Vattenfall has adopted the use of Enterprise Risk Management (ERM). Implementation was carried out in 2008 and will continue in 2009. ERM gives management an effective means of taking uncertainties, risks and opportunities in the company into account and comparing them with each other. Through this, management gains better guidance in business decisions and business planning as well as support in achieving its strategic objectives. Once the process is fully implemented, continuous identification, valuation, management and reporting of all types of risk will be conducted.

## Risks at Vattenfall

Political risks, operational risks and environmental risks are general in nature and exist in all units throughout the Group. The more specific risks in each part of the value

chain are discussed on page 72. Insurable risks are managed centrally by Försäkrings AB Vattenfall Insurance. The Group's funding is conducted primarily through Vattenfall Treasury AB, the Group's internal bank. The treasury operation aims to provide cost-effective management of the Group's financial risks. The Group's loans, investments and currency trading are handled for the most part by Vattenfall Treasury AB and, to a lesser extent, by Vattenfall Europe AG. The Group's liquidity is centralised in Group cash pool systems. The main risks that arise in connection with the Group's financing are liquidity risk, interest rate risk, currency risk and credit risk. For a quantification of financial risks, see Note 35 to the consolidated accounts.

## Political risk ①

Political risk is defined as the business risk that can arise as a result of political decisions. Examples of this are price regulations in electricity distribution and transmission, uncertainty regarding a new political majority, or changes in finance policies. In connection with acquisitions and other investments, this type of risk is managed by adjusting the cost of capital.

Another type of political risk stems from changes in the rules governing the energy industry. These can concern such factors as changed taxes, environmental surcharges, changes in environmental legislation and permit requirements, changes in how natural monopolies are regulated, and political objectives regarding the composition of the energy system. This type of risk is more difficult to predict and protect against. To mitigate this risk, Vattenfall conducts active business intelligence activities and maintains contacts with decision-makers in relevant markets. Vattenfall also belongs to various national and international trade organisations.

## Operational risk ②

Operational risk refers to the risk of incurring financial loss, or a loss of trust, due to errors or defects in the company's routines.

- *Administrative risks* – the risk of loss due to shortcomings in the company's division of responsibility, competence, reporting routines, risk measurement and evaluation models, and in control and follow-up routines
- *Legal risks* – the risk of loss arising from the non-fulfilment of contracts due to shortcomings in documentation, counterparties lacking the right to enter into contracts or uncertainties regarding contract validity

**Definition of risks (Management of these risks is described in the corresponding reference text)**

**General risks for all business units**

**Political risk 1**

The risk of financial loss stemming from political decisions.

**Operational risk 2**

By operational risk is meant the risk of errors or defects in the company's routines, leading to economic loss or loss of trust.

**Environmental risks and environmental liabilities 3**

By environmental risks is meant the probability of accidents and defects in operations and their impact on the environment. By environmental liabilities is meant identified environmental problems in which demands for remedial measures can be expected.

**Financial risks (for complete description, see Note 35 to the consolidated accounts)**

**Liquidity risk 4**

Liquidity risk pertains to the risk for a lack of liquidity caused by a failure to meet borrowing needs.

**Interest rate risk 5**

Interest rate risk consists in part of the risk of the market value of investments falling and in part of a poorer balance of net interest and expense in the Group associated with rising interest rates.

**Currency risk 6**

Currency risk pertains to the risk of a negative impact on the consolidated income statement and balance sheet caused by changes in exchange rates.

**Credit risk 7**

Credit risk arises, for example, in transactions with customers and is defined as the risk of a counterparty failing to fulfil its obligations. Measurement and management of credit risk are conducted within the respective business units.

**Specific risks along the value chain**

**Generation**

**Electricity price risk 8**

Earnings risk stemming from changes in the wholesale price of electricity.

**Plant risk 9**

Vattenfall's generation plants can be damaged by incidents and accidents, which as a rule also give rise to costs associated with outages.

**Fuel price risk 10**

Risk of loss due to changes in the market price of the fuels that Vattenfall uses in its generation plants. Measurement and management of this risk are conducted by the respective generation units.

**Investment risk 11**

The risk of loss caused by investments losing value (such as due to changes in electricity prices, delays, increased risks, etc.)

**Volume risk 12**

Volume risk is an earnings risk arising from uncertainty of available generation capacity, such as water supply and the related uncertainty regarding future hydro power generation.

**Trading**

**Electricity price risk 8**

Risk of loss due to changes in the wholesale price of the electricity that Vattenfall conducts physical and financial trading in.

**Price area risk 13**

Price area risk arises when electricity prices differ between geographical areas due to shortages in transmission between areas. This risk is managed centrally by Vattenfall Trading Services.

**Liquidity risk 4**

Liquidity risk pertains to the risk of not being able to pursue the trading strategy due to insufficient liquidity in the market.

**Currency risk 6**

Currency risk pertains to the risk of a negative impact on the consolidated income statement and balance sheet caused by changes in exchange rates.

**Credit risk 7**

Credit risk arises, for example, in transactions with a counterparty and is defined as the risk of a counterparty failing to fulfil its obligations. Measurement and management of credit risk is conducted within the respective business units.

**Sales**

**Electricity price risk 8**

Earnings risk stemming from changes in the wholesale price of electricity sold to customers.

**Volume risk 12**

This is defined as deviations in delivered volumes compared with anticipated volumes for customers, caused by weather and economic factors. Vattenfall uses simulation models to measure volume risk.

**Credit risk 7**

Credit risk arises, for example, in transactions with customers and is defined as the risk of a counterparty failing to fulfil its obligations. Measurement and management of credit risk is conducted within the respective business units.

**Networks**

**Plant risk 9**

The risk of damage to Vattenfall's transmission grid and distribution networks.

**Credit risk 7**

Credit risk arises, for example, in transactions with customers and is defined as the risk of a counterparty failing to fulfil its obligations. Measurement and management of credit risk is conducted within the respective business units.

- *IT and information security risks* – the risk of loss due to defects or other disruptions in IT systems and the handling of Vattenfall's information assets
- *Nuclear safety* – the risk of outages due to deficient safety work and a deficient safety culture (read more on pages 20–23)

To limit operational risks at Vattenfall, each business unit is responsible for ensuring that well-documented routines, reliable IT systems and satisfactory internal controls are in place. For more information, see page 45.

### Environmental risk ③

Vattenfall works systematically to maintain control over the environmental risks that the company's operations can be believed to give rise to. Environmental risk work is also conducted as part of the company's ambition to be Number One for the Environment.

The general concept of "environmental risk" can be broken down into two categories: environmental risks and environmental liabilities.

#### Environmental risks

A combination of, and the probability of, an activity that results in environmental damage. Environmental damage is defined in this context in accordance with Article 2 in the Environmental Liability Directive (2004/35/CE).

#### Environmental liabilities

Cases where emissions, use of substances, or the use of technology in accordance with currently applicable environmental legislation requires remedial measures and/or where demands are made on financial reporting of provisions. The consequences of an environmental risk can entail the following, for example:

- Contamination/clean-up costs
- Impact on the Vattenfall brand
- Opinions and policies that lead to more cumbersome permit application processes and production limitations

The business units' reporting on environmental liabilities covers the following areas, among others:

- Air, water and ground pollution
- Oil-filled cables with lead encapsulation
- Mercury in electrical equipment and fumes
- Insulation in electrical equipment
- Asbestos in thermal power plants and CHP plants
- Magnetic fields from transformers and power lines

#### Risk management

At the end of each year a compilation is prepared of the company's environmental risks and environmental liabilities, and of the provisions and actions that are needed. This compilation is based on joint-Group reporting according to definitions that are decided on internally. This analysis includes a general evaluation of the risk situation and the trend in recent years.

Much of the work on continuously preventing and controlling environmental risks is conducted locally and is based on the knowledge and experience that exists in the Group's units. In addition to this, the business units are responsible for identifying and expressing risks and liabilities in accordance with the joint definitions in order to create an overall picture for the Group.

Preventive action in this area is one way of enhancing the Group's competitive strength in the long term. To give an example, in the German companies, provisions have been made

to clean up contaminated land and restore land after coal mining. This also applies for areas in which action plans have been drawn up in consultation with the pertinent authorities.

### Liquidity risk ④

Liquidity risk pertains to the risk of not being able to pursue the trading strategy due to insufficient liquidity in the market. Liquidity risk is minimised by maintaining an even maturity structure and a long average remaining term in the company's debt portfolio. The maturity profile of Vattenfall's debt portfolio is shown in the diagram in Note 35 to the consolidated accounts.

To safeguard the availability of funds and maintain flexibility, the Group has several types of debt issuance programmes. The Group's target for short-term liquidity is always to have no less than 10% of the Group's sales and at least the equivalent of the next 90 days' maturities in the form of liquid assets or committed credit facilities. Vattenfall's credit rating for long-term and short-term borrowing respectively is A-/A-2 from Standard & Poor's and A2/P-1 from Moody's. Vattenfall's goal with regard to credit rating is to maintain a rating in the single A category.

### Interest rate risk ⑤

Interest rate risk in the Group's debt portfolio is measured in terms of duration, which is permitted to vary from a norm of 2.5 years by up to 12 months either way. The duration of the Group's debt portfolio at year-end was 2.4 years. Including Capital Securities the duration was 2.9 years. To adjust the duration of borrowing, the company uses interest rate swaps, interest rate forwards and options, among other things. The Group's interest rate sensitivity during a 12-month period is shown in the diagram in Note 35 to the consolidated accounts.

### Currency risk ⑥

Currency risk pertains to the risk of a negative impact on the consolidated income statement and balance sheet caused by changes in exchange rates. 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 exposure (or balance sheet exposure). The Group's goal in managing currency risk is to minimise exchange rate effects while taking into account hedging costs and tax aspects. Currency exposure in borrowing is eliminated using currency interest rate swaps for the purpose of avoiding the effect of exchange rate differences on earnings.

The Group has limited transaction exposure, as most generation, distribution and sales of energy take place in the respective companies' local markets. In the Nordic operations, most transaction exposure arises in conjunction with the hedging of electricity prices, primarily on Nord Pool, while in the German and Danish subsidiaries, transaction exposure arises primarily in conjunction with purchases of

fuel. In both cases, currency risk is managed through the use of forward exchange contracts.

The Group's units shall hedge contracted transaction exposure when it exceeds the equivalent of SEK 10 million. Hedges are made through Vattenfall's Treasury unit, where currency risks are managed within established risk limits for interest rates and currencies. The Group's translation exposure is reported in Note 35 to the consolidated accounts.

**Credit risk 7**

Vattenfall uses external rating information, where available, to manage and limit its credit risk. In other cases, internal models are used to establish the creditworthiness of its counterparties. Individual limits are established for each counterparty, and each counterparty is assessed on a regular basis. Exposures are followed up in relation to the credit limits on a daily basis. If necessary, additional credit assurances are demanded in the form of a guarantee from the Parent Company or a bank, for example. In cases where master agreements are entered into, net calculation of debts and receivables for an individual counterparty are permitted. In cases where Vattenfall has more than one master agreement with the same counterparty, a master netting agreement is desirable in order to calculate the net debt and receivable amount, even when trading in different commodities, such as electricity, coal and gas. In many cases agreements are used which limit credit risk through an arrangement by which the parties pledge assets to each other if the exposure exceeds certain, set amounts (such as CSA agreements). When contracts are made in marketplaces, such as the Nordic electricity exchange (Nord Pool) or the European Energy Exchange (EEX) in Germany, which offer central counterparty clearing, the risk is towards the market place instead.

**Electricity price risk 8**

Electricity price risk is the risk that has the single greatest bearing on Vattenfall's earnings and is thus the most important factor for

value creation. A sensitivity analysis of changes in the wholesale price of electricity is provided in the table below.

Electricity prices are determined by fundamental factors such as water levels, available generation capacity, fuel prices, prices of CO<sub>2</sub> emission allowances and electricity consumption. Continuous analysis of these factors is crucial for the successful management of electricity price risk. (Read more about electricity prices on pages 26–27.)

Vattenfall hedges its generation and sales using physical and financial electricity forward contracts available in the market. Such hedging is done while taking into account liquidity in the market at different periods in time. As the sharp fluctuations in electricity prices have shown in recent years, forward trading is an important way of smoothing out and balancing the major price risks in operations. The amount that is hedged varies, and the Group hedges in accordance with established mandates and generally for three years ahead in time (see chart at left). Vattenfall enters into long-term contracts with major industrial customers. These contracts pertain to time horizons in which there is no possibility to hedge prices in the market and which stretch as far as 2019. Total volume for the period 2012–2019 amounts to 125 TWh. The business units conduct their hedging in Vattenfall's various markets through Vattenfall Trading Services, which hedges its own positions in external markets, such as Nord Pool and the EEX.

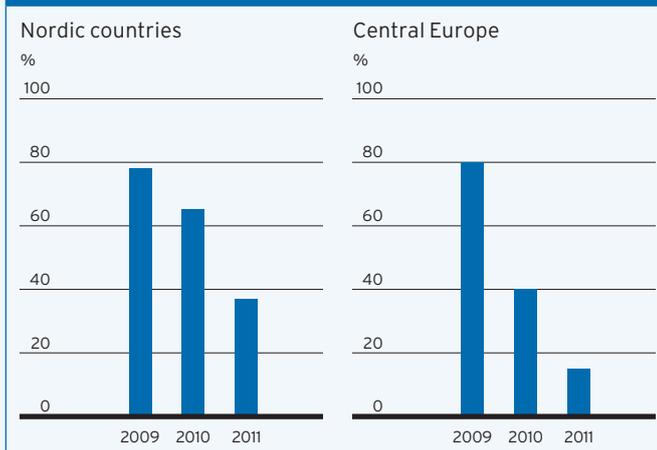
The mandates allocated to the various business units regulate how large of an electricity price risk is acceptable. Exposure is followed up in relation to the mandate on a daily basis. To measure electricity price risk, Vattenfall uses methods such as Value at Risk (VaR) and Profit at Risk (PaR) along with various stress tests.

**Sensitivity analysis**

Market-quoted price risks	Change	Impact on profit before tax, SEK million for the three-year period 2009–2011
Electricity	+/-10%	+/-15,800
Coal	+/-10%	+/-2,800
Gas	+/-10%	+/-1,300
CO <sub>2</sub>	+/-10%	+/-1,500
Uranium	+/-10%	0

The sensitivity analyses of Vattenfall's profit based on variations in various market-quoted risks are performed independent of each other. Each parameter is calculated separately without any connection to the other risks. Most of the parameters affect Vattenfall's earnings with respect to both income and expenses. The reason for this is the pricing connection that exists between the price of coal/gas/oil/CO<sub>2</sub> emission allowances and wholesale electricity prices. The connection between these is described in more detail on pages 26–27. The analyses take into account Vattenfall's level of hedging as per 31 December 2008.

**Vattenfall's hedging positions in various markets as per 31 December 2007**



**Plant risk 9**

Vattenfall's largest insurable risks are associated with the operation of power generation and heat production plants. Vattenfall's plants can be damaged as a result of incidents and breakdowns of components and equipment which, as a rule, give rise to substantial costs due to outages. Plant risk also includes damage to Vattenfall's transmission grid and distribution network.

Plant risk can be reduced through loss-prevention measures, good maintenance, training, advanced planning in the

renewal of Vattenfall's plants and good administrative routines. An example of a maintenance investment is Vattenfall's investment programme in nuclear power, which is aimed at achieving long-term high operating safety and extended useful life.

### Plant insurance

The Group protects itself against major economic loss to the greatest extent possible through insurance. Vattenfall's nuclear power plants in Sweden have insurance cover for property damage through EMANI, a European mutual insurance association. The Nordic nuclear insurance pool participates in this insurance programme in Sweden and also writes nuclear liability insurance. Nuclear liability risk in Germany is insured by the German Mutual Atomic Energy Reinsurance Pool and by the mutual undertaking between German power plant operators.

Försäkrings AB Vattenfall Insurance, a captive company, provides various levels of contracting, property and business interruption insurance for other plants in the Group.

Electricity transmission and distribution networks are uninsured, with the exception of transformer stations and switchgear. The reasoning is that these risks are not generally covered by most insurance companies. Vattenfall continually works to reduce electricity network vulnerability.

In Sweden, companies have strict and unlimited liability for damage to third parties as a result of dam accidents. Vattenfall and other hydro power generators have therefore taken out dam liability insurance together that utilises all available capacity in the insurance market.

Vattenfall Reinsurance S.A. in Luxembourg reinsures part of the insurance obligations of Vattenfall Insurance. Economies of scale and direct access to the international reinsurance market help keep total insurance costs low.

### Fuel price risk <sup>10</sup>

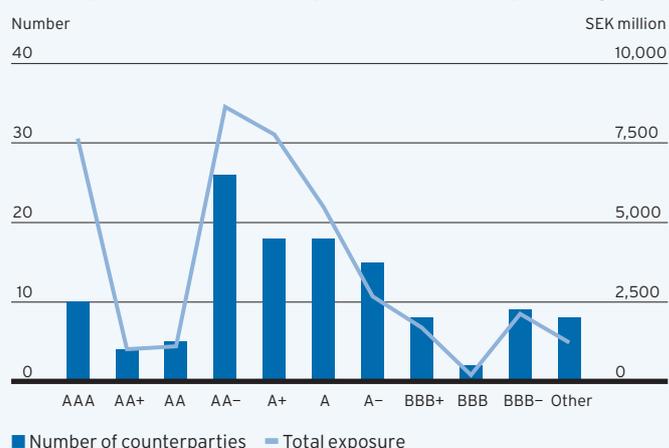
Measurement and management of fuel price risk is conducted within the individual generation units. Fuel prices are affected by macroeconomic factors, among other things. Vattenfall manages fuel price risk by forecasting and analysing price trends. For example, financial and physical instruments for coal and oil are used to smoothen earnings over time. However, most of Vattenfall's coal-fired plants in Germany use lignite from Vattenfall's own mines. For coal-fired electricity generation, hedges on electricity and coal prices are coordinated to safeguard margins. Uranium is used as fuel in Vattenfall's nuclear power plants. This price risk is limited, however, since the uranium fuel constitutes a relatively small portion of the generation cost.

### Investment risk <sup>11</sup>

Vattenfall is a highly capital-intensive company and has an extensive investment programme (see page 58).

Prior to every investment decision, a risk analysis is performed. By simulating various outcomes of price, cost, delays and cost of capital, the risks associated with each individual investment are assessed.

Counterparties, number and exposure, SEK million, per rating class



The chart above shows Vattenfall's counterparties in which the exposure is greater than EUR 5 million per counterparty. The breakdown is based on rating classes and the amount of the credit exposure per rating class. The rating classes are from Standard & Poor's. "Other" consists of exceptions for contracts that have existed for a long time and which Vattenfall has taken over in connection with acquisitions.

Vattenfall's Capacity Management Group function ensures that capital is invested in a way that will maximise long-term economic value. In addition to a strategic investment "roadmap", a list of priority investment projects is continuously updated to guide the Executive Group Management in its investment decision-making process. Projects are ranked according to a number of main criteria: support of Vattenfall's overarching strategic orientation, consequences for the existing generation portfolio, risk profile and profitability.

### Volume risk <sup>12</sup>

In the generation activities, Vattenfall manages its volume risk through analysis and forecasting activities concerning precipitation and snowmelt. Analysis models are based on extensive weather history, among other things.

Volume risk arises also in the sales activities as deviations in anticipated and actual delivered volumes to customers. Volume risks are managed by improving and developing forecasts of electricity consumption. Another way is to transfer this risk to customers when drawing up the terms of contracts with customers or by including this risk in customers' rates.

### Price area risk <sup>13</sup>

Price area risk arises when the price of electricity differs between various geographic areas. Vattenfall's price area risk is centralised and is managed by Vattenfall Trading Services through hedging in the respective areas in which delivery is to take place. In the Nordic countries, the Nord Pool electricity exchange provides financial instruments – area swaps – which can be used to manage price area risk. Vattenfall Trading Services is also a market maker on Nord Pool. Through this undertaking, liquidity is ensured in these financial instruments, and Vattenfall also helps spread risks for other operators.

# CONSOLIDATED INCOME STATEMENT

Amounts in SEK million, 1 January–31 December	Note	2008	2007
Net sales	5, 6	164,549	143,639
Cost of products sold <sup>1</sup>	7	-122,961	-103,404
<b>Gross profit</b>		<b>41,588</b>	<b>40,235</b>
Other operating income	8	2,376	1,782
Selling expenses		-5,584	-4,915
Administrative expenses		-7,587	-7,578
Research and development costs		-1,529	-1,015
Other operating expenses	9	-796	-924
Participations in the results of associated companies	6, 23, 51	1,427	998
<b>Operating profit (EBIT)<sup>2</sup></b>	<b>6, 10, 11, 12, 49, 50</b>	<b>29,895</b>	<b>28,583</b>
Financial income <sup>3</sup>	13	3,412	2,276
Financial expenses <sup>4</sup>	14	-9,809	-6,926
<b>Profit before tax<sup>5</sup></b>		<b>23,498</b>	<b>23,933</b>
Income tax expense	16	-5,735	-3,247
<b>Profit for the year<sup>6</sup></b>		<b>17,763</b>	<b>20,686</b>
<b>Attributable to</b>			
Equity holders of the Parent Company		17,095	19,769
Minority interests	17	668	917
<b>Total</b>		<b>17,763</b>	<b>20,686</b>
<b>Earnings per share</b>			
Number of shares in Vattenfall AB, thousands		131,700	131,700
Earnings per share, basic and diluted, SEK		129.80	150.11
Dividend, SEK million		6,900 <sup>7</sup>	8,000
Dividend per share, SEK		52.39 <sup>7</sup>	60.74
<b>Supplementary information</b>			
Operating profit before depreciation and amortisation (EBITDA)		45,960	45,821
Financial items, net excl. discounting effects attributable to provisions, interest components related to pension costs and return from the Swedish Nuclear Waste Fund		-5,049	-3,040
1) Of which, depreciation, amortisation and impairment losses related to intangible assets (non-current) and property, plant and equipment		-15,508	-16,486
2) Of which, depreciation, amortisation and impairment losses related to intangible assets (non-current) and property, plant and equipment		-16,065	-17,238
2) Including items affecting comparability attributable to: Capital gains/losses, net		98	86
3) Including return from the Swedish Nuclear Waste Fund		1,452	843
4) Including interest components related to pension costs		-943	-811
4) Including discounting effects attributable to provisions		-2,800	-2,453
5) Including items affecting comparability attributable to: Capital gains/losses, net		124	97
6) Including items affecting comparability stated above adjusted for tax		95	136
7) Proposed dividend.			

# CONSOLIDATED BALANCE SHEET

Amounts in SEK million	Note	31 Dec. 2008	31 Dec. 2007
<b>Assets</b>	6		
<b>Non-current assets</b>			
Intangible assets: non-current	19	7,257	4,346
Property, plant and equipment	20	256,077	214,208
Investment property	21	812	906
Participations in associated companies	23	15,925	13,369
Other shares and participations	24	5,439	694
Share in the Swedish Nuclear Waste Fund	25	25,250	24,143
Current tax assets, non-current	16	1,417	1,229
Other non-current receivables	26	4,367	5,128
Deferred tax assets	16	1,368	841
<b>Total non-current assets</b>		<b>317,912</b>	<b>264,864</b>
<b>Current assets</b>			
Inventories	27	12,580	9,537
Intangible assets: current	28	3,285	750
Trade receivables and other receivables	29	34,293	28,120
Advance payment to suppliers		704	672
Derivatives with positive fair values	41	26,450	5,442
Prepaid expenses and accrued income	30	5,660	4,834
Current tax assets	16	4,707	1,358
Short-term investments	31	19,332	12,096
Cash and cash equivalents	32	20,904	10,563
<b>Total current assets</b>		<b>127,915</b>	<b>73,372</b>
<b>Total assets</b>		<b>445,827</b>	<b>338,236</b>
<b>Equity and liabilities</b>			
<b>Equity attributable to holders of the Parent Company</b>			
Share capital		6,585	6,585
Translation reserve		12,861	4,892
Reserve for cash flow hedges		-4,054	-6,385
Retained earnings incl. profit for the year		114,469	106,617
<b>Total equity attributable to holders of the Parent Company</b>		<b>129,861</b>	<b>111,709</b>
<b>Equity attributable to minority holders</b>		<b>11,025</b>	<b>12,423</b>
<b>Total equity</b>		<b>140,886</b>	<b>124,132</b>
<b>Non-current liabilities</b>	6		
Capital Securities	33, 35	10,811	9,341
Other interest-bearing liabilities	34, 35	67,022	42,643
Pension provisions	36	20,752	17,735
Other interest-bearing provisions	37	64,068	51,614
Deferred tax liabilities	16	26,107	23,704
Other noninterest-bearing liabilities	38	3,818	3,285
<b>Total non-current liabilities</b>		<b>192,578</b>	<b>148,322</b>
<b>Current liabilities</b>	6		
Trade payables and other liabilities	39	24,506	15,408
Advance payments from customers		346	395
Derivatives with negative fair values	41	28,582	14,242
Accrued expenses and deferred income	40	21,941	12,968
Current tax liabilities	16	2,495	2,928
Interest-bearing liabilities	34	29,514	15,205
Interest-bearing provisions	37	4,979	4,636
<b>Total current liabilities</b>		<b>112,363</b>	<b>65,782</b>
<b>Total equity and liabilities</b>		<b>445,827</b>	<b>338,236</b>

See also information on the Group's pledged assets (Note 44), contingent liabilities (Note 45) and commitments under consortium agreements (Note 46).

# CONSOLIDATED CASH FLOW STATEMENT

Amounts in SEK million, 1 January–31 December	Note	2008	2007
<b>Operating activities</b>			
Profit before tax		23,498	23,933
Depreciation, amortisation and impairment losses		16,060	17,252
Tax paid		-8,203	-8,132
Other adjustment items	42	-620	996
<b>Funds from operations (FFO)</b>		<b>30,735</b>	<b>34,049</b>
Changes in inventories		-2,222	55
Changes in operating receivables		-1,318	-1,395
Changes in operating liabilities		12,858	64
Other changes		-3,859	-442
<b>Cash flow from changes in operating assets and operating liabilities</b>		<b>5,459</b>	<b>-1,718</b>
<b>Cash flow from operating activities</b>		<b>36,194</b>	<b>32,331</b>
<b>Investing activities</b>			
Investments	42	-42,296	-18,964
Divestments	42	865	925
Cash and cash equivalents in acquired/divested companies		158	2
<b>Cash flow from investing activities</b>		<b>-41,273</b>	<b>-18,037</b>
<b>Cash flow before financing activities</b>		<b>-5,079</b>	<b>14,294</b>
<b>Financing activities</b>			
Changes in short-term investments		-4,806	-4,155
Changes in loans to minority owners in foreign subsidiaries		-174	-773
Loans raised	42	31,797	4,434
Amortisation of debt		-4,457	-10,570
Contribution from minority interests		-	9
Dividends paid to equity holders		-8,066	-7,607
<b>Cash flow from financing activities</b>		<b>14,294</b>	<b>-18,662</b>
<b>Cash flow for the year</b>		<b>9,215</b>	<b>-4,368</b>
<b>Cash and cash equivalents</b>			
Cash and cash equivalents at the beginning of the year		10,563	14,634
Cash flow for the year		9,215	-4,368
Translation differences		1,126	297
<b>Cash and cash equivalents at the end of the year</b>		<b>20,904</b>	<b>10,563</b>
<b>Supplementary information</b>			
<b>Cash flow before financing activities</b>		<b>-5,079</b>	<b>14,294</b>
<b>Financing activities</b>			
Dividends paid to equity holders		-8,066	-7,607
Contribution from minority interests		-	9
<b>Cash flow after dividend</b>		<b>-13,145</b>	<b>6,696</b>
<b>Analysis of change in net debt</b>			
Net debt at beginning of the year		-43,740	-49,407
Cash flow after dividend		-13,145	6,696
Changes as a result of valuation at fair value		-1,847	783
Change in interest-bearing liabilities for leasing		-25	-194
Interest-bearing liabilities acquired		-107	-
Translation differences on net debt		-7,136	-1,618
<b>Net debt at the end of the year</b>		<b>-66,000</b>	<b>-43,740</b>
Free cash flow		18,963	19,650

# CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

Amounts in SEK million	Attributable to equity holders of the Parent Company				Total	Attributable to minority holders	Total equity
	Share capital	Translation reserve	Reserve for cash flow hedges	Retained earnings incl. profit for the year			
<b>Balance brought forward 2007</b>	<b>6,585</b>	<b>1,467</b>	<b>-5,811</b>	<b>94,348</b>	<b>96,589</b>	<b>11,085</b>	<b>107,674</b>
Cash flow hedges:							
Changes in fair value	-	-	-1,556	-	-1,556	-9	-1,565
Dissolved against income statement	-	-	1,299	-	1,299	114	1,413
Transferred to cost of hedged item	-	-	92	-	92	2	94
Tax attributable to items reported directly against equity	-	-	-409	-	-409	-48	-457
Hedging of net investments in foreign operations	-	-2,048	-	-	-2,048	-	-2,048
Translation differences	-	5,473	-	-	5,473	383	5,856
<b>Income, net, recognised directly in equity</b>	<b>-</b>	<b>3,425</b>	<b>-574</b>	<b>-</b>	<b>2,851</b>	<b>442</b>	<b>3,293</b>
Profit for the year	-	-	-	19,769	19,769	917	20,686
<b>Total recognised income and expense for the year</b>	<b>-</b>	<b>3,425</b>	<b>-574</b>	<b>19,769</b>	<b>22,620</b>	<b>1,359</b>	<b>23,979</b>
Dividends paid to equity holders	-	-	-	-7,500	-7,500	-107	-7,607
Group contributions from minority, net after tax	-	-	-	-	-	87	87
Changes in ownership	-	-	-	-	-	-1	-1
<b>Balance carried forward 2007</b>	<b>6,585</b>	<b>4,892</b>	<b>-6,385</b>	<b>106,617</b>	<b>111,709</b>	<b>12,423</b>	<b>124,132</b>
Cash flow hedges:							
Changes in fair value	-	-	-3,629	-	-3,629	143	-3,486
Dissolved against income statement	-	-	6,466	-	6,466	-	6,466
Transferred to cost of hedged item	-	-	373	-	373	-5	368
Tax attributable to items reported directly against equity	-	-	-879	-	-879	-20	-899
Hedging of net investments in foreign operations	-	-7,177	-	-	-7,177	-	-7,177
Translation differences	-	15,146	-	-	15,146	247	15,393
<b>Income, net, recognised directly in equity</b>	<b>-</b>	<b>7,969</b>	<b>2,331</b>	<b>-</b>	<b>10,300</b>	<b>365</b>	<b>10,665</b>
Profit for the year	-	-	-	17,095	17,095	668	17,763
<b>Total recognised income and expense for the year</b>	<b>-</b>	<b>7,969</b>	<b>2,331</b>	<b>17,095</b>	<b>27,395</b>	<b>1,033</b>	<b>28,428</b>
Dividends paid to equity holders	-	-	-	-8,000	-8,000	-66	-8,066
Group contributions from minority, net after tax	-	-	-	-	-	189	189
Changes in ownership	-	-	-	-1,243	-1,243	-2,554	-3,797
<b>Balance carried forward 2008</b>	<b>6,585</b>	<b>12,861</b>	<b>-4,054</b>	<b>114,469</b>	<b>129,861</b>	<b>11,025</b>	<b>140,886</b>

See also Note 43 to the consolidated accounts, Specifications to Equity.

# NOTES TO THE CONSOLIDATED ACCOUNTS

(Amounts in SEK million unless stated otherwise.)

## Contents

Note	Page
1 Company information	80
2 Accounting principles	80
3 Acquired and divested operations	86
4 Exchange rates	87
5 Net sales	87
6 Segmental information	87
7 Cost of products sold	88
8 Other operating income	88
9 Other operating expenses	88
10 Depreciation and amortisation	88
11 Impairment losses and reversed impairment losses	88
12 Operating costs according to type	88
13 Financial income	89
14 Financial expenses	89
15 Ineffectiveness from hedges recognised in profit or loss	89
16 Income tax expense	89
17 Minority interests	90
18 Financial instruments – Items of income, expense, gains or losses	90
19 Intangible assets: non-current	90
20 Property, plant and equipment	91
21 Investment property	92
22 Shares and participations held by the Parent Company Vattenfall AB and other Group companies	92
23 Participations in associated companies	94
24 Other shares and participations	95
25 Share in the Swedish Nuclear Waste Fund	95
26 Other non-current receivables	95
27 Inventories	95
28 Intangible assets: current	96
29 Trade receivables and other receivables	96
30 Prepaid expenses and accrued income	97
31 Short-term investments	97
32 Cash and cash equivalents	97
33 Capital Securities	97
34 Other interest-bearing liabilities	97
35 Financial risks	97
36 Pension provisions	99
37 Other interest-bearing provisions	100
38 Other noninterest-bearing liabilities (non-current)	101
39 Trade payables and other liabilities	101
40 Accrued expenses and deferred income	101
41 Carrying amounts and fair values of financial assets and financial liabilities by category	102
42 Specifications to the Cash Flow Statement	103
43 Specifications to Equity	103
44 Pledged assets	104
45 Contingent liabilities	104
46 Commitments under consortium agreements	104
47 Average number of employees and personnel costs	105
48 Gender distribution among senior executives	108
49 Leasing	108
50 Auditors' fees	108
51 Related party disclosures	108
52 Important estimations and assessments	109
53 Events after the balance sheet date	109

## Note 1 Company information

The Year-End Report for Vattenfall AB for 2008 was approved for publication in accordance with a decision by the Board of Directors on 11 February 2009. The Annual Report was approved in accordance with a decision by the Board of Directors on 17 March 2009. The Parent Company, Vattenfall AB, is a limited liability company with its registered office in Stockholm and with the address SE-162 87 Stockholm, Sweden. The consolidated balance sheet and income statement included in the Annual Report will be submitted at the Annual General Meeting (AGM) on 29 April 2009.

The main activities of the Group are described in Note 6 to the consolidated accounts, Segmental information.

## Note 2 Accounting principles

### 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 International Financial Reporting Interpretations Committee (IFRIC) as endorsed by the European Commission for application within the EU. These also include the International Accounting Standards (IAS) issued by IASB's predecessor, the International Accounting Standards Committee (IASC), and the interpretations issued by IFRIC's predecessor, the Standing Interpretations Committee (SIC).

In addition, recommendation RFR 1.1 – Supplementary Accounting Principles for Groups, issued by the Swedish Financial Reporting Board (RFR), has been applied. RFR 1.1 specifies the necessary additions to the IFRS disclosure requirements in accordance with the Swedish Annual Accounts Act.

### Basis of measurement

Assets and liabilities are reported at cost, with the exception of financial assets and liabilities, which are stated at fair value. Financial assets and liabilities stated at fair value consist of derivative instruments and financial assets that are stated at fair value in the income statement.

### Functional and presentation currencies

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

The Parent Company's functional currency is the Swedish krona, 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 (SEK). 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 principles and the reported amounts of assets, liabilities, income and expenses. The estimations and assumptions are based on historic experience and of other factors that seem reasonable under current conditions. The results of these estimations and assumptions are then used to establish the reported values of assets and liabilities which are not clearly documented from other sources. The final outcome can deviate from the results of these estimations and assessments.

The estimations and assumptions 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.

When applying IFRS, assessments made by the company's executive

management and board of directors which 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 52 to the consolidated accounts.

### Accounting principles

The accounting principles of the Group detailed below have been applied consistently for all periods presented in the consolidated financial statements, except for the depreciation method used for the Group's nuclear power plants in Germany, which is described below under the heading Property, plant and equipment/Depreciation principles.

The Group's accounting principles have been applied consistently for the reporting and consolidation of subsidiaries and associated companies.

### New IFRSs and interpretations effective as of 2008

The new standards and amendments to standards and interpretations described below are effective as of the 2008 financial year, but have not had any effect on Vattenfall's financial statements:

Amendments in IAS 39 – Financial Instruments: Recognition and Measurement, and IFRS 7 – Financial Instruments: Disclosures, which entail the possibility of re-classifying financial instruments in certain cases.

IFRIC 11 refers to an interpretation of IFRS 2 – Share-based Payment, "Group and Treasury Share Transactions". The interpretation clarifies the accounting for transactions of own equity instruments in an entity that receives goods or services from employees.

IFRIC 14 refers to an interpretation of IAS 19 – Employee Benefits, "The Limit on a Defined Benefit Asset, Minimum Funding Requirements and Their Interaction", and addresses how minimum funding requirements affect the ceiling in IAS 19 for a defined benefit asset.

### New IFRSs and interpretations not yet adopted

New standards, amendments to standards and interpretations endorsed by the EU as per 31 December 2008, which are effective as of the 2009 financial year and which have not been applied prospectively:

IFRS 8 – Operating Segments, which defines an operating segment and what information shall be disclosed for each operating segment in the financial statements. IFRS 8 will entail a further split of the segments disclosed by Vattenfall compared to the segments reported in 2008.

Amendments in IAS 23 – Borrowing Costs, require that an entity must capitalise borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset that takes a substantial period of time to get ready for its intended use or sale. The amendments are expected to have no or minimal impact on Vattenfall's financial statements, as such borrowing costs are already capitalised within the Vattenfall Group.

Amendments in IAS 1 – Presentation of Financial Statements, will lead to changed presentation format of the consolidated financial statements in certain areas and the introduction of new titles for the statements. The amendment does not affect the calculation of numbers reported. It will entail that certain transactions that were previously recognised directly in equity, will be recognised as separate items in the statement that corresponds to the present Consolidated Income Statement – Consolidated Statement of Comprehensive Income – under the heading Other Comprehensive Income.

The following amendments to standards and interpretations endorsed by the EU are expected to have no or minimal impact on Vattenfall's financial statements:

Amendments in IFRS 2 – Share-based Payment: Vesting Conditions and Cancellations. These clarify, among other things, the treatment of vesting conditions related to share-based payments.

IFRIC 13 – Customer Loyalty Programmes. This interpretation addresses the reporting and valuation of a company's obligation to provide free or discounted goods or services to customers that have qualified for such through previous purchases.

New standards, amendments to standards and interpretations not yet endorsed by the EU as per 31 December 2008 and effective as of the 2009 financial year or later:

Revised IFRS 3 – Business Combinations, and amendments in IAS 27 – Consolidated and Separate Financial Statements, entail amendments

in the preparation of consolidated accounts and in the accounting for business combinations. The revised standards are expected to be effective as of the 2010 financial year and will affect the accounting for future business combinations made by Vattenfall.

Amendments in IAS 27 – Consolidated and Separate Financial Statements, "Cost of an Investment in a Subsidiary, Jointly Controlled Entity or Associate", which affect dividends received from subsidiaries, associated companies and joint ventures. The amendments may have an impact on Vattenfall's financial statements.

Amendments in IAS 32 – Financial Instruments: Presentation, and IAS 1 – Presentation of Financial Statements. "Puttable Financial Instruments and Obligations Arising on Liquidation" states that certain well-defined financial instruments shall be classified as equity and not as a liability. The amendments are expected to have no or minimal impact on Vattenfall's financial statements.

IFRIC 12 – Service Concession Arrangements. The interpretation provides, among other things, general principles on recognising and measuring the obligations and related rights in service concession arrangements. The interpretation is expected to have no or minimal impact on Vattenfall's financial statements.

IFRIC 15 – Agreements for the Construction of Real Estate, clarifies when construction and sale of real estate shall be accounted for according to IAS 11 – Construction Contracts, or IAS 18 – Revenue. The interpretation is expected to have no or minimal impact on Vattenfall's financial statements.

IFRIC 16 – Hedges of a Net Investment in a Foreign Operation, clarifies the accounting treatment in respect of net investments in foreign operations. The interpretation is expected to have no or minimal impact on Vattenfall's financial statements.

IFRIC 17 – Distribution of Non-cash Assets to Owners, addresses questions on the situation when a dividend is distributed by using other assets than cash. The interpretation is expected to have no impact on Vattenfall's financial statements.

### Segmental information

In the accounts, a segment is an identifiable part of the Group that either provides products and services (business segments), or products and services in a certain economic environment (geographic area) that are exposed to risks and opportunities that distinguish it from other segments. Segmental information (see Note 6 to the consolidated accounts) is 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 commercial purposes 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 commercial purposes 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.

### Principles of consolidation

#### Subsidiaries

Subsidiaries are companies in which the Parent Company, Vattenfall AB, directly or indirectly holds more than 50% of the voting power, or in any other way has a controlling influence. Controlling influence entails a right to design a company's financial and operational strategies with the purpose of gaining financial advantages.

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. Through acquisition analysis 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 and assumed liabilities and

## Note 2 continued

contingent liabilities. Deferred tax is taken into account for differences between the carrying amount and the corresponding tax base on all items except for goodwill. The difference between the cost of the subsidiaries' shares and the fair value of acquired assets, assumed liabilities and contingent liabilities constitutes consolidated goodwill.

In a situation where a subsidiary is acquired in several stages, an acquisition analysis is also prepared for each acquisition transaction that takes place before a controlling influence is obtained. The reported value of goodwill is the sum total of the goodwill values calculated for each sub-acquisition.

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

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

Acquisitions and divestments of minority shares of subsidiaries are recognised within equity.

**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 of between 20% and 50% of the votes. In conjunction with the acquisition of an associated company, an acquisition analysis 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. Dividends received from an associated company reduce the book value 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 up to the point when the significant influence ceases.

**Joint ventures**

In the accounts, joint ventures are activities in which the Group has a joint controlling influence over the operational and financial management through collaborative agreement 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 on 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 only if there is no indication of any need for 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.

**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 ex-

change 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 directly against equity under the heading Translation reserve.

For the Vattenfall Group, key exchange rates applied in the accounts are provided in Note 4 to the consolidated accounts.

**Revenue recognition**

Net sales include sales proceeds from core businesses, i.e., sales, distribution and transmission of electricity and sales and distribution of heat.

**Sales of electricity and heat**

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

Starting on 1 April 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 offset against sales of generation to Nord Pool in the reporting of the Business Group Nordic segment at the Group level.

The change in fair value of commodity derivatives that does not qualify for hedge accounting is reported in net sales.

**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/transmission and heat distribution are reported as revenues to the extent that they do not 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 book value of the asset.

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

**Operating expenses****Operating leases**

Payments concerning 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 rate 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 that the due date is approaching.

Issue expenses and similar direct transaction costs for raising loans are distributed over the term of the loan in accordance with the effective rate 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 burdened in the amount corresponding 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

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 on 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 flow. 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 into 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*

In this category, assets are classified as holdings for commercial purposes, which means that the aim is for them to be divested in the near term. Derivative instruments not held for hedging purposes are always classified in this category.

Assets are restated on an ongoing basis at fair value, with changes in value reported in the income statement.

This category also includes cash equivalents, i.e., short-term investments with an original term of less than three months. The category also includes short-term investments with original terms exceeding three months.

#### *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 debt or without the intention of doing business in the right of action. Acquired receivables are also covered. A valuation is made at amortised cost. Amortised cost is defined as the value at which a financial asset or liability is stated when it is initially recorded in 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 bad 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.

This category also includes Cash and bank balances, i.e., immediately available balances with banks and similar institutions and Share in the Swedish Nuclear Waste Fund.

#### *Available-for-sale financial assets*

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

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 into 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. Valuation is conducted on a continual basis at fair value with changes in value reported in the income statement.

#### *Other financial liabilities*

In this category, interest-bearing and noninterest-bearing financial liabilities that are not held for commercial purposes are reported. A valuation is made at amortised cost.

Non-current liabilities have a remaining term of more than one year, while liabilities with shorter terms are reported as current. Trade liabilities have a short anticipated term and are therefore valued at a nominal amount without discounting.

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

### Derivative instruments

The Company uses various types of derivative instruments (forwards, futures and swaps) to hedge various financial risks, primarily interest rate risks, currency risks and electricity price risks.

Derivative instruments with a positive market value are reported as a separate line item in the balance sheet under current assets, while derivative instruments with a negative market value are reported as a separate line item under current liabilities.

Derivative instruments are reported at fair value on the balance sheet date. Changes in value are reported in various ways, depending 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 reported in the income statement 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.

### Embedded derivatives

In customer contracts on electricity that stretch over long periods of time, the price can be linked to the price trend for other commodities than electricity, and indirectly also to currency movements, since current commodity prices are quoted in foreign currency. Such contracts are considered to contain embedded derivatives. Vattenfall has signed such contracts with a number of major customers. Some of these contracts stretch over long periods of time – the longest contract has a term 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, Vattenfall has made the judgement that a reliable value cannot be established on the portion of these embedded derivatives that pertains to the period extending beyond April 2011.

### Hedge accounting

Hedge accounting is adopted for derivative instruments that are included in a documented hedge relationship. For hedge accounting to be applied, an unambiguous 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. How changes in value are reported in these cases depends on the type of hedge entered into.

Continued on page 84

Note 2 continued

#### *Cash flow hedges*

For derivative instruments that constitute hedges in a cash flow hedge, the effective part of the change in value is reported under equity while the ineffective part is reported directly in the income statement. The part of the change in value that is reported under equity is then transferred to the income statement for 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 in 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 under equity 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 under equity are transferred to the income statement/balance sheet for 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 reported directly in the income statement. If the hedged transaction is no longer expected to occur, the hedge's accumulated changes in value are immediately transferred from equity to the income statement.

Cash flow hedges are used primarily in the following cases: i) when forward electricity contracts are used to hedge electricity 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.

#### *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 the hedged risk in the hedged item is stated at fair value along with the change in value 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 hedges in hedging of net investments in foreign operations, the effective part of the change in value is reported under equity while the ineffective part is reported directly in the income statement. The changes in value reported under equity are transferred to the income statement at a later stage 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 in the balance sheet from the time when the product or process is expected to become technically and commercially usable 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 assets. Other development costs are reported in the income statement as expenses when they arise. In the balance sheet, development costs are reported at cost less accumulated amortisation and impairment losses.

Research costs with the purpose of obtaining new scientific or technical knowledge are reported as expenses when 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 valued at cost less any accumulated impairment losses.

Goodwill is not subject to amortisation but is tested annually for impairment. Goodwill that arises on acquisition of associated companies is included in the reported value of Participations in associated companies.

#### **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 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 19 to the consolidated accounts, Intangible assets: non-current. Assessments of the residual value and useful life of an asset are conducted annually.

### **Property, plant and equipment**

#### **Owned assets**

Property, plant and equipment are reported as assets in 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 purpose 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 cost of the asset during the construction period.

Within nuclear power operations in Germany 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, cost at the time of the acquisition includes a calculated present value for estimated costs for undertaking to restore the land.

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 in the consolidated balance sheet. A 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 leasing period or useful life while the leasing payments are reported as interest and amortisation of the debts.

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

#### **Hired out assets**

Assets that are hired 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 leasing charges.

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

**Subsequent costs**

Subsequent costs for property, plant and equipment are only added to 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 future costs are reported as expenses in the period when they arise.

What is decisive for the assessment when a subsequent cost is added to 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 replacement components, or parts of components, are retired and carried as an expense in connection with the replacement. Repairs are carried as an expense continuously.

**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 (see below). The Group applies component depreciation, which means that the components' estimated useful life provides the basis for the depreciation. Estimated useful lives are unchanged compared with last year for all property, plant and equipment except for the Group's nuclear power plants. For the Swedish nuclear power plants, starting in 2008 the estimated useful life has been extended from 40 years to 50 years. For the German nuclear power plants, as per 1 April 2008 the depreciation method has been 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. Estimated useful lives are further described in Note 20 to the consolidated accounts, Property, plant and equipment. Assessments of the residual value and useful life of an asset are conducted annually.

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 in 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.

**Inventories****Nuclear fuel, fossil fuels, and materials and spare parts**

These inventories 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.

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

**Intangible assets: current****Emission allowances**

As of 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, 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, the trading 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 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 booked 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 Poland have so-called electricity certificate systems. Plants included in a system receive, earned free of charge, certificates from the authorities in Sweden and Poland, respectively, in pace with their generation of electricity qualifying for certificates.

Accumulated certificates, earned free of charge, are reported as an intangible asset under current assets at fair value when obtained, whereas purchased certificates 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**

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 annually.

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 the income statement.

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 selling expenses 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 losses of financial assets that are reported at amortised cost are reversed if a later increase of the recoverable amount can be attributed to an event that occurred after the impairment loss was made.

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

**Employee benefits****Defined contribution pension plans**

Defined contribution pension plans are post-employment benefit plans

Continued on page 86

Note 2 continued

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 a first-class corporate bond with a lifetime 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 is 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 wholly 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 in the income statement, 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 in 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 important, provisions are estimated by discounting the anticipated future cash flow at an interest rate before tax that reflects current market estimates of the money's time value and the risks associated with the liability. 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. When the change is due to an approaching payment date, the corresponding amount is reported as a financial expense. See also 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 tax expense

Income tax comprises current tax and deferred tax. Income tax is reported in the income statement except when the underlying transaction is reported directly against equity, whereby the associated tax effect is reported under equity.

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: for a temporary difference that arises with the initial reporting of goodwill, initial reporting of assets and liabilities which 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 which 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.

#### Contingent liabilities

A contingent liability is reported when there is a possible obligation that arises from events and whose existence is only confirmed by one or more doubtful future events or when there is an obligation that is not reported as a liability or provision because it is not likely that an outflow of resources will be required or cannot be measured with sufficient reliability.

### Note 3 Acquired and divested operations

In April 2008 the redemption of the outstanding minority shares (3.19%) in Vattenfall's German subsidiary Vattenfall Europe AG was completed, and the company was delisted from the German stock exchanges.

During October and November 2008 Vattenfall acquired several British wind power companies: AMEC Wind Energy Ltd, (100% and later renamed to Vattenfall Wind Power Ltd) one of the UK's foremost developers of commercial wind farms, with current projects corresponding to 500–750MW, Eclipse Energy UK Plc (96%) which is working with six wind power projects in the UK with a combined capacity of more than 200 MW and Thanet Offshore Wind Ltd, (100%) which with 300 MW under construction is the UK's largest wind power project.

Valuations of assets and liabilities acquired are preliminary pending a final review of each acquisition, respectively.

In addition, there are some minor acquisitions and divestments.

	Fair value recognised in consolidation		Total
	Wind power companies	Other companies	
Intangible assets: non-current	2,068	–	2,068
Property, plant and equipment	1,072	33	1,105
Trade receivables and other receivables	114	16	130
Cash and cash equivalents	49	109	158
Minority interests	–2	–	–2
Interest-bearing liabilities	–107	–	–107
Deferred tax liabilities	–213	–27	–240
Trade payables and other liabilities	–878	–21	–899
<b>Identifiable assets and liabilities, net</b>	<b>2,103</b>	<b>110</b>	<b>2,213</b>
Goodwill arising on acquisitions			700
<b>Total purchase consideration for wind power and other companies</b>			<b>2,913</b>
Redemption of minority interests in Germany			4,056
<b>Total acquisitions of Group companies (Note 42)</b>			<b>6,969</b>

In November 2008 Vattenfall also acquired 18.7% of the Polish energy company ENEA S.A. for SEK 4,602 million, recognised as Other shares and participations. The company has 2.3 million customers and accounts for approximately 8% of Poland's energy generation.

## Note 4 Exchange rates

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

	Currency	Average rate		Balance sheet date rate	
		2008	2007	31 Dec. 2008	31 Dec. 2007
Europe	EUR	9.6628	9.2464	10.9400	9.4700
Denmark	DKK	1.2962	1.2409	1.4680	1.2705
Norway	NOK	1.1704	1.1530	1.1035	1.1875
Poland	PLN	2.7331	2.4477	2.6200	2.6300
UK	GBP	12.1085	13.4817	11.2500	12.9000
USA	USD	6.5929	6.7439	7.7500	6.4700

## Note 5 Net sales

	2008	2007
Sales including excise taxes		
sale of goods (electricity, heat, gas, etc.)	161,464	141,109
rendering of services	6,602	5,594
Excise taxes	-3,517	-3,064
<b>Net sales</b>	<b>164,549</b>	<b>143,639</b>

## Note 6 Segmental information

The Group's activities are conducted primarily in two operating units (Business Groups) with different geographic areas of responsibility.

These primary segments (operating units) are Business Group Nordic, having responsibility for business activities in Sweden, Finland and Denmark, but also including activities in the UK, and Business Group Central Europe, having responsibility for business activities in Germany and Poland. There is also a segment named Other (including Energy Trading, Treasury operations and Other Group functions). The primary segments consist of areas based on the location of assets.

Operating profit for the primary segment Other includes changes in market values for electricity trading. These are reported in Energy Trading until the amounts are realised. When the amounts are realised, other segments are affected.

The Group's activities are also divided into business segments (secondary segments), namely, Electricity Generation, Electricity Markets (sales and trading), Electricity Networks (electricity transmission and distribution) and Heat (generation, distribution and sale of heat). Other activities include Vattenfall's Treasury operations and Group functions. Operating profit of the secondary segment Electricity Markets includes changes in market values for electricity trading. These are reported in Energy Trading until the amounts are realised. When the amounts are realised, Electricity Generation is the main segment affected.

Deliveries of electricity between segments are made at market prices. In the case of services between segments, cost prices generally apply, although in certain cases market prices are applied.

### Primary segments

2008	Business Group Nordic	Business Group Central Europe	Other	Eliminations	Total
External net sales	54,732	99,182	10,635	-	164,549
Sales between segments	-5,881	43,078	34,214	-71,411	-
<b>Total</b>	<b>48,851</b>	<b>142,260</b>	<b>44,849</b>	<b>-71,411</b>	<b>164,549</b>
Operating profit (EBIT)	16,760	15,140	-2,005	-	29,895
Operating profit (EBIT) excl. items affecting comparability	16,760	15,042	-2,005	-	29,797
Assets	198,935	243,664	186,175	-182,947	445,827
Liabilities	167,110	126,315	194,460	-182,944	304,941
Net assets	111,263	92,344	6,800	1,616	212,023
Investments	14,984	64,131	54,596	-91,415	42,296
Depreciation and amortisation	5,480	10,000	162	-	15,642
Impairment losses affecting Operating profit (EBIT)	-	423	-	-	423
Participations in the results of associated companies	88	1,339	-	-	1,427
2007	Business Group Nordic	Business Group Central Europe	Other	Eliminations	Total
External net sales	44,429	86,736	12,474	-	143,639
Sales between segments	2,284	35,520	28,965	-66,769	-
<b>Total</b>	<b>46,713</b>	<b>122,256</b>	<b>41,439</b>	<b>-66,769</b>	<b>143,639</b>
Operating profit (EBIT)	12,591	16,430	-438	-	28,583
Operating profit (EBIT) excl. items affecting comparability	12,418	16,517	-438	-	28,497
Assets	163,548	199,386	113,842	-138,540	338,236
Liabilities	137,187	98,783	116,669	-138,535	214,104
Net assets	91,122	78,714	-5,750	2,034	166,120
Investments	10,806	8,118	8,557	-8,517	18,964
Depreciation and amortisation	5,375	10,005	52	-	15,432
Impairment losses affecting Operating profit (EBIT)	225	1,625	-	-	1,850
Reversed impairment losses affecting Operating profit (EBIT)	-	44	-	-	44
Participations in the results of associated companies	116	882	-	-	998

Continued on page 88

Note 6 continued

**Secondary segments**

	Electricity Generation	Electricity Markets	Electricity Networks	Heat	Other	Eliminations	Total
2008							
External net sales	48,389	80,130	45,644	13,593	3,367	-26,574	164,549
Sales between segments	30,563	8,960	15,564	8,921	9,286	-73,294	-
<b>Total</b>	<b>78,952</b>	<b>89,090</b>	<b>61,208</b>	<b>22,514</b>	<b>12,653</b>	<b>-99,868</b>	<b>164,549</b>
Operating profit (EBIT)	24,318	-1,363	4,654	3,689	-1,403	-	29,895
Operating profit (EBIT) excl. items affecting comparability	24,308	-1,363	4,677	3,669	-1,494	-	29,797
Assets	263,399	66,567	101,480	53,808	194,996	-234,423	445,827
Investments	24,301	157	6,562	2,477	11,952	-3,153	42,296
2007							
External net sales	32,162	68,018	41,654	13,717	2,974	-14,886	143,639
Sales between segments	33,950	4,243	13,420	6,543	6,099	-64,255	-
<b>Total</b>	<b>66,112</b>	<b>72,261</b>	<b>55,074</b>	<b>20,260</b>	<b>9,073</b>	<b>-79,141</b>	<b>143,639</b>
Operating profit (EBIT)	22,064	314	3,035	4,179	-1,009	-	28,583
Operating profit (EBIT) excl. items affecting comparability	22,094	314	3,071	4,118	-1,100	-	28,497
Assets	212,909	31,578	89,159	46,510	133,242	-175,162	338,236
Investments	9,986	87	5,705	2,535	1,337	-686	18,964

**Note 7 Cost of products sold**

Direct costs include production taxes and duties of SEK 6,241 million (5,362) and property taxes of SEK 1,815 million (1,359).

**Note 8 Other operating income**

Other operating income comprises capital gains from the sale of non-current assets, emission allowances and certificates, operationally derived exchange rate gains, rental income and insurance compensation.

**Note 9 Other operating expenses**

Other operating expenses primarily comprise capital losses from the sale of non-current assets, emission allowances and certificates, operationally derived exchange rate losses and closure and restructuring expenses.

**Note 10 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:

	2008	2007
Cost of products sold	15,041	14,679
Selling expenses	372	307
Administrative expenses	212	426
Research and development costs	4	5
Other operating expenses (investment property)	13	15
<b>Total</b>	<b>15,642</b>	<b>15,432</b>

Amortisation of non-current intangible assets is included in Cost of products sold above in the amount of SEK 409 million (415), Selling expenses in the amount of SEK 126 million (116) and Administrative expenses in the amount of SEK 59 million (111).

**Note 11 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:

	2008	2007
Cost of products sold	419	1,850
Other operating expenses (investment property)	4	-
<b>Total</b>	<b>423</b>	<b>1,850</b>

Major impairment losses above include:

**Business Group Central Europe**

Future cost increases stemming from new network fees decided on by Bundesnetzagentur, the German network regulator, have resulted in impairment charges for pumped storage power plants in Germany. The reported value of the plants has been compared with a calculated net present value based on future, sustainable cash flows. This has resulted in an impairment loss of SEK 387 million for the Mining & Generation business unit. A discount rate of 6.6% after tax has been used in the calculations.

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

	2008	2007
Cost of products sold	-	14
Administrative expenses	-	1
Other operating expenses (investment property)	-	29
<b>Total</b>	<b>-</b>	<b>44</b>

**Note 12 Operating costs according to type**

	2008	2007
Personnel costs	20,820	18,820
Depreciation and amortisation	15,642	15,432
Impairment losses of non-current assets	423	1,850
Reversed impairment losses of non-current assets	-	-44
Other operating costs incl. input commodities	101,572	81,778
<b>Total</b>	<b>138,457</b>	<b>117,836</b>

**Note 13 Financial income**

	2008	2007
Dividends	71	79
Interest income attributable to investments, etc.	1,692	1,331
Return from the Swedish Nuclear Waste Fund	1,452	843
Exchange rate differences	160	-
Reversed impairment losses on shares and participations	5	-
Capital gains from divestments of shares and participations	32	23
<b>Total</b>	<b>3,412</b>	<b>2,276</b>

**Note 14 Financial expenses**

	2008	2007
Interest expenses attributable to loans, etc.	4,151	3,325
Interest components related to pension costs, net after deductions for expected returns on plan assets	943	811
Discounting effects attributable to provisions	2,800	2,453
Exchange rate differences, net	-	19
Net change in value from reassessment of derivatives	1,709	243
Net change in value from reassessment of other financial assets	200	54
Impairment losses on shares and participations	-	14
Capital losses from divestments of shares and participations	6	7
<b>Total</b>	<b>9,809</b>	<b>6,926</b>

**Note 15 Ineffectiveness from hedges recognised in profit or loss**

	2008	2007
Ineffectiveness from fair value hedges <sup>1</sup>	158	-15
Ineffectiveness from cash flow hedges	40	24
<b>Total</b>	<b>198</b>	<b>9</b>

1) Ineffectiveness from fair value hedges is distributed as follows:

Gains(+)/losses(-) from hedging instruments	1,840	777
Gains(+)/losses(-) from hedged items	-1,682	-792
<b>Total</b>	<b>158</b>	<b>-15</b>

**Note 16 Income tax expense**

Profit before tax amounted to:	2008	2007
Sweden	9,357	7,784
Other countries	14,141	16,149
<b>Total</b>	<b>23,498</b>	<b>23,933</b>

In December 2008 the Swedish government reduced the company income tax rate in Sweden from 28.0% to 26.3%, effective 1 January 2009. Based on Vattenfall's balance sheet as per 31 December 2008, this results in a reduction of the deferred tax expense in the 2008 income statement by SEK 749 million.

The income tax expense for 2007 was affected by a nonrecurring positive tax effect of SEK 3,800 million as a result of the German government's decision to reduce the company tax rate by approximately 10 percentage points. This explains the low effective tax rate that was reported for 2007.

The reported income tax expense breaks down as follows:

	2008	2007
<b>Current tax</b>		
Current taxes related to the period:		
Sweden	2,774	2,122
Other countries	4,286	6,676
Adjustment of current taxes for prior periods:		
Sweden	185	-17
Other countries	-553	724
<b>Deferred tax</b>	<b>6,692</b>	<b>9,505</b>
Sweden	-1,497	17
Other countries	540	-6,275
	<b>-957</b>	<b>-6,258</b>
<b>Total income tax expense</b>	<b>5,735</b>	<b>3,247</b>

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

Per cent (%)	2008	2007
Swedish income tax rate	28.0	28.0
Difference in tax rate in foreign operations	-0.3	5.7
Tax adjustment for previous periods	-0.9	3.0
Amended tax rates	-3.2	-16.6
Adjustment because of change in tax base	-	-2.2
Non-deductible expenses and non-taxable income, net	0.8	-3.5
Other	-	-0.8
<b>Effective tax rate<sup>1</sup></b>	<b>24.4</b>	<b>13.6</b>
Tax rate, current tax <sup>2</sup>	28.5	39.7

- 1) Income tax expense according to the consolidated income statement in relation to profit before tax.  
2) Income tax expense according to the consolidated income statement excluding deferred tax in relation to profit before tax.

Accumulated tax-loss carryforwards are broken down as follows:

	2008	2007
Sweden	24	5
Other countries	6,097	419
<b>Total</b>	<b>6,121</b>	<b>424</b>

The increase of tax loss carryforward during 2008 is mainly relating to trade tax losses in Germany representing a tax value of approximately 13%.

The tax-loss carryforwards fall due as follows:

	2008
2009	1
2010-2013	5
No time limit	6,115
<b>Total</b>	<b>6,121</b>

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.

Deferred tax assets and deferred tax liabilities are attributable to balance sheet items as follows:

Deferred tax assets	2008	2007
Non-current assets	2,018	968
Current assets	721	842
Non-current liabilities	6,929	3,949
Current liabilities	10,068	2,197
Tax-loss carryforwards	781	75
Offsetting of deferred tax liabilities	-19,149	-7,190
<b>Total</b>	<b>1,368</b>	<b>841</b>

Note 16 continued

Deferred tax liabilities	2008	2007
Non-current assets	32,794	27,367
Current assets	7,326	782
Non-current liabilities	3,141	2,735
Current liabilities	1,995	10
Offsetting of deferred tax assets	-19,149	-7,190
<b>Total</b>	<b>26,107</b>	<b>23,704</b>

Deferred tax assets (changes in 2008)

Balance brought forward	841
Acquired companies	338
Additions/dissolutions for the period, net	2,156
Translation differences	300
Offsetting of deferred tax liabilities	-2,267
<b>Balance carried forward</b>	<b>1,368</b>

Deferred tax liabilities (changes in 2008)

Balance brought forward	23,704
Acquired companies	578
Additions/dissolutions for the period, net	2,099
Translation differences	1,993
Offsetting of deferred tax assets	-2,267
<b>Balance carried forward</b>	<b>26,107</b>

**Note 17 Minority interests**

	2008	2007
Minority interests in profit before tax	878	1,018
Minority interests in income tax expense	-210	-101
<b>Total</b>	<b>668</b>	<b>917</b>

**Note 18 Financial instruments – Items of income, expense, gains or losses**

Gains(+)/losses(-) from:

	2008	2007
Financial assets and financial liabilities at fair value through profit or loss for financial assets and financial liabilities held for trading	-1,694	2,003
Available-for-sale financial assets	102	80
Loans and receivables	2,053	1,495
Financial liabilities valued at amortised cost	-9,216	-3,437
<b>Total</b>	<b>-8,755</b>	<b>141</b>

Interest income amounts to SEK 533 million (522), and interest expenses amounts to SEK 3,741 million (2,585) for financial assets and financial liabilities not carried at fair value through profit or loss.

**Note 19 Intangible assets: non-current**

	Development costs not yet capitalised		Capitalised development costs		Goodwill		Concessions and similar rights with finite useful lives		Renting rights, mining rights and similar rights with finite useful lives		Total	
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
<b>Cost</b>												
Cost brought forward	45	-	1,494	1,381	289	435	3,244	2,889	4,901	4,624	9,973	9,329
Acquired companies	-	-	-	-	700	-	2,068	131	-	-	2,768	131
Investments	65	45	122	71	-	-	144	146	42	17	373	279
Advance payments capitalised	-	-	-	-	-	-	3	-	8	-	11	-
Divestments/Disposals	-1	-	-	-	-	-179	-27	-51	-2	-	-30	-230
Reclassifications	-22	-	60	-	-	-	491	35	-500	109	29	144
Divested companies	-	-	-	-	-	-	-5	-7	2	-37	-3	-44
Translation differences	14	-	163	42	-43	33	212	101	563	188	909	364
<b>Accumulated cost carried forward</b>	<b>101</b>	<b>45</b>	<b>1,839</b>	<b>1,494</b>	<b>946</b>	<b>289</b>	<b>6,130</b>	<b>3,244</b>	<b>5,014</b>	<b>4,901</b>	<b>14,030</b>	<b>9,973</b>
<b>Accumulated amortisation according to plan<sup>1</sup></b>												
Amortisation brought forward	-	-	-1,052	-795	-	-	-2,216	-2,010	-1,624	-1,352	-4,892	-4,157
Amortisation for the year	-	-	-190	-222	-	-	-205	-188	-199	-232	-594	-642
Divestments/Disposals	-	-	-	-	-	-	25	43	1	-	26	43
Reclassifications	-	-	-6	-	-	-	-90	3	98	-2	2	1
Divested companies	-	-	-	-	-	-	-	2	2	23	2	25
Translation differences	-	-	-148	-35	-	-	-215	-66	-235	-61	-598	-162
<b>Accumulated amortisation carried forward</b>	<b>-</b>	<b>-</b>	<b>-1,396</b>	<b>-1,052</b>	<b>-</b>	<b>-</b>	<b>-2,701</b>	<b>-2,216</b>	<b>-1,957</b>	<b>-1,624</b>	<b>-6,054</b>	<b>-4,892</b>
<b>Impairment losses</b>												
Impairment losses brought forward	-	-	-193	-193	-	-176	-19	-19	-525	-524	-737	-912
Divestments/Disposals	-	-	-	-	-	179	-	-	-	-	-	179
Reclassifications	-	-	-2	-	-	-	2	1	-	-	-	1
Translation differences	-	-	-	-	-	-3	-3	-1	-3	-1	-6	-5
<b>Accumulated impairment losses carried forward</b>	<b>-</b>	<b>-</b>	<b>-195</b>	<b>-193</b>	<b>-</b>	<b>-</b>	<b>-20</b>	<b>-19</b>	<b>-528</b>	<b>-525</b>	<b>-743</b>	<b>-737</b>
<b>Residual value according to plan carried forward</b>	<b>101</b>	<b>45</b>	<b>248</b>	<b>249</b>	<b>946</b>	<b>289</b>	<b>3,409</b>	<b>1,009</b>	<b>2,529</b>	<b>2,752</b>	<b>7,233</b>	<b>4,344</b>
Advance payment to suppliers											24	2
<b>Total</b>											<b>7,257</b>	<b>4,346</b>

1) Estimated useful lives are for Capitalised development costs 3–4 years, for Concessions etc., 3–30 years and for Renting rights, mining rights, etc., 3–50 years.

At 31 December 2008, contractual commitments for the acquisition of non-current intangible assets amounted to SEK 5 million (7).

## Note 20 Property, plant and equipment

	Land and buildings <sup>1</sup>		Plants and other technical installations		Equipment, tools, and fixtures and fittings		Construction in progress <sup>2</sup>		Total	
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
<b>Cost</b>										
Cost brought forward <sup>3</sup>	72,783	69,343	382,843	361,368	9,682	9,047	17,901	11,367	483,209	451,125
Acquired companies	3	106	144	7	1	-	996	-	1,144	113
Investments <sup>4</sup>	238	371	3,454	2,596	587	745	19,037	14,859	23,316	18,571
Advance payments capitalised	2	-	267	-	4	-	1,150	-	1,423	-
Capitalised/Reversed future expenses for decommissioning, restoration, etc.	362	254	8,160	2,821	-	-	-	-	8,522	3,075
Transfer from construction in progress	673	870	9,448	7,677	173	95	-10,294	-8,642	-	-
Divestments/Disposals	-304	-475	-2,955	-3,825	-430	-610	-60	-36	-3,749	-4,946
Other reclassifications	-267	149	1,139	-454	-884	88	-107	95	-119	-122
Divested companies	-	-73	-	-611	-2	-27	-	-14	-2	-725
Translation differences	6,448	2,238	40,891	13,264	1,038	344	1,801	272	50,178	16,118
<b>Accumulated cost carried forward</b>	<b>79,938</b>	<b>72,783</b>	<b>443,391</b>	<b>382,843</b>	<b>10,169</b>	<b>9,682</b>	<b>30,424</b>	<b>17,901</b>	<b>563,922</b>	<b>483,209</b>
<b>Accumulated depreciation according to plan<sup>5</sup></b>										
Depreciation brought forward	-33,799	-31,228	-224,256	-208,069	-7,548	-7,288	-	-	-265,603	-246,585
Acquired companies	-1	-11	-38	-2	-	-	-	-	-39	-13
Depreciation for the year	-1,712	-1,755	-12,816	-12,446	-507	-574	-	-	-15,035	-14,775
Divestments/Disposals	207	232	2,558	3,559	414	586	-	-	3,179	4,377
Other reclassifications	48	8	-342	266	374	-19	-	-	80	255
Divested companies	-	24	-	169	1	14	-	-	1	207
Translation differences	-3,157	-1,069	-25,092	-7,733	-857	-267	-	-	-29,106	-9,069
<b>Accumulated depreciation carried forward</b>	<b>-38,414</b>	<b>-33,799</b>	<b>-259,986</b>	<b>-224,256</b>	<b>-8,123</b>	<b>-7,548</b>	<b>-</b>	<b>-</b>	<b>-306,523</b>	<b>-265,603</b>
<b>Impairment losses</b>										
Impairment losses brought forward	-1,047	-986	-4,908	-3,013	-69	-60	-8	-8	-6,032	-4,067
Impairment losses for the year	-32	-49	-387	-1,795	-	-5	-	-1	-419	-1,850
Reversed impairment losses for the year	-	-	-	15	-	-	-	-	-	15
Divestments/Disposals	13	39	18	31	-	-1	-	-1	31	68
Other reclassifications	1	-3	-	-	9	-	1	-	11	-3
Divested companies	-	3	-	17	-	-	-	2	-	22
Translation differences	-153	-51	-741	-163	-7	-3	-	-	-901	-217
<b>Accumulated impairment losses carried forward</b>	<b>-1,218</b>	<b>-1,047</b>	<b>-6,018</b>	<b>-4,908</b>	<b>-67</b>	<b>-69</b>	<b>-7</b>	<b>-8</b>	<b>-7,310</b>	<b>-6,032</b>
<b>Residual value according to plan carried forward</b>	<b>40,306</b>	<b>37,937</b>	<b>177,387</b>	<b>153,679</b>	<b>1,979</b>	<b>2,065</b>	<b>30,417</b>	<b>17,893</b>	<b>250,089</b>	<b>211,574</b>
Advance payment to suppliers									5,988	2,634
<b>Total</b>									<b>256,077</b>	<b>214,208</b>

1) Cost for land and buildings includes cost of land and water rights amounting to SEK 15,305 million (14,167), which are not subject to depreciation.

2) Interest during the construction period has been reported as an asset in the amount of SEK 155 million (109) for the year. The average interest rate for 2008 was 4.9%.

3) Government grants received, balance brought forward, amount to SEK 4,586 million (4,294). Accumulated interest reported as an asset totalling SEK 912 million (757) is included in cost of buildings.

4) Government grants received during the year amounted to SEK 196 million (266).

5) Estimated useful lives are for Hydro power installations 5–40 years, for Combined heat and power installations 5–50 years, for Wind power installations 20–35 years, for Electricity distribution and transmission lines 5–35 years, for Mining operations 5–20 years, for Office equipment 5–10 years and for Office and warehouse buildings and workshops 25–50 years.

A change in depreciation method for the German nuclear power plants, i.e., adoption of the unit of production method instead of the straight-line method, has resulted in lower depreciation for 2008 in the amount of SEK 361 million.

Tax assessment values (for Swedish real estate)

	2008	2007
Buildings	63,119	63,118
Land	25,412	25,476
<b>Total</b>	<b>88,531</b>	<b>88,594</b>

Distribution lines and transformer stations are not subject to tax assessment values.

At 31 December 2008, contractual commitments for the acquisition of property, plant and equipment amounted to SEK 25,433 million (20,338).

**Note 21 Investment property**

	2008	2007
<b>Cost</b>		
Cost brought forward	2,181	2,225
Investments	3	1
Divestments/Disposals	-266	-144
Reclassifications	-2	-1
Translation differences	302	100
<b>Accumulated cost carried forward</b>	<b>2,218</b>	<b>2,181</b>
<b>Accumulated depreciation according to plan<sup>1</sup></b>		
Depreciation brought forward	-552	-549
Depreciation for the year	-13	-15
Divestments/Disposals	41	38
Reclassifications	-	-1
Translation differences	-82	-25
<b>Accumulated depreciation carried forward</b>	<b>-606</b>	<b>-552</b>
<b>Impairment losses</b>		
Impairment losses brought forward	-723	-740
Impairment losses for the year	-4	-
Reversed impairment losses for the year	-	29
Divestments/Disposals	34	18
Reclassifications	1	3
Translation differences	-108	-33
<b>Accumulated impairment losses carried forward</b>	<b>-800</b>	<b>-723</b>
<b>Residual value according to plan carried forward</b>	<b>812</b>	<b>906</b>
<b>Estimated fair value</b>	<b>1,013</b>	<b>1,139</b>

1) The estimated useful life for investment property ranges from 25–50 years.

Investment property encompasses 129 (143) 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 106 million in (112). Direct costs for the concerned properties amounted to SEK 224 million (251), of which SEK 74 million (97) is related to properties that did not generate rental income.

At 31 December 2008, contractual obligations to purchase, construct or develop investment property or for repairs, maintenance or enhancements amounted to SEK 11 million (10).

**Note 22 Shares and participations held by the Parent Company Vattenfall AB and other Group companies****Shares and participations held by Parent Company Vattenfall AB**

	Corporate Identity Number	Registered office	Number of shares 2008	Participation in % 2008	Book value 2008
<b>Nordic countries</b>					
Bergeforsens Kraft AB	556044-8887	Sundsvall	3,240	60	3
Boda Kraft AB	556731-7242	Stockholm	1,000	100	0
Boda Kraft 2 AB	556744-4194	Stockholm	1,000	100	0
Boda Kraft 3 AB	556744-4202	Stockholm	1,000	100	0
Boda Kraft 4 AB	556744-6496	Stockholm	1,000	100	0
Energibolaget Botkyrka-Salem Försäljn. AB	556014-7406	Tumba	23,988	100	35
Forsaströms Kraft AB	556010-0819	Åtvidaberg	400,000	100	48
Forsmarks Kraftgrupp AB	556174-8525	Östhammar	198,000	66	198
Försäkrings AB Vattenfall Insurance	516401-8391	Stockholm	200,000	100	200
Gotlands Energi AB	556008-2157	Gotland	112,500	75	13
Haparanda Värmeverk AB	556241-9209	Haparanda	200	50	1
Kraftgården AB	556532-5551	Bispgården	74,327	74	1
Produktionsbalans PBA AB	556425-8134	Stockholm	4,800	100	5
Ringhals AB	556558-7036	Varberg	248,572	70	379
Svensk Kärnbränslehantering AB <sup>1</sup>	556175-2014	Stockholm	360	36	0
Säffle Årjäng Energi AB	556499-8689	Säffle	8,000	100	12
Vattenfall Nuclear Fuel AB	556440-2609	Stockholm	100	100	96
Vattenfall A/S	21,311,332	Copenhagen	10,040,000	100	11,195
Vattenfall Business Services Nordic AB	556439-0614	Stockholm	100	100	10
Vattenfall Elanläggningar AB	556257-5661	Sundsvall	1,000	100	1
Vattenfall Eldistribution AB	556417-0800	Stockholm	8,000	100	11
Vattenfall Fastigheter AB	556438-5952	Sundsvall	100	100	120
Vattenfall Inlandskraft AB	556528-2562	Jokkmokk	3,000	100	4
Vattenfall Kalix Fjärrvärme AB	556012-9958	Kalix	1,880	94	0
Vattenfall Kundservice AB	556529-7065	Stockholm	100,000	100	0
Vattenfall Nederland B.V.		Hoofddorp	200	100	0
Vattenfall Oy	1071366-1	Helsinki	10,000	100	1,483
Vattenfall Poland AB	556467-0643	Uppsala	1,000	100	0
Vattenfall Power Consultant AB	556383-5619	Stockholm	12,500	100	15
Vattenfall Power Management AB	556573-5940	Stockholm	6,570	100	12

	Corporate Identity Number	Registered office	Number of shares 2008	Participation in % 2008	Book value 2008
Vattenfall Research & Development AB	556390-5891	Älvkarleby	14,000	100	17
Vattenfall Service Nord AB	556242-0959	Luleå	10,000	100	1
Vattenfall Service Syd AB	556417-0859	Trollhättan	16,000	100	18
Vattenfall Trading Services A/S	3181181	Copenhagen	500	100	49
Vattenfall Treasury AB (publ)	556439-0606	Stockholm	500	100	6
Vattenfall Tuggen AB	556504-2826	Stockholm	9,317	93	1
Vattenfall Vindkraft AB	556731-0866	Stockholm	1,000	100	0
Vattenfall Vätter EI AB	556528-3180	Motala	100	100	291
Västerbergslagens Kraft AB	556194-9784	Ludvika	89,726	58	19
Västerbergslagens Energi AB	556565-6856	Ludvika	14,674	51	15
Övertorneå Värmeverk AB	556241-9191	Övertorneå	200	50	2
Överkalix Värmeverk AB	556241-9183	Överkalix	100	50	0
3C – Combat Climate Change AB	556765-0444	Stockholm	100	100	0
<b>Germany</b>					
Vattenfall (Deutschland) GmbH	(HRB) 62659	Hamburg	2	100	64,066
<b>Poland</b>					
Vattenfall Heat Poland S.A.	0000025667	Warsaw	18,381,556	75	3,240
GZE S.A.	0000013196	Gliwice	936,203	75	5,271
Vattenfall Poland Sp.z.o.o	0000270893	Warsaw	10,000	100	5
Vattenfall Trading Services Sp.z.o.o	0000233066	Warsaw	80,000	100	9
<b>Other countries</b>					
Vattenfall Reinsurance S.A.	(B) 49528	Luxembourg	13,000	100	13
Eclipse Energy UK Plc	0546926	Grantham, Lincolnshire	2,733,432	96	592
StuRe S.A.	R.C.S-B-31 876	Luxembourg	1,200	100	85
<b>Total</b>					<b>87,542</b>

1) Group companies own a further 20% through Forsmarks Kraftgrupp AB.

#### Large shareholdings held 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	Participa- tion in % 2008		Registered office	Participa- tion in % 2008
<b>Nordic countries</b>			<b>Poland</b>		
Barsebäck Kraft AB, Sweden	Malmö	70	Nieruchomosci EWSA	Warsaw	75
Pamilo Oy, Finland	Uimaharju	100	Vattenfall Distribution Poland S.A.	Gliwice	75
Vattenfall Indalsälven AB, Sweden	Bispgården	74	Vattenfall Wolin-North Sp.z.o.o	Szczecin	75
Vattenfall Sähkötuotanto Oy, Finland	Helsinki	100	Vattenfall Business Services Poland Sp.z.o.o	Gliwice	75
Vattenfall Verkkö Oy, Finland	Helsinki	100			
Vattenfall Vindkraft Lillgrund AB, Sweden	Malmö	100	<b>UK</b>		
Vattenfall Vindkraft Kriegers Flak AB, Sweden	Stockholm	100	Vattenfall Wind Power Ltd	Hexham	100
Vattenfall Vindkraft A/S, Denmark	Esbjerg	100	Kentish Flats Ltd	London	100
			Thanet Offshore Wind Ltd	London	100
<b>Germany</b>					
Dan Tysk Kabel GmbH	Hamburg	100			
Fernheizwerk Märkisches Viertel GmbH	Berlin	100			
Fernheizwerk Neukölln AG	Berlin	80			
Kernkraftwerk Brunsbüttel GmbH & Co. oHG	Hamburg	67			
Kraftwerke Schwarze Pumpe GmbH	Spremberg	100			
Müllverwertung Borsigstrasse GmbH	Hamburg	85			
MVR Müllverwertung Rugenberger Damm GmbH & Co. KG	Hamburg	55			
Vattenfall Europe AG	Berlin	100			
Vattenfall Europe Berlin AG & Co. KG	Berlin	100			
Vattenfall Europe Distribution Berlin GmbH	Berlin	100			
Vattenfall Europe Distribution Hamburg GmbH	Hamburg	100			
Vattenfall Europe Generation AG & Co. KG	Cottbus	100			
Vattenfall Europe Hamburg AG	Hamburg	100			
Vattenfall Europe Mining AG	Cottbus	100			
Vattenfall Europe Nuclear Energy GmbH	Hamburg	100			
Vattenfall Europe Sales GmbH	Hamburg	100			
Vattenfall Europe Transmission GmbH	Berlin	100			
Vattenfall Europe New Energy GmbH	Hamburg	100			
Vattenfall Trading Services GmbH	Hamburg	100			
WEMAG AG	Schwerin	80			

**Note 23 Participations in associated companies**

	2008	2007
Balance brought forward	13,369	12,126
New share issues and shareholders' contributions	193	-10
Reclassifications from other shares and participations	14	570
Profit participations and dividends	358	130
Translation differences	1,991	553
<b>Balance carried forward</b>	<b>15,925</b>	<b>13,369</b>

Shares and participations owned by the Parent Company Vattenfall AB or by other Group companies.

	Corporate Identity Number	Registered office	Number of shares 2008	Participation in % 2008	Book value Group 2008	Book value Parent Company 2008
<b>Associated companies held by the Parent Company Vattenfall AB</b>						
<b>Nordic countries</b>						
Gulsele AB, Sweden	556001-1800	Sollefteå	84,000	35	349	333
Luleå Energi AB, Sweden	556139-8255	Luleå	54,000	30	247	3
PiteEnergi AB, Sweden	556330-9227	Piteå	70,000	50	158	7
Plusenergi AB, Sweden	556572-4696	Gothenburg	50,000	50	206	170
Preem Gas AB, Sweden	556037-2970	Stockholm	750	30	13	6
SwePol Link AB, Sweden	556530-9829	Stockholm	96,000	16	15	1
<b>Associated companies held by other Group companies than the Parent Company Vattenfall AB</b>						
<b>Nordic countries</b>						
Ensted Havn I/S, Denmark	29636223	Aabenraa	500,000	50	685	-
Taggen Vindpark AB, Sweden	556739-6287	Sölvesborg	500	50	0	-
<b>Germany</b>						
DOTI Deutsche Offshore Testfeld und Infrastruktur GmbH & Co. KG	A 200395	Oldenburg		26	301	-
ENSO Energie Sachsen Ost AG	HRB 965	Dresden	436,926	21	1,370	-
GASAG Berliner Gaswerke AG	HRB 44343	Berlin	8,100,000	32	4,027	-
Kernkraftwerk Krümmel GmbH & Co. oHG	HRB 15033	Hamburg		50	4,920	-
Kernkraftwerk Stade GmbH & Co. oHG	HRB 12163	Hamburg		33	913	-
Kernkraftwerk Brokdorf GmbH & Co. oHG	HRB 17623	Hamburg		20	2,133	-
EHA Energie Handels Gesellschaft mbH & Co.KG	HRA 92729	Hamburg		50	95	-
Städtische Werke AG	HRB 2150	Kassel	121,148	25	493	-
<b>Total</b>					<b>15,925</b>	<b>520</b>

Amounts relating to held participation of associated companies' revenues, profit, assets and liabilities:

	Revenues 2008	Profit 2008	Assets 31 Dec. 2008	Liabilities 31 Dec. 2008
<b>Associated companies held by the Parent Company Vattenfall AB</b>				
Gulsele AB, Luleå Energi AB, PiteEnergi AB, Plusenergi AB, Preem Gas AB, Taggen Vindpark AB and SwePol Link AB	2,551	47	1,781	1,106
<b>Associated companies held by other Group companies than the Parent Company Vattenfall AB</b>				
GASAG Berliner Gaswerke AG	3,593	268	8,262	5,838
Kernkraftwerk Krümmel GmbH & Co. oHG, Kernkraftwerk Stade GmbH & Co. oHG and Kernkraftwerk Brokdorf GmbH & Co. oHG	1,849	818	22,342	13,878
Other companies	4,752	294	5,202	2,420
<b>Total</b>	<b>12,745</b>	<b>1,427</b>	<b>37,587</b>	<b>23,242</b>

**Note 24 Other shares and participations**

	2008	2007
Balance brought forward	694	1,254
Investments	4,603	6
New share issues and shareholders' contributions	32	11
Divestments	-4	-27
Reclassifications to participations in associated companies	-14	-576
Impairment losses	5	-14
Translation differences	123	40
<b>Balance carried forward</b>	<b>5,439</b>	<b>694</b>

	Participation in % 2008	Book value Group 2008	Book value Parent Company 2008
<b>Shares and participations held by the Parent Company Vattenfall AB</b>			
Jämtkraft AB, Sweden	20 <sup>1</sup>	23	23
ENEA S.A., Poland	19	4,602	4,602
Other companies		7	7
<b>Shares and participations held by other Group companies than the Parent Company Vattenfall AB</b>			
<b>Germany</b>			
BEU Berliner Energie			
Umweltsfonds GbR	50	41	-
EHA Energie Handels			
Gesellschaft mbH & Co. KG	50	0	-
European Energy Exchange	1	12	-
Sulfurcell Solartechnik GmbH	7	11	-
GNS Gesellschaft für			
Nuklear-Service GmbH	1	27	-
Stadtwerke Eilenburg GmbH	49	61	-
Stadtwerke Parchim GmbH	15	33	-
Stadtwerke Rostock AG	13	440	-
Stadtwerke Wittenberge GmbH	23	30	-
Other companies		54	-
<b>Other countries/companies</b>			
Asikkalan Voima Oy, Finland	50	34	-
ELINI, Netherlands	13 <sup>2</sup>	29	-
Other companies		35	-
<b>Total</b>		<b>5,439</b>	<b>4,632</b>

1) The share of voting rights is 16%.

2) The share of voting rights is 7%.

**Note 25 Share in the Swedish Nuclear Waste Fund**

	2008	2007
Balance brought forward	24,143	23,321
Payments	421	693
Disbursements	-766	-714
Returns	1,452	843
<b>Balance carried forward</b>	<b>25,250</b>	<b>24,143</b>

According to the Swedish Nuclear Activities Act (1984:3), any organisation in Sweden with a permit to own or run a nuclear installation is obligated 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. (1992:1537). Starting on 1 January 2008, this law was superseded by a newer Act (2006:647) with the same purpose. Pursuant to this law, the reactor owner shall 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 (1984:3) 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 2008, the fair value of the Vattenfall Group's share of the Swedish Nuclear Waste Fund was SEK 26,643 million (24,667).

As stated in Note 37 to the consolidated accounts, provisions for future expenses for decommissioning, etc. within Swedish nuclear power operations amount to SEK 27,697 million (21,869).

Contingent liabilities attributable to the Swedish Nuclear Waste Fund are described in Note 45 to the consolidated accounts.

**Note 26 Other non-current receivables**

	Receivables from associated companies		Other receivables	
	2008	2007	2008	2007
Balance brought forward	392	468	4,736	5,152
New receivables	11	-	163	1,855
Payments received	-30	-32	-1,019	-1,055
Impairment losses	-	-46	-143	-1,106
Divested companies	-	-	-	-88
Reclassifications	-1	-	27	-52
Translation differences	5	2	226	30
<b>Balance carried forward</b>	<b>377</b>	<b>392</b>	<b>3,990</b>	<b>4,736</b>

Breakdown of receivables:

	2008	2007	2008	2007
Non-current interest-bearing receivables	73	59	1,312	2,426
Non-current noninterest-bearing receivables	304	333	2,678	2,310
<b>Total</b>	<b>377</b>	<b>392</b>	<b>3,990</b>	<b>4,736</b>

**Note 27 Inventories**

	2008	2007
Nuclear fuel	4,484	4,249
Materials and spare parts	3,023	2,391
Fossil fuel	4,198	2,214
Other	875	683
<b>Total</b>	<b>12,580</b>	<b>9,537</b>

Inventories recognised as an expense in 2008 amount to SEK 24,377 million (17,811). Inventory write-downs amount to SEK 948 million (29) during the year.

**Note 28 Intangible assets: current**

Attributable to emission allowances and certificates. See Note 2 to the consolidated accounts, Accounting principles.

	Emission allowances		Certificates		Total	
	2008	2007	2008	2007	2008	2007
Balance brought forward	8	746	741	-	749	746
Purchases	5,358	91	1,467	166	6,825	257
Received free of charge	-	-	483	8	483	8
Sold	-3,250	-448	-1,260	-	-4,510	-448
Redeemed	-1	-347	-312	-	-313	-347
Disposals	-8	-	-11	-	-19	-
Reclassifications from inventories	-	-	-	546	-	546
Impairment losses	-156	-50	-	-	-156	-50
Translation differences	231	16	-5	21	226	37
<b>Balance carried forward</b>	<b>2,182</b>	<b>8</b>	<b>1,103</b>	<b>741</b>	<b>3,285</b>	<b>749</b>

**Note 29 Trade receivables and other receivables**

	2008	2007
Accounts receivable – trade	26,129	20,935
Receivables from associated companies	941	365
Other receivables	7,223	6,820
<b>Total</b>	<b>34,293</b>	<b>28,120</b>

**Age analysis**

The collection period is normally between 10 and 30 days.

	2008			2007		
	Receivables, gross	Receivables impaired	Receivables, net	Receivables, gross	Receivables impaired	Receivables, net
<b>Accounts receivable – trade</b>						
Not due	23,803	5	23,798	18,836	19	18,817
Due 1–30 days	1,040	3	1,037	1,118	5	1,113
Due 31–90 days	367	3	364	363	11	352
Due > 90 days	2,085	1,155	930	1,783	1,130	653
<b>Total</b>	<b>27,295</b>	<b>1,166</b>	<b>26,129</b>	<b>22,100</b>	<b>1,165</b>	<b>20,935</b>
<b>Receivables from associated companies</b>						
Not due	736	-	736	352	-	352
Due 1–30 days	48	-	48	9	-	9
Due 31–90 days	157	-	157	-	-	-
Due > 90 days	-	-	-	4	-	4
<b>Total</b>	<b>941</b>	<b>-</b>	<b>941</b>	<b>365</b>	<b>-</b>	<b>365</b>
<b>Other receivables</b>						
Not due	6,826	2	6,824	6,645	16	6,629
Due 1–30 days	345	-	345	49	-	49
Due 31–90 days	19	1	18	97	-	97
Due > 90 days	109	73	36	108	63	45
<b>Total</b>	<b>7,299</b>	<b>76</b>	<b>7,223</b>	<b>6,899</b>	<b>79</b>	<b>6,820</b>

Receivables impaired as above:

	2008	2007
Balance brought forward	1,244	1,350
Acquired companies	64	52
Provision for impairment losses	63	231
Impairment losses	-185	-263
Impairments reversed	-27	-65
Reclassifications	2	-1
Translation differences	81	-60
<b>Balance carried forward</b>	<b>1,242</b>	<b>1,244</b>

**Note 30 Prepaid expenses and accrued income**

	2008	2007
Prepaid insurance premiums	34	14
Prepaid expenses, other	812	440
Prepaid expenses and accrued income, electricity	2,644	2,270
Accrued income, other	2,170	2,110
<b>Total</b>	<b>5,660</b>	<b>4,834</b>

**Note 31 Short-term investments**

	2008	2007
Interest-bearing investments	18,606	11,257
Shares	726	839
<b>Total</b>	<b>19,332</b>	<b>12,096</b>

**Note 32 Cash and cash equivalents**

	2008	2007
Cash and bank balances	6,705	3,995
Cash equivalents	14,199	6,568
<b>Total</b>	<b>20,904</b>	<b>10,563</b>

**Note 34 Other interest-bearing liabilities**

	Non-current portion		Current portion		Total	
	2008	2007	2008	2007	2008	2007
Bond loans	53,660	30,722	8,593	2,154	62,253	32,876
Liabilities to credit institutions	5,683	5,373	1,729	1,506	7,412	6,879
Liabilities to minority owners	6,310	5,446	373	345	6,683	5,791
Liabilities to associated companies	142	-	16,752	11,105	16,894	11,105
Other liabilities	1,227	1,102	2,067	95	3,294	1,197
<b>Total</b>	<b>67,022</b>	<b>42,643</b>	<b>29,514</b>	<b>15,205</b>	<b>96,536</b>	<b>57,848</b>

Of the above liabilities, the following amounts are due after more than five years: Bond loans SEK 26,652 million (14,810), Liabilities to credit institutions SEK 1,398 million (1,777), Liabilities to minority owners SEK 6,160 million (5,296) and Other liabilities SEK 132 million (150).

**Note 35 Financial risks****Financial risks**

The Group's financial risks are mainly managed by Vattenfall Treasury AB, which houses the Group's internal bank and finance function. These finance operations are intended to provide cost-effective management of the Group's financial risks.

The Group's funding, investments and currency trading are mainly carried out by Vattenfall Treasury AB and, to a lesser extent, by Vattenfall Europe AG. The agreements related to the group's funding contain standard representations as for example the status of the companies, powers and authority, legal validity, pari-passu ranking, etc. The agreements regarding Vattenfall's issuance of public debt instruments also contain negative pledge clauses stating that the Group generally may not create any pledge for financial indebtedness, and it is Vattenfall's policy to avoid so-called "MAC clauses". The Group's liquidity is centralised using so-called Group cash pool systems. Speculative investments are made to a limited extent within fixed risk limits.

**Liquidity risk**

Liquidity risk is minimised through a debt portfolio with an even maturity profile and a long average remaining term. The maturity profile of Vattenfall's debt is shown in the diagram. On 31 December 2008, the average maturity was 6.5 years (6.5) excluding Capital Securities and loans from minority owners and associated companies. The aim is for it to exceed 5 years. Including Capital Securities the average maturity was 6.5 years (6.7).

To safeguard the availability of funds and maintain flexibility, the Group has several types of debt issuance programmes. At present, there are two commercial paper programmes and two medium term note (MTN) programmes. In addition, Vattenfall has approximately SEK 15.4 billion (9.6) in committed credit facilities.

**Note 33 Capital Securities**

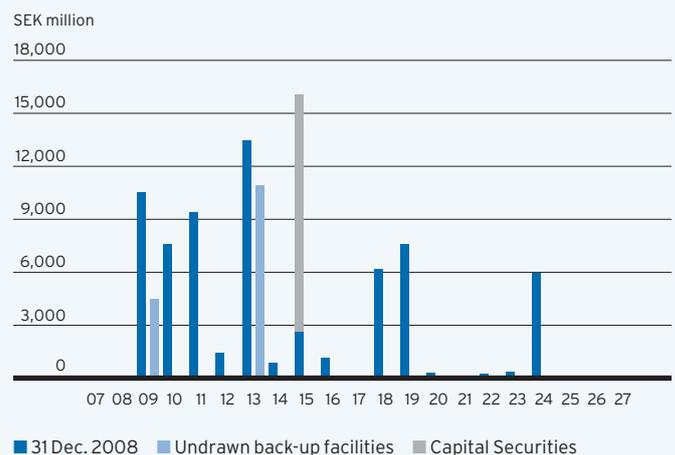
In June 2005, Vattenfall issued Capital Securities, which are reported as interest-bearing non-current liabilities. The maturity of the Capital Securities is perpetual and they are junior to all of Vattenfall's unsecured debt instruments. There is no redemption requirement, although the intention is to repay the loan. The interest is fixed for the initial ten-year period, thereafter a floating rate is applied. The interest is conditional upon, among other things, Vattenfall's means of paying dividends to shareholders and the key ratio "Interest Coverage Trigger Ratio" amounting to at least 2.5.

	2008	2007
Balance brought forward	9,341	8,911
Discount allocation	27	18
Translation differences	1,443	412
<b>Balance carried forward</b>	<b>10,811</b>	<b>9,341</b>

The Interest Coverage Trigger Ratio key ratio is calculated as follows:

	2008	2007
Funds from operations (FFO)	30,735	34,049
Interest paid	3,846	2,902
<b>FFO plus interest paid (a)</b>	<b>34,581</b>	<b>36,951</b>
Interest expenses (b)	4,151	3,325
<b>Interest Coverage Trigger Ratio (a/b)</b>	<b>8.33</b>	<b>11.11</b>

The Group's target for short-term liquidity is always to have no less than 10% of the Group's sales and at least the equivalent of the next 90 days' maturities in the form of liquid assets or committed credit facilities. Vattenfall's credit rating for long-term and short-term borrowing respectively is A-/A-2 from Standard & Poor's and A2/P-1 from Moody's. Vattenfall's goal with regard to credit rating is to maintain a rating in the Single A category.

**Maturity profile in debt portfolio<sup>1)</sup>**

Continued on page 98

Note 35 continued

**Borrowing programmes and credit facilities**

	Maximum aggregated amount	Currency	Maturity	Used proportion, %	Reported external liability
<b>Borrowing programmes</b>					
Commercial Paper	15,000	SEK		-	-
Euro Commercial Paper <sup>1</sup>	2,000	USD		48	-
Medium Term Note	10,000	SEK		-	-
Euro Medium Term Note	6,000	EUR		92	62,253
<b>Committed credit facilities</b>					
Revolving Credit Facility <sup>2</sup>	1,000	EUR	2013	-	-
364-Day Credit Facility <sup>2</sup>	400	EUR	2009	-	-
Bank overdraft facilities	100	SEK		-	-
<b>Other credit facilities</b>					
Bank overdraft facilities and other lines of credit	13,513	SEK		-	-
<b>Total</b>					<b>62,253</b>

1) Utilised for intra-Group purposes (centralisation of liquidity from Vattenfall Poland).

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

**Benchmark bonds**

Type	Currency	Amount	Coupon, %	Maturity
Euro Medium Term Note	EUR	650	6.000	2009
Euro Medium Term Note	EUR	500	6.000	2010
Euro Medium Term Note	EUR	850	5.750	2013
Euro Medium Term Note	EUR	500	5.000	2018
Euro Medium Term Note	EUR	650	6.750	2019
Euro Medium Term Note	EUR	500	5.375	2024

**Interest rate risk**

Interest rate risk in the Group's debt portfolio is measured in terms of duration, which at year-end was 2.4 years (2.6) excluding Capital Securities and loans from minority owners and associated companies. The duration is permitted to vary from a norm of 2.5 years by up to 12 months either way. Including Capital Securities the duration was 2.9 years (3.3). To adjust the duration of borrowing, interest rate swaps, interest rate forwards and options, among other things, are used.

**Remaining fixed rate term in loan portfolio**

Excluding Capital Securities and loans from minority owners and associated companies. Nominal amounts.

	SEK	EUR	Other	Total
< 3 months	-2,456	12,633	14	10,191
3 months-1 year	9,076	14,221	841	24,138
1 year-5 years	13,000	9,414	743	23,157
> 5 years	3,421	5,783	-	9,204
<b>Total</b>	<b>23,041</b>	<b>42,051</b>	<b>1,598</b>	<b>66,690</b>

Average financing rate, %

	SEK	EUR	Other	Total
	6.4	5.6	4.7	5.8

**Remaining fixed rate term in loan portfolio**

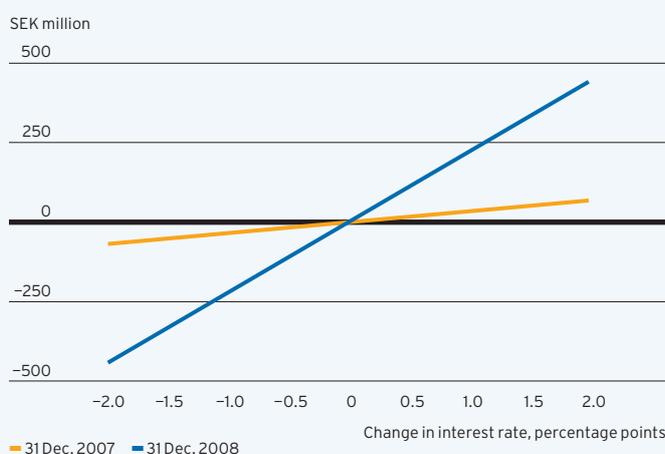
Excluding Capital Securities and loans from minority owners and associated companies. Nominal amounts.

	Debt	Derivatives	Total
< 3 months	6,077	4,114	10,191
3 months-1 year	11,922	12,216	24,138
1 year-5 years	26,735	-3,578	23,157
> 5 years	25,095	-15,891	9,204
<b>Total</b>	<b>69,829</b>	<b>-3,139</b>	<b>66,690</b>

**Currency risk**

Currency risk is the risk of negative effects on Vattenfall's earnings and balance sheet caused by exchange rate fluctuations. Vattenfall is exposed to currency risk through exchange rate fluctuations attributable to future cash flows (transaction exposure) and in the revaluation of net assets in non-Swedish subsidiaries (translation exposure).

Interest rate sensitivity, excluding Capital Securities and loans from minority owners and associated companies.



The diagram shows how changes in interest rates affect the Group's interest expenses over a 12-month period based on the Group's present fixed rate structure.

The Group's goal in managing currency risk is to minimise foreign exchange losses while taking into account hedging costs and tax aspects. Currency exposure in borrowing is eliminated using interest currency swaps for the purpose of avoiding the effect of exchange rate differences on earnings.

**Loan portfolio, breakdown per currency**

Including loans from minority owners and associated companies but excl Capital Securities. Nominal amounts.

Original currency	Debt	Derivatives	Total
CHF	1,469	-1,469	-
DKK	1,477	-	1,477
EUR	70,200	-11,220	58,980
GBP	107	-	107
JPY	4,524	-4,524	-
NOK	386	-386	-
PLN	14	-	14
SEK	15,229	14,460	29,689
<b>Total</b>	<b>93,406</b>	<b>-3,139</b>	<b>90,267</b>

The Group has limited transaction exposure, as the greater part of energy generation, distribution and sales is made in each company's local market. In the Nordic operations, most transaction exposure is in EUR in conjunction with the hedging of electricity prices, primarily in Nord Pool. This currency exposure is hedged with forward exchange contracts. In the German subsidiaries, transaction exposure arises primarily in USD in conjunction with the purchase of fuel. This currency exposure is also hedged with forward exchange contracts.

**Consolidated operating revenues/expenses per currency, %**

Currency	Revenues	Expenses
EUR	64	69
SEK	25	18
PLN	7	7
DKK	3	4
Other	1	2
<b>Total</b>	<b>100</b>	<b>100</b>

The amounts are calculated from a statistical compilation of external operating revenues/expenses. Changes in inventories and investments are not included in the compilation.

The Group's units shall hedge contracted transaction exposure when it exceeds the equivalent of SEK 10 million. Hedges shall be made through Vattenfall Treasury AB, where currency risks are managed within established risk limits for interest rates and currencies.

As regards translation exposure, a change in exchange rates of 5% would affect consolidated equity by approximately SEK 3,320 million (3,190). The reporting principles of translation exposure are described in Note 2 to the consolidated accounts under the headings Derivative instruments and Hedging, respectively.

#### Translation exposure

Currency	Equity	Hedging after tax	Net exposure after tax
EUR	96,399	50,769	45,630
PLN	14,517	2,830	11,687
DKK	14,145	6,490	7,655
Other	1,574	215	1,359
<b>Total</b>	<b>126,635</b>	<b>60,304</b>	<b>66,331</b>

#### Credit risk

The Group is exposed to credit risks when trading in electricity, making investments and trading in derivative contracts. The Group's policy is to primarily use liquid assets to repay loans. Remaining liquidity is invested in part in the short term (to manage daily variations in the Group's liquidity flows) and in part in the long term. The Group's long-term investment portfolio is intended to secure legal requirements regarding capital availability for nuclear power operations in Germany. Investments are made in accordance with established investment rules with counterparties with low credit risk. The proportion of equities in the long-term investment portfolio may not exceed 30% of assets. As of 31 December 2008, the proportion of equities was 14% (20%). The average interest rate was 4.0% (4.1%) while the average duration was 3.8 years (3.8).

Credit risks are managed within the framework of established limits based on external ratings or internal credit assessments. Individual limits are established for each counterparty, and counterparties are reassessed on a regular basis. Exposures are monitored in relation to credit limits on a daily basis.

Prior to entering into a long-term agreement, a general master agreement, such as an ISDA, FEMA or EFET, is required. In the Nordic countries, most financial electricity contracts are settled via Nord Pool and most credit risk that arises is in the marketplace. In Germany, prices are hedged in a similar manner against EEX, even if OTC trade between bilateral counterparties is also common.

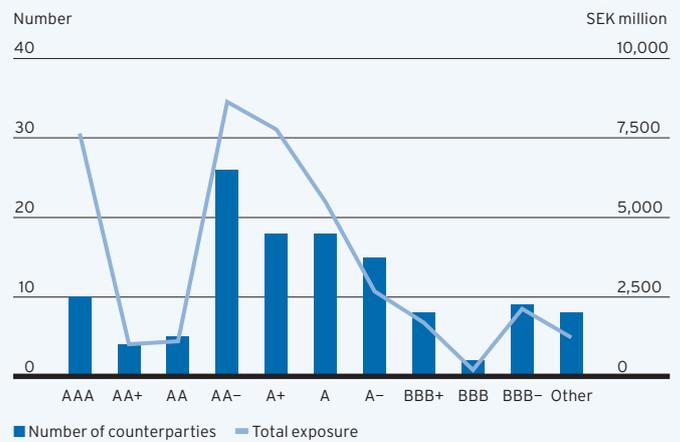
#### Credit risks

Type of instrument	Exposure
Electricity derivatives, positive fair values	8,170
Electricity derivatives, settlement risk	6,029
Interest and currency derivatives, positive fair values	3,477
Interest-bearing investments including larger bank balances	26,455
Shares	619
<b>Total</b>	<b>44,750</b>

Total exposure in electricity derivatives taking into account netting under agreements amounted to SEK 10,921 million.

Exposure in interest and currency derivatives adjusted for netting under ISDA agreements or the equivalent amounts to SEK 3,477 million (1,007). This calculation takes into account margin security requirements under CSA agreements, totalling SEK 1,843 million. Without adjustment for ISDA and CSA agreements, the exposure amounts to SEK 12,125 million (2,293).

#### Counterparties – number of exposures, SEK million, per rating class



The chart shows Vattenfall's counterparties in which Vattenfall's exposure is greater than EUR 5 million per counterparty. The breakdown is based on rating classes and the amount of the credit exposure per rating class. The rating classes are from Standard & Poor's. "Other" consists of exceptions for contracts that have existed for a long time and which Vattenfall has taken over in connection with acquisitions.

## Note 36 Pension provisions

#### General

Vattenfall's pension obligations in the Group's Swedish and German 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 in a pension trust or through provisions in the balance sheet.

Certain of Vattenfall's obligations in the ITP plan are secured through an insurance policy from Alecta (a Swedish mutual insurance company), e.g. spouse's benefits and disability benefits. According to a statement issued by the Swedish Financial Reporting Board, UFR 3, this plan is a multi-employer defined benefit plan. As in previous years, Vattenfall has not had access to such information as to make it possible to report this plan as a defined benefit plan. The ITP pension plan, which is secured through an insurance policy from Alecta, is therefore reported as a defined contribution plan. Contributions for the year for pension insurance policies from Alecta amount to SEK 72 million (97). Alecta's surplus can be distributed among the policyholders and/or the insureds. At the end of 2008, Alecta's surplus in the form of its so-called collective funding amounted to 112% (152%). 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 for employees of the companies Vattenfall Europe Berlin and Vattenfall Europe Hamburg.

Vattenfall Europe Berlin has two pension plans, both secured through Pensionskasse der Bewag, a mutual insurance company. This plan is financed through funds from Vattenfall Europe Berlin 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

Continued on page 100

Note 36 continued

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 Europe Berlin'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.

Pension obligations for Vattenfall Europe Hamburg employees mainly comprise of 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.

Defined benefit obligations	2008	2007
Present value of unfunded obligations	20,410	16,876
Present value of fully or partly funded obligations	18,865	16,881
<b>Present value of obligations</b>	<b>39,275</b>	<b>33,757</b>
Fair value of plan assets	17,436	16,684
<b>Present value of net obligations</b>	<b>21,839</b>	<b>17,073</b>
Unrecognised actuarial gains(+)/ losses(-) of the obligations	-142	504
Unrecognised actuarial gains(+)/ losses(-) of the obligations	-945	158
<b>Pension provisions</b>	<b>20,752</b>	<b>17,735</b>
<b>Changes in obligations</b>	<b>2008</b>	<b>2007</b>
Balance brought forward	33,757	35,647
Benefits paid by the plan	-1,882	-1,734
Service costs	606	609
Actuarial gains(+) or losses(-)	830	-3,602
Current interest expense	1,706	1,576
Translation differences	4,258	1,261
<b>Balance carried forward</b>	<b>39,275</b>	<b>33,757</b>
<b>Changes in plan assets</b>	<b>2008</b>	<b>2007</b>
Balance brought forward	16,684	15,977
Benefits paid by the plan	-507	-343
Expected return on plan assets	762	765
Difference between expected and actual return (actuarial gain(+)) or loss(-)	-1,057	-171
Translation differences	1,554	456
<b>Balance carried forward</b>	<b>17,436</b>	<b>16,684</b>

**Plan assets consist of the following**

	2008	2007
Equity securities	3,443	4,149
Debt instruments	11,837	10,551
Property	787	638
Other	1,369	1,346
<b>Total</b>	<b>17,436</b>	<b>16,684</b>

**Historical information**

	2008	2007	2006	2005	2004
Present value of obligations	39,275	33,757	35,647	37,615	32,313
Fair value of plan assets	17,436	16,684	15,977	16,248	14,972
<b>Present value of net obligations</b>	<b>21,839</b>	<b>17,073</b>	<b>19,670</b>	<b>21,367</b>	<b>17,341</b>

Payments for contributions to defined benefit plans during 2009 are estimated at SEK 1,421 million.

**Pension costs**

	2008	2007
Defined benefit plans:		
Current service cost	497	558
Interest expense	1,706	1,576
Expected return on plan assets	-762	-765
Past service cost	104	52
Other	9	29
<b>Total cost for defined benefit plans</b>	<b>1,554</b>	<b>1,450</b>
Cost for defined contribution plans	359	440
<b>Total pension costs</b>	<b>1,913</b>	<b>1,890</b>

**Pension costs are reported in the following rows in the income statement:**

	2008	2007
Cost of products sold	838	846
Selling expenses	50	66
Administrative expenses	82	167
Financial expenses	943	811
<b>Total pension costs</b>	<b>1,913</b>	<b>1,890</b>

**In calculating pension obligations, the following actuarial assumptions have been made (%):**

	2008	2007
Discount rate	4.0-5.75	4.5-5.25
Expected return on plan assets	4.5-5.25	4.25-5.25
Future annual salary increases	2.5-3.9	2.5-3.5
Future annual pension increases	2.0	2.0

**Note 37 Other interest-bearing provisions**

	Non-current portion		Current portion		Total	
	2008	2007	2008	2007	2008	2007
Provisions for future expenses of nuclear operations	39,442	29,496	336	317	39,778	29,813
Provisions for future expenses of mining operations and other environmental measures/undertakings	13,070	10,890	1,534	1,085	14,604	11,975
Personnel-related provisions for non-pension purposes	3,851	3,708	1,196	1,096	5,047	4,804
Provisions for tax and legal disputes	6,301	6,022	1,636	1,527	7,937	7,549
Other provisions	1,404	1,498	277	611	1,681	2,109
<b>Total</b>	<b>64,068</b>	<b>51,614</b>	<b>4,979</b>	<b>4,636</b>	<b>69,047</b>	<b>56,250</b>

In Sweden a discount rate of 4.5% (5.0%) has been used for provisions for future expenses of nuclear operations. For all other provisions in the Nordic countries the discount rate of 5.0% (5.0%) was used.

In Germany a discount rate of 5.25% (5.5%) was used for provisions for future expenses of nuclear operations and for provisions for future

expenses of mining operations and other environmental measures/undertakings. For all other provisions in Germany the discount rate of 5.0% (5.5%) was used.

See also Note 52 to the consolidated accounts.

**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 estimations are that all of the provisions will result in disbursements after 2018.

Current plans for the decommissioning of the German nuclear power operations entail about 94% of the provisions resulting in cash flows after 2010. For 2009 and 2010, respectively, disbursements are estimated at about 3% of the provisions per year.

Provisions for future expenses of nuclear operations (changes in 2008)	Sweden	Germany	Total
Balance brought forward	21,869	7,944	29,813
Provisions for the period	47	-	47
Discounting effects	1,068	437	1,505
Revaluation (within the balance sheet)	5,496	2,494	7,990
Provisions used	-783	-241	-1,024
Provisions reversed	-	-129	-129
Translation differences	-	1,576	1,576
<b>Balance carried forward</b>	<b>27,697<sup>1</sup></b>	<b>12,081<sup>2</sup></b>	<b>39,778</b>

- 1) Of which approximately 22% pertains to the dismantling, etc. of nuclear power plants and approximately 78% to the handling of spent radioactive fuel.  
 2) Of which approximately 58% pertains to the dismantling, etc. of nuclear power plants and approximately 42% to the handling of spent radioactive fuel.

**Provisions for future expenses of mining operations and other environmental measures/undertakings:**

Provisions are made for restoring sites and other undertakings connected with the Group's permits for conducting lignite mining in Germany. Provisions are also made for environmental measures/undertakings within other activities carried out by the Group.

According to current assessments, some 62% of the provisions will result in cash outflows later than 2011. For 2009, disbursements are estimated at about 12% of the provisions, while disbursements for the years 2010 and 2011 are estimated at 19% and 7%, respectively, of the provisions.

**Provisions for mining operations, etc. (changes in 2008)**

Balance brought forward	11,975
Provisions for the period	389
Discounting effects	575
Revaluation (within the balance sheet)	560
Provisions used	-568
Provisions reversed	-264
Translation differences	1,937
<b>Balance carried forward</b>	<b>14,604</b>

**Personnel-related provisions for non-pension purposes:**

Provisions are made for future costs relating to redundancy in the form of severance pay and other costs for giving notice to personnel.

Approximately 22% of the provisions that have been made are estimated to result in disbursements in 2009, while about 34% are estimated to be disbursed in 2010 and 2011. Thereafter with approximately 25% between the years 2012–2015. The remaining 19% is estimated to be relatively evenly distributed over the years 2016–2039.

**Personnel-related provisions for non-pension purposes (changes in 2008)**

Balance brought forward	4,804
Provisions for the period	1,142
Discounting effects	195
Revaluation	-317
Provisions used	-1,144
Provisions reversed	-248
Translation differences	615
<b>Balance carried forward</b>	<b>5,047</b>

**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 40% of the provisions for tax and legal disputes are expected to result in disbursements in 2009–2010. The remaining provisions are estimated to result in cash flows during the years 2011–2012 (43%) and 17% thereafter.

**Provisions for tax and legal disputes (changes in 2008)**

Balance brought forward	7,549
Acquired companies	2
Provisions for the period	388
Discounting effects	501
Revaluation	-200
Provisions used	-961
Provisions reversed	-529
Translation differences	1,187
<b>Balance carried forward</b>	<b>7,937</b>

**Other provisions:**

Other provisions include, among others, those for onerous contracts, restructuring and guarantee commitments.

Approximately 17% of these provisions are estimated to result in disbursements in 2009, while the remaining approximately 53% are estimated to result in disbursements during 2010–2011 and 30% thereafter.

**Other provisions (changes in 2008)**

Balance brought forward	2,109
Provisions for the period	518
Discounting effects	22
Revaluation	174
Provisions used	-280
Provisions reversed	-962
Translation differences	100
<b>Balance carried forward</b>	<b>1,681</b>

**Note 38 Other noninterest-bearing liabilities (non-current)**

Of the total liabilities of SEK 3,818 million (3,285), SEK 2,508 million (2,135) falls due after more than five years. Of the total liabilities SEK 3,016 million (2,395) refer to accrued expenses, SEK 515 million (589) to deferred income and SEK 287 million (301) to other liabilities.

**Note 39 Trade payables and other liabilities**

	2008	2007
Accounts payable – trade	18,005	10,441
Liabilities to associated companies	1,723	784
Other liabilities	4,778	4,183
<b>Total</b>	<b>24,506</b>	<b>15,408</b>

**Note 40 Accrued expenses and deferred income**

	2008	2007
Accrued personnel-related costs	3,186	2,976
Accrued expenses, emission allowances	6,811	8
Accrued expenses, connection fees	123	124
Accrued nuclear power-related fees and taxes	67	184
Accrued interest expense	1,579	1,373
Other accrued expenses	4,806	3,381
Deferred income and accrued expenses, electricity	4,422	3,942
Other deferred income	947	980
<b>Total</b>	<b>21,941</b>	<b>12,968</b>

**Note 41 Carrying amounts and fair values of financial assets and financial liabilities by category**

	2008		2007	
	Carrying amount	Fair value	Carrying amount	Fair value
<b>Financial assets at fair value through profit or loss</b>				
Derivatives with positive fair values for financial assets held for trading	14,858	14,858	2,924	2,924
Short-term investments	19,332	19,332	12,096	12,096
Cash equivalents (Note 32)	14,199	14,199	6,568	6,568
<b>Total</b>	<b>48,389</b>	<b>48,389</b>	<b>21,588</b>	<b>21,588</b>
<b>Derivatives for hedging purposes (with positive fair values) for:</b>				
Fair value hedges	4,812	4,812	1,094	1,094
Cash flow hedges	6,538	6,538	1,414	1,414
Hedges of net investments in foreign operations	242	242	10	10
<b>Total</b>	<b>11,592</b>	<b>11,592</b>	<b>2,518</b>	<b>2,518</b>
<b>Loans and receivables</b>				
Share in the Swedish Nuclear Waste Fund	25,250	26,643	24,143	24,667
Other non-current receivables	4,367	4,367	5,128	5,128
Trade receivables and other receivables	34,293	34,293	28,120	28,120
Cash and bank balances (Note 32)	6,705	6,705	3,995	3,995
<b>Total</b>	<b>70,615</b>	<b>72,008</b>	<b>61,386</b>	<b>61,910</b>
<b>Available-for-sale financial assets</b>				
Other shares and participations	5,439	5,450	694	700
<b>Total</b>	<b>5,439</b>	<b>5,450</b>	<b>694</b>	<b>700</b>
<b>Financial liabilities at fair value through profit or loss</b>				
Derivatives with negative fair values for financial liabilities held for trading	12,045	12,045	2,876	2,876
<b>Total</b>	<b>12,045</b>	<b>12,045</b>	<b>2,876</b>	<b>2,876</b>
<b>Derivatives for hedging purposes (with negative fair values) for:</b>				
Fair value hedges	191	191	938	938
Cash flow hedges	11,915	11,915	9,331	9,331
Hedges of net investments in foreign operations	4,431	4,431	1,097	1,097
<b>Total</b>	<b>16,537</b>	<b>16,537</b>	<b>11,366</b>	<b>11,366</b>
<b>Other financial liabilities</b>				
Capital Securities	10,811	12,100	9,341	9,834
Other non-current interest-bearing liabilities	67,022	71,866	42,643	44,992
Other non-current noninterest-bearing liabilities	3,818	3,818	3,285	3,285
Current interest-bearing liabilities	29,514	29,686	15,205	15,423
Trade payables and other liabilities	24,506	24,506	15,408	15,408
<b>Total</b>	<b>135,671</b>	<b>141,976</b>	<b>85,882</b>	<b>88,942</b>

When an active market is available, fair values have been determined according to quoted market prices. If no active market is available, a so-called mark-to-model technique is used. In the items listed above, the following amounts are valued at mark-to-model:

Derivatives with positive fair values at SEK 74 million (221).

Other shares and participations at SEK 5,409 million (694).

Derivatives with negative fair values at SEK 752 million (243).

## Note 42 Specifications to the Cash Flow Statement

### Other adjustment items

Amounts in SEK million	2008	2007
Undistributed results from participation in associated companies	-359	-125
Unrealised foreign exchange gains	-392	-86
Unrealised foreign exchange losses	5,720	1,254
Unrealised items related to derivatives	-4,778	-1,253
Capital gains	-202	-541
Capital losses	78	444
Changes in interest receivables	-380	-226
Changes in interest liabilities	1,108	607
Changes in the Swedish Nuclear Waste Fund	-1,108	-822
Changes in provisions	-307	1,744
<b>Total</b>	<b>-620</b>	<b>996</b>

Interest paid totalled SEK 3,846 million (2,902) and interest received totalled SEK 1,679 million (1,420).

Dividends received totalled SEK 1,140 million (952).

### Investments

Amounts in SEK million	2008	2007
Acquisitions of Group companies (Note 3)	-6,969	-106
Investments in associated companies and other shares and participations	-4,829	-7
Investments in intangible assets: non-current, incl. advance payments	-395	-279
Investments in property, plant and equipment, incl. advance payments	-30,100	-18,571
Investments in investment property	-3	-1
<b>Total</b>	<b>-42,296</b>	<b>-18,964</b>

### Divestments

Amounts in SEK million	2008	2007
Divestments of shares and participations	33	442
Divestments of intangible assets: non-current	4	2
Divestments of property, plant and equipment	828	481
<b>Total</b>	<b>865</b>	<b>925</b>

Short-term borrowings in which the duration is three months or shorter are reported net under the heading Loans raised.

## Note 43 Specifications to Equity

### Share capital:

As of 31 December 2008 the registered share capital comprised 131,700,000 shares with a quota value of SEK 50 each.

### Translation reserve:

The translation reserve includes all exchange rate differences arising in 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 in the reassessment of debts raised as hedges for net investments in non-Swedish operations.

### Reserve for cash flow hedges:

The reserve for cash flow hedges includes mostly unrealised values of electricity derivatives used to hedge future sales.

The reserve for cash flow hedges is expected to affect the income statement and cash flow, respectively, in the periods indicated below:

	2008		2007	
	Cash flow	Income statement	Cash flow	Income statement
Within 1 year	-7,167	-7,533	-4,998	-5,661
Between 1-5 years	2,652	1,505	-2,852	-3,129
	-4,515	-6,028	-7,850	-8,790
No expected effect	-177	80	-74	-56
<b>Total</b>	<b>-4,692</b>	<b>-5,948</b>	<b>-7,924</b>	<b>-8,846</b>

Amounts that were removed from the reserve for cash flow hedges are included in the following line items in the income statement:

	2008	2007
Net sales	-6,396	-1,458
Cost of products sold	3	68
Other operating income	-75	1
Other operating expenses	42	-
Financial expenses	-40	-24
<b>Total</b>	<b>-6,466</b>	<b>-1,413</b>

Amounts that were removed from the reserve for cash flow hedges are included in the following line items in the balance sheet:

	2008	2007
Property, plant and equipment	-17	-1
Inventories	385	95
<b>Total</b>	<b>368</b>	<b>94</b>

### Retained earnings including profit for the year:

Retained earnings including profit for the year includes earned profits in the Parent Company and its subsidiaries, associated companies and joint ventures.

**Note 44 Pledged assets**

	2008	2007
For own liabilities and provisions		
Liabilities to credit institutions:		
Real estate mortgages as security for loans	1,472	1,274
Blocked bank funds as security for trading on energy exchanges	31	53
Blocked bank funds as security for redemption of minority shares	54	3,165
Other	74	6
<b>Total</b>	<b>1,631</b>	<b>4,498</b>

**Note 45 Contingent liabilities**

	2008	2007
Guarantees	1,537	1,206
Other contingent liabilities	3,061	2,501 <sup>1</sup>
<b>Total</b>	<b>4,598</b>	<b>3,707<sup>1</sup></b>

1) The amount is adjusted compared to previously published information. See below.

On some rivers, several hydro power stations share regulation facilities. The owners of the stations are each liable for their share of the regulation costs.

Vattenfall has obligations to compensate certain owners of water rights, in rivers where hydro power stations are built, through the delivery of power. During 2008 such compensation deliveries amounted to 0.93 TWh (1.04), corresponding to approximately SEK 465 million (295).

Under Swedish law, Vattenfall has strictly unlimited liability for third-party loss resulting from dam accidents. Together with other hydro power producers in Sweden, Vattenfall has liability insurance that will pay out a maximum of SEK 8,000 million for these types of claims.

As a natural part of the Group's business and in addition to the contingent liabilities specified above, guarantees are in place for the fulfilment of various contractual obligations.

In its German operations, Vattenfall conducted a number of leasing transactions involving power plants in 1999 and 2000. The basis for the transactions is the right of use of power plants leased to US counterparties as part of so-called head leases, lasting a maximum of 99 years, and thereafter leased back for 24 years as part of subleases. After the subleases expire, Vattenfall has the right to regain the right of use through a call option. Rents from the US counterparties have been received in advance and have been deposited in financial institutions with high credit ratings for the disbursement of the lease payments in accordance with the subleases, including payment for the options. The net difference between rental payments received and deposits made has been reported net at the time the lease contracts were entered into. In the event that the lessees or the underlying customers fail to meet their obligations during the lease period, this would give rise to termination costs for Vattenfall. On the balance sheet date, these obligations amounted to a maximum of SEK 1,175 million (1,046), which is included in the reported contingent liabilities.

In its Swedish operations, Vattenfall conducted a number of leasing transactions involving power plants in 2003 and 2005. The transactions are based on sale and 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 via call options. Income from the sale to the French counterparts has been deposited with financial institutions with high credit ratings

for the disbursement of the lease payments, including payment for the options. In the event Vattenfall should wish to prematurely redeem the lease agreements, this would give rise to costs for Vattenfall. On the balance sheet date, these costs amounted to a maximum of SEK 97 million (70). This amount is not included in the reported contingent liabilities.

In Germany, nuclear power operators have unlimited liability. The combined mandatory insurance coverage for all operators is EUR 2,500 million. Claims of up to EUR 256 million are covered by the German Mutual Atomic Energy Reinsurance Pool. Claims in excess of EUR 256 million up to a maximum of EUR 2,500 million are covered by a joint liability insurance agreement (Solidarvereinbarung) between the owners of the German nuclear power plants. The Vattenfall Group's share of this joint liability insurance agreement, as of 1 January 2007, is approximately EUR 170 million (170) per claim and entails an obligation to keep available liquid assets corresponding to twice this amount, i.e., EUR 340 million (340).

The Group's contingent liabilities previously included amounts that pertain to transactions contracted by subsidiaries for which Vattenfall AB, as the Parent Company, has issued guarantees. Effective 31 December 2008, these amounts have been excluded from the Group's contingent liabilities, since the underlying transaction are reported by the subsidiaries. In addition, through a bank guarantee issued by Nordea Bank, Vattenfall AB has pledged security to Nord Pool for its electricity trading. Effective 31 December 2008, the value of this security is only reported under contingent liabilities for the Parent Company Vattenfall AB.

Under Swedish law (the Act (2006:647) on the Financing of Future Expenses for Spent Nuclear Fuel), Sweden's nuclear power companies are required to pledge assets to the Swedish state (the Swedish Nuclear Waste Fund) to guarantee that sufficient funds exist to cover the future costs of nuclear waste management. The pledged assets consist of guarantee commitments issued by the owners of the nuclear power companies.

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 17,113 million (6,132). Two types of guarantee commitments have been made. The one guarantee commitment is intended to cover the requisite need for fees that has been decided on for the fees that have not yet been paid in during the so-called earnings period (25 years of operation – so-called Financing Security). The other guarantee commitment pertains to future cost increases stemming from unforeseen events (so-called Complementary Security). In previous years, Vattenfall Group has reported the entire amount as a contingent liability. Starting with the 2008 year-end closing these guarantees are not recognised as contingent liabilities, since new assessments indicate that these commitments are covered in the provision for future expenses for nuclear operations recognised in the consolidated balance sheet at 31 December. Previously published information for the year 2007 is adjusted.

**Note 46 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.

Vattenfall bears full financial responsibility for SwePol Link up to July 2020.

**Note 47 Average number of employees and personnel costs**

Average number employees by country	2008			2007		
	Men	Women	Total	Men	Women	Total
Sweden	6,947	2,179	9,126	6,689	2,009	8,698
Denmark	580	104	684	553	100	653
Finland	279	211	490	276	214	490
Germany	15,111	4,649	19,760	15,093	4,677	19,770
Poland	2,086	626	2,712	2,110	649	2,759
UK	6	3	9	-	-	-
Other countries	18	2	20	23	3	26
<b>Total</b>	<b>25,027</b>	<b>7,774</b>	<b>32,801</b>	<b>24,744</b>	<b>7,652</b>	<b>32,396</b>

Personnel costs	2008	2007
Salaries and other remuneration	15,655	14,073
Social security costs (of which pension costs) <sup>1</sup>	(1,504)	(1,387)
<b>Total</b>	<b>20,820</b>	<b>18,820</b>

1) SEK 38 million (57) of the pension costs are attributable to senior executives, i.e., presidents and vice presidents and former presidents and vice presidents. The Group's outstanding pension obligations attributable to these officers total SEK 594 million (469).

Salaries and other compensation	2008			2007		
	Senior executives <sup>1</sup>	Other employees	Total	Senior executives <sup>1</sup>	Other employees	Total
Sweden	53	4,076	4,129	47	3,846	3,893
Denmark	1	471	472	1	104	105
Finland	4	222	226	5	203	208
Germany	174	10,022	10,196	212	9,158	9,370
Poland	20	572	592	24	470	494
UK	-	18	18	-	-	-
Other countries	-	22	22	-	3	3
<b>Total<sup>2</sup></b>	<b>252</b>	<b>15,403</b>	<b>15,655</b>	<b>289</b>	<b>13,784</b>	<b>14,073</b>

Social security costs	2008	2007
Sweden	2,417	2,145
Denmark	47	11
Finland	56	52
Germany	2,538	2,444
Poland	102	95
Other countries	5	-
<b>Total</b>	<b>5,165</b>	<b>4,747</b>

1) Senior executives comprise directors and senior executives but also deputy directors and vice presidents and former directors, deputy directors, presidents and vice presidents, in Vattenfall AB and other Group companies.

2) Total salaries and other compensation to directors and presidents include variable salaries of SEK 49 million (81).

Continued on page 106

Note 47 continued

**Benefits to directors and senior executives of Vattenfall AB**

SEK thousands	Directors' fees and base salary 2008 including vacation pay	Other remuneration and benefits 2008	Pension and severance costs 2008	Estimated variable compensation for 2008 to be paid 2009
Lars Westerberg, Chairman of the Board (from 29 April 2008)	387	–	–	–
Dag Klackenber, Chairman of the Board (until 29 April 2008)	183	–	–	–
Viktoria Aastrup, Director (from 29 April 2008)	233	–	–	–
Carl-Gustaf Angelin, Director	41	–	–	–
Eli Arnstad, Director (from 29 April 2008)	187	–	–	–
Johnny Bernhardsson, Director	47	–	–	–
Christer Bådholm, Director	360	–	–	–
Ronny Ekwall, Director	41	–	–	–
Greta Fossum, Director (until 29 April 2008)	80	–	–	–
Jonas Iversen, Director (until 29 April 2008)	80	–	–	–
Lars-Göran Johansson, Deputy director (from 29 April 2008)	26	–	–	–
Hans-Olov Olsson, Vice Chairman of the Board	383	–	–	–
Lone Fønss Schrøder, Director	336	–	–	–
Tuija Soanjärvi, Director	336	–	–	–
Anders Sundström, Director	290	–	–	–
Lars Carlsson, Deputy director	41	–	–	–
Stig Lindberg, Deputy director (until 29 April 2008)	15	–	–	–
Per-Ove Lööf, Deputy director	55	–	–	–
Lars G. Josefsson, President and CEO	11,953	95	8,010	–
Jan Erik Back, First Senior Executive Vice President and CFO (until 15 August 2008)	2,903	71	533	–
Dag Andresen, First Senior Executive Vice President and CFO (from 1 October 2008)	825	2	248	–
Hans von Uthmann, Senior Executive Vice President	4,878	71	791	89
Tuomo Hatakka, Senior Executive Vice President	4,831	40	1,208	2,608
Hélène Biström, Deputy Head Business Group Nordic (from 1 February 2008)	1,754	61	291	–
Ann-Charlotte Dahlström, Senior Vice President Personnel	3,042	80	6,558 <sup>1)</sup>	–
Knut Leman, Senior Vice President Communications	2,008	56	3,325 <sup>1)</sup>	–
Hans-Jürgen Meyer, Finance Director Vattenfall Europe AG (from 1 February 2008)	3,543	43	761	2,975
Helmar Rendéz, Senior Vice President Strategies	2,610	69	630	–
Carolina Wallenius, Senior Vice President Communications (from 1 February 2008)	1,444	39	434	25
<b>Total</b>	<b>42,912</b>	<b>627</b>	<b>22,789</b>	<b>5,697</b>

1) Including severance costs.

**Board of Directors**

In 2008 the Board of Directors had two chairmen. Dag Klackenber, who served as Chairman until 29 April, received a fee of SEK 183 thousand (512). Lars Westerberg, who has been Chairman since 29 April, received a fee of SEK 387 thousand.

Combined fees of SEK 2,551 thousand (2,274) were paid to the other directors, as shown in the breakdown in the table above. Of the reported amount, a fee of SEK 70 thousand (64) was paid to each the four non-executive directors who served on the Board's Audit Committee, and a fee of SEK 13 thousand (13) was paid to the employee representative who held this position.

**President and Chief Executive Officer**

In 2008, Lars G. Josefsson, who is President and Chief Executive Officer of Vattenfall AB, received salary and other remuneration, including the value of a company car, amounting to SEK 12,048 thousand (8,711). As of 2005, no variable salary component is paid to the CEO.

The ordinary retirement age for Lars G. Josefsson (born 1950) is 60. Mr Josefsson has a pension solution which, in connection with his 2008 salary review, was locked at an amount corresponding to his pensionable salary in 2007, which was SEK 8,645 thousand. In connection with his salary review, Mr Josefsson was offered an amount that he was free to choose whether it would be applied toward a salary increase or pension premiums, whereby he chose a salary increase.

Occupational pension will thus be payable in the amount of 65% of said pensionable salary until 65 years of age. Thereafter, retirement benefits

will be payable in accordance with the ITP plan. Above and beyond this is a pension supplement of 32.5% of the portion of his salary in excess of 30 times the Base Amount (the Base Amount is a standard amount used for Swedish social security purposes). The latter supplemental benefit is time-restricted until the age of 80. After the age of 76, it will be scaled down by one-fifth for each subsequent year and ceases completely at the age of 80. The pension obligation is covered by periodic premiums paid to an insurance company. The benefits are vested, i.e., they are not conditional on future employment. In the event Vattenfall serves notice, the CEO is entitled to severance pay corresponding to a maximum of 24 months' salary. However, severance pay may only be paid until the contractual retirement age. The amount of the severance pay will be calculated on the basis of his base salary at the time notice was served. In the event of new employment or income from another source, the severance pay will be reduced by an amount corresponding to the new income or other benefits received during the period in question. Severance pay is paid monthly.

**Other senior executives***Salaries and other benefits*

For other senior executives who have been members of the Executive Group Management – a total of 10 individuals (10) – the sum of salaries and other compensation for 2008, including the value of company cars, was SEK 28,370 thousand (31,669). A breakdown and estimated variable compensation is shown in the table above.

*Pension benefits*

The costs for pension benefits in 2008 are shown in the table above.

Dag Andresen and Tuomo Hatakka have defined contribution pension solutions, which also applied for Jan Erik Back and Carolina Wallenius.

The other members of the Executive Group Management have defined benefit solutions – in one case with the opportunity to retire at 60 years of age, and for employees hired after 1 October 2003, with the opportunity to retire at 62 years of age and in one case at 65. For the employee with the opportunity to retire at 60, 70% of the base salary is payable between the ages of 60 and 65. The ITP plan applies from the age of 65, together with a supplementary pension (a so-called extension). The extension consists of 32.5% of the level of pensionable salary in excess of 20 times the Base Amount. Pensionable salary consists of the executives' base salary and annual variable salary, in accordance with the ITP plan. Occupational pension from the age 65 amounts to approximately 45% of base salary.

In cases where a retirement age of 62 applies (four individuals), in one case the ITP plan applies with an extension equivalent to 32.5% of the level of salary in excess of 30 times the Base Amount. In addition, the average of the last five years' fixed salaries is pensionable, while variable salary is not pensionable. The pension from age 62 amounts to approximately 40% of base salary. In the other cases a defined contribution pension solution applies.

All pension benefits are vested, i.e., they are not conditional on future employment. In the case of the defined benefit solution, premiums totalling SEK 237 thousand were paid to Alecta and for ITP-K. The rest of the pension cost (the majority) is an actuarially calculated cost consisting of the ITP liability and the annual change in the capital value of the portions over and above ITP. This is posted as a liability and is secured through the Vattenfall Pension Foundation. In cases where alternative ITP has been chosen (a so-called high-earner solution), premiums have been paid in instead of the equivalent amount being posted as a liability. Added to this is the so-called extension above and beyond ITP described above.

*Terms of notice on the part of the company*

For the Swedish executives, if the company serves notice, they are entitled to their salary during the contractual notice period (6 months), plus severance pay equivalent to 18 months' salary, which is paid monthly with a deduction for the amount corresponding to any new income during the period in question. A departure has been made from the principle of monthly payment and deduction, since payment that allows for a pension solution has been chosen.

However, Tuomo Hatakka, Hans-Jürgen Meyer and Helmar Rendez have fixed-term employment contracts.

**Drafting and decision processes**

In 2006 the Board established a compensation committee to conduct preparatory work for ongoing matters regarding the compensation of senior executives. The committee handles matters pertaining to annual salary reviews and other terms of employment for the CEO. In addition, the committee drafts principles regarding the salary and remuneration of the members of the Executive Group Management. The committee reports its work to the Board of Directors in such a way that the committee chair, who is the Vice Chairman of the Board, informs the Board about the committee's decisions. However, the Board as a whole must decide on matters concerning the CEO's employment and decide on the CEO's terms of employment. (See also page 41.)

**Incentive programme**

Against the background of the Swedish government's guidelines on executive compensation and incentive programmes, the Board of Vattenfall AB has adopted a programme which as of 2005 applies for the Swedish operations and for all employees in Sweden. In accordance with the government's

guidelines, the Group CEO does not receive any variable salary portion. Regarding other managers and employees, no one has a variable salary portion that exceeds the equivalent of two months' salary per year, or 16.7% of normal base salary. Also, for certain managers, the normal base salary can be reduced by 16.7%, depending on outcome. The maximum level for most employees averages approximately SEK 17 thousand per year.

As previously, the basis of the incentive programmes is the Group's goal for long-term value creation<sup>1</sup>. The Group target applies for all employees. Further, the result of each unit and individual is measured.

In other countries the Group's value creation target is also used in agreements on variable salary for senior executives and other employees, where applicable.

*Long-term target programme (LTI)*

Starting in 2008, the members of the Executive Group Management (excluding the CEO) and the business unit managers (totalling approximately 20 persons) also have agreements on the long-term target (LTI) for the period 2008–2010. In these agreements, targets are set only with respect to the Group's five strategic ambitions. The maximum outcome at the end of the period can amount to four extra months' salary if the three-year targets have been met.

1) Value creation = the positive change in operating profit less the required return on average net assets, where the required return is 11%.

## Note 48 Gender distribution among senior executives

	Women, %		Men, %	
	2008	2007	2008	2007
Gender distribution among Company directors	10	9	90	91
Gender distribution among other senior executives	18	14	82	86

## Note 49 Leasing

### Leasing expenses

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

	2008	2007
<b>Machinery/Equipment</b>		
Cost	827	658
Accumulated depreciation according to plan	-163	-101
<b>Residual value according to plan</b>	<b>664</b>	<b>557</b>

Future payment commitments, as of 31 December 2008, for leasing contracts and rental contracts are broken down as follows:

	Financial leasing, nominal	Financial leasing, present value	Operating leasing
2009	87	84	678
2010	87	79	568
2011	87	75	488
2012	86	71	447
2013	89	69	424
2014 and beyond	710	511	1,409
<b>Total</b>	<b>1,146</b>	<b>889</b>	<b>4,014</b>

The current year's leasing expenses for Group assets amounted to SEK 624 million (580).

Certain major leasing undertakings are described further in Note 45 to the consolidated accounts, Contingent liabilities.

### 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 2008, cost of assets reported under Operating leasing amounted to SEK 1,550 million (1,943). Accumulated depreciation amounted to SEK 709 million (851) and accumulated impairment losses amounted to SEK 34 million (34).

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

	Financial leasing	Operating leasing
2009	–	107
2010	–	95
2011	–	91
2012	–	87
2013	–	86
2014 and beyond	–	78
Less: Financial income	–	-9
<b>Total</b>	<b>–</b>	<b>535</b>

## Note 50 Auditors' fees

	2008	2007
<b>Audit fees</b>		
Ernst & Young	51	37
PricewaterhouseCoopers	13	12
Swedish National Audit Office	1	1
Other	–	7
<b>Total</b>	<b>65</b>	<b>57</b>
<b>Other fees</b>		
Ernst & Young	23	11
PricewaterhouseCoopers	34	9
Other	–	4
<b>Total</b>	<b>57</b>	<b>24</b>

## Note 51 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 47 to the consolidated accounts, Average number of employees and personnel costs.

Disclosures of transactions with associated companies in 2008 and associated receivables and liabilities as per 31 December 2008 are described below.

### SwePol Link AB

SwePol Link AB handles the electricity cable that links together the Nordic and Polish electricity systems in the aim of achieving higher delivery reliability and more effective utilisation of generation plants. Purchases from the company amounted to SEK 187 million. Trade receivables as per 31 December amounted to SEK 331 million. Trade liabilities to the company amounted to SEK 18 million.

### PiteEnergi AB

PiteEnergi sells electricity, heat, broadband Internet access and other services in the Piteå area. Electricity is generated by the company's own hydro power plants. Vattenfall's sales revenue from the company amounted to SEK 24 million. Trade receivables as per 31 December amounted to SEK 1 million.

### Plusenergi AB

The main product consists of electricity sales to both retail and corporate customers. The company focuses on the market in Sweden's Västra Götaland region. Vattenfall's sales revenue from the company amounted to SEK 28 million. Trade receivables as per 31 December totalled SEK 2 million, while interest-bearing receivables amounted to SEK 5 million.

### Luleå Energi AB

Luleå Energi's business areas include electricity trading operations, generation and distribution of district heating and optical network activities. Vattenfall's sales revenue from the company amounted to SEK 472 million. Trade receivables as per 31 December totalled SEK 2 million, while trade liabilities amounted to SEK 5 million.

**Gulsele AB**

Gulsele sells electricity generated by its own hydro power plants. Vattenfall's interest income from the company amounted to SEK 2 million.

**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 5 million, while purchases from the company amounted to SEK 165 million. Trade receivables and trade liabilities as per 31 December amounted to SEK 1 million and SEK 67 million, respectively.

**Kernkraftwerk Brokdorf GmbH & Co. oHG**

This is a nuclear power plant from which Vattenfall purchases electricity. Purchases amounted to SEK 574 million. Sales revenue from the company amounted to SEK 2 million. Vattenfall's interest expense to the company amounted to SEK 65 million. Trade liabilities and loan liabilities as per 31 December amounted to SEK 133 million and SEK 3,970 million, respectively.

**Kernkraftwerk Krümmel GmbH & Co. oHG**

This is a nuclear power plant from which Vattenfall purchases electricity. Purchases amounted to SEK 1,476 million. Sales revenue from the company amounted to SEK 683 million. Vattenfall's interest expense to the company amounted to SEK 378 million. Trade receivables amounted to SEK 63 million as per 31 December and interest-bearing receivables amounted to SEK 340 million. Trade liabilities and loan liabilities as per 31 December amounted to SEK 654 million and SEK 10,042 million, respectively.

**Kernkraftwerk Stade GmbH & Co. oHG**

This is a nuclear power plant that is being decommissioned. Vattenfall's purchases from the company amounted to SEK 185 million. Vattenfall's interest expense to the company amounted to SEK 103 million. Trade liabilities and loan liabilities as per 31 December amounted to SEK 131 million and SEK 2,869 million, respectively.

**GASAG Berliner Gaswerke AG**

GASAG Berliner Gaswerke sells, distributes and stores natural gas in the Berlin area. Vattenfall received SEK 79 million in sales revenue from the company, and purchases from the company totalled SEK 3,936 million. Trade receivables amounted to SEK 4 million, while trade liabilities amounted to SEK 509 million.

**ENSO Energie Sachsen Ost AG**

The company generates and distributes electricity and heat. The company also provides services in gas, water, telecommunications and waste collection. Vattenfall received SEK 2,292 million in sales revenue from the company, while purchases amounted to SEK 277 million. Trade receivables and liabilities as per 31 December amounted to SEK 156 million and SEK 1 million, respectively.

**Städtische Werke AG, Kassel**

This company provides electricity, heat, gas, water and waste collection services. Vattenfall's sales revenue from the company amounted to SEK 2,242 million, while purchases from the company amounted to SEK 2,259 million. Trade receivables and trade liabilities as per 31 December amounted to SEK 251 million and SEK 250 million, respectively.

**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 625 million, while purchases from the company amounted to SEK 140 million. Operating liabilities as per 31 December amounted to SEK 1 million.

**DOTI Deutsche Offshore Testfeldt und Infrastructure GmbH KG**

DOTI conducts planning work and operates an offshore wind power test facility. Vattenfall's purchases from the company amounted to SEK 1 million.

**Note 52 Important estimations and assessments**

The various provisions made in Vattenfall's consolidated balance sheet are reviewed on an annual basis. The review of 2008 has led to changes in earlier assumptions about discount rates in the calculation of provisions as follows:

For pension provisions in Sweden, the discount rate was adjusted from 4.5% to 4.0% compared with a year ago. In Germany the corresponding discount rate was adjusted from 5.25% to 5.75%.

For provisions for future expenses of nuclear operations in Sweden, the discount rate was adjusted from 5.0% to 4.5%. The corresponding discount rate in Germany, which also is applicable for provisions for future expenses of mining operations and other environmental measures/undertakings, was adjusted from 5.5% to 5.25%.

For other provisions than those mentioned above, the discount rate is unchanged compared with a year ago, at 5.0%, for provisions made in the Nordic countries, while the discount rate for such provisions made in Germany, was adjusted from 5.5% to 5.0%.

**Note 53 Events after the balance sheet date**

On 23 February 2009 Vattenfall announced it has made an all cash offer of EUR 8.5 billion enterprise value for 100% of the shares of the Dutch energy company N.V. Nuon Energy. Nuon's grid company Alliander is not included in the transaction. The partners have agreed that Vattenfall acquires initially 49% of the shares. The remaining 51% of the shares will be acquired in the coming six years under fixed terms. Following the initial acquisition of 49% Vattenfall will have operational control over Nuon. The transaction is subject to the approval of at least 80% of Nuon's shareholders and clearance by the European Commission. Nuon and Vattenfall expect to complete the closing of this transaction at mid-year 2009.

# PARENT COMPANY

## Parent Company Income Statement

Amounts in SEK million, 1 January–31 December	Note	2008	2007
Net sales	4, 5	31,844	25,223
Cost of products sold	6	-18,118	-14,974
<b>Gross profit</b>		<b>13,726</b>	<b>10,249</b>
Selling expenses		-850	-857
Administrative expenses		-1,726	-1,657
Research and development costs		-329	-280
Other operating income	7	277	168
Other operating expenses	8	-117	-185
<b>Operating profit</b>	9, 10	<b>10,981</b>	<b>7,438</b>
Result from participations in Group companies	11	34,579	1,038
Result from participations in associated companies	12	12	-2
Result from other shares and participations	13	20	-5
Interest income and similar profit/loss items	14	1,558	1,545
Interest expenses and similar profit/loss items	15	-13,431	-6,046
Group contributions		1,315	1,564
<b>Profit before appropriations and tax</b>		<b>35,034</b>	<b>5,532</b>
Appropriations	16	3,498	452
<b>Profit before tax</b>		<b>38,532</b>	<b>5,984</b>
Income tax expense	17	-1,024	-1,529
<b>Profit for the year</b>		<b>37,508</b>	<b>4,455</b>

## Parent Company Balance Sheet

Amounts in SEK million	Note	31 Dec. 2008	31 Dec. 2007
<b>Assets</b>			
<b>Non-current assets</b>			
Intangible assets	18		
Capitalised development costs		16	69
Concessions and similar rights		20	3
Renting and similar rights		14	17
<b>Total intangible assets: non-current</b>		<b>50</b>	<b>89</b>
<b>Property, plant and equipment</b>	19		
Buildings and land		11,229	11,411
Plants and machinery and other technical installations		7,100	7,367
Equipment, tools, and fixtures and fittings		36	41
Construction in progress		1,783	988
<b>Total property, plant and equipment</b>		<b>20,148</b>	<b>19,807</b>
<b>Other non-current assets</b>			
Participations in Group companies	20, 21	87,542	55,658
Receivables from Group companies	22	7,630	6,512
Participations in associated companies	20, 21	520	520
Receivables from associated companies	22	333	362
Other shares and participations	20, 21	4,632	33
Deferred tax assets	17	1,615	321
Other non-current receivables	22	1,032	2,196
<b>Total other non-current assets</b>		<b>103,304</b>	<b>65,602</b>
<b>Total non-current assets</b>		<b>123,502</b>	<b>85,498</b>
<b>Current assets</b>			
Inventories	23	322	310
Intangible assets: current	24	710	432
Current receivables	25	33,353	40,032
Current tax assets	17	1,688	274
Cash and cash equivalents	26	375	352
<b>Total current assets</b>		<b>36,448</b>	<b>41,400</b>
<b>Total assets</b>		<b>159,950</b>	<b>126,898</b>
<b>Equity, provisions and liabilities</b>			
<b>Equity</b>			
Restricted equity			
Share capital (131,700,000 shares with a quota value of SEK 50)		6,585	6,585
Statutory reserve		1,286	1,286
Non-restricted equity			
Retained earnings		10,633	19,667
Profit for the year		37,508	4,455
<b>Total equity</b>		<b>56,012</b>	<b>31,993</b>
Untaxed reserves	16	7,495	10,993
Provisions	27	109	144
<b>Non-current liabilities</b>			
Non-current interest-bearing liabilities	28	59,557	58,214
Non-current noninterest-bearing liabilities	29	2,803	2,643
<b>Total non-current liabilities</b>		<b>62,360</b>	<b>60,857</b>
<b>Current liabilities</b>			
Current interest-bearing liabilities	30	7,932	7,197
Other current noninterest-bearing liabilities	31	26,042	15,714
<b>Total current liabilities</b>		<b>33,974</b>	<b>22,911</b>
<b>Total equity, provisions and liabilities</b>		<b>159,950</b>	<b>126,898</b>
Pledged assets	32	85	3,218
Contingent liabilities	33	205,020	118,388
Commitments under consortium agreements	34		

## Parent Company Statement of Changes in Equity

Amount i SEK million	Share capital	Statutory reserve	Non-restricted capital	Total
Balance brought forward 2007	6,585	1,286	27,844	35,715
Dividend paid to equity holders	-	-	-7,500	-7,500
Group contributions	-	-	-940	-940
Tax effect of Group contributions	-	-	263	263
Profit for the year	-	-	4,455	4,455
<b>Balance carried forward 2007</b>	<b>6,585</b>	<b>1,286</b>	<b>24,122</b>	<b>31,993</b>
Dividend paid to equity holders	-	-	-8,000	-8,000
Group contributions	-	-	-7,624	-7,624
Tax effect of Group contributions	-	-	2,135	2,135
Profit for the year	-	-	37,508	37,508
<b>Balance carried forward 2008</b>	<b>6,585</b>	<b>1,286</b>	<b>48,141</b>	<b>56,012</b>

As of 31 December 2008 the registered share capital comprised 131,700,000 shares with a quota value of SEK 50 each.

## Parent Company Cash Flow Statement

Amounts in SEK million, 1 January–31 December	2008	2007
<b>Operating activities</b>		
<b>Funds from operations (FFO)</b>		
Profit for the year	37,508	4,455
Adjustments for the effect of items not included in the cash flow:		
Income tax expense	1,024	1,529
Appropriations	-3,498	-452
Depreciation and amortisation	806	832
Dividend-contingent Group contributions	-1,315	-1,564
Unrealised exchange rate effects	6,102	2,170
Change in provisions	-35	-40
Capital gains	-31,409	-
Other	1,270	-
Tax paid	-2,872	-1,844
Cash flow from changes in operating assets and operating liabilities	2,998	8,421
<b>Cash flow from operating activities</b>	<b>10,579</b>	<b>13,507</b>
<b>Investing activities</b>		
Investments in Group companies, associated companies and other shares and participations	-9,139	-10
Investments in property, plant and equipment and intangible assets: non-current	-1,320	-1,103
Investment grants received	10	-
New share issue/shareholder contribution rendered	-45,247	-
Divestments of property, plant and equipment and intangible assets: non-current	271	363
Divestments of shares and participations	49,227	102
<b>Cash flow from investing activities</b>	<b>-6,198</b>	<b>-648</b>
<b>Cash flow before financing activities</b>	<b>4,381</b>	<b>12,859</b>
<b>Financing activities</b>		
Changes in loans	2,078	-7,256
Group contributions received	1,564	2,068
Dividend paid to equity holders	-8,000	-7,500
<b>Cash flow from financing activities</b>	<b>-4,358</b>	<b>-12,688</b>
<b>Cash flow for the year</b>	<b>23</b>	<b>171</b>
<b>Cash and cash equivalents</b>		
Cash and cash equivalents at the beginning of the year	352	181
Cash flow for the year	23	171
<b>Cash and cash equivalents at the end of the year</b>	<b>375</b>	<b>352</b>

Interest paid totalled SEK 3,343 million (3,202) and interest received totalled SEK 1,558 million (1,545). Dividends received totalled SEK 3,269 million (769).

# NOTES TO THE PARENT COMPANY ACCOUNTS

(Amounts in SEK million unless stated otherwise.)

## Contents

Note	Page
1 Company information	112
2 Accounting principles	112
3 Exchange rates	113
4 Net sales	113
5 Intra-Group transactions	113
6 Cost of products sold	113
7 Other operating income	113
8 Other operating expenses	113
9 Depreciation and amortisation	113
10 Impairment losses	113
11 Result from participations in Group companies	113
12 Result from participations in associated companies	113
13 Result from other shares and participations	113
14 Interest income and similar profit/loss items	113
15 Interest expenses and similar profit/loss items	114
16 Appropriations and untaxed reserves	114
17 Income tax expense	114
18 Intangible assets: non-current	114
19 Property, plant and equipment	115
20 Participations in Group companies, associated companies and other shares and participations	116
21 Shares and participations	116
22 Receivables from Group companies, associated companies and other non-current receivables	116
23 Inventories	116
24 Intangible assets: current	116
25 Current receivables	116
26 Cash and cash equivalents	117
27 Provisions	117
28 Non-current interest-bearing liabilities	118
29 Non-current noninterest-bearing liabilities	118
30 Current interest-bearing liabilities	118
31 Other current noninterest-bearing liabilities	118
32 Pledged assets	118
33 Contingent liabilities	118
34 Commitments under consortium agreements	119
35 Average number of employees and personnel costs	119
36 Sickness-related absence	119
37 Gender distribution among senior executives	119
38 Leasing	119
39 Auditors' fees	119
40 Related party disclosures	119

## Note 1 Company information

Vattenfall AB's 2008 Annual Report was approved in accordance with a decision by the Board of Directors of 17 March 2009. Vattenfall AB, which is the Parent Company in the Vattenfall Group, is a limited liability company with its registered office in Stockholm and with the address SE-162 87 Stockholm, Sweden. The Parent Company's balance sheet and income statement included in the Annual Report will be submitted at the Annual General Meeting (AGM) on 29 April 2009.

## Note 2 Accounting principles

### General

The Parent Company Vattenfall AB's accounts are prepared in accordance with the Swedish Annual Accounts Act and recommendation RFR 2.1 – Accounting for Legal Entities, issued by the Swedish Financial Reporting Board (RFR). RFR 2.1 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 this is 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 2.1, which entails that financial instruments are reported at cost.

Accounting principles and methods of calculations are unchanged from those applied in the 2007 Annual Accounts.

New and amended accounting standards effective as of 2009 are expected to have no or minimal impact on Vattenfall AB's financial statements.

The accounting principles applied are stated in the applicable parts of Note 2 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 in the balance sheet corresponds to these pension obligations, recognised net against plan assets of Vattenfall's Pension Foundation.

### 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 in 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 4 to the consolidated accounts.

**Note 4 Net sales**

	2008	2007
Sales including excise taxes		
sale of goods (electricity, heat, etc.)	31,095	23,641
rendering of services	970	1,773
Excise taxes	-221	-191
<b>Net sales</b>	<b>31,844</b>	<b>25,223</b>

**Net sales per geographic area**

	2008	2007
Nordic countries	28,816	24,372
Germany	1,532	432
Poland	1,487	419
Other	9	-
<b>Total</b>	<b>31,844</b>	<b>25,223</b>

**Net sales per segment**

	2008	2007
Electricity Generation	10,162	4,939
Electricity Markets	19,336	17,846
Heat	2,115	2,186
Other	231	252
<b>Total</b>	<b>31,844</b>	<b>25,223</b>

**Note 5 Intra-Group transactions**

Of the Parent Company's total income from sales and total purchase costs, transactions with Group companies account for 10% (9%) of sales and 27% (35%) of purchase costs.

**Note 6 Cost of products sold**

Direct costs include production taxes and duties of SEK 217 million (222) and property taxes of SEK 1,270 million (982).

**Note 7 Other operating income**

Other operating income consists primarily of capital gains from the sale of non-current assets, emission allowances and certificates, rental income, insurance compensation and operationally derived foreign exchange gains.

**Note 8 Other operating expenses**

Other operating expenses consist primarily of capital losses on divestments of non-current assets, emission allowances and certificates and operationally derived exchange rate losses.

**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:

	2008	2007
Cost of products sold	745	756
Selling expenses	52	53
Administrative expenses	7	1
<b>Total</b>	<b>804</b>	<b>810</b>

Amortisation of non-current intangible assets is included above in Cost of products sold in the amount of SEK 4 million (2), in Selling expenses in the amount of SEK 51 million (52) and in Administrative expenses in the amount of SEK 4 million (2).

**Note 10 Impairment losses**

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

	2008	2007
Cost of products sold	-	6
Administrative expenses	2	-
<b>Total</b>	<b>2</b>	<b>6</b>

Impairment losses of non-current intangible assets are included above in Administrative expenses in the amount of SEK 2 million (0).

**Note 11 Result from participations in Group companies**

	2008	2007
Dividends	3,255	757
Impairment losses	-	-11
Capital gains/losses on divestments <sup>1</sup>	31,324	292
<b>Total</b>	<b>34,579</b>	<b>1,038</b>

1) For 2008 attributable to an intra-Group non-taxable capital gain on the sale of shares to a wholly owned subsidiary.

**Note 12 Result from participations in associated companies**

Attributable to dividends from associated companies and capital gains/losses from the sale of associated companies.

**Note 13 Result from other shares and participations**

	2008	2007
Dividends	2	2
Impairment losses	-	-5
Capital gains/losses on divestments	18	-2
<b>Total</b>	<b>20</b>	<b>-5</b>

**Note 14 Interest income and similar profit/loss items**

	2008	2007
Interest income from subsidiaries	1,099	1,188
Other interest income	459	357
<b>Total</b>	<b>1,558</b>	<b>1,545</b>

**Note 15 Interest expenses and similar profit/loss items**

	2008	2007
Interest expenses to subsidiaries	3,341	3,171
Other interest expenses	2	31
Foreign exchange losses	10,088	2,844
<b>Total</b>	<b>13,431</b>	<b>6,046</b>

**Note 16 Appropriations and untaxed reserves**

	Balance brought forward	Provision/Dissolution (-)	Balance carried forward
Accelerated depreciation	440	474	914
2003 Tax allocation reserve	966	-966	-
2004 Tax allocation reserve	1,295	-1,295	-
2005 Tax allocation reserve	2,726	-1,704	1,022
2006 Tax allocation reserve	1,737	-7	1,730
2007 Tax allocation reserve	2,307	-	2,307
2008 Tax allocation reserve	1,522	-	1,522
<b>Total</b>	<b>10,993</b>	<b>-3,498</b>	<b>7,495</b>

**Note 17 Income tax expense**

The reported income tax expense is broken down as follows:

	2008	2007
Current tax	2,318	1,456
Deferred tax	-1,294	73
<b>Total</b>	<b>1,024</b>	<b>1,529</b>

The income tax expense for the year attributable to previous years amounts to SEK 183 million (88). The tax effect of the standard tax interest on tax allocation reserves amounts to SEK 89 million (77).

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

%	2008	2007
Swedish income tax rate	28.0	28.0
Appropriations	2.8	2.3
Tax adjustment for previous periods	-0.9	-1.6
Non-taxable income <sup>1</sup>	-27.4	-8.0
Non-deductible expenses	0.1	7.1
Amended tax rate	0.3	-
Other	-	-0.1
<b>Effective tax rate<sup>2</sup></b>	<b>2.9</b>	<b>27.7</b>
Tax rate, current tax <sup>3</sup>	6.6	26.3

- 1) Non-taxable income includes a 24.4% effect due to an intra-Group capital gain.
- 2) Tax expense according to the Parent Company income statement in relation to profit before appropriations and tax.
- 3) Tax expense according to the Parent Company income statement excluding reported deferred tax in relation to profit before appropriations and tax.

**Note 18 Intangible assets: non-current**

	Capitalised development costs		Goodwill		Concessions and similar rights		Renting and similar rights		Total	
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
<b>Cost</b>										
Cost brought forward	301	301	13	13	344	350	50	63	708	727
Investments	-	-	-	-	25	4	1	3	26	7
Divestments/Disposals	-	-	-	-	-	-1	-4	-25	-4	-26
Reclassifications	-	-	-	-	-	-9	-	9	-	-
<b>Accumulated cost carried forward</b>	<b>301</b>	<b>301</b>	<b>13</b>	<b>13</b>	<b>369</b>	<b>344</b>	<b>47</b>	<b>50</b>	<b>730</b>	<b>708</b>
<b>Accumulated amortisation according to plan</b>										
Amortisation brought forward	-118	-67	-13	-13	-341	-340	-33	-40	-505	-460
Amortisation for the year	-51	-51	-	-	-8	-2	-1	-2	-60	-55
Divestments/Disposals	-	-	-	-	-	1	1	9	1	10
<b>Accumulated depreciation carried forward</b>	<b>-169</b>	<b>-118</b>	<b>-13</b>	<b>-13</b>	<b>-349</b>	<b>-341</b>	<b>-33</b>	<b>-33</b>	<b>-564</b>	<b>-505</b>
<b>Impairment losses</b>										
Impairment losses brought forward	-114	-114	-	-	-	-	-	-	-114	-114
Impairment losses for the year	-2	-	-	-	-	-	-	-	-2	-
<b>Accumulated impairment losses carried forward</b>	<b>-116</b>	<b>-114</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-116</b>	<b>-114</b>
<b>Residual value according to plan carried forward</b>	<b>16</b>	<b>69</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>3</b>	<b>14</b>	<b>17</b>	<b>50</b>	<b>89</b>
Accumulated excess amortisation	-	-21	-	-	-	-1	-	-5	-	-27
<b>Book value</b>	<b>16</b>	<b>48</b>	<b>-</b>	<b>-</b>	<b>20</b>	<b>2</b>	<b>14</b>	<b>12</b>	<b>50</b>	<b>62</b>

At 31 December 2008 there were no contractual commitments for the acquisition of non-current intangible assets.

## Note 19 Property, plant and equipment

	Buildings and land <sup>1</sup>		Plants and machinery and other technical installations		Equipment tools, and fixtures and fittings		Construction in progress		Total	
	2008	2007	2008	2007	2008	2007	2008	2007	2008	2007
<b>Cost</b>										
Cost brought forward	17,467	17,066	15,504	15,498	145	129	988	1,360	34,104	34,053
Investments	-	13	1	1	5	21	1,288	1,064	1,294	1,099
Grants received	-	-	-	-	-	-	-10	-3	-10	-3
Transfer from construction in progress	80	437	397	984	-	2	-479	-1,423	-2	-
Divestments/Disposals	-34	-49	-396	-995	-15	-7	-4	-10	-449	-1,061
Reclassifications	-	-	-	16	-	-	-	-	-	16
<b>Accumulated cost carried forward</b>	<b>17,513</b>	<b>17,467</b>	<b>15,506</b>	<b>15,504</b>	<b>135</b>	<b>145</b>	<b>1,783</b>	<b>988</b>	<b>34,937</b>	<b>34,104</b>
<b>Accumulated depreciation according to plan</b>										
Depreciation brought forward	-6,056	-5,832	-8,131	-8,301	-104	-101	-	-	-14,291	-14,234
Depreciation for the year	-249	-246	-488	-501	-7	-8	-	-	-744	-755
Divestments/Disposals	21	22	219	687	12	5	-	-	252	714
Reclassifications	-	-	-	-16	-	-	-	-	-	-16
<b>Accumulated depreciation carried forward</b>	<b>-6,284</b>	<b>-6,056</b>	<b>-8,400</b>	<b>-8,131</b>	<b>-99</b>	<b>-104</b>	<b>-</b>	<b>-</b>	<b>-14,783</b>	<b>-14,291</b>
<b>Impairment losses</b>										
Impairment losses brought forward	-	-	-6	-	-	-	-	-	-6	-
Impairment losses for the year	-	-	-	-6	-	-	-	-	-	-6
<b>Accumulated impairment losses carried forward</b>	<b>-</b>	<b>-</b>	<b>-6</b>	<b>-6</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-</b>	<b>-6</b>	<b>-6</b>
<b>Residual value according to plan carried forward</b>	<b>11,229</b>	<b>11,411</b>	<b>7,100</b>	<b>7,367</b>	<b>36</b>	<b>41</b>	<b>1,783</b>	<b>988</b>	<b>20,148</b>	<b>19,807</b>
Accumulated excess depreciation	-	-	-6,507	-6,005	-11	-12	-	-	-6,518	-6,017
<b>Book value</b>	<b>11,229</b>	<b>11,411</b>	<b>593</b>	<b>1,362</b>	<b>25</b>	<b>29</b>	<b>1,783</b>	<b>988</b>	<b>13,630</b>	<b>13,790</b>

1) Cost for land and buildings includes cost for land and water rights amounting to SEK 6,623 million (6,617), which are not subject to depreciation.

### Tax assessment values

	2008	2007
Buildings	36,772	36,681
Land	22,279	21,610
<b>Total</b>	<b>59,051</b>	<b>58,291</b>

Distribution lines and transformer stations are not subject to tax assessment values.

At 31 December 2008 there were no contractual commitments for the acquisition of property, plant and equipment.

## Note 20 Participations in Group companies, associated companies and other shares and participations

	Participations in Group companies		Participations in associated companies		Other shares and participations	
	2008	2007	2008	2007	2008	2007
Balance brought forward	55,658	55,715	520	520	33	38
Investments/acquisitions	4,537	7	-	-	4,602	3
Shareholder contributions <sup>1</sup>	45,247	-	-	-	-	-
Divestments <sup>1</sup>	-17,900	-7	-	-	-3	-3
Merged shareholdings	-	-46	-	-	-	-
Impairment losses	-	-11	-	-	-	-5
<b>Balance carried forward</b>	<b>87,542</b>	<b>55,658</b>	<b>520</b>	<b>520</b>	<b>4,632</b>	<b>33</b>

1) Shareholder contributions and divestments are mainly attributable to restructuring in the Group.

## Note 21 Shares and participations

For a breakdown of the Parent Company's shares and participations in Group companies, Associated companies and Other shares and participations, see Notes 22–24 to the consolidated accounts.

## Note 22 Receivables from Group companies, associated companies and other non-current receivables

	Receivables from Group companies		Receivables from associated companies		Other non-current receivables	
	2008	2007	2008	2007	2008	2007
Balance brought forward	6,512	5,195	362	392	2,196	3,433
New receivables	1,118	1,317	-	-	-	-
Payments received	-	-	-29	-30	-1164	-1237
<b>Balance carried forward</b>	<b>7,630</b>	<b>6,512</b>	<b>333</b>	<b>362</b>	<b>1,032</b>	<b>2,196</b>

## Note 23 Inventories

	2008	2007
Biomass	48	44
Fossil fuels	246	243
Materials and spare parts	28	23
<b>Total</b>	<b>322</b>	<b>310</b>

The amount of inventories recognised as an expense in 2008 amount to SEK 650 million (1,794). No impairment losses of inventories or reversal of impairment losses were recognised during the year.

## Note 24 Intangible assets: current

Attributable to emission allowances and certificates. See Note 2 to the consolidated accounts, Accounting principles.

	Emission allowances		Certificates	
	2008	2007	2008	2007
Balance brought forward	-	5	432	-
Purchases	139	1	1,435	-
Received free of charge	-	-	236	-
Sold	-81	-	-1,074	-
Redeemed	-	-6	-377	-
Reclassification from inventories	-	-	-	432
<b>Balance carried forward</b>	<b>58</b>	<b>-</b>	<b>652</b>	<b>432</b>

## Note 25 Current receivables

	2008	2007
Accounts receivable – trade	3,631	3,289
Receivables from Group companies	26,579	30,306
Receivables from associated companies	87	76
Other receivables	517	3,581
Prepaid expenses and accrued income	2,539	2,780
<b>Total</b>	<b>33,353</b>	<b>40,032</b>

**Age analysis of Current receivables**

The collection period is normally 30 days

	2008			2007		
	Receivables, gross	Receivables impaired	Receivables, net	Receivables, gross	Receivables impaired	Receivables, net
<b>Accounts receivable – trade</b>						
Not due	3,431	–	3,431	3,143	–	3,143
Due 1–30 days	141	–	141	75	–	75
Due 31–90 days	26	–	26	22	–	22
Due > 90 days	57	24	33	83	34	49
<b>Total</b>	<b>3,655</b>	<b>24</b>	<b>3,631</b>	<b>3,323</b>	<b>34</b>	<b>3,289</b>
<b>Receivables from group companies</b>						
Not due	26,579	–	26,579	30,306	–	30,306
<b>Total</b>	<b>26,579</b>	<b>–</b>	<b>26,579</b>	<b>30,306</b>	<b>–</b>	<b>30,306</b>
<b>Receivables from associated companies</b>						
Not due	87	–	87	74	–	74
Due 1–30 days	–	–	–	2	–	2
<b>Total</b>	<b>87</b>	<b>–</b>	<b>87</b>	<b>76</b>	<b>–</b>	<b>76</b>
<b>Other receivables</b>						
Not due	497	–	497	3,570	–	3,570
Due 1–30 days	–	–	–	4	–	4
Due 31–90 days	–	–	–	7	–	7
Due > 90 days	20	–	20	–	–	–
<b>Total</b>	<b>517</b>	<b>–</b>	<b>517</b>	<b>3,581</b>	<b>–</b>	<b>3,581</b>

**Note 26 Cash and cash equivalents**

Cash and cash equivalents amount to SEK 375 million (352).

Funds in the Group cash pool managed by the subsidiary Vattenfall Treasury AB amount to SEK 16,525 million (22,667) and are reported in the balance sheet as current receivables from Group companies.

**Note 27 Provisions**

	2008	2007
Personnel-related provisions for non-pension purposes	109	144
<b>Total</b>	<b>109</b>	<b>144</b>
	2008	2007
Pension obligations <sup>1,2</sup>	2,763	2,736
Less: Plan assets, carrying amount	-2,763	-2,736
<b>Total pension provisions at year-end</b>	<b>–</b>	<b>–</b>
1) Of which, information registered by PRI	1,807	1,685
2) Of which, covered by credit insurance with FPG/PRI	2,468	2,380

The Parent Company's pension obligations are subject in their entirety to the Act on Safeguarding of Pension Obligations ("Tryggandelagen").

	2008	2007
Fair value of plan assets at the beginning of the year	3,642	3,586
Return on plan assets	-280	56
<b>Fair value of plan assets at the end of the year</b>	<b>3,362</b>	<b>3,642</b>
Plan assets consist of the following:	2008	2007
Equity securities	874	1,348
Debt instruments	1,916	1,748
Other	572	546
<b>Total</b>	<b>3,362</b>	<b>3,642</b>

**Note 28 Non-current interest-bearing liabilities**

Fully attributable to liabilities to Group companies in the amount of SEK 59,557 million (58,214), of which SEK 21,673 million (18,738) falls due after more than five years.

Liabilities to Group companies are mainly attributable to long-term borrowings from Vattenfall Treasury AB.

**Note 29 Non-current noninterest-bearing liabilities**

	2008	2007
Liabilities to Group companies	2,467	2,264
Other liabilities	336	379
<b>Total</b>	<b>2,803</b>	<b>2,643</b>

Liabilities to Group companies are mainly attributable to long-term liabilities to Forsmarks Kraftgrupp AB for power charges. For this liability there shall be, in accordance with an agreement between the co-owners, no interest payable on the debt. Of other liabilities, SEK 201 million (245) falls due after more than five years.

**Note 30 Current interest-bearing liabilities**

SEK 0 million (347) is attributable to the Swedish tax account and SEK 7,932 million (6,850) is attributable to liabilities to Group companies.

**Note 31 Other current noninterest-bearing liabilities**

	2008	2007
Advance payments from customers	28	28
Accounts payable – trade	758	1,169
Liabilities to Group companies	22,356	12,025
Liabilities to associated companies	28	27
Other liabilities	754	682
Accrued expenses and deferred income	2,118	1,783
<b>Total</b>	<b>26,042</b>	<b>15,714</b>

Breakdown of accrued expenses and deferred income:

	2008	2007
Accrued personnel-related costs	163	143
Other accrued expenses	327	213
Deferred income and accrued expenses, electricity	650	499
Deferred income and accrued expenses, Group companies	978	901
Other deferred income	-	27
<b>Total</b>	<b>2,118</b>	<b>1,783</b>

**Note 32 Pledged assets**

	2008	2007
Blocked bank funds as security for trading on Nord Pool	31	53
Blocked bank funds as security for redemption of minority shares	54	3,165
<b>Total</b>	<b>85</b>	<b>3,218</b>

**Note 33 Contingent liabilities**

	2008	2007
<b>Guarantees</b>		
of which:		
<b>for Vattenfall Treasury's:</b>		
lending to Group companies, associated companies and other	45,084	27,665
external borrowing for Group companies	71,377	42,370
borrowing from Group companies and associated companies	46,912	25,115
<b>for lending by:</b>		
Group companies, associated companies and other	5,291	5,305
Swedish Nuclear Waste Fund	17,113	6,132
Contract guarantees	8,215	130
Other contingent liabilities	11,028	11,671
<b>Total</b>	<b>205,020</b>	<b>118,388</b>

Vattenfall has obligations to compensate certain owners of water rights, in rivers where hydro power stations are built, through the delivery of power. During 2008 such compensation deliveries amounted to 0.93 TWh (1.04), corresponding to approximately SEK 465 million (295).

The Parent Company's contingent liabilities pertaining to subsidiaries amounted to SEK 189,084 million (110,949), which are included in the reported contingent liabilities. Vattenfall Treasury AB is a wholly owned subsidiary of Vattenfall AB with responsibility for the Group's borrowing, liquidity management and management of therewith associated financial risks. Vattenfall AB has provided, in total, SEK 163,448 million (97,391) in guarantees to cover all intra-Group and external obligations of Vattenfall Treasury AB and subsidiaries' obligations to Vattenfall Treasury AB. This amount is included in the reported contingent liabilities. As security for energy trading conducted by the subsidiary Vattenfall Europe Trading GmbH, Vattenfall AB has provided guarantees with a total value of SEK 17,044 million (11,096). On the balance sheet date, utilised guarantees totalling SEK 8,141 million (1,785) were included in the reported contingent liabilities.

Under Swedish law (the Act (2006:647) on the financing of future expenses for spent nuclear fuel), Sweden's nuclear power companies are required to pledge assets to the Swedish state (the Swedish Nuclear Waste Fund) to guarantee that sufficient funds exist to cover the future costs of nuclear waste management. As security for the subsidiaries Forsmarks Kraftgrupp AB and Ringhals AB, Vattenfall AB has made guarantee commitments for a combined value of SEK 17,113 million (6,132). The amounts are included in the company's reported contingent liabilities. Two types of guarantee commitments have been made. The one guarantee commitment is intended to cover the requisite need for fees that has been decided on for the fees that have not yet been paid in during the so-called earnings period (25 years of operation – so-called Financing Security). The other guarantee commitment pertains to future cost increases stemming from unforeseen events (so-called Complementary Security). Both amounts 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%. The security amounts also apply for 2009.

See also Note 45 to the consolidated accounts.

### Note 34 Commitments under consortium agreements

See Note 46 to the consolidated accounts.

### Note 35 Average number of employees and personnel costs

Average number employees	2008			2007		
	Men	Women	Total	Men	Women	Total
Sweden	777	276	1,053	802	283	1,085
Other countries	-	-	-	2	-	2
<b>Total</b>	<b>777</b>	<b>276</b>	<b>1,053</b>	<b>804</b>	<b>283</b>	<b>1,087</b>

Personnel costs	2008		2007	
	SEK million	SEK million	SEK million	SEK million
Salaries and other remuneration	685	646	685	646
Social security expenses (of which pension costs) <sup>1</sup>	(239)	(202)	(239)	(202)
<b>Total</b>	<b>1,208</b>	<b>1,114</b>	<b>1,208</b>	<b>1,114</b>

1) SEK 11 million (9) 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 71 million (64).

None of the company directors receives any pension benefits in connection with board duties.

Salaries and other remuneration	2008			2007		
	Senior executives <sup>1</sup>	Other employees	Total	Senior executives <sup>1</sup>	Other employees	Total
Sweden	24	661	685	19	624	643
Other countries	-	-	-	-	3	3
<b>Total<sup>2</sup></b>	<b>24</b>	<b>661</b>	<b>685</b>	<b>19</b>	<b>627</b>	<b>646</b>

1) Senior executives comprise directors and senior executives but also deputy directors and vice presidents and former directors, deputy directors, presidents and vice presidents.

2) Total salaries and other remuneration to directors and presidents include bonuses of SEK 1 million (1).

For benefits to senior executives at Vattenfall, see Note 47 to the consolidated accounts.

### Note 36 Sickness-related absence

Sickness-related absence as a percentage of normal working hours during the year.

	Parent Company Vattenfall AB		Vattenfall Group, Swedish operations	
	2008	2007	2008	2007
Total sickness-related absence	2.1	2.3	2.6	3.2
Total sickness-related absence:				
- for women	3.9	3.8	4.3	5.0
- for men	1.4	1.8	2.2	2.6
- for employees aged 29 and younger	1.3	0.7	2.6	3.3
- for employees aged 30-49 years	1.9	1.6	2.5	2.7
- for employees aged 50 and above	2.5	2.5	3.3	3.7
Percentage of sickness-related absence lasting 60 days or more	47.8	21.7	28.2	32.6

### Note 37 Gender distribution among senior executives

	Women, %		Men, %	
	2008	2007	2008	2007
Gender distribution among directors	36	27	64	73
Gender distribution among other senior executives	22	11	78	89

### Note 38 Leasing

#### Leasing expenses

Future payment commitments, as of 31 December 2008, for leasing contracts and rental contracts break down as follows:

	Financial leasing	Operating leasing
2009	-	25
2010	-	22
2011	-	19
<b>Total</b>	<b>-</b>	<b>66</b>

Leasing expenses for the year attributable to the Parent Company amounted to SEK 10 million (20).

#### 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 2008, the cost of assets reported under Operating leases amounted to SEK 672 million (810). Accumulated depreciation amounted to SEK 186 million (275) and accumulated impairment losses to SEK 34 million (34).

Future payments for this type of facility break down as follows:

	Financial leasing	Operating leasing
2009	-	5
2010	-	1
2011	-	1
2012	-	1
2013	-	1
2014 and beyond	-	5
Less: Financial income	-	-4
<b>Total</b>	<b>-</b>	<b>10</b>

### Note 39 Auditors' fees

	2008	2007
<b>Audit fees</b>		
Ernst & Young	9	8
Swedish National Audit Office	1	1
<b>Total</b>	<b>10</b>	<b>9</b>
<b>Other fees</b>		
Ernst & Young	7	5
<b>Total</b>	<b>7</b>	<b>5</b>

### Note 40 Related party disclosures

See Note 51 to the consolidated accounts.

# PROPOSED DISTRIBUTION OF PROFITS

The Annual General Meeting has at its disposal profits totalling SEK 48,141,265,644.

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

To be distributed to the shareholders, SEK	6,900,000,000
To be carried forward, SEK	41,241,265,644
	<hr/> 48,141,265,644

The proposed distribution is equivalent to a dividend of SEK 52.39 per share. The dividend is scheduled for payment on 4 May 2009.

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

Based on the company's and Group's strong financial position, favourable earnings and strong 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 company's or Group's ability to make any necessary invest-

ments or to meet their obligations in the short and long term. Nor does the proposed dividend have any material impact on the company's key ratios.

In view of the above, the Board finds the proposed distribution of profits, totalling SEK 6,900,000,000, to be carefully considered and justified. Further, the Board finds that proposed distribution of profits adheres to the principles of the adopted dividend policy (page 51).

## The Board of Directors and President's affirmation upon signing the Annual Accounts for 2008

The undersigned certify that the consolidated accounts and the Annual Report have been prepared in accordance with International Financial Reporting Standards (IFRS), as adopted for use in the European Union, and generally accepted accounting principles respectively, and give a true and fair view of the financial positions and results of the Group and the company, and that the Administration Report of the Group and the company give a fair review of the development of the operations, financial positions and results of the Group and the company and describe substantial risks and uncertainties that the Group companies face.

Stockholm, 17 March 2009

Lars Westerberg  
Chairman of the Board

Viktorija Aastrup  
Director

Carl-Gustaf Angelin  
Director

Eli Arnstad  
Director

Johnny Bernhardsson  
Director

Christer Bådholm  
Director

Ronny Ekwall  
Director

Lone Fønss Schrøder  
Director

Hans-Olov Olsson  
Vice Chairman of the Board

Tuija Soanjärvi  
Director

Anders Sundström  
Director

Lars G. Josefsson  
President and Chief Executive Officer

# AUDIT REPORT

To the Annual General Meeting of Vattenfall AB  
Corporate identity number 556036-2138

We have audited the annual accounts, the consolidated accounts, the accounting records and the administration of the Board of Directors and the President of Vattenfall AB for the year 2008. The Board of Directors and the President are responsible for these accounts and the administration of the Company as well as for the application of the Annual Accounts Act when preparing the annual accounts and the application of international financial reporting standards (IFRSs) as adopted by the EU and the Annual Accounts Act when preparing the consolidated accounts. Our responsibility is to express an opinion on the annual accounts and the consolidated accounts comprising pages 52-120 and the administration based on our audit.

We conducted our audit in accordance with generally accepted auditing standards in Sweden. Those standards require that we plan and perform the audit to obtain reasonable assurance that the annual accounts and the consolidated accounts are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the accounts. An audit also includes assessing the accounting principles used and their application by the Board of Directors and the President and significant estimates made by the Board of Directors and the President when preparing the annual accounts and consolidated accounts as well as evaluating the overall pre-

sentation of information in the annual accounts and the consolidated accounts. As a basis for our opinion concerning discharge from liability, we examined significant decisions, actions taken and circumstances of the Company in order to be able to determine the liability, if any, to the Company of any board member or the President. We also examined whether any board member 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 our audit provides a reasonable basis for our opinion set out below.

The annual accounts have been prepared in accordance with the Annual Accounts Act and give a true and fair view of the Company's financial position and results of operations in accordance with generally accepted accounting principles in Sweden. The consolidated accounts have been prepared in accordance with the international financial reporting standards (IFRSs) as adopted by the EU and the Annual Accounts Act and give a true and fair view of the Group's financial position and results of operations. The statutory administration report is consistent with the other parts of the annual accounts and the consolidated accounts.

We recommend to the Annual General Meeting that the income statements and balance sheets of the Parent Company and the Group be adopted, that the profit of the Parent Company be dealt with in accordance with the proposal in the administration report and that the members of the Board of Directors and the President be discharged from liability for the financial year.

Stockholm, 17 March 2009

Ernst & Young AB  
Hamish Mabon  
Authorised Public Accountant

Per Redemo  
Authorised Public Accountant  
Swedish National Audit Office

# QUARTERLY REVIEW

Amounts in SEK million	2007				2008			
	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
<b>Income statement items</b>								
Net sales	41,644	32,077	31,589	38,329	45,404	35,259	37,016	46,870
EBITDA	15,119	9,432	8,768	12,502	15,203	10,078	9,272	11,407
Operating profit (EBIT)	11,399	5,672	4,760	6,752	11,426	6,316	5,591	6,562
Operating profit (EBIT) <sup>1</sup>	11,321	5,655	4,745	6,776	11,357	6,300	5,579	6,561
Financial income	786	845	472	173	714	740	341	1,617
Financial expenses	-1,481	-1,502	-1,718	-2,225	-2,072	-1,580	-2,389	-3,768
Profit before tax	10,704	5,015	3,514	4,700	10,068	5,476	3,543	4,411
Profit for the period	7,235	6,252	3,523	3,676	7,184	4,043	2,481	4,055
- of which, attributable to equity holders of the Parent Company	6,866	5,963	3,145	3,795	6,809	3,808	2,584	3,894
- of which, attributable to minority interests	369	289	378	-119	375	235	-103	161
<b>Cash flow items</b>								
Funds from operations (FFO)	12,206	4,932	6,002	10,909	11,828	-666	8,687	10,886
Free cash flow	7,270	5,311	3,231	3,838	5,027	74	7,464	6,398
<b>Balance sheet items</b>								
Cash and cash equivalents and short-term investments	27,865	20,849	21,480	22,659	30,582	22,896	27,878	40,236
Equity	118,455	116,102	119,679	124,132	132,822	112,372	124,068	140,886
- of which, attributable to equity holders of the Parent Company	106,898	104,145	107,403	111,709	120,035	101,708	113,364	129,861
- of which, attributable to minority interests	11,557	11,957	12,276	12,423	12,787	10,664	10,704	11,025
Interest-bearing liabilities	72,774	67,996	66,341	67,189	71,082	75,968	77,501	107,347
Net debt	44,828	46,765	44,524	43,740	39,545	52,011	48,476	66,000
Provisions	67,904	67,816	69,704	73,985	74,090	74,270	76,046	89,799
Noninterest-bearing liabilities	75,828	70,567	68,892	72,930	72,352	91,322	83,972	107,795
Net assets, weighted average value	150,657	151,986	154,194	157,252	160,925	165,321	170,719	179,114
Balance sheet total	334,961	322,481	324,616	338,236	350,346	353,932	361,587	445,827
<b>The key ratios are presented as percentages (%) or times (x)</b>								
Operating margin, %	27.4	17.7	15.1	17.6	25.2	17.9	15.1	14.0
Operating margin, % <sup>1</sup>	27.2	17.6	15.0	17.7	25.0	17.9	15.1	14.0
Pre-tax profit margin, %	25.7	15.6	11.1	12.3	22.2	15.5	9.6	9.4
Pre-tax profit margin, % <sup>1</sup>	25.5	15.6	11.1	12.3	22.0	15.5	9.5	9.4
Return on equity, % <sup>2</sup>	17.9	19.9	20.5	17.6	17.0	14.8	14.0	13.6
Return on equity, % <sup>1,2</sup>	17.6	19.8	20.4	17.5	16.9	14.7	13.8	13.5
Return on net assets, % <sup>2</sup>	16.1	15.7	16.3	16.6	16.2	16.1	16.0	15.1
Return on net assets, % <sup>1,2</sup>	16.0	15.7	16.2	16.6	16.1	16.0	16.0	15.1
EBIT interest cover, (x)	12.4	6.7	4.5	4.7	8.1	7.6	3.7	2.4
EBIT interest cover, (x) <sup>1</sup>	12.3	6.7	4.5	4.7	8.1	7.6	3.7	2.4
FFO interest cover, (x)	13.8	6.3	6.5	8.2	9.1	0.3	6.3	4.6
FFO interest cover, net, (x)	25.7	13.2	7.4	10.1	12.4	-0.5	8.4	5.6
Cash flow interest cover after maintenance investments, (x)	10.6	8.4	4.7	3.9	5.0	1.1	6.3	3.3
FFO/gross debt, % <sup>2</sup>	47.5	47.5	49.2	50.7	47.4	37.0	39.7	28.6
FFO/net debt, % <sup>2</sup>	77.2	69.0	73.4	77.8	85.1	54.0	63.4	46.6
EBITDA/net financial items, (x)	30.5	23.4	9.3	10.4	14.6	22.4	7.9	4.8
EBITDA/net financial items, (x) <sup>1</sup>	30.4	23.4	9.3	10.4	14.5	22.4	7.9	4.8
Equity/total assets, %	35.4	36.0	36.9	36.7	37.9	31.7	34.3	31.6
Gross debt/equity, %	61.4	58.6	55.4	54.1	53.5	67.6	62.5	76.2
Net debt/equity, %	37.8	40.3	37.2	35.2	29.8	46.3	39.1	46.8
Gross debt/gross debt plus equity, %	38.1	36.9	35.7	35.1	34.9	40.3	38.4	43.2
Net debt/net debt plus equity, %	27.5	28.7	27.1	26.1	22.9	31.6	28.1	31.9
Net debt/EBITDA, (x)	1.0	1.1	1.0	1.0	0.9	1.1	1.0	1.4
<b>Other information</b>								
Investments	3,438	4,463	4,310	6,753	5,027	12,773	6,312	18,184
Electricity sales, TWh	56.4	44.9	43.4	49.1	54.2	44.1	41.5	49.5
Average number employees	32,325	32,295	32,523	32,396	32,510	32,627	33,069	32,801

1) Excl. items affecting comparability.

2) Last 12-months values.

#### Comments

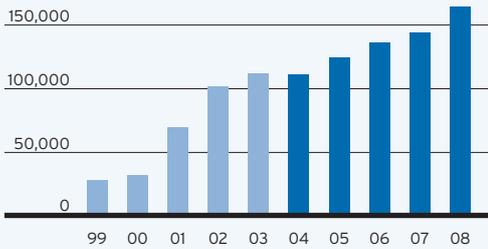
Vattenfall's earnings vary sharply during the year. Normally, the majority of annual profit is generated during the first and fourth quarters, when demand for electricity and heat is at its highest.

# TEN-YEAR REVIEW

## Net sales

SEK million

200,000

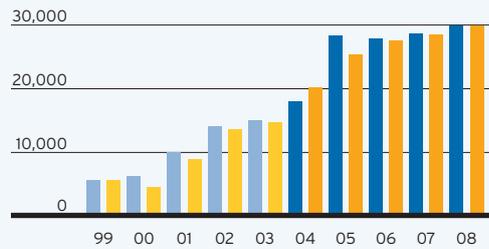


■ Net sales (Sw. GAAP)  
■ Net sales (IFRS)

## Operating profit

SEK million

40,000



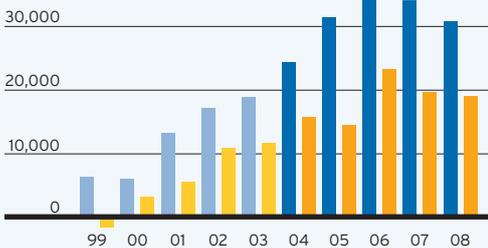
■ Operating profit (Sw. GAAP)      ■ Operating profit' (Sw. GAAP)  
■ Operating profit (IFRS)          ■ Operating profit' (IFRS)

1) Excl. items affecting comparability.

## Funds from operations (FFO) and Free cash flow

SEK million

40,000

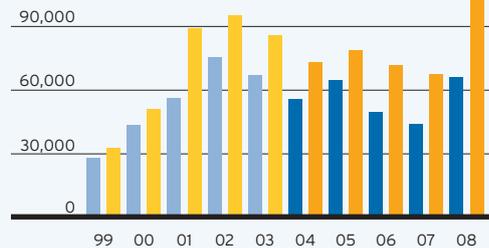


■ Funds from operations (Sw. GAAP)      ■ Free cash flow (Sw. GAAP)  
■ Funds from operations (IFRS)          ■ Free cash flow (IFRS)

## Net debt and Interest-bearing liabilities

SEK million

120,000

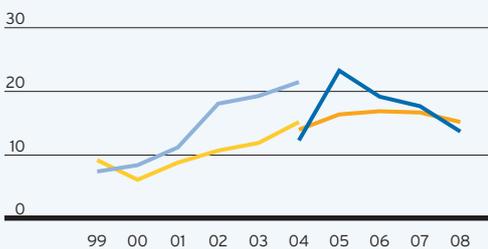


■ Net debt (Sw. GAAP)      ■ Interest-bearing liabilities (Sw. GAAP)  
■ Net debt (IFRS)          ■ Interest-bearing liabilities (IFRS)

## Return on equity

%

40

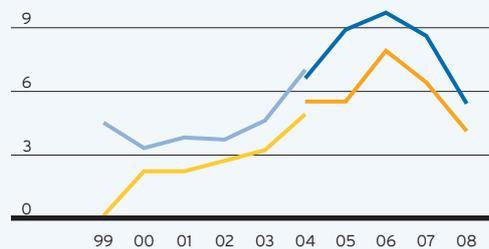


— Return on equity (Sw. GAAP)  
— Return on equity (IFRS)  
— Return on net assets' (Sw. GAAP)  
— Return on net assets' (IFRS)

## FFO interest cover

%

12



— FFO interest cover (Sw. GAAP)  
— FFO interest cover (IFRS)  
— Cash flow interest cover after maintenance investments (Sw. GAAP)  
— Cash flow interest cover after maintenance investments (IFRS)

1) Excl. items affecting comparability.

**Comments:** The ten-year period has been characterised by strong international growth. From having been essentially a national Swedish utility, through substantial company acquisitions primarily in Germany, Poland and Denmark, Vattenfall has grown to become Europe's fifth-largest electricity generator and the largest supplier of heat. In 2008, substantial acquisitions were made in wind power in the UK. Value creation during the period has been substantial due to very successful integration and consolidation work, but also due to increased production volumes and higher wholesale electricity prices. Return on equity has varied from 7.3% to 23.2%, and was 13.6% in 2008. The return on net assets has varied from 8.3% to 18.4%, and was 15.1% in 2008. The book value of assets has grown five-fold, from SEK 87 billion to SEK 446 billion. Net sales and operating profit have grown six-fold. Net debt, which was SEK 27.4 billion in 1999, rose sharply to SEK 75 billion up until

2003, due to borrowings in the bond market in order to finance the extensive acquisitions. Thereafter, net debt was amortised down to SEK 43.7 billion as per 2007, thanks to good profitability and strong cash flows. In 2008 net debt increased to SEK 66 billion, mainly due to larger borrowings as a result of the sharp rise in investments. The net debt/equity ratio was reduced from 81% in 1999 to 54% in 2007, and then rose again in 2008, to 76%. The annual dividend to the owner has increased from SEK 1.5 billion in 1998 to a proposed dividend of SEK 6.9 billion for 2008. For the ten-year period, the average dividend payout was approximately SEK 4.1 billion per year. Investments, including acquisitions, have averaged SEK 21.8 billion per year, and the number of employees quadrupled during the period, from approximately 8,000 to more than 32,000. Electricity sales have risen from approximately 87 TWh to 189 TWh.

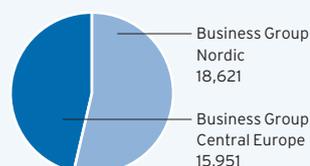
Amounts in SEK million	Swedish GAAP						IFRS				
	1999	2000	2001	2002	2003	2004	2004	2005	2006	2007	2008
<b>Income statement items</b>											
Net sales	27,754	31,695	69,003	101,025	111,935	111,016	111,016	123,794	135,802	143,639	164,549
EBITDA	9,834	11,670	18,207	25,489	24,450	31,347	33,161	43,175	43,938	45,821	45,960
Operating profit (EBIT)	5,483	6,193	9,916	13,997	14,868	19,501	17,887	28,363	27,821	28,583	29,895
Operating profit (EBIT) <sup>1</sup>	5,483	4,474	8,779	13,550	14,605	18,682	20,102	25,377	27,448	28,497	29,797
Financial income	542	1,037	2,232	3,010	2,267	1,772	2,969	3,810	3,839	2,276	3,412
Financial expenses	-1,760	-2,536	-4,737	-6,386	-5,203	-4,020	-6,297	-6,013	-6,135	-6,926	-9,809
Profit before tax	4,265	4,694	7,411	10,621	11,932	17,253	14,559	26,160	25,525	23,933	23,498
Profit for the year	2,897	3,432	5,287	8,224	9,529	12,348	9,604	20,518	19,858	20,686	17,763
- of which, attributable to equity holders of the Parent Company	2,538	2,970	4,190	7,566	9,123	11,776	8,944	19,235	18,729	19,769	17,095
- of which, attributable to minority interests	359	462	1,097	658	406	572	660	1,283	1,129	917	668
<b>Cash flow items</b>											
Funds from operations (FFO)	6,224	5,830	13,148	17,106	18,804	24,159	24,302	31,386	35,673	34,049	30,735
Free cash flow	-1,660	3,050	5,478	10,820	11,606	15,684	15,684	14,341	23,178	19,650	18,963
<b>Balance sheet items</b>											
Cash and cash equivalents and short-term investments	4,860	7,543	10,340	15,473	14,647	13,616	13,616	14,074	22,168	22,659	40,236
Equity	38,262	42,802	61,101	57,532	64,328	73,947	85,551	90,909	107,674	124,132	140,886
- of which, attributable to equity holders of the Parent Company	35,790	37,817	42,021	47,572	54,949	64,759	75,437	80,565	96,589	111,709	129,861
- of which, attributable to minority interests	2,472	4,985	19,080	9,960	9,379	9,188	10,114	10,344	11,085	12,423	11,025
Interest-bearing liabilities	32,275	50,854	88,723	94,838	85,631	73,013	73,013	78,663	71,575	67,189	107,347
Net debt	27,415	43,311	55,736	75,207	66,890	55,411	55,411	64,343	49,407	43,740	66,000
Provisions	-	-	-	-	-	-	61,941	65,123	66,094	73,985	89,799
Noninterest-bearing liabilities	16,126	21,603	109,219	123,906	115,006	109,955	64,700	90,373	77,823	72,930	107,795
Net assets, weighted average value	60,395	74,968	100,701	127,479	124,229	123,423	134,125	143,001	151,155	157,252	179,114
Balance sheet total	86,663	115,259	259,043	276,276	264,965	256,915	285,205	325,068	323,166	338,236	445,827
<b>The key ratios are presented as percentages (%) or times (x)</b>											
Operating margin, %	19.8	19.5	14.4	13.9	13.3	17.6	16.1	22.9	20.5	19.9	18.2
Operating margin, % <sup>1</sup>	19.8	14.1	12.7	13.4	13.0	16.8	18.1	20.5	20.2	19.8	18.1
Pre-tax profit margin, %	15.4	14.8	10.7	10.5	10.7	15.5	13.1	21.1	18.8	16.7	14.3
Pre-tax profit margin, % <sup>1</sup>	15.3	9.0	9.1	10.1	10.4	14.8	15.1	18.7	18.5	16.6	14.2
Return on equity, %	7.3	8.3	11.1	18.0	19.2	21.4	12.2	23.2	19.1	17.6	13.6
Return on equity, % <sup>1</sup>	7.2	4.0	9.7	17.3	18.8	20.4	13.9	19.4	18.7	17.5	13.5
Return on net assets, %	9.1	8.3	9.8	11.0	12.0	15.8	12.2	18.4	17.1	16.6	15.1
Return on net assets, % <sup>1</sup>	9.1	6.0	8.7	10.6	11.8	15.1	13.9	16.3	16.8	16.6	15.1
EBIT interest cover, (x)	3.4	2.9	2.6	2.7	3.3	5.3	4.4	7.6	7.2	6.7	4.5
EBIT interest cover, (x) <sup>1</sup>	3.4	2.2	2.3	2.6	3.2	5.1	5.0	6.9	7.1	6.7	4.5
FFO interest cover, (x)	4.5	3.3	3.8	3.7	4.6	7.0	6.6	8.9	9.7	8.6	5.4
FFO interest cover, net, (x)	6.1	4.9	6.2	6.1	7.4	11.7	8.9	15.1	15.9	12.2	7.1
Cash flow interest cover after maintenance investments, (x)	0.1	2.2	2.2	2.7	3.2	4.9	5.5	5.5	7.9	6.4	4.1
FFO/gross debt, %	19.3	11.5	14.8	18.0	22.0	33.1	30.0	39.9	49.8	50.7	28.6
FFO/net debt, %	22.7	13.5	23.6	22.7	28.1	43.6	43.9	48.8	72.2	77.8	46.6
EBITDA/net financial items, (x)	8.1	7.8	7.3	7.6	8.3	13.9	10.8	19.3	18.4	15.1	9.1
EBITDA/net financial items, (x) <sup>1</sup>	7.9	6.1	6.8	7.4	8.2	13.6	11.5	18.0	18.2	15.0	9.1
Equity/total assets, %	45.2	37.6	23.7	20.9	24.4	28.8	30.0	28.0	33.3	36.7	31.6
Gross debt/equity, %	81.2	118.4	144.9	164.7	133.0	98.7	85.3	86.5	66.5	54.1	76.2
Net debt/equity, %	71.7	101.2	91.2	130.7	104.0	74.9	64.8	70.8	45.9	35.2	46.8
Gross debt/gross debt plus equity, %	44.8	54.2	59.2	62.2	57.1	49.7	46.0	46.4	39.9	35.1	43.2
Net debt/net debt plus equity, %	41.7	50.3	47.7	56.7	51.0	42.8	39.3	41.4	31.5	26.1	31.9
Net debt/EBITDA, (x)	2.8	3.7	3.1	3.0	2.7	1.8	1.7	1.5	1.1	1.0	1.4
<b>Other information</b>											
Dividend to equity holders of the Parent Company	1,500	990	1,030	1,675	2,400	5,600	5,600	5,800	7,500	8,000	6,900 <sup>2</sup>
Investments	7,916	23,840	43,443	39,932	11,356	12,601	12,731	24,497	17,220	18,964	42,296
Electricity sales, TWh	86.9	83.1	149.9	188.3	184.2	189.2	189.2	197.2	191.1	193.8	189.3
Average number employees	7,991	13,123	23,814	34,248	35,296	33,017	33,017	32,231	32,308	32,396	32,801

1) Excl. items affecting comparability.

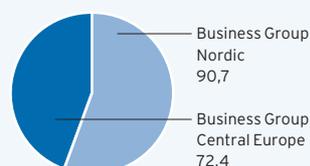
2) Proposed dividend.

# FACTS ABOUT VATTENFALL'S MARKETS

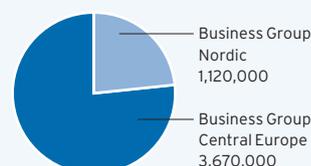
Installed capacity electricity & heat, MW (2008)



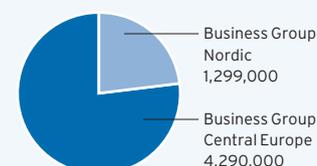
Generated electricity, TWh (2008)



Number of electricity customers (2008)



Number of network customers (2008)



	Business Group Nordic		Business Group Central Europe		Total	
	2008	2007	2008	2007	2008	2007
<b>Installed capacity electricity &amp; heat, MW<sup>1</sup></b>						
Hydro power	8,362	8,417	2,894	2,894	11,256	11,311
Nuclear power	6,788	6,860	771	771	7,559	7,631
Fossil-based power	2,603	2,708	12,141	12,141	14,744	14,849
Wind power	568	556	43	43	611	599
Biomass, waste	300	361	102	102	402	463
<b>Total electricity</b>	<b>18,621</b>	<b>18,902</b>	<b>15,951</b>	<b>15,951</b>	<b>34,572</b>	<b>34,853</b>
<b>Total Heat</b>	<b>4,354</b>	<b>4,987</b>	<b>13,518</b>	<b>13,483</b>	<b>17,872</b>	<b>18,470</b>
<b>Generated electricity, TWh<sup>2</sup></b>						
Hydro power	36.5	33.6	3.0	3.1	39.5	36.6
Nuclear power	46.2	48.8	0.0	2.5	46.2	51.3
Fossil-based power	6.1	7.1	69.0	70.6	75.1	77.7
Wind power	1.5	1.2	0.1	0.1	1.6	1.3
Biomass, waste	0.5	0.4	0.4	0.3	0.8	0.6
<b>Total electricity</b>	<b>90.7</b>	<b>91.1</b>	<b>72.4</b>	<b>76.6</b>	<b>163.1</b>	<b>167.6</b>
<b>Heat sales, TWh<sup>2</sup></b>						
Fossil-based power	6.4	6.6	25.2	25.3	31.6	31.9
Biomass, waste	3.9	4.1	0.0	0.1	3.9	4.2
Other	-	-	-	-	-	-
<b>Total heat</b>	<b>10.4</b>	<b>10.7</b>	<b>25.3</b>	<b>25.5</b>	<b>35.6</b>	<b>36.2</b>
<b>External electricity trading volume, TWh<sup>3</sup></b>	<b>332</b>	<b>238</b>	<b>675</b>	<b>435</b>	<b>1,007</b>	<b>673</b>
<b>Number of electricity customers</b> (Retail customers, small and medium-sized companies)	<b>1,120,000</b>	<b>1,034,000</b>	<b>3,670,000</b>	<b>3,668,000</b>	<b>4,790,000</b>	<b>4,702,000</b>
<b>Volume, TWh</b> Large electricity customers (industries, resellers, etc.)	<b>49.9</b>	<b>49.0</b>	<b>44.0</b>	<b>36.3</b>	<b>93.9</b>	<b>85.3</b>
<b>Number of network customers</b>	<b>1,299,000</b>	<b>1,302,000</b>	<b>4,290,000</b>	<b>4,427,000</b>	<b>5,589,000</b>	<b>5,729,000</b>
<b>Electricity networks</b>						
Transited volume, TWh	79.8 <sup>4</sup>	80.5 <sup>4</sup>	43.1 <sup>5</sup>	42.2 <sup>5</sup>	122.9	122.7
Transmission grid, km	-	-	9,755	9,755	9,755	9,755
Distribution network, km	189,300	187,500	103,100	103,200	292,400	290,700
<b>Number of employees (full-year equivalents)</b>						
Business Groups	9,507	9,489	22,387	22,396	31,894	31,885
Group total <sup>6</sup>					<b>32,801</b>	<b>32,396</b>

1) Certain values for 2007 have been adjusted compared with previously published information.

2) Rounding differences of 0.1 TWh exist for some items.

3) OTC and exchanges.

4) Excl. generation transmission.

5) Excl. transmission grid.

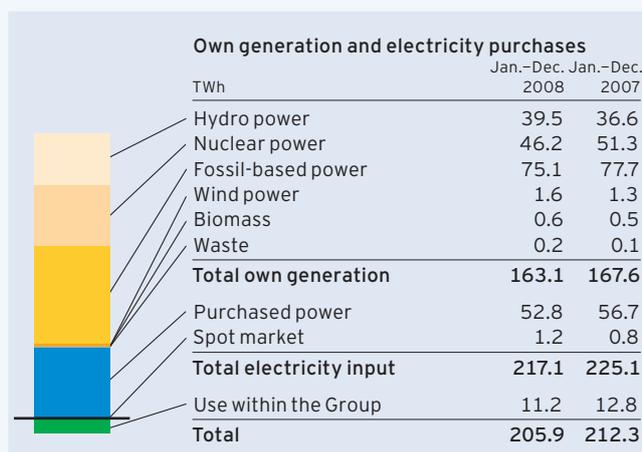
6) There are 909 (511) employees in Energy Trading, Treasury operations, other Group Shared Services and Group staffs.

## Pro rata – Generation data corresponding to Vattenfall's ownership in the respective facilities

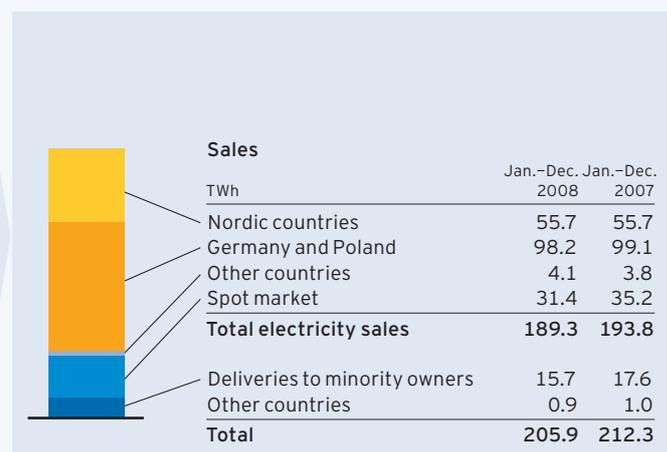
	Business Group Nordic		Business Group Central Europe		Total	
	2008	2007	2008	2007	2008	2007
<b>Installed capacity electricity &amp; heat, MW<sup>1</sup></b>						
Hydro power	7,901	7,961	2,894	2,894	10,795	10,855
Nuclear power	4,642	4,691	1,469	1,461	6,111	6,152
Fossil-based power	2,589	2,694	11,928	11,928	14,517	14,622
Wind power	568	556	36	36	604	592
Biomass, waste	300	361	83	83	383	444
<b>Total electricity</b>	<b>16,000</b>	<b>16,263</b>	<b>16,410</b>	<b>16,402</b>	<b>32,410</b>	<b>32,665</b>
<b>Total Heat</b>	<b>4,325</b>	<b>4,847</b>	<b>12,175</b>	<b>12,140</b>	<b>16,500</b>	<b>16,987</b>
<b>Generated electricity, TWh<sup>2</sup></b>						
Hydro power	34.4	31.3	3.0	3.1	37.4	34.4
Nuclear power	31.7	33.4	2.2	6.6	33.9	40.0
Fossil-based power	6.1	7.1	68.0	69.7	74.1	76.8
Wind power	1.5	1.2	0.1	0.1	1.6	1.3
Biomass, waste	0.5	0.4	0.2	0.3	0.7	0.7
<b>Total electricity</b>	<b>74.1</b>	<b>73.4</b>	<b>73.6</b>	<b>79.7</b>	<b>147.7</b>	<b>153.1</b>
<b>Heat sales, TWh<sup>2</sup></b>						
Fossil-based power	6.4	6.6	22.4	22.6	28.8	29.2
Biomass, waste	3.9	4.0	0.0	0.1	3.9	4.1
Other	-	-	-	-	-	-
<b>Total heat</b>	<b>10.4</b>	<b>10.6</b>	<b>22.5</b>	<b>22.6</b>	<b>32.9</b>	<b>33.2</b>

1) Certain values for 2007 have been adjusted compared with previously published information.

2) Rounding differences of 0.1 TWh exist for some items.

Vattenfall's electricity balance<sup>1</sup>

**Comments:** Total electricity generation decreased by 2.7% in 2008. The decrease is mainly attributable to lower nuclear power generation – partly due to the outage at the Brunsbüttel nuclear power plant in Germany, but also to shutdowns and planned outages at the Ringhals and Forsmark nuclear power plants in Sweden. Fossil-based power decreased by 3.3% due to lower availability and planned outages at the German coal-fired plants and lower generation in Denmark. Hydro power generation increased by 7.9% due to high water levels, and wind power generation increased by 23.1% due to the new Lillgrund wind farm and favourable wind conditions. Electricity generation based on biomass and waste increased by 0.1 TWh each. Consumption within the Group pertains primarily to transmission losses within the electricity networks and consumption within the German pumped storage plants.



**Comments:** Total electricity sales decreased by 2.3%, mainly due to lower spot sales on EEX in Germany and slightly lower sales with delivery in Germany and Poland. Deliveries to minority part owners decreased by 10.8% due to lower nuclear power generation in both the Nordic countries and Germany.

1) Rounding differences of 0.1 TWh exist for some items. Certain values for 2007 have been adjusted compared with previously published information.

# DEFINITIONS AND CALCULATIONS OF KEY RATIOS

Figures for the Group in 2008. Amounts in SEK million unless stated otherwise.

<b>EBIT</b> =	Earnings Before Interest and Tax.
<b>EBITDA</b> =	Earnings Before Interest, Tax, Depreciation and Amortisation.
<b>FFO</b> =	Funds From Operations.
<b>Items affecting comparability</b> =	Non-recurring capital gains and capital losses from shares and other non-current assets.
<b>Free cash flow</b> =	Cash flow from operating activities less maintenance investments.
<b>Capital Securities</b> =	Perpetual subordinated securities, junior to all Vattenfall's unsubordinated debt instruments. Reported as interest-bearing non-current liabilities.
<b>Net assets</b> =	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.
<b>Net debt</b> =	Interest-bearing liabilities less loans to minority owners in foreign subsidiaries, cash and cash equivalents, short-term investments.

The key ratios are presented as percentages (%) or times (x).

## Key ratios based on full year amounts 2008:

<b>Operating margin, %</b> =	$100 \times \frac{\text{Operating profit (EBIT)}}{\text{Net sales}}$	$\frac{29,895}{164,549} = 18.2$
<b>Operating margin excl. items affecting comparability, %</b> =	$100 \times \frac{\text{Operating profit (EBIT) excl. items affecting comparability}}{\text{Net sales}}$	$\frac{29,797}{164,549} = 18.1$
<b>Pre-tax profit margin, %</b> =	$100 \times \frac{\text{Profit before tax}}{\text{Net sales}}$	$\frac{23,498}{164,549} = 14.3$
<b>Pre-tax profit margin excl. items affecting comparability, %</b> =	$100 \times \frac{\text{Profit before tax excl. items affecting comparability}}{\text{Net sales}}$	$\frac{23,374}{164,549} = 14.2$
<b>Return on equity, %</b> =	$100 \times \frac{\text{Profit for the period attributable to equity holders of the Parent Company}}{\text{Average equity for the period attributable to equity holders of the Parent Company excl. the Reserve for cash flow hedges}}$	$\frac{17,095}{125,760} = 13.6$
<b>Return on equity excl. items affecting comparability, %</b> =	$100 \times \frac{\text{Profit for the period attributable to equity holders of the Parent Company excl. items affecting comparability}}{\text{Average equity for the period attributable to equity holders of the Parent Company excl. the Reserve for cash flow hedges}}$	$\frac{17,000}{125,760} = 13.5$
<b>Return on net assets, %</b> =	$100 \times \frac{\text{Operating profit (EBIT) + discounting effects attributable to provisions}}{\text{Weighted average of net assets for the period}}$	$\frac{27,095}{179,114} = 15.1$
<b>Return on net assets excl. items affecting comparability, %</b> =	$100 \times \frac{\text{Operating profit (EBIT) excl. items affecting comparability + discounting effects attributable to provisions}}{\text{Weighted average of net assets for the period}}$	$\frac{26,997}{179,114} = 15.1$

EBIT interest cover, (x) =	Operating profit (EBIT) + financial income excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	31,855	=	4.5
	Financial expenses excl. discounting effects attributable to provisions	7,009		
EBIT interest cover excl. items affecting comparability, (x) =	Operating profit (EBIT) excl. items affecting comparability + financial income excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	31,757	=	4.5
	Financial expenses excl. discounting effects attributable to provisions	7,009		
FFO interest cover, (x) =	Funds from operations (FFO) + financial expenses excl. discounting effects attributable to provisions	37,744	=	5.4
	Financial expenses excl. discounting effects attributable to provisions	7,009		
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	35,784	=	7.1
	Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	5,049		
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	25,029	=	4.1
	Financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	6,066		
FFO/gross debt, % = 100 x	Funds from operations (FFO)	30,735	=	28.6
	Interest-bearing liabilities	107,347		
FFO/net debt, % = 100 x	Funds from operations (FFO)	30,735	=	46.6
	Net debt	66,000		
EBITDA/net financial items, (x) =	Operating profit before depreciation and amortisation (EBITDA)	45,960	=	9.1
	Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	5,049		
EBITDA excl. items affecting comparability/net financial items, (x) =	Operating profit before depreciation and amortisation (EBITDA) excl. items affecting comparability	45,862	=	9.1
	Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	5,049		

## Key ratios based on the balance sheet per 31 December 2008:

Equity/total assets, % = 100 x	Equity	140,886	=	31.6
	Balance sheet total	445,827		
Gross debt/equity, % = 100 x	Interest-bearing liabilities	107,347	=	76.2
	Equity	140,886		
Net debt/equity, % = 100 x	Net debt	66,000	=	46.8
	Equity	140,886		
Gross debt/gross debt plus equity, % = 100 x	Interest-bearing liabilities	107,347	=	43.2
	Interest-bearing liabilities + equity	248,233		
Net debt/net debt plus equity, % = 100 x	Net debt	66,000	=	31.9
	Net debt + equity	206,886		
Net debt/EBITDA, (x) =	Net debt	66,000	=	1.4
	Operating profit before depreciation and amortisation (EBITDA)	45,960		

# GLOSSARY AND ABBREVIATIONS

**Availability** Actual electricity generation capability in relation to the maximum possible generation.

**CCS** Carbon Capture and Storage – capture and storage underground of the carbon dioxide that is emitted in the combustion of fossil fuels.

**Combined heat and power (CHP) plant** A plant that generates heat and electricity in the same process.

**CSR** Corporate Social Responsibility – How a company, on a voluntary basis, integrates economic, social and environmental concerns in its business activities and in contacts with its stakeholders.

**Deep repository** Underground facility for the final disposal of spent nuclear fuel. See also SKB's website: [www.skb.se](http://www.skb.se).

**Deregulation** Abolishing monopoly rights and obligations to open up for competition. Used here as a synonym for liberalisation.

**Derivative instruments** Financial instruments where the value or change in value is derived from an underlying instrument. Examples of derivative instruments include options, forwards and swaps. Derivative instruments are often used in risk management.

**DSO** Distribution System Operator. Responsible for operating, ensuring the maintenance of and developing the distribution system in a given area (compare with TSO).

**EEX** European Energy Exchange, in Germany.

**Electricity spot market** Short-term physical trading in electricity on an exchange.

**EPD** Environmental Product Declaration. A system based on certified environmental declarations.

**EU27** The 27 Member States constituting the European Union following the enlargement on 1 January 2007.

**Ex-ante tariff regulation** The approval of tariffs prior to implementation.

**Ex-post tariff regulation** Tariffs are examined by the regulator after implementation, if necessary.

**Forward market** A market in which buyers and sellers agree on a fixed price for the future delivery of an underlying instrument, such as electricity. (See also Derivative instruments.)

**Green Certificates/electricity certificates** Tradeable certificates issued for renewable energy. Called electricity certificates in Sweden.

**Gross capacity** The electrical power that is delivered directly from a plant's generator.

**IAEA** International Atomic Energy Agency – the UN's nuclear energy agency.

**IFRS** International Financial Reporting Standards. Applied by Vattenfall since 2005.

**Installed capacity** Plant performance based on design data. Commonly measured in MW.

**ISDA agreement** A bilateral general agreement prepared in accordance with guidelines established by the International Swap Dealers Association. The agreement regulates the parties' legal obligations in derivative transactions with each other.

**ISO 14001** International standard for environmental management systems.

**Kyoto Protocol** International agreement to reduce greenhouse gas emissions.

**Local network** An electricity network in Sweden within the 0.4–20 kV range.

**Margin call** Marginal security that the holder of a derivative position must pledge to cover the credit risk of its counterparty (OTC or exchange)

**Merit order** The order in which capacity is put into use.

**Net capacity** The electric power a plant delivers to connected networks, i.e., gross power less the plant's own electricity use.

**Nord Pool** The Nordic electricity exchange.

**Normalised annual generation** Planned generation at normal values of weather and plant status.

**NO<sub>x</sub>** A collective term for various oxides of nitrogen.

**NTPA** Negotiated Third Party Access. Access to a network granted on the basis of bilateral negotiations between the network owner and the network user.

**OTC** Over the Counter. Trading (directly or via a broker) outside the official exchanges in physical and financial contracts.

**Oxyfuel combustion** Combustion of fossil fuel in pure oxygen.

**PoIPX** The Polish electricity exchange, Towarowa Gielda Energii. Post-combustion Separation of CO<sub>2</sub> after combustion.

**PSE** Polskie Sieci Elektroenergetyczne – Polish Power Grid Company. Regional network An electricity network in Sweden within the 40–130 kV range.

**Renewable energy sources** Non-finite energy sources such as hydro power, biofuel, wind, solar power, tidal power, wave power, geothermal power.

**SKB** Svensk Kärnbränslehantering AB, the company responsible for managing radioactive waste in Sweden.

**SO<sub>2</sub>** Sulphur dioxide.

**Spot market** A market where trade is conducted with immediate delivery.

**Swap** A financial instrument that is a combination of spot and forward transactions, a type of financial exchange agreement.

**Swedish GAAP** Swedish Generally Accepted Accounting Principles – Applied by Vattenfall through 2004.

**Thermal power** Electricity generated via a heating process, such as a gas turbine or a steam process in a coal-fired or nuclear power plant (compare with CHP).

**TSO** Transmission System Operator. Responsible for operating, ensuring the maintenance of and developing the transmission system in a given area (compare with DSO).

**Unbundling** Legal separation of transmission and distribution from other activities of a company (generation and sales).

**Value chain** Process for creating value. Within the electricity sector this includes the generation, transmission, distribution, trading and selling of electricity.

**Volatility** A measure of how the price of a commodity varies over a particular period.

## Energy terms

### Units of power

Power is energy per unit of time

Power is expressed in Watts (W)

1 kW (kilowatt) = 1,000 W

1 MW (megawatt) = 1,000 kW

1 GW (gigawatt) = 1,000,000 kW

### Units of energy

Energy is power multiplied by time

1 kWh (kilowatt hour) = 1 kW expended over an hour

1 MWh (megawatt hour) = 1,000 kWh

1 GWh (gigawatt hour) = 1,000,000 kWh

1 TWh (terawatt hour) = 1,000,000,000 kWh

### Voltage

1 kV (kilovolt) = 1,000 volt (V)

# VATTENFALL'S HISTORY



Olidan, on the Göta River, was one of the first hydro power stations built between 1909 and 1916 by the newly formed Swedish State Power Board.

**1909** The restructuring of the Trollhättan canal and hydro power plant to the Swedish State Power Board marks the birth of Vattenfall. The Swedish state had bought the water rights in Trollhättan a few years earlier and was now taking an active involvement in this emerging electricity generation technology.

**1909–1916** The first large hydro power plants – Olidan, Porjus and Älvkarleby – are built.

**1951** Inauguration of the Harsprånget hydro power plant, the world's largest hydro power plant in many respects. During the same year, the world's first 400 kilovolt transmission line is put in operation, stretching from northern Norrland to Hallsberg in Central Sweden.

**1952** The entire Swedish national electricity grid is hooked together.

**1954** Vattenfall commissions the world's first commercial high-voltage direct current line – between the mainland and the island of Gotland.

**1975–1976** Vattenfall's first two nuclear reactors, Ringhals 1 and 2, are commissioned. During the 1970s and '80s, 12 reactors were built across Sweden, of which seven are owned by Vattenfall.

**1992** Vattenfall is transformed from a state enterprise to the limited liability company Vattenfall AB. Responsibility for the national grid – the Swedish high-voltage network – is transferred to the newly formed state authority Svenska Kraftnät.

**1995** Vattenfall's board charts out an international growth strategy for Vattenfall.

**1996** The Swedish electricity market is deregulated. The electricity grid operations are legally separated from electricity generation and sales.

## European expansion

**1996** Vattenfall's international expansion is initiated in 1996 through the acquisition of Hämeen Sähkö, a Finnish electricity distribution company. A representative office is opened in Hamburg, and Vattenfall begins working in the German market through the joint venture company VASA Energy.

**1998** The German electricity market is deregulated in April.

**1999** Vattenfall agrees to acquire 25.1% of the shares in HEW from the City of Hamburg, with an option for the city to sell another 25.1% to Vattenfall. The Barsebäck 1 nuclear reactor is decommissioned following a decision by Swedish parliament.

**2000** In January, 55% of the Polish heat production company EW is acquired in Warsaw, Poland. In August an agreement is signed with E.ON to acquire a majority shareholding in Berlin's energy company, Bewag. However, the deal is blocked by the US company Southern Energy (renamed Mirant).

**2001** In February a 32% stake is acquired in the Polish distribution company GZE. In May Vattenfall becomes a majority owner in HEW through share purchases from E.ON and Sydkraft. Also in May, HEW acquires the electricity generator VEAG, which also owns the electricity grid in eastern Germany, and the lignite producer LAUBAG.

**2002** In January Vattenfall acquires all of Mirant's shares in Bewag. Vattenfall's various acquisitions in Germany are gathered under the name Vattenfall Europe AG, which is formally established in August through the merger between HEW and VEAG, including LAUBAG. Vattenfall thereby becomes Germany's third-largest electricity generator.

**2003** In January/February, Bewag is merged into Vattenfall Europe AG. Vattenfall increases its stake in the Polish company EW to 70% and in GZE to 54%.

**2005** In April, 35.3% of the shares in the Danish company Elsam A/S are acquired. The nuclear reactor Barsebäck 2 is closed 31 May. In August, Vattenfall announces that it has gained possession of more than 95% of the shares in Vattenfall Europe AG and initiates compulsory redemption of the minority owners' shares.

**2006** On 1 January the local German brands HEW and Bewag, and the Polish brands EW and GZE, are replaced with the Vattenfall brand. Vattenfall increases its ownership in both Polish companies to 75%. On 1 July a number of Danish wind power and combined heat and power assets are acquired from the Danish company DONG in exchange for ownership stakes in Elsam A/S and I/S Avedøre 2. Construction begins of a pilot Carbon Capture and Storage (CCS) plant at Schwarze Pumpe.

**2007** The Lillgrund wind farm, with 48 turbines, is commissioned and begins delivering electricity at the end of the year. In December the decision is made to merge Business Group Europe and Business Group Poland into the single Business Group Central Europe.

**2008** Vattenfall lays out its strategic direction during the autumn – Making electricity clean. This also summarises Vattenfall's climate vision – to be climate-neutral by 2050. In September the world's first pilot CCS plant using oxyfuel technology is inaugurated in Germany. During the autumn Vattenfall acquires several wind power companies in the UK: AMEC Wind Energy Ltd, Eclipse Energy UK Plc, and Thanet Offshore Wind Ltd, the UK's largest offshore wind farm ready for construction.



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