# 2010

Annual Report

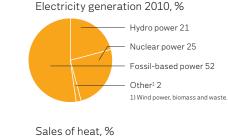


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Contents	
CEO s message	23
Strategic direction	4 17
The European	
energy market	18 23
Competitive situation	24 25
Vattenfall s customers	26 29
Vattenfall s six energy	30 43
sources	
Administration report	44 63
Corporate governance	
report	64 71
Board of Directors	72 73
Executive Group	
Management	74 75
Risks and risk	70.00
management	76 83
Consolidated income statements	84 88
	04 00
Notes to the consolidated account	89 123
Parent Company	00 120
financial statements	124 126
Notes to the Parent	
Company financial	
statements	126 134
Proposed distribution	
of profits and	105
Audit Report	135
Quarterly review	136 137
Several year overview	138 139
Definitions and calcu	
lations of key ratios	140 141
Facts about	142 144
Vattenfall s markets	
Financial calendar	145

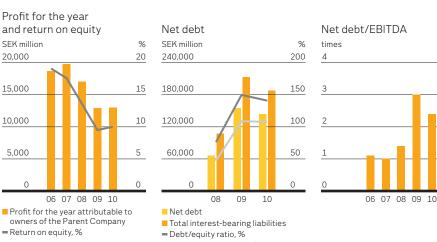
## Vattenfall today - a European energy company

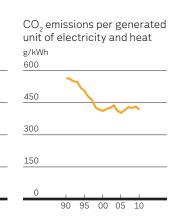
Vattenfall is one of Europe's largest generators of electricity and the largest producer of heat. Consolidated sales in 2010 amounted to SEK 213,572 million. Vattenfall's main products are electricity, heat and gas. In electricity and heat, Vattenfall works in all parts of the value chain: generation, distribution and sales. In gas, Vattenfall is mainly active in sales. Vattenfall is also engaged in energy trading and lignite mining. The Group has slightly more than 38,000 employees. The Parent Company, Vattenfall AB, is 100%-owned by the Swedish state. The core markets are Sweden, Germany and the Netherlands. In 2010 operations were also conducted in Belgium, Denmark, Finland, Poland and the UK.





#### Sales and operating profit and return on equity Net debt SEK million SEK million SEK million % SEK million 240,000 60,000 20,000 20 240,000 15,000 180,000 45,000 15 180,000 30,000 10,000 10 120,000 120,000 60,000 60,000 15,000 5,000 5 0 0 0 06 07 08 09 10 06 07 08 09 10 08 Sales (LHS) Profit for the year attributable to Net debt owners of the Parent Company = Operating profit<sup>1</sup> (RHS) = Return on equity, % 1) Excl. items affecting comparability = Debt/equity ratio, net, %





Important events 2010

Vattenfall announces plan to divest its high-voltage transmission grid in Germany.

Øystein Løseth takes office as new President and CEO of Vattenfall AB.

Alpha ventus, Germany's first offshore wind farm, is inaugurated.

## 16/6

Vattenfall acquires stake in Liberian biomass company Buchanan Renewables Fuel to secure long-term supply of biomass.

#### Sweden's parliament lifts ban on construction of new nuclear reactors in Sweden.

	2010	2009	Change, %	2010, EUR m <sup>1</sup>	2009, EUR m <sup>1</sup>
Net sales, SEK million	213,572	205,407	4.0	23,725	22,818
EBITDA, SEK million	60,706	51,777	17.2	6,744	5,752
Operating profit, SEK million	29,853	27,938	6.9	3,316	3,104
Operating profit excl. items					
affecting comparability, SEK million	39,952	31,294	27.7	4,438	3,476
Profit before tax, SEK million	21,423	17,734	20.8	2,380	1,970
Profit for the year, SEK million	13,185	13,448	-2.0	1,465	1,494
Return on equity, %	10.0	9.5	-		
Return on net assets, %	9.1	10.0	-		
Total assets, SEK million	541,432	602,127	-10.1	60,146	66,888
Equity/total assets, %	24.7	23.7	-		
Net debt , SEK million	144,109	154,987	-7.0	16,009	17,217
Funds from operations (FFO),					
SEK million	40,108	36,700	9.3	4,455	4,077
Free cash flow, SEK million	23,846	27,566	-13.5	2,649	3,062
Investments, SEK million	41,794	102,989	-59.4	4,643	11,441
Electricity generation, TWh	172.5	158.9	8.6		
Sales of gas, TWh	63.3	20.1 <sup>2</sup>	-		
Sales of heat, TWh	44.5	37.9	17.4		
Number of employees, full-time					
equivalents	38,179	40,026	-4.6		

1) Exchange rate SEK 9.002 = EUR 1. The EUR values are shown only to facilitate comparisons between SEK and EUR.

2) Pertains to quarters 3-4 2009.

major player in the European energy sector. International diversification has provided Vattenfall with more stable cash flow and a stronger platform for continued growth and value creation. However, Vattenfall is currently fac-

## 23/8

An Extraordinary General Meeting approves amendment to Vattenfall AB's Articles of Association clarifying Vattenfall's assignment.

Agreement reached on lifetime extensions of German nuclear power plants and new tax on nuclear fuel.

## /9

Vattenfall announces new strategic direction and new organisational structure.

Vattenfall's core m	harkets	
<b>W</b> ee 2	Electricity generation, TWh 76.6 Market position, electricity generation 1 Market position, electricity sales 1 Sales of gas, TWh 0 Market position, gas sales - Sales of heat, TWh 4.6	
Market position, Sales of gas, TWI Market position,	electricity generation 3 electricity sales 2 58.9 gas sales 1	
Sales of heat, TW	h 1.7 Electricity generation, TWh Market position, electricity generation Market position, electricity sales Sales of gas, TWh Market position, gas sales Sales of heat, TWh	69 n 3 4 0.1 - 17.6

#### Vattenfall's other markets

	Denmark	Finland	Poland	Belgium	UK
Electricity generation, TWh	8.4	0.6	3.6	-	0.7
Market position, electricity generation	2	>10	7	-	_1
Market position, electricity sales	-	3	5	3	-
Sales of gas, TWh	0	0.2	0	4.1	-
Market position, gas sales	-	-	-	3	-
Sales of heat, TWh	7.0	1.7	11.9	-	-
1) Second largest in offshore wind power.					

21/10

23/9

in the UK.

Vattenfall inaugurates Thanet, the Decision to build DanTysk, world's largest offshore wind farm, a large offshore wind farm in the German North Sea, together with Stadtwerke München.

## 15/12

Vattenfall and E.ON agree on joint optimisation process for the Krümmel and Brunsbüttel nuclear power plants in Germany.

# Strong earnings – but major challenges ahead for Vattenfall

Vattenfall reported improved earnings for 2010 compared with a year earlier, despite a number of one-off negative items. However, the substantial challenges that lie ahead for Vattenfall and the energy sector as a whole remain, and there is a continued strong need for further efficiency improvement and stronger competitiveness.



Vattenfall increased its net sales by 4.0% in 2010, to SEK 213,572 million (205,407), and operating profit by 6.9% to SEK 29,853 million (27,938). Profit for the year fell 2.0% to SEK 13,185 million (13,448). However, the changes over the preceding year are not entirely comparable, since the conditions for both sales and earnings have changed compared with 2009. For the first time, the figure for total sales includes full-year sales for N.V. Nuon Energy, which amounted to SEK 45,089 million. Nuon joined the Group on 1 July 2009. The sale of the German high voltage transmission business, 50Hertz Transmission GmbH, brought a decrease in net sales by SEK 17.9 billion, while the strengthening of the Swedish krona adversely affected sales by SEK 16.9 billion.

Profit for 2010 was hurt by one-off items. The sale of 50Hertz Transmission GmbH gave rise to an impairment charge of SEK 5.1 billion. In addition, Vattenfall booked an

impairment loss related to goodwill of SEK 4.3 billion for Business Group Benelux. This impairment charge was recognised as a result of deteriorated market conditions in the wake of the global economic crisis. In all, items affecting comparability hurt Vattenfall's operating profit by slightly more than SEK 10 billion.

Excluding items affecting comparability, operating profit rose 27.7% to SEK 39,952 million. It is gratifying to note that this earnings improvement is grounded in higher generation from all types of energy as well as in lower costs for operations and maintenance, administration and sales. It shows once again the strength of having a portfolio that is diversified across a variety of energy sources at the same time that operations are conducted in several regional markets. This strength will play a central role in Vattenfall's ability to manage the major challenges that the Group – along with the energy industry as a whole – is facing. Continued weak demand combined with an expansion of generation capacity in Europe is expected to put pressure margins in the years ahead. At the same time, the costs for fossil-based energy production will rise significantly when phase III of the EU's Emissions Trading System for  $CO_2$  emission allowances is implemented in 2013, which is expected to have a negative effect on profitability.

The challenges that lie ahead are indeed great. However, we are resolute in our determination to overcome these challenges and secure Vattenfall's position as one of the leading energy companies in Europe. Based on the new assignment that our owner, the Swedish state, has formulated, we are addressing the challenges with a new vision, a new strategic direction, and a new organisational structure.

Our new strategic direction rests on four pillars. The first is greater focus on profitability and value creation. The efficiency improvement programme that has already been launched will reduce our annual costs by more than SEK 6 billion by year-end 2013 at the latest. In order to at the same time increase Vattenfall's financial flexibility, the Board has decided to scale back the Group's investment programme from a total of SEK 201 billion for the period 2010–2014 to SEK 165 billion for the five-year period 2011–2015, or by 18%.

Another pillar supporting the new, strategic direction entails a focus on Vattenfall's core markets – Germany, Sweden and the Netherlands – which together account for 85%–90% of the Group's cash flow. In these three countries Vattenfall has advanced market positions that enable economies of scale and give the Group a voice in the public debate on development of tomorrow's energy supply. Vattenfall's other markets are Denmark, Finland, Poland and Belgium. The UK is not a core market, however, it is considered to have a special role as a growth market – particularly in offshore wind power. During the first half of 2011 Vattenfall will be evaluating opportunities to divest non-strategic assets that are not considered to be part of the Group's core operations. The aim is in part to strengthen our balance sheet and in part to reduce the Group's total carbon emissions. The third pillar involves Vattenfall's continued work with three main products – electricity, heat and gas.

Potential divestments, the efficiency improvement programme and the scale-back of the investment programme will all help strengthen Vattenfall financially. With an improved financial position. Vattenfall will be able to make the investments that are needed to be one of the leading European players in developing sustainable, environmentally adapted energy generation. A natural reference point for Vattenfall's reporting of its progress in environmentally sustainable energy generation is – in applicable respects – the EU's 20-20-20 climate and energy targets. Vattenfall's goal to achieve an entirely climate-neutral operation by 2050 at the latest is entirely in line with the EU's target to reduce greenhouse gas emissions by 80%–95% by the same time. Consequently, all of Vattenfall's new investments will have a distinct climate profile and will contribute to reducing the Group's total carbon exposure. which is the fourth pillar in Vattenfall's strategic direction. The business decision that has been taken for the period 2010-2020 calls for a cut in Vattenfall's CO<sub>2</sub> emissions from a total of 90 million tonnes/vear to 65 million tonnes.

In every investment decision, apart from taking climate and environmental aspects into consideration, Vattenfall also weighs in its competitiveness and security of supply. We commonly refer to these three aspects as "the energy triangle". The various forms of energy all have their advantages and disadvantages, and in every investment decision the ambition is to optimise the balance so that Vattenfall will gain environment-friendly, new energy that can compete in price while giving society secure supply of energy. All of the energy sources that today make up Vattenfall's portfolio will continue to have a role to play in the foreseeable future, as will energy sources that are still in the development stage and not yet commercially viable.

One of the fastest paths to reducing climate impact is to

increase the use of biomass. Vattenfall's ambition is that by 2020, biomass will account for half of the fuel in the power plants that are today fired by hard coal. To secure its supply of biomass, in 2010 Vattenfall acquired a stake in a Liberian company that produces biomass from rubber trees that are no longer productive. Another significant source of energy on the path to environmentally sustainable energy supply is wind power, where Vattenfall is investing heavily. During the year we commissioned two major facilities – Thanet in the UK, which is the world's largest offshore wind farm, and Stor-Rotliden, a land-based wind farm in northern Sweden.

In our ongoing shift to more climate- and environmentally adapted energy generation, natural gas will play a key role; the acquisition of Nuon has provided Vattenfall with key expertise in this area. Although natural gas is a fossil fuel, with the disadvantages that entails, it has considerably lower carbon dioxide emissions per generated unit of energy than hard coal and lignite. Therefore we view natural gas as a vital transitional solution, and investments in natural gas will have priority.

As we now leave 2010 behind and shift our focus forward, as I said there are many challenges awaiting Vattenfall. With our new organisational structure we have taken the step from a region-based to a business-led organisation, which will simplify governance and thereby facilitate the achievement of our strategic direction.

Øystein Løseth President and CEO

# New vision

Vattenfall will develop a sustainable, diversified European energy portfolio with long-term increased profits and significant growth opportunities. At the same time, Vattenfall will be among the leaders in developing environmentally sustainable energy production.

# **New strategic direction**

As Vattenfall now enters the second decade of the new millennium, it is with new Articles of Association, a new vision, a new strategic direction, new management and a new organisational structure. The new strategic direction rests on four pillars: greater focus on profitability and value creation, focus on three core markets, three main products, and growth in low  $CO_2^$ emitting energy production and in gas.

Improved profitability and value creation are fundamental prerequisites for continued growth and for Vattenfall's ability

to be among the leaders in developing environmentally sustainable energy production. Vattenfall has chosen to focus on the markets in which the company has a strong position: Germany, Sweden and the Netherlands. The company's main products are electricity, heat and gas. In addition, Vattenfall will act decisively to change the composition of the production portfolio towards more environmentally sustainable energy production in order to reduce its  $CO_2$  exposure and thus also its financial exposure to the cost of  $CO_2$  emission allowances.

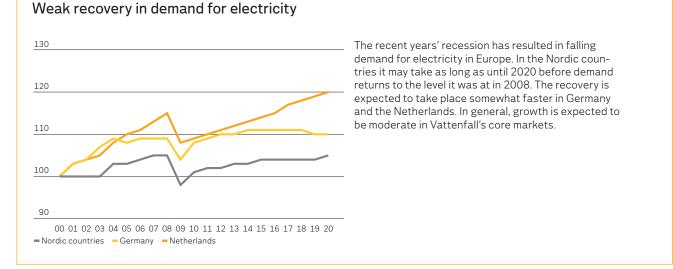
- Greater focus on profitability and value creation
- Focus on three core markets
- Three main products electricity, heat and gas
- Reduced CO<sub>2</sub> exposure and growth in low CO<sub>2</sub>-emitting energy production, and in gas

# Why a new strategic direction?

Vattenfall is facing a number of challenges in the coming 2-3 years. The energy market is characterised by squeezed margins and continued pressure to reduce carbon footprint. Vattenfall must increase its profitability and value creation as well as reduce its debt. By addressing its near-term challenges, Vattenfall will have a solid foundation for continued growth in low CO<sub>2</sub>-emitting energy production, and in gas.

## Changed market conditions

A number of interrelated factors indicate that Vattenfall and other major energy companies will be facing a number of changes in their operating environment in the years immediately ahead. Taken together, these are expected to lead to weaker price development compared to previous estimations. The recent years' recession has resulted in weaker demand for electricity throughout Europe, which is reflected in lower electricity prices. It will take another several years before demand returns to 2008 levels. In the long term, growth in Vattenfall's core markets is expected to be moderate. The addition of new generation capacity to the market in the years immediately ahead is also expected to put further pressure on electricity prices. Wind power is one of the forms of energy that is on the rise in Vattenfall's core markets. In ten years, wind power is expected to account for 10%–15% of electricity generation in Germany, the Netherlands and the Nordic countries.



The commissioning of new coal, gas and hydro power plants is also adding to overcapacity in the market, as are anticipated lifetime extensions of nuclear power plants.

Low gas prices are another factor that is affecting electricity prices. The low price of gas is mainly attributable to a surplus of gas, which is explained in part by continued weak industrial demand in the West and a lower need for imports from the USA as a result of higher domestic gas production.

Gas prices are expected to rise somewhat, but will

most likely also continue to be considerably lower than before.

Where costs are concerned, the full auctioning of  $CO_2$  emission allowances will have an impact on Vattenfall, which has a substantial share of fossilbased electricity and heat generation. When phase III of the EU's Emissions Trading System for  $CO_2$  emission allowances is implemented in 2013, costs will rise for fossil-based energy production.

## Clearer assignment from the owner

On 3 June 2010, Swedish parliament (Riksdag) decided to clarify Vattenfall AB's assignment in accordance with a government bill (prop 2009/10:179). The Riksdag's decision was formally implemented through an amendment to Vattenfall AB's Articles of Association at an Extraordinary General Meeting on 23 August 2010. The aim of the clarification was to more precisely define the owner's (the Swedish state) mandate for Vattenfall with respect to profitability and the fact that Vattenfall is an international company that is active in large parts of Europe. The new wording in the Articles of Association states: "The object for the Company's activities is to generate a market rate of return by, directly or via subsidiaries and associated companies, operating an energy business that enables the company to be among the leaders in developing environmentally sustainable energy production".

A natural reference point for Vattenfall's reporting of its progress in environmentally sustainable energy production is – in applicable respects – the EU's 20-20-20 climate and energy targets.

## What do the EU's 20-20-20 targets entail?

The EU's energy policy sets the parameters for future energy production in order to effectively deal with the major challenges posed by global climate change. The EU's climate and energy package, commonly referred to as the 20-20-20 targets, entails that by 2020, renewable energy shall account for 20% of Europe's energy production. greenhouse gas emissions shall be reduced by 20% (from 1990 levels), and energy use shall be reduced by 20% through efficiency improvements. A key tool in the EU's energy policy is trading in CO<sub>2</sub> emission allowances, which is designed to significantly increase costs for energy production with high levels of CO<sub>2</sub> emissions. Other aspects of the EU's energy policy include the creation of uniform and deregulated markets (to promote effective competition) and secure energy supply, including improved transmission capacity between various regions in Europe.

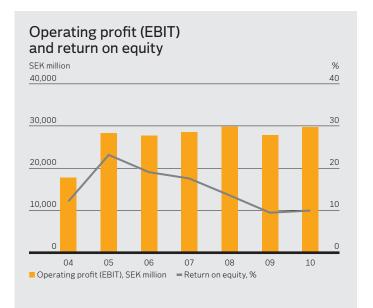
## Need for financial recovery

Today most of the major players in the European energy market are focusing their growth ambitions on competitive generation business rather than regulated business, such as transmission and distribution. Although several companies have announced reduced investment budgets, planned new construction of power plants remains at high levels. If all growth plans are realised, there is a risk for overcapacity in many markets, which will put further pressure on electricity prices.

Vattenfall's return on equity has fallen successively since the peak year 2005, and return on equity in 2010 was 10%. This is the third consecutive year that Vattenfall's return fell short of the 15% target set by the company's owner. Vattenfall shares the adverse factors in the operating environment with other major energy companies. Vattenfall's financial situation has been hurt above all by a high level of investment, a generally rising level of costs, and low availability at nuclear power plants.

Another challenge is Vattenfall's high level of debt. The high

level of investment in recent years, together with the acquisition of N.V. Nuon Energy in 2009, has pushed the company's net debt up from SEK 66 billion in 2008 to SEK 144 billion in 2010. If Vattenfall is to be able to continue to grow and be among the leaders in developing environmentally sustainable energy production, profitability will have to improve and debt levels must be brought down.



# How to get there – realising the strategic direction

Vattenfall is taking a number of actions to address the challenges it faces and to realise its new strategic direction. Some of these have already been set in motion, while others have a more long-term perspective. To support the new strategic direction, Vattenfall implemented a new, business-led organisational structure on 1 January 2011.

The near-term goal is to improve profitability and strengthen the balance sheet. One of the most important measures is to carry out an extensive efficiency improvement programme. By year-end 2013, co-ordination and synergies between operations in the various countries in which Vattenfall is active shall have reached such a level that Vattenfall has reduced annual costs by SEK 6 billion. Reduction of the five-year investment plan for the period 2011–2015 and divestment of non-core assets are other actions that are being taken. By year-end 2013, Vattenfall shall have attained the financial strength and flexibility needed to take advantage of growth opportunities in low CO<sub>2</sub>-emitting energy production, and in gas.

The measures that are being taken to improve profitability, financial flexibility and value creation will form the foundation for the work on reshaping and developing Vattenfall's generation portfolio.

Improve the efficiency of operations (page 11) Create financial flexibility (page 12) New business-led organisational structure (page 14) Reshape the generation portfolio (page 15)

# Roadmap for implementation of the new strategic direction

Vattenfall breaks down implementation of its new strategic direction into two phases – a consolidation phase and a growth phase. Being able to invest in new, more efficient plants with lower  $CO_2$  emissions during the growth phase will require successful measures during the consolidation phase. During the

consolidation phase, annual costs will be cut by SEK 6 billion at the same time that the five-year investment plan for the period 2011–2015 will be reduced compared with previous plans. In addition, opportunities to divest assets that do not support the new strategic direction are being thoroughly investigated.

## **Consolidation phase**

Next 2–3 years

#### Short-term efficiency improvement programme

- •Cost-cutting programme, SEK 6 billion
- Divestment of non-core businesses
- •Revised investment plan for 2011–2015 to SEK 165 billion (compared with SEK 201 billion for 2010–2014)
- •New business-led organisational structure from 1 January 2011

# **Growth phase** 2014–

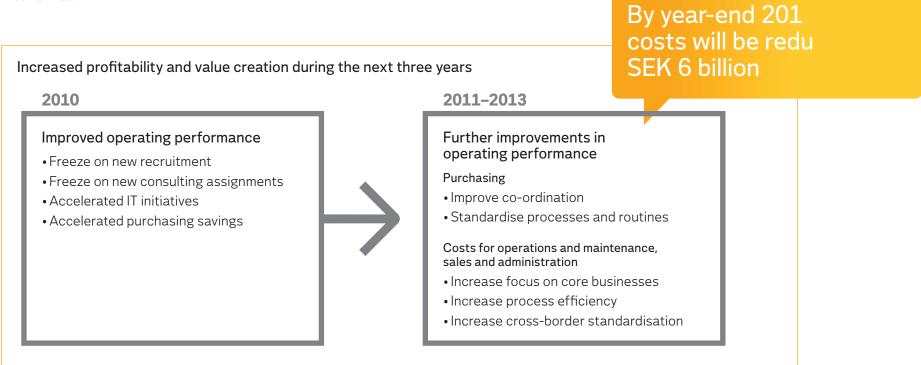
#### Reshaping the generation portfolio<sup>1</sup>

- •Focus on growth in low CO<sub>2</sub>-emitting energy production, and in gas
- Focus on large markets with good growth opportunities and on markets in which Vattenfall has sizeable positions
  Reduced CO<sub>2</sub> exposure

1) Read more about the growth phase in Vattenfall's 2010 CSR Report.

## Improve the efficiency of operations

During the next three years – the consolidation phase – Vattenfall's focus will be on enhancing operating efficiencies and thereby reducing costs by SEK 6 billion annually and strengthening cash flow. A number of measures were already taken in 2010: a freeze on new recruitment and new consulting assignments was announced at the same time that the work on finding savings in purchasing and developing new, effective IT solutions was intensified. The greatest potential for improved cost effectiveness lies in purchasing through improved co-ordination across the Group and greater standardisation of processes and administrative routines. In other operating areas as well, costs will be cut by focusing on the core businesses while increasing process efficiencies and uniformity between the various national markets. Costs for personnel and administration will also be lowered.

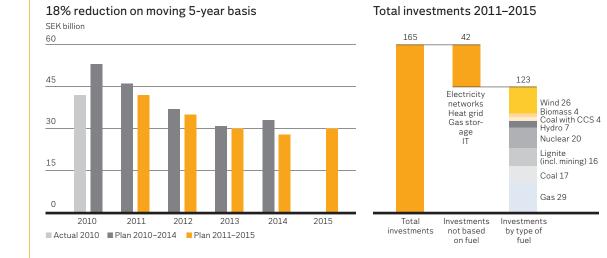


## Create financial flexibility with stronger balance sheet

To be able to reshape the generation portfolio and take advantage of value-creating growth opportunities in low  $CO_2$ -emitting energy production and in gas, Vattenfall must strengthen its balance sheet. One of the most important measures will be the scale-back of the investment plan that has been decided on for the five-year period 2011–2015.

Compared with the investment plan for the fiveyear period 2010–2014, investments will be SEK 36 billion lower while the share dedicated to low  $CO_2$ emitting energy production will increase. Divestments of non-core assets will be another important measure to strengthen the balance sheet.

#### Scale-back of investment programme for 2011–2015



#### Scale-back of investment programme

Vattenfall's total investment programme will be reduced from SEK 201 billion for the period 2010–2014 to SEK 165 billion for the period 2011-2015, or by 18%. Of the total investment budget, SEK 123 billion will be allocated to generation of electricity and heat. The remaining amount will be allocated to investments in electricity and heat networks, IT and gas storage. A large share of investments consist of completion of ongoing projects that were decided on several years ago. As shown in the chart at left, Vattenfall's investments are spread among a large number of energy sources. Compared with the five-year period 2010–2014, the share of low CO<sub>2</sub>-emitting energy production has increased from 25% to 36%

#### Vattenfall is exploring opportunities to divest non-core assets

In autumn 2010 Vattenfall began investigating opportunities to divest non-core assets and the consequences of this. Such divestments will strengthen Vattenfall's financial flexibility, among other things.

Vattenfall defines Germany, Sweden and the Netherlands as the

company's core markets, while Belgium, Denmark, Finland and Poland are regarded as other markets. The UK is viewed as a significant growth market in the near and medium terms, primarily in wind power.

#### Vattenfall's core market

- Germany, Sweden and the Netherlands together account for approximately 85% of Vattenfall's cash flow.
- They are markets in which Vattenfall has a top-3 position, which:
- provides adequate economies of scale,
- allows Vattenfall to play an important role in policy-related discussions, both at the national and EU levels.
- Vattenfall considers the UK to be an important growth market due to Vattenfall's strong position in offshore wind power in the UK.



#### Vattenfall's other markets

- Assets in Vattenfall's other markets – Belgium, Denmark, Finland and Poland – that support the new strategic direction, will be kept, for example:
   Hydro power in Finland
- Wind power in Denmark.
- Divestment of assets that are no longer considered to be part of the core operations.



#### Vattenfall's goal is to maintain "single A" credit ratings

Being a capital intensive company, it is important that Vattenfall has good access to financing in the international credit markets at favourable terms when the need arises. One prerequisite for this is that Vattenfall maintains high credit ratings from the leading rating agencies. Vattenfall is committed to maintaining "single A" ratings from both Moody's and Standard & Poor's. This is also in line with the rating objectives of Vattenfall's main peers. To maintain a credit rating in the "single A" category, it is important that Vattenfall focuses on financial discipline and carries out cash flow–enhancing measures such as non-core asset disposals and capital expenditures reductions.

## New business-led organisational structure

To enable Vattenfall to carry out its new strategic direction, a new business-led organisational structure was implemented on 1 January 2011. The previous, regionbased structure has been replaced by five new Business Divisions: Asset Development, Production, Asset Optimisation and Trading, Distribution and Sales, and Renewables. The new, business-led organisational structure will streamline decision-making and is expected to create substantial cost, personnel and knowledge synergies. In connection with implementation of the new organisational structure, a number of the Group's central processes will be strengthened, including regulatory influencing, capital allocation, portfolio management and performance management.



## Reshape the generation portfolio

The measures taken to increase Vattenfall's financial flexibility, mainly by reducing costs and debt, form the foundation for the actions that will be taken during the growth phase starting from 2014. During this period, Vattenfall will again seek growth opportunities, with focus on low CO<sub>2</sub>-emitting energy production and in gas. This will reduce the Group's CO<sub>2</sub> exposure in absolute terms as well as in terms of emissions per produced unit of energy. The ambition is to reduce Vattenfall's CO<sub>2</sub> emissions in faster pace than the market average, which translates to a total of 65 million tonnes by 2020, compared to 90 million tonnes in 2009. This corresponds to approximately 350 g/kWh of electricity. It should be noted, however, that Vattenfall's CO<sub>2</sub> emissions will rise temporarily in

the years immediately ahead as a number of new fossil-based plants come on stream. Construction of these new plants was begun several years ago. In the future, Vattenfall will continue to operate in all parts of the value chain, but with a focal point on generation. Vattenfall will continue to be active in electricity, heat and gas, but growth will take place primarily in electricity generation and will be concentrated in markets with favourable development opportunities and where Vattenfall already has or can achieve a leading position. This applies for the countries that Vattenfall has already defined as core markets - Germany, Sweden and the Netherlands - but may also include additional countries in which Vattenfall sees major potential for profitable growth.

#### Towards the vision

If Vattenfall successfully carries out the measures laid out in the new strategic direction, by 2020 the Group will have taken a major step toward realisation of its vision: "To develop a sustainable, diversified European energy portfolio with longterm increased profits and significant growth opportunities. At the same time, Vattenfall will be among the leaders in developing environmentally sustainable energy production."

#### **Towards low CO<sub>2</sub>-emitting generation** Vattenfall's 2010 Corporate Social Responsibility Report provides a

Vattenfall's 2010 Corporate Social Responsibility Report provides a detailed review of the extensive work that is being conducted within the Group to reshape operations to more environmentally sustainable energy production. Intensive work is currently being carried out to meet the targets that have been set to reduce  $CO_2$  emissions by 2020 and develop technologies to generate energy in a way that results in lower environmental impact.



## **Financial targets and performance 2010**

Vattenfall's overarching financial target is to create economic value by generating a competitive return over time. Based on this, Vattenfall's owner has set four financial targets - for profitability, interest coverage, credit ratings and the dividend. The targets are long-term, which means that they are to be evaluated as averages over a business cycle (approx. 5-7 years). They are also the foundation for the business planning process within the Group. These financial targets form the framework for Vattenfall's business control

### Profitability

#### Target

- The owner's long-term target for Vattenfall's earnings is that profit after tax should amount to at least 15% of average equity.
- Internally, Vattenfall also uses a target for return on net assets of 11% before tax.

#### Outcome 2010

- Return on equity after tax was 10.0% (9.5%).
- Return on net assets was 9.1% (10.0%).

0 06 07 08 09 10 Return on equity after tax, last 12-month figures Return target 15%

Return

%

20

15

10

5

#### Interest coverage

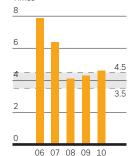
#### Target

The owner's long-term target for Vattenfall's interest coverage is that the cash flow interest coverage ratio after maintenance investments should amount to 3.5–4.5. This target has been set to ensure that Vattenfall always has sufficiently high cash flow to be able to cover its interest expenses even after bearing the cost of maintenance investments. By maintenance investments is meant primarily investments in maintenance and productivity improvements in existing plants.

#### Outcome 2010

• The cash flow interest coverage ratio after maintenance investments was 4.6 in 2010.





#### Ratings

#### Target

Vattenfall's goal is to maintain a long-term credit rating in the "single A" category from both Moody's and Standard & Poor's (S&P). A rating from these rating agencies is a balanced assessment of a company's creditworthiness based on quantitative credit metric analysis as well as qualitative assessment of the company's business risk. Ratings are therefore a good indication of a company's financial position. The "single A" category is defined as A1 – A3 by Moody's and A+ – A- by S&P. The ratings are monitored continuously by the rating agencies.

#### Outcome 2010

Vattenfall's current long-term and short-term ratings are A2/P-1 from Moody's and A/A-1 from S&P. Moody's affirmed its rating on 22 December 2010 and S&P affirmed its rating on 10 November 2010. The outlook for Vattenfall's rating is stable from Moody's and negative from S&P. S&P changed its outlook from stable to negative on 23 December 2009.

#### Dividend

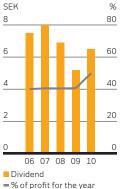
#### Target

Vattenfall's dividend to the owner should amount to 40%–60% of profit after tax over the long term. However, yearly decisions on the dividend shall take implementation of the company's strategy, financial position and other economic targets into account.

#### Outcome 2010

The proposed dividend for 2010 is SEK 6.5 billion, corresponding to 50% of profit after tax. The level of the dividend is higher than a year earlier (40.6%).





## **Energy market in transition**

In the wake of the financial crisis, demand for electricity in Europe has fallen. Parallel with this, generation capacity is steadily rising, above all for renewable electricity and gas.

The market situation for electric utilities remained challenging in 2010, with relatively low prices and pressure on margins. This is attributable to three main, interrelated factors: weaker demand, surplus supply of gas, and effects of fluctuating wind capacity.

#### 1. Weaker demand

The recent years' recession led to weaker demand for electricity in Europe in late 2008 and in 2009. Although a slight recovery took place in 2010, demand is still low, especially in northern Europe.

The biggest drop in electricity use has been in industry. In the Nordic countries, for example, a number of large, energy-intensive pulp and paper companies have cut back on their operations, and a few plants have been shut down on a permanent basis. Private consumption of electricity has been relatively stable.

It will take another several years before demand is back to 2008 levels. In the Nordic countries, it may take until 2020. The recovery is also slow in Germany and the Netherlands. Parallel with the drop in demand, generation capacity is rising steadily, above all for renewable electricity. The commissioning of new power plants based on coal, gas and hydro is also contributing to increased generation capacity, as are the anticipated lifetime extensions of nuclear power plants. In Vattenfall's core markets – Germany, Sweden and the Netherlands – a substantial capacity reserve of electricity generation is being built up for the period until 2020, estimated at anywhere from 5%–20%. In order for the electricity market to work optimally, there should be a capacity reserve of approximately 10%–20%.

#### 2. Surplus supply of gas

Gas is an important factor in the European energy market and is being used to a growing extent in electricity generation. The gas market has undergone major changes in recent years. Especially in the USA, production of gas has grown sharply – among other things of shale gas, i.e., gas produced from shale formations. The USA has thus virtually discontinued importing gas, which is one of the main reasons for the surplus of gas that has arisen in the world market.

As a result of this, futures prices for gas have fallen by 10%–25% since 2009. Gas prices have traditionally been coupled to oil prices, but now it is becoming apparent that a looser coupling is emerging between gas and oil prices. This is leading to falling spot prices for gas, which has a direct impact on the electricity price.

#### 3. Effects of fluctuating wind capacity

A large share of new electricity generation capacity that is being built in Europe consists of wind power. In 2009, renewable electricity – mainly wind power – accounted for more than 60% of newly installed electricity generation capacity. As the market is topped up with renewable electricity, volatility in pricing rises, which creates greater uncertainty for players in the market. Wind power has priority over other power sources and is fed into the price system first, which further increases price competition between other types of power, such as coal and gas. The rising share of wind power may also lead to lock-in effects caused by bottlenecks in transmission lines between regions and areas. During certain times of the day, negative electricity prices can even arise due to the lock-in effects caused by limited transmission capacity.

#### Price-setting mechanisms

Although the European electricity market is deregulated, it is not harmonious. Prices are influenced mainly by local generation conditions. In the Nordic countries it is the hydrological balance – access to water at hydro power plants – that is a key factor in pricing. When water supply is low, prices rise, and vice versa. In Germany and the Netherlands, electricity prices are influenced mainly by commodity prices – such as the price of coal and gas. Trading in  $CO_2$  emission allowances also affects pricing.

A large share of Europe's energy trading is conducted on

electricity exchanges – such as Nord Pool, EPEX and APX – where producers, retailers, large industrial companies and financial players conduct trading. Transactions are done either through immediate delivery – in the spot market – or in the futures market for future deliveries.

#### CO<sub>2</sub> emission allowances - an important tool

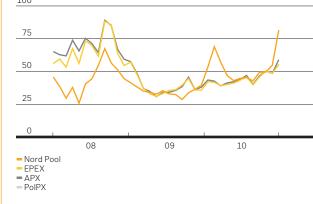
Trading in CO<sub>2</sub> emission allowances through the EU's Emission Trading System (EU ETS), which began in 2005, is one of the EU's most important tools for reducing carbon dioxide emissions in a cost-effective manner while at the same time creating incentives to invest in new, low CO<sub>2</sub>-emitting generation. The EU ETS, which covers a total of 11,000 industrial plants across the EU, is based on an allocation of allowances within a capped amount for total emissions in the respective countries, which are then distributed among the respective companies.

The price of  $CO_2$  emission allowances started out at a relatively low level in 2010 in the wake of the climate summit in Copenhagen in December 2009, since the summit failed to reach any binding accord.

#### Higher costs for fossil fuels in phase III

The rise in electricity prices in autumn 2010 reflects the uncertainty in the market ahead of developments after 2013. At that time, phase III of the trading system (2013–2020) will begin, which in addition to a more restrictive allocation will entail a number of changes. For electric utilities, the major difference will be that 100% of  $CO_2$  emission allowances will be auctioned (however, free allocation will still apply for certain other industrial sectors).

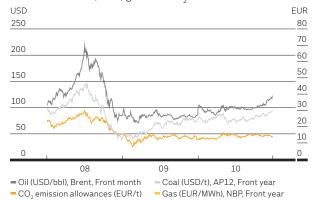
The consequence of this change in the rules will be higher costs for companies that generate electricity using fossil fuels, since according to the current rules they receive a certain share of emission allowances free of charge. It remains unclear, however, if electricity prices will rise as a result of this change, since the price of  $CO_2$  emission allowances is already factored into current wholesale electricity prices. Nordic, German, Dutch and Polish electricity spot prices 2008–2010, monthly averages EUR/MWh 100



Nordic, German and Dutch electricity futures prices EUR/MWh 100



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



Average spot prices in the Nordic countries were 52% higher than in 2009 (EUR 53.14/MWh, compared with EUR 35.03/MWh). Extremely cold and dry weather in the Nordic countries, a low hydrological balance, a break in a cable connection between Norway and Sweden, and low nuclear power generation in Sweden led to Nordic spot prices reaching occasional peaks in excess of EUR 100/MWh in February 2010. The hydrological balance strengthened somewhat during the year, but fell back to -45 TWh towards the end of the year, which led to higher spot prices at the end of the year.

The average spot price in Germany was EUR 44.46/MWh (EUR 38.89/MWh), which was 14% higher than in 2009. The average spot price in the Netherlands was EUR 45.35/MWh (EUR 39.21/MWh), up 16% over 2009. The average spot price in Poland was EUR 47.63/MWh (EUR 38.87/MWh), which was 23% higher than in 2009.

Prices of electricity futures contracts developed differently in Vattenfall's markets in 2010. Electricity futures prices in Continental Europe were lower than in 2009, while Nordic electricity futures prices traded at a higher level. Nordic futures contracts for 2011 and 2012 were 19% and 6% higher, respectively (45.20 EUR/MWh and 42.52 EUR/MWh), than a year ago, which is mainly attributable to the weak hydrological balance and extremely cold weather. German electricity futures prices for 2011 and 2012 fell by 8% (49.88 EUR/ MWh) and 9% (52.53 EUR/MWh), respectively, in 2010. Dutch futures contracts were 10% and 11% lower for 2011 and 2012, respectively (49.54 EUR/MWh) and 51.66 EUR/MWh).

Commodity prices were generally higher in 2010 than in 2009, due in large part to the weak euro. Due to expectations for an economic recovery and high demand from Asia, the average price of oil rose 28% in 2010, from USD 63.08/bbl to USD 80.48/bbl. The average price of coal rose 19% over 2009. The average gas price rose 7% over 2009, from EUR 17.91/MWh to EUR 19.21/MWh.  $CO_2$  emission allowances traded at an average price of EUR 14.49/tonne (EUR 13.40/tonne in 2009).

#### EU's climate package dictating the playing rules

The generation mix in Europe's electricity market is changing gradually. The overarching framework is set by EU directives. The long-term target, referred to commonly as 20-20-20, was adopted in 2007. It consists of the following three components: By 2020, the share of renewable energy shall be 20%,  $CO_2$  emissions shall be reduced by 20% (compared with 1990 levels), and energy use shall be reduced by 20% through efficiency improvements. These requirements will be sharpened gradually in the future. For 2050 the goal is to reduce  $CO_2$  emissions by 80%–95%.

The transformation of the European energy market is not only a climate issue. An important goal for the EU is also to maintain high security of supply. In 2006 the EU imported roughly 54% of its primary energy – mainly oil and gas from Russia and the Middle East. If the current trend continues, it is estimated that this amount will rise to 70% by 2030.

### Rising demands on electric utilities to reduce CO<sub>2</sub> emissions

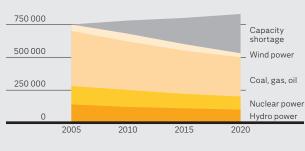
Europe's electric utilities currently emit an average of 350 g CO<sub>2</sub>/kWh, a figure that must be brought down to 260–290 g/ kWh if the energy sector is to contribute its share to meeting the EU's targets. This will require annual reductions of 1.5%–2%, which will put high demands on all electricity producers. To meet these demands, major investments are being made primarily in renewable energy generation and in wind power in particular. In ten years, wind power is expected to account for 10%–15% of generated electricity in Germany, the Netherlands and the Nordic countries. Most of the major European energy companies are carrying out major investments in wind power. For example, in 2010 Vattenfall inaugurated Thanet, the world's largest offshore wind farm (300 MW), in the UK.

In the area of renewable energy, interest is also rising for biofuels as well as for solar energy, which has been growing

Gas 103,948 MW (43.1%)

Need for new electricity generation capacity due to phaseout of existing plants

Installed capacity in the EU, MW 1 000 000



Source: VGB Powertech 2009/2010.

## Planned new electricity generation capacity in Europe from 2007–2012



Oil 3,100 MW (1.3%)
 Hard coal 51,135 MW (21.2%)
 Lignite 7,590 MW (3.1%)
 Nuclear power 16,995 MW (7.0%)
 Hydro power 4,807 MW (2.0%)
 Wind power 51,614 MW (21.4%)
 Biomass, waste and other renewable forms of energy 1,916 MW (0.8%)

Due to the age structure of Europe's electricity generation portfolio, a capacity shortage will arise over time, amounting to approximately 300,000 MW by 2020. As a result of the need for new generation capacity and rising demand, many electric utilities in Europe have major construction projects included in their investment programmes. The pie chart above shows the amount of new electricity generation capacity in Europe by 2020. steadily, especially in Germany. However, subsidies are still necessary for achieving acceptable profitability in energy projects focusing on renewable electricity. In the long-term the idea is that subsidies can be phased out altogether.

#### Nuclear power and gas in focus

As a result of the more stringent climate standards, interest in nuclear power has had a resurgence in recent years. New nuclear power plants are currently being built in France and Finland, while deliberations are ongoing in several other countries, including the UK and Poland, on the construction of new plants. During the year, the German government decided to grant lifetime extensions for existing nuclear power plants in Germany by 8 or 14 years, depending on the plant's age.

Natural gas has also come into focus in recent years. Although natural gas is a fossil fuel, its  $CO_2$  emissions are significantly lower than for coal and oil. Moreover, gas is a very flexible type of energy that is suitable as balancing power in the electricity system.

#### The future of coal depends on CCS

Coal remains a very large source of electrical energy generation in Europe, however, its share will be gradually reduced in the decades ahead due to more stringent emission requirements. The future of coal power is also dependent on the development of carbon capture and storage (CCS) technology. Several major CCS projects are planned in Europe. Among others, Vattenfall is planning to build a large demonstration plant in Jänschwalde, Germany, which has received EUR 180 million in support from the EU.

#### Uncertainties in the market due to political decisions

In order to meet their obligations in the energy sector, most countries have specific support systems and rules. In Germany, electricity from renewable energy sources is subsidised through so-called feed-in tariffs, which pay a fixed amount for the generated electricity. Sweden uses a system in which electricity producers receive an electricity certificate for each MWh that is generated from renewable energy sources and delivered to the grid. In France and Spain, feed-in tariffs were revised downwards in 2010 under political pressure over high prices this year. The rules governing subsidies are changing constantly, which is causing uncertainty in the market. In Germany, subsidies for solar energy were cut in 2010 through a new decision. Parallel with this decision, a new tax was levied on Germany's nuclear power plant owners, in exchange for lifetime extensions of the plants. The future price trend for  $CO_2$  emission allowances in phase III is another uncertainty factor.

#### Still no uniform European electricity market

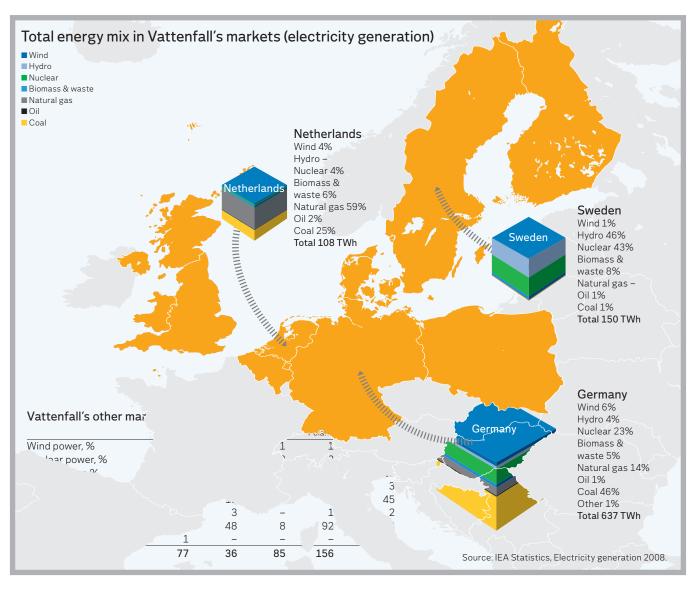
An important objective of the EU's energy policies is to create open and uniform electricity markets. In July 2007 the opening of the EU's electricity market was completed. The aim was to promote competition, create effective price mechanisms and provide incentives for new electricity generation.

Today there is still no uniform European electricity market; instead, the market is made up of a number of regional and national electricity markets – the Nordic countries, Benelux and Germany, for example – each with their own electricity exchanges. In early November a major step was taken toward creation of a more uniform energy market when the Nordic electricity market was linked together with the electricity exchanges in the Benelux countries, Germany and France through the introduction of the Central Western European Interim Tight Volume Coupling. In all, 17 separate electricity exchanges and system operators are included in this market collaboration, which covers some 60% of Europe's energy use.

#### Need for new power transmission lines

As the markets become tied more closely together, we will begin to see more uniform prices throughout Europe.

But success in building an effective, harmonious market requires that transmission capacity between and within



countries is expanded and strengthened. This corresponds to an investment cost of EUR 200 billion. The higher share of renewable electricity – particularly wind power – is also putting greater demands on the electric grid. Even though this is a priority issue in the EU, progress is slow, among other things due to long and complex regulatory processes. Two major European transmission projects, among others, were in progress in 2010: Lithuania–Poland, and Estonia–Finland. In spring 2010 the EU decided to invest EUR 910 million in transmission projects within the framework of the Economic Recovery Package.

The rising share of renewable electricity is not only putting greater demands on electricity grid; the need for balancing power is also rising steadily in order to accommodate the subsequent fluctuations in electricity generation. While the Nordic countries can rely on hydro power to balance wind power-based electricity, in Central Europe, pumped storage power plants and gas-fired power plants are commonly used.

#### Substantial investments needed to meet future demand

In the near and medium term, Europe is expected to have a surplus of generation in the electricity market. But in the longer term, the picture is radically different. By 2030, 55% of Europe's electric generation capacity will reach the end of its lifetime. It is mainly coal and nuclear power plants that will be phased out. Nearly 80% of all existing nuclear power plants are expected to be phased out by 2030, as are twothirds of all existing coal-fired plants.

This means that substantial investments will be needed to meet future demand for electricity. According to calculations performed by the European Commission, these investments will amount to approximately EUR 1 trillion.



#### The heat market

Vattenfall is the largest supplier of heat in Europe, and delivered a total of 44.5 TWh of heat in 2010, compared with 37.9 TWh a year earlier. With respect to heat, Vattenfall is mainly active in district heating and to a lesser extent in contract heating. District heating involves production and distribution of hot water to buildings for heating, and return of the cooler water to the district heating plant to be heated up again. District heating is a relatively mature market that is prevalent in Central and Eastern Europe as well as in the Nordic countries – particularly in large cities like Berlin, Hamburg and Warsaw. Heat is delivered primarily to apartment buildings, office buildings and small companies. In the EU 27, 16% of retail customers (75 million customers) obtain their heating from district heating.

An increased focus on energy efficiency, such as through improved insulation standards, is expected to lead to a slow decline in total heat demand in the future. For district heating, however, the heat loads are often used as a base for power generation by CHP plants, which produce both electricity and heat. This enables a considerably higher degree of energy efficiency than plants that generate only electricity or heat. CHP plants thus offer an interesting lever for achieving the EU's energy efficiency and greenhouse gas emission targets. In Sweden and Finland, virtually all heat production from CHP plants is based on biomass. In Denmark, a number of plants were recently converted from coal to straw. In Germany and Poland, heat production is based mainly on coal. Future development of the heat market will most likely vary significantly between local markets and will also be dependent on the development of support systems for biomass-based plants. In Sweden, competition from ground source heat pumps as a source of heat is significant.

In Denmark and Poland, Vattenfall does not own any district heating networks, but delivers heat to local – often municipally owned – network operators, which distribute the heat to end customers.

With the exception of Poland and Denmark, sales of heat are not formally regulated, however, heat operations have a number of characteristics that resemble price-regulated electricity distribution operations. The principles of pricing vary from country to country:

Sweden, Finland	No price regulation
Germany	Indexing against commodity prices
Netherlands	Indexing against gas prices
Poland, Denmark	Cost-plus price regulation

#### "One Tonne Life"

KAB 03

In September the "One Tonne Life" project was launched on the initiative of the three companies A-hus, Vattenfall and Volvo Car Corporation. The project's aim is to demonstrate how a single household can reduce its carbon footprint to a level of 1 tonne of  $CO_2$  per person/year (compared with an average of 6–8 tonnes per person/year in Sweden) and still maintain their ordinary lifestyle.

# **Major challenges for Europe's utilities**

Continued focus on financial discipline and liquidity. Stable earnings for 2010 within the industry, but weaker outlook for the years immediately ahead.

Energy companies reported mainly strong results in 2010, in line with previous years and in line with analysts' expectations. However, several utilities have announced weaker earnings outlooks for the coming years, mainly due to lower electricity and gas prices and higher taxes, particularly for the German nuclear operators.

#### Credit quality is challenged

Energy companies are by nature very capital intensive, which means that good access to the bond markets is crucial. This in turn requires solid, ratings ("investment grade rating"). However, in recent years, large debt-financed acquisitions in combination with other factors such as weaker demand, weaker earnings outlooks, and increasing political and regulatory pressures, have increased business risk and deteriorated the credit quality of many companies in the sector. As a result, their ratings have come under pressure. Most energy companies have a policy to maintain single A category ratings, and in order to secure these rating levels, they have continued to focus on financial discipline and initiated a number of credit enhancing measures.

#### Europe's energy companies

A large number of energy companies operate throughout Europe's energy markets. The largest players in terms of sales are: EDF (France), Enel (Italy), E.ON (Germany), GDF Suez (France), and RWE (Germany). These companies are integrated utilities with Pan-European activities, some of which also have sizeable operations outside of Europe. Aside from these major companies are a large number of regional players, such as Centrica and SSE (UK), CEZ (Czech Republic), Dong (Denmark), EDP (Portugal), Fortum (Finland), Gas Natural Fenosa and Iberdrola (Spain), Statkraft (Norway) and Verbund (Austria). Vattenfall is today positioned between these two groups. There are also a large number of electricity supply companies, mostly municipality-owned. In Sweden there are some 120 such companies, in Germany about 900 and in the Netherlands about 80. There are also a number of regulated transmission and distribution companies. Vattenfall's market positions are shown in a table on page 143.

#### Consolidation and asset disposals

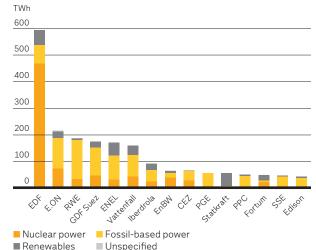
Instead of entering into new M&A transactions, Europe's utilities have focused on consolidating and integrating recent acquisitions. They have also been actively pruning their asset portfolios through disposal programmes. Of announced plans to divest EUR 65 billion in assets from 2008 to 2010, EUR 50 billion had been achieved as of 1 December 2010<sup>1</sup>. The largest transactions were the sale of E.ON's US Power and gas business for USD 7.6 billion and EDF's UK distribution network for EUR 6.7 billion. Other transactions included E.ON's and Vattenfall's sales of their respective transmission grids in Germany. In autumn 2010 E.ON announced its intention to execute further asset disposals of EUR 15 billion by 2013. EDF announced the sale of its 45% stake in the German company EnBW.

#### Cost-cutting programmes

Due to the recession that began in 2008 in the wake of the financial crisis, many energy companies have announced farreaching multi-year cost-cutting programmes. During the year, most companies reported good progress in achieving targeted savings. In some cases, the cost reduction targets were increased further.

#### Capex reductions

Reducing capital expenditures is an effective way of improving cash flow and debt levels in the short-term. In practice, however, this is often difficult to carry out, since many investment projects have been decided on years ago and cannot easily be discontinued. It is also often impossible to cut back on maintenance investments. Nonetheless, several energy companies have announced reduced investment limits for the coming years. For example, Vattenfall has scaled back its total investment programme from SEK 201 billion for 2010–2014 to SEK 165 billion for 2011–2015. In November 2010 E.ON announced a cut from EUR 24 billion for 2009–2011 to EUR 20 billion for 2011–2013. As for the composition of investments, there is generally a clear move towards renewable energy generation. Europe's largest electricity generators 2009

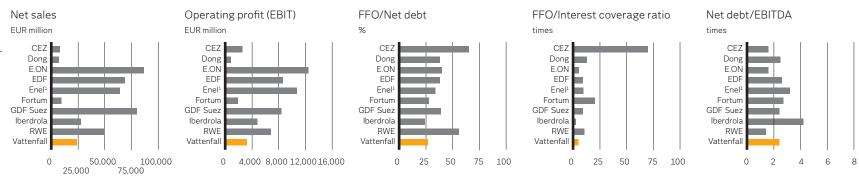


Improved liquidity and good access to credit market In 2010 several energy companies issued long-term debt on an opportunistic basis, taking advantage of attractive conditions in the bond markets to issue long-term bonds. To some extent the aim has been to prefinance loan redemptions in coming years and bolster cash positions in the meantime. There has also been a trend to renegotiate or sign new committed credit lines with banks in order to further improve liquidity positions. 2010 was also characterised by a number of new so-called hybrid bond issues. A hybrid bond is an instrument that lies between equity and debt, typically classified as 50% equity and 50% debt by the rating agencies.

1) Source: Research report by Crédit Agricole.

## **Comparison of selected European utilities**

The table and charts shown here provide a comparison of selected European utilities with respect to size, operations, strategies and various key ratios. The presentation is not exhaustive, nor are the companies ranked in any way.



	CEZ	Dong	EDF	Enel	E.ON	Fortum	GDF Suez	Iberdrola	RWE	Vattenfall
Country	Czech Republic	Denmark	France	Italy	Germany	Finland	France	Spain	Germany	Sweden
Listing info	Listed (Czech state owns 69.8%)	Unlisted (Danish state owns 76.5%)	Listed (French state owns 84.5%)	Listed (Italian state owns 31.3%)	Listed (Free float 91%) <sup>3</sup>	Listed (Finnish state owns 50.8%)	Listed (French state owns 35.9%)	Listed (Free float 83%)	Listed (Free float 78%)	Unlisted (100% state-owned)
Electricity sales Europe 2009², TWh	75.3	10.7	547.4	227.7	726.2	56.2	206.2	136.1	282.8	194.6
Number of customers, millions	Electricity: 6.8	Electricity: 1.1 Gas: 0.3	Electricity and gas: 37.9	Electricity: 57.0 (of which Europe: 44.1) Gas: 3.4	Electricity: 25.4 (Europe: 24.5) Gas: 9.6 (Europe: 9.3)	Electricity: 1.6	In Europe: Electricity: 5.6 Gas: 16.2	Electricity: 24.7 (Europe: 13.2) Gas: 3.2 (Europe: 2.3)	Electricity: 16.5 Gas: 8.0	Electricity: 7.8 Gas: 2.1
Main products	Electricity, heat, gas	Gas, oil, electricity, heat	Electricity, gas	Electricity, gas	Electricity, gas	Electricity, heat	Electricity, gas, energy services, waste management, water	Electricity, gas	Electricity, gas	Electricity, gas, heat
Main markets	Czech Republic, Poland, Slovakia, Bulgaria, Romania	Denmark, Norway, Sweden, Germany, Netherlands, Belgium, Poland, UK, Ireland	France, UK and Italy. Also active in Belgium, Hungary, Poland, Slovakia, Spain, Asia, USA, Latin America and Africa	Italy, Spain, France, Russia, Central and Eastern Europe, North and South America	Germany, UK, Nordic countries, Hungary, Czech Republic, Slovakia, Poland, Russia, Bulgaria, Romania, France, Spain, Italy, Netherlands	Finland, Sweden, Norway, Russia, Baltic countries, Poland	France, Benelux, UK, Germany, Italy, Spain, Portugal, Central and Eastern Europe, North and South America, Asia–Pacific region, Africa	Spain, Portugal, UK, USA, Latin America	Germany, UK, Benelux, Central and Eastern Europe	Core markets: Sweden, Nether- lands, Germany Other markets: Belgium, Denmark, Finland, Poland, UK
Strategies and business orientation	To be a leading power company in Central and southeast Europe Long-term strategy: Stable, CO <sub>2</sub> -neutral electricity generation Focus areas: • Operational excel- lence • Innovation • Investment in selec- ted markets outside of the Czech Republic • Renew production portfolio	Vision: Supply environ- ment-friendly, secure energy • Invest in renewable energy • Close coal-based power stations out- side Denmark and convert domestic plants from coal to biomass/natural gas • Establish new gas- fired power plants	<ul> <li>Be a major player in the global nuclear revival</li> <li>Promote development of energy efficiency, renewable energi, and more environment- friendly new techno- logies</li> <li>Consolidate leader- ship in Europe and secure its competitive advantages over the long term</li> </ul>	<ul> <li>Maintain leadership position in the energy market where the company is present</li> <li>Pursue integration and consolidation of acquired assets</li> <li>Pursue operational excellence</li> <li>Develop renewables and promote techno- logical innovation and nuclear power</li> </ul>	New strategy launched in November 2010 under the motto: "Clea- ner and better energy" • Focus on competitive businesses in Europe and growth outside Europe, in Russia, North America and two new growth regions • Business outside Europe to deliver 25% of EBITDA by 2015 • EUR 15 billion in divestments by year- end 2013	<ul> <li>Continue to leverage its strong position in the Nordic power and heat market</li> <li>Create solid earnings growth in Russia</li> <li>Continued develop- ment of CO<sub>2</sub>-free and energy-efficient solutions</li> <li>Aim for growth in new markets, especially emerging Euro-Asian countries</li> </ul>	Sustainable develop- ment and responsible growth with major objectives: • Meeting energy needs • Ensuring a secure energy supply • Combating climate changes • Improving the use of resources	<ul> <li>Maintain world- leading position in renewable energy</li> <li>Focus on growth of wind power, primarily in the USA and UK, and in hydro power in Spain, Portugal and Brazil</li> <li>Development of CCS and nuclear power</li> </ul>	<ul> <li>Lowering CO<sub>2</sub> emissions</li> <li>Value-added growth by expanding the renewable energy business</li> <li>Strengthening the upstream gas and oil position</li> <li>Stronger international diversification by increasing activities outside Germany</li> </ul>	New strategic direction announced in Septem- ber 2010: Greater focus on profitability and value creation • Focus on 3 core markets • Three main products: electricity, heat and gas • Reduce CO <sub>2</sub> exposure and grow in low CO <sub>2</sub> - emitting energy pro- duction and in gas
1) Full year 2009.       2) EU27+2.       Sources:         Exchange rates: EUR 1/SEK 9.3779 (Vattenfall); EUR 1/CZK       Graph values: Barclay's Capital 5 January 2011; European Utilities – 2011 Outlook. Last 12-month values as per 30 September 2010 except for Enel, which shows full-year figures for 2009.				Electricity soles, number of customers, primary products, core markets, strategies: Vattenfall Research, analyst reports and the companies' annual reports, interim reports and websites. Definitions: Net debt pertains to reported net debt. Free float = The proportion of a company's shares that are available for trading on the open market. (Source: Bloombergs.)						

## Large number of customers in several countries

Vattenfall's main products are electricity, heat and gas. Vattenfall sells its products to retail customers, business customers and resellers in a large number of countries.

Vattenfall has a large number of customers in several countries: Sweden, Finland, Denmark, Norway, the Netherlands, Belgium, Germany, Poland and France. In addition to selling electricity, heat and gas, a wide range of energy solutions, operation and maintenance services, advanced consulting and add-on services are provided to help customers efficiently manage their individual energy needs. While the electricity and gas markets are fully deregulated, Vattenfall also operates in electricity distribution, which is a regulated business. District heating is not formally regulated but has certain characteristics that are similar to electricity distribution.

#### Differences between Vattenfall's core markets

The end-customer sales market for electricity is deregulated in all of Vattenfall's markets, with the exception of Poland, and thus is less exposed to regulatory risk. However, there are big differences between the markets. The number of competing suppliers also differs significantly from market to market. The Dutch end-customer market has a handful of large players, a dual-fuel market and the potential for additional revenue from value-added services, such as maintenance and servicing of heating and other household installations. The end-customer markets in Vattenfall's other two large regions, Sweden and Germany, are highly fragmented, with limited dual-fuel opportunities, low entry barriers for new players and a lack of value-added service offerings. The electricity markets are liquid, which contributes to strong price competition and low gross margins.

#### Electricity retail customers

Vattenfall has a total of 7.8 million electricity retail customers (see detailed table on page 27) and strong market positions primarily in Sweden and the Netherlands. Price competition is strong. In the Dutch, German and Swedish energy markets, switching between electricity suppliers is easy, which further intensifies competition. One of the most important criteria for retail customers is the price of electricity, and as customers grow more price-conscious, they are increasingly comparing prices between suppliers.

Having satisfied customers is very important for energy companies. Vattenfall's Customer Satisfaction Index for 2010 shows that customer satisfaction was stable during the year, despite the recession, fluctuating electricity prices and negative media publicity.

Energy efficiency-improvement services have become an increasingly important feature in electric utilities' product offering. In Sweden, Finland and the Netherlands, Vattenfall offers online energy guides to help customers calculate their energy use, obtain individual energy advice and find general tips on use of energy in their homes. In the Netherlands, Vattenfall offers value-added services, such as energy advice, insulation, installation of double glazing, and installation of efficient heating systems and solar panels.

#### District heating customers

Vattenfall is a leading provider of district heating in Germany and Poland, and among top five in Sweden, the Netherlands and Denmark. The economic fundamentals of district heating vary significantly between the countries. Since district heating is subject to different regulatory conditions in the various markets, it is difficult to foresee how economic fundamentals will affect the companies' profitability. In addition, district heating provides an interesting lever for achieving the EU's energy efficiency and  $CO_2$  emission targets, e.g., via combined heat and power generation and biomass co-combustion.

#### Gas customers

Vattenfall has 2.1 million gas customers and delivered 63.3 TWh of gas in 2010. Gas operations are concentrated in the Netherlands, where Vattenfall has a market leading position. Heating accounts for a large share of gas consumption. Vattenfall's involvement in the gas market grew substantially through the acquisition of Dutch energy group N.V. Nuon Energy in 2009. Natural gas gives Vattenfall a more balanced portfolio that better reflects the European energy mix.

#### Business customers (including resellers)

Vattenfall delivered 97.4 TWh of electricity to business customers and resellers in 2010. Business customers demand customised, long-term contracts with fixed prices in order to reduce uncertainty in their investment plans, since electricity accounts for a large share of the cost base.

In the Nordic countries, Vattenfall has long had a close relationship with energy-intensive industries. And in Germany and the Netherlands, Vattenfall continues to develop its products and services for business customers, including energy efficiency improvement services and environmentally adapted services. Vattenfall is also helping its business customers boost their competitiveness by improving the efficiency of their energy use.

#### Network customers

Electricity distribution is a monopoly business that is regulated by the network authorities in the respective countries. In all, Vattenfall has nearly 5.7 million network customers. In Sweden and Finland, Vattenfall is the second largest electricity distributor, while in Germany and Poland Vattenfall holds number four and five positions, respectively.

Electricity supply that is free of outages is the most important criterion for network customers, and Vattenfall invests large sums every year to improve its delivery reliability. The growth of wind power generation and emerging use of electric vehicles are creating a growing need for intelligent, flexible and reliable networks. This – together with a number of development trends in society in general, and in energy use and politics in particular – has resulted in the development of smart grid technology.

The regulations governing electricity distribution vary from country to country. Distribution tariffs are regulated by national regulatory authorities, who define or approve tariff levels and/or returns on investment that distributors are allowed to set.

#### Key data

····, ·····								
	Sweden	Germany	Netherlands	Denmark	Finland	Poland	Belgium	Totalt Vattenfall
Number of retail customers, electricity	983,000	2,823,000	2,288,000	-	347,000	1,012,000	320,000	7,773,000
Sales of electricity (retail) TWh	9.6	9.0	10.3	-	2.8	2.7	-	34.4
Market position, electricity sales	1	4	2	-	3	5	3	-
Number of gas customers	-	9,300	1,935,000	-	300	_	190,000	2,134,600
Sales of gas, TWh	-	0.1	58.9	-	0.2	_	4.1	63.3
Market position, gas sales	-	-	1	-	-	_	3	-
Sales of heat, TWh	4.6	17.6	1.7	7.0	1.7	11.9	-	44.5
Number of network customers <sup>1</sup>	921,000	3,273,000	-	-	393,000	1,132,000	-	5,719,000

Electricity volume, TWh Retail customers 33.9 Resellers 34.4 Companies 63.5

1) Network customers can often be both retail and network customers.

#### Efficiency and profitability in focus

Vattenfall's sales business is characterised in general by fierce competition and low operating margins. To achieve satisfactory profitability and continuously be able to develop competitive customer offerings, in the years ahead Vattenfall will have to make efficiency improvements in is sales business primarily in the following areas:

#### Joint sales organisation

Effective 1 January 2011 all downstream business in Vattenfall has been organised in a single Business Division: Distribution & Sales. This will facilitate cross-border co-operation and customer orientation so that offerings and services can be improved and co-ordinated in a way that makes it easier for customers. Vattenfall is striving for a customer-focused organisation that provides a comprehensive portfolio of attractive and reliable energy solutions.

#### Reduced operating costs

Standardised processes and systems will be implemented to achieve economies of scale on an European level. Vattenfall's aim is to run cost- and capital-efficient heat and electricity distribution and sales operations through a crossborder framework and country optimisation within the framework. By transferring best practice product development and pricing between countries, costs can be lowered and better solutions can be achieved for the customers.

## Important events 2010 - Vattenfall's customers

Goal – to be the best in the electricity network business In March 2010 the Nordic Distribution business

In March 2010 the Nordic Distribution business unit communicated its goal of being the best in the electricity network business, with respect to both customer satisfaction and quality. A few examples of customer pledges include compensation for power outages lasting six hours or more, compared with twelve hours previously, and a deduction on customer invoices in the event of delay in new service.

#### Power outage in Finland

More than 190,000 Vattenfall customers in Finland were affected by a power outage during the last days of July and first week of August. The outages were caused by severe storms, which downed thousands of trees and damaged the electricity network, requiring extensive repair work.

#### Fixed winter price

In December 2010 Vattenfall launched a new product in Sweden featuring a fixed price through the winter months for customers with spot price contracts as well as Energy Watch, an analysis product that enables customers to monitor their electricity use for specified appliances in real time and monitor and manage their electricity use in a much more detailed way.

#### Agreement with Uppsala municipality

The Nordic Heat business unit signed an agreement with Uppsala municipality in Sweden on long-term close co-operation in energy generation and use, which will lead to more sustainable use of resources in the municipality. Under the terms of the agreement, Vattenfall will maintain close and regular contact with the municipality for reviews and discussions about energy solutions in the expansion and new construction of homes and other buildings in Uppsala.

#### "CO<sub>2</sub> OK Energy"

In July a new sustainable gas product was launched for customers in the Netherlands who have both gas and electricity contracts, called "CO<sub>2</sub> OK Energy". All CO<sub>2</sub> emissions resulting from customers' use of gas is offset by investments in renewable energy development projects. The electricity is generated by CO<sub>2</sub>-neutral energy sources, such as wind, solar and hydro. Customers have previously been offered sustainable electricity under the CO<sub>2</sub> OK Energy product.



#### Smart meters

In July 2010 Vattenfall began work on providing a residential area in Berlin's Reinickendorf district with more than 10,000 smart meters in conjunction with the launch of Germany's largest smart metering project. For the first time in Germany, customers can now see their electricity use in real time on their TV screens, iPhones and iPod touches, or via an online portal. Smart metering is one of several projects that Vattenfall is conducting in an effort to reduce its CO<sub>2</sub> exposure.



#### New unit established

In June 2010, Vattenfall Europe New Energy Services GmbH was established. The new company will be involved primarily in marketing electricity services in Hamburg's district heating sector. In addition to district heating, the company will also offer local supply solutions, such as local combined heat and power stations, heat pumps and solar energy.



Vattenfall Power Management AB (VPM), a wholly owned subsidiary of Vattenfall AB, offers financial portfolio- and risk management services, such as discretionary portfolio management, advisory service, trading on behalf of customers and risk management services for third-party customers to limit their cost volatility for electricity- and other energy-related commodities and mitigate their risk exposure.

VPM's international customers require a broad-based commodities contract both geographically – by involving more of their international locations – and involving other commodities than electricity. One example can be seen in Volvo Car Corporation in Sweden, where VPM manages Volvo's financial electricity portfolio to guarantee favourable purchasing terms and professional risk management. In July Vattenfall – through Nuon – expanded its several-year agreement with Volvo, which covers the supply of 100 GWh of electricity per year and also includes the company's plant in Gent, Belgium. In addition, Volvo expanded its service agreement with VPM to also include the Belgian site.

# Vattenfall's six energy sources

Generation of electricity and heat from six sources of energy give Vattenfall a strong and diversified generation portfolio.

Vattenfall's main products are electricity, heat and gas. In electricity and heat. Vattenfall works in all parts of the value chain: generation, distribution and sales. In gas, Vattenfall is mainly active in sales. Vattenfall is also engaged in energy trading and lignite mining. In 2010, Vattenfall conducted operation in Sweden, Finland, Denmark, Germany, Poland, Belgium, the Netherlands and the UK. Vattenfall is well diversified geographically as well as in its balance of energy sources. Having operations in several markets reduces sensitivity to variations in demand in individual countries. A strong and diversified generation portfolio also reduces sensitivity to price changes or regulations that could affect profitability of the individual sources of energy. Vattenfall's generation mix generally reflects the countries' overall mix of energy sources, with coal as the largest source in Germany, gas in the Netherlands, and nuclear and hydro power in Sweden.

#### Vattenfall today – A European energy company

During the past decade Vattenfall carried out a substantial expansion and transformed itself from a Swedish nuclear and hydro power operator to a major European energy com-

pany with operations in several countries and a strong and diversified generation portfolio comprising hydro power. coal- and gas-fired power, wind power, biomass-based power and nuclear power. Vattenfall's involvement in the gas market was boosted substantially in July 2009 through the acquisition of Dutch energy group N.V. Nuon Energy.

#### Challenges ahead

Vattenfall will be facing a number of challenges in the years immediately ahead. The energy market is characterised by pressure on margins and continued pressure to reduce carbon dioxide emissions. When phase III of the EU's Emissions Trading System for CO<sub>2</sub> emission allowances is carried out in 2013, costs will rise for fossil-based energy generation. Concerns about the environment and climate change have become a priority that must be balanced with security of supply and cost.

#### Reshaping the portfolio

Following a period of expansion, Vattenfall is now in a consolidation phase. In the coming years Vattenfall will focus its

geographic base of operations to its core markets: Germany, Sweden and the Netherlands. Aside from these countries. Vattenfall considers the UK to be an important growth market, mainly owing to Vattenfall's strong position in offshore wind power. Vattenfall will remain active in its three products: electricity, heat and gas.

Vattenfall will continue to be an integrated - but generation-focused – utility with a diversified generation portfolio comprising six energy sources and will increase the share of low CO<sub>2</sub>-emitting and renewable electricity generation.

In the coming years, organic growth in generation will be focused primarily on wind power and gas-fired generation, along with hydro power where possible. Vattenfall will also invest in biomass co-combustion in existing coal-fired power plants, based on the expectation that necessary biomass support systems will exist in the future. This will allow Vattenfall to reduce its current high CO<sub>2</sub> exposure.

Electricity generation	Electricity generation by	Major ongoing and decided investments in new generation							
by energy source, %	energy source, %	Name	Country	Energy source	Total installed capacity , MW	Co			
(EU total), 2008	(Vattenfall total), 2010	Boxberg	Germany	Lignite	675				
Oil 3 Biomass & waste 3	Oil – Biomass & waste 1	Ormonde	UK	Wind	150				
Wind 4 Hydro 11	Wind 1 Natural gas 8	Magnum	Netherlands	Gas, biomass	1,311				
Natural gas 23 Nuclear 28	Hydro 21 Nuclear 25	Moorburg	Germany	Hard coal	1,654				
Coal 28	Coal 44	Diemen 34	Netherlands	Gas	440				
Source: IEA, World Energy Out- look 2010		Hemweg 9	Netherlands	Gas	433				
		DanTysk	Germany	Wind	2881				
		1) Vattenfall's s	hare 51% = 147 MW						

mmissioning year

#### Vattenfall's energy mix in its respective markets 2010 (electricity generation) Sweden Wind 1% Biomass & waste 1% Hydro 41% Nuclear 57% Total 76.6 TWh -161 Finland Natural gas 17% Biomass & waste 33% Hydro 50% Total 0.6 TWh **UK** Denmark Wind 100% Biomass & waste 2% Total 0.7 TWh Natural gas 6% Wind 10% Coal 82% Total 8.4 TWh Netherlands Germanv Poland Biomass & waste 1% Coal 100% Hydro 1% Wind 2% Hydro 4% Total 3.6 TWh Coal 29% Natural gas 6% Coal 89% Natural gas 68% Total 13.6 TWh Total 69.0 TWh

#### Hydro

The potential of hydro power has already been captured for the most part, and opportunities for new plant construction are rare. Opportunities for acquisition-driven growth are also small. France, which recently opened the operation of a number of hydro power plants to competitive bids, is one market in which Vattenfall could expand.

#### Nuclear

Vattenfall is intensifying its efforts to achieve impeccable safety and optimal availability and will keep the option for growth in nuclear power open.

#### Coal

Vattenfall is currently building two new coal-fired plants in Germany – Moorburg and Boxberg. These projects, which were decided on several years ago, will be completed. After that, Vattenfall will not build any new coal plants until CCS (carbon capture and storage) technology is commercially viable.

#### Natural gas

Natural gas is a prioritised investment area for Vattenfall in the years ahead. Currently Vattenfall is building a number of gas-fired power plants in the Netherlands.

#### Wind

Vattenfall sees significant growth opportunities in wind power and has a competitive advantage in offshore wind. However, profitability is currently dependent on support systems.

#### Biomass

Vattenfall intends to expand co-combustion of biomass in coal-fired combined heat and power plants (CHPs). However, the use of biomass is dependent on support systems.

Read more about Vattenfall's six energy sources on pages 32–43.

# Hydro power

Vattenfall remains committed to hydro power with the intention of growing through acquisitions in Central and Western Europe where possible.

Hydro power has been instrumental for Vattenfall and for Sweden as a nation ever since Vattenfall was founded in 1909 to manage the Swedish state's hydro power assets. Hydro power will continue to play a crucial role in achieving an environmentally sustainable energy system for the future.

Today Vattenfall is one of Europe's largest operators of hydro power. Vattenfall owns and operates more than 100 hydro power plants, most of which are located in Sweden, with a few in Finland and Germany. Vattenfall's Swedish hydro power plants, with total installed capacity of 8,510 MW, generate 30–35 TWh per year, depending on water levels. In Germany, Vattenfall operates three small hydro power plants and eight pumped storage power plants. The latter are used to balance generation between periods of low and high consumption.

#### Flexible energy source

Vetterfell's 10 leverent budge

Hydro power is a reliable, cost-effective and renewable source of energy that produces almost no emissions that impact the climate or environment. Hydro power plants can be used to generate not only base load power (the amount of electricity that is always needed), but also balancing power (electricity output that can quickly be turned on and off to meet variations in demand). An important characteristic of hydro power is its flexibility: water flows can be regulated to adjust generation of electricity, and it is not dependent on weather, wind or long and complicated start-up processes – a characteristic that is not shared by many other types of energy sources. Hydro power can be used to guarantee an even supply and to balance the irregular feed-in of wind power to the electricity grid.

Hydro power plants have very low operating costs. The

power plants are almost entirely automated, no fuel needs to be purchased, and maintenance costs are relatively low. In addition, the economic life of a hydro power plant is very long. However, hydro power plants are complex structures that require substantial investment capital.

#### Hydro power increasingly attractive

As a result of new legislation, the energy market in France will be further deregulated when hydro power concessions for total power capacity of 5,300 MW will be up for tenders until 2015. Vattenfall intends to participate in this bidding process, and as one of Europe's largest operators, Vattenfall has a competitive advantage. Vattenfall will continue to keep its growth options open. However, opportunities for acquisition-driven growth are very small, and most of the potential for hydro power in Europe has already been captured.

Share of Vat	tenfall's
electricity g	eneration
2010	



EU (2008), %11Vattenfall (2010), %21Vattenfall's generation 2010Electricity, TWh35.4Total installed capacityEU27+2, <sup>1</sup> MW184,230Vattenfall, MW11,516Investment programme 2011–2015,SEK billion71) Power Statistics 2010 (Eurelectric).

Share of electricity generation

Country	Hydro power plant	Installed capacity,MW	Average annual output, TWh	Year commissioned
Germany	Goldisthal <sup>1</sup>	1,060	-	2003
Germany	Markersbach <sup>1</sup>	1,046	-	1979
Sweden	Harsprånget	977	2.1	1951
Sweden	Stornorrfors	590	2.3	1958
Sweden	Porjus	465	1.2	1975
Sweden	Letsi	456	1.9	1967
Sweden	Messaure	442	1.8	1963
Sweden	Ligga	324	0.8	1954
Sweden	Ritsem	320	0.5	1927
Sweden	Vietas	320	1.1	1971

Construction of Abelvattnet, Vattenfall's new hydro power plant in Storuman municipality in northern Sweden, was started in September 2010.

### Pumped storage power – a flexible electric source

Pumped storage power plants, such as the one shown here in Goldisthal, Germany, use surplus electricity that is generated by other power plants during off-peak periods. During these periods, water is pumped through pipelines from a dam to a highersituated water reservoir. When a sudden

increase in power demand occurs in peak load periods, water from the reservoir can be used to generate instant electricity. Goldisthal is one of the largest and most modern power plants of its kind in Europe, with a generation capacity of 1,060 MW. The reservoir can hold 12 million cubic metres of water, which is enough to generate electricity at full power output for eight hours. Vattenfall has a total of eight pumped storage power plants in Germany, with total installed capacity of 2,900 MW. With the rise in wind power generation in the coming years, the overall system will benefit from the balancing function provided hydro and pumped storage power capacity.

Two exceptions, however, are the new Abelvattnet hydro power plant in Storuman, Sweden, and an addition to the Stornorrfors plant in northern Sweden. Construction of Abelvattnet started in September 2010. The nearly SEK 100 million that will be invested in the project will result in a small power station with installed capacity of 5 MW that will generate approximately 15 GWh per year. In Stornorrfors, a new small power station is being built with a capacity of 4.7 MW.

**Increasing efficiency in existing hydro power plants** While opportunities to build new hydro power are limited, this does not necessarily mean that hydro power cannot grow as an energy source. Over a ten-year period, Vattenfall will be investing in modernising and upgrading 30 existing hydro power plants with an expected increase in output of 400 GWh by 2014. In Sweden alone, Vattenfall will be investing about SEK 4 billion between 2011 and 2014. In addition, Vattenfall is currently conducting a comprehensive dam safety programme. Other R&D projects are targeting effective solutions for increasing dam safety and finding effective solutions to reduce environmental impact without reducing generation capacity. One ongoing project involves replacing a 150 MW unit in Akkats, Sweden, with two 75 MW units by 2014. The efficiency of the new units will be higher and will increase output by approximately 30 GWh. At the power station in Porjus, Sweden, two 10 MW development units allow new technical concepts to be introduced at full scale in a real operating environment.

# Nuclear

Vattenfall aims to maintain its current nuclear positions and to keep its options open for future growth.

In view of the large-scale, low CO<sub>2</sub>-emitting output of nuclear power, Vattenfall considers nuclear power to be a crucial part of the energy system of the future. Vattenfall has played a major role in building Sweden's nuclear power plants and is also one of four nuclear operators in Germany. Vattenfall operates seven nuclear power reactors in Sweden – four at Ringhals and three at Forsmark – as well as two reactors in Germany – one at Brunsbüttel and one at Krümmel. Vattenfall also has a minority interest in the Brokdorf nuclear power plant in Germany.

#### A cost-competitive energy source

Nuclear power plays a vital role in many European countries due to its economic attractiveness, security of supply and low CO<sub>2</sub> emissions. Currently 148 nuclear power reactors are in operation in Europe, and another four are under construction. According to the International Energy Agency

(IEA), the rate of expansion for nuclear reactors is expected to grow in pace with the changeover to low carbon energy technologies and rising demand for energy, particularly in developing countries. All EU countries but one that had previously made decisions to phase out nuclear power have now reconsidered their policies. Nuclear power is a cost-competitive energy source. Fuel, operation and maintenance costs are lower for nuclear power than for coal and natural gas. Construction of a new nuclear power plant entails a major investment, and the predominant share of a newly built nuclear power plant's costs consists of capital costs. The life cycle of a newly built plant, from construction to decommissioning, is 80-90 years, while the effective operational time is estimated to be more than 60 years. The large initial investment costs are recovered after 20-25 years. Additional investments for safety and modernisation may be required, but in general, low running costs and a

long operating life make nuclear power a profitable investment.

#### Operations in 2010

The Brunsbüttel and Krümmel nuclear power plants in Germany have been off line since 2007. Against the background of changes in Germany's nuclear energy laws, Vattenfall and E.ON have expanded their co-operation surrounding the jointly owned Krümmel and Brunsbüttel nuclear power plans in order to quickly resume generation at the two plants and further optimise the facilities' operations. Several of Sweden's nuclear reactors were offline in early 2010. Ringhals 2 and Ringhals 1 resumed operation in February and March, respectively, following extensive, extended audits. All of Vattenfall's nuclear power plants were in full operation heading into the 2010–2011 winter season except Ringhals 1, which was offline for an annual outage from early October through mid-December 2010.

	Share of Vattenfall's Share of electricity generation electricity generation EU (2008). %			Vattenfall's nuclear power plants								
2010	leration	EU (2008), % Vattenfall (2010), %	28 25									
		Generation in 2010 Electricity, TWh	43.6	Sweden	Ringhals (4 units)	3,654		2	4.6	See below	v	70.40
		Heat, TWh	-	Sweden	Forsmark (3 units)	3,138		2	2.8	See below	N	66.00
25%		Total installed capacity EU 27+2. <sup>1</sup> MW	136.102	Germany	Brokdorf	1,370		1	1.0	198	6	20.00
	Vattenfall <sup>2</sup> , MW	7,563	Germany	Krümmel	1,346		1	0.0	198	4	50.00	
	Investment programme 2011–201 SEK billion		<b>-2015</b> , 20	Germany	Brunsbüttel	771			6.0	197	7	66.70
		1) Power Statistics 2010 (Eurel	ectric).									
			?) Vattenfall's ownership (pro rata)									
		6,114 MW		Installed c	apacity, MW	855	813	1,051	935	978	990	1,170
				Average a	nnual electricity output, T	Wh 5.1	5.9	6.9	6.7	7.0	7.0	8.8
				Year comn	nissioned	1976	1975	1981	1983	1980	1981	1985

### Possibility of new construction in Sweden and lifetime extensions in Germany

In June, Sweden's parliament (Riksdag) decided to lift the ban on new construction of nuclear reactors in Sweden. The decision, which took effect on 1 January 2011, will make it possible to apply for permits to build new reactors on sites currently with reactors in operation. The precondition is that the new reactor replaces an older one and that there are never more than ten reactors in operation at one time in Sweden.

In September, Germany's coalition government reached an agreement with the country's nuclear power operators to extend the lifetime of existing nuclear power plants by an average of 12 years. For Vattenfall this entails lifetime extensions of 14 years for the Krümmel and Brokdorf nuclear power plants and 8 years for the Brunsbüttel plant. At the same time the introduction of a new nuclear fuel tax and an obligation for the nuclear power operators to make payments to an investment fund for renewable energy projects was announced. It is estimated that the nuclear fuel tax will raise a total of EUR 2.3 billion per year, which for Vattenfall will amount to approximately EUR 165 million per year through 2016. Payments to the fund are estimated to amount to approximately EUR 21 million per year in 2011 and 2012, and approximately EUR 14 million per year from 2013 to 2016. The new rules were approved by Germany's parliament on 28 October and took effect on 1 January 2011. Vattenfall's share of the total installed nuclear capacity in Germany is 7.2%.

#### Continuous investments in safety improvement

Major investments are being made to increase safety, reduce environmental impact, upgrade equipment and extend the useful life of the Group's existing nuclear power plants. In Sweden alone, in recent years Vattenfall has invested approximately SEK 3–5 billion per year in safety upgrades, capacity increases and modernisation. The same level of investment is planned for the coming five years.

In Germany, Vattenfall has been investing approximately EUR 20 million per year in the Brunsbüttel plant and EUR 30 million in the Krümmel plant. Following the German parliament's decision to allow lifetime extensions for the country's nuclear power plants, investment plans enabling longer operation are currently being drawn up for Vattenfall's plants.



Forsmark nuclear power plant in Sweden.

# Coal

Vattenfall is investing to improve the efficiency and reduce  $CO_2$  emissions from its existing plants, but will not be building any new plants without commercially proven CCS technology.

Vattenfall currently operates 17 coal-fired power plants – eleven in Germany, two in Poland, three in Denmark and one in the Netherlands.

Two different types of coal are used to generate electricity: hard coal and lignite, in CHP (combined heat and power) and condensing plants, respectively. Lignite has a lower energy content than hard coal and is mainly used in power plants located near lignite mines. Vattenfall's coal-fired power plants in eastern Germany use primarily lignite as fuel. Vattenfall owns and operates its own lignite mines in the Lausitz region of eastern Germany. Vattenfall coal-fired plants in Denmark, Poland, Germany and the Netherlands use hard coal.

#### Vattenfall's coal power going forward

Coal power will continue to be a cornerstone of Europe's energy system in the foreseeable future, and as such, it will remain part of Vattenfall's generation portfolio. Vattenfall is currently optimising its existing generation portfolio and is investing in efficiency improvements and reductions in  $CO_2$  emissions at existing plants. Vattenfall will not be building any new coal-fired power plants until carbon capture and storage (CCS) technology is commercially viable. Construction of the Boxberg and Moorburg coal-fired plants in Germany, which was decided on several years ago, will be completed, however.

Vattenfall's goal is to reduce its  $CO_2$  exposure from today's 90 million tonnes/year to 65 million tonnes/year by 2020. The intention is that this will be achieved through a number of measures:

- Divestments, which are expected to reduce exposure by 12–14 million tonnes/year;
- Co-combustion of biomass and coal, which can achieve a reduction of 8–10 million tonnes/year;
- Changing fuels (coal to gas or biomass) and/or adoption

of CCS technology, which will lead to a reduction of 12–14 million tonnes of  $\rm CO_2\,per$  year.

However, in the years immediately ahead, Vattenfall's absolute  $CO_2$  emissions will rise temporarily as a couple of new fossil-based plants come on stream.

#### Ongoing investments in Moorburg and Boxberg

Moorburg is a coal-fired CHP plant with installed capacity of 1,640 MW and is scaled for annual electricity generation of 11.5 TWh. The Moorburg plant will also produce about 2 TWh in district heating. When completed in 2012, Moorburg CHP is expected to be one of the world's most modern and efficient power plants.

In Boxberg, an additional 675 MW unit is under construction. This unit will make us of the latest progress in material research, boilers and turbine technology, thereby improving the plant's overall efficiency and reducing its CO<sub>2</sub> emissions.

Share of Vattenfall's	Share of electricity		Vattenfall's 10 largest coal power plants			
electricity generation 2010	EU (2008), % 46	46 44	Country	Coal power plant	Installed	
			Germany	Jänschwalde		
A A02	Vattenfall's generation in 2010 Electricity, TWh	76	Germany	Boxberg		
44%	Heat, TWh	27	Germany	Schwarze Pumpe		
			Germany	Lippendorf		
		65,235 12,350	Denmark	Fynsværket		
	Investment programme 2011-20	15,	Netherlands	Hemweg 8		
	SEK billion	39	Denmark	Nordjyllandsværket		
	1) Power Statistics 2010 (Eurelectric).		Germany	Reuter West		
			Poland	Siekierki		

	valleman 5 I	o lai gest coal powe	i piants		
46 44	Country	Coal power plant	Installed capacity, MW	Average annual electricity output, TWh	Commissioning year
	Germany	Jänschwalde	2,790	22.0	1981
76	Germany	Boxberg	1,787	15.0	1979
27	Germany	Schwarze Pumpe	1,500	12.0	1997
205	Germany	Lippendorf	875	6.7	2000
235 350	Denmark	Fynsværket	675	2,0	1974
,	Netherlands	Hemweg 8	650	4.0	1994
39	Denmark	Nordjyllandsværket	660	2.8	1977
c).	Germany	Reuter West	564	2.6	1987
	Poland	Siekierki	538	2.6	1961
	Denmark	Amagerværket	410	1.7	1971



Schwarze Pumpe power plant, Germany.

**Coal power technology under constant development** The technology used to generate electricity and heat from coal is proven and cost-effective. The coal-fired power plants built today are far superior to older ones. They require less fuel to generate the same amount of energy, and as new power plants replace older and less efficient ones, total emissions will be significantly lower. Moreover, the supply of coal is relatively reliable and usually available in domestic coal reserves. This makes coal a comparatively inexpensive and secure source of energy, assuring its long-term prominence in the energy mix. However, technologies to reduce CO<sub>2</sub> emissions from coalfired plants are expensive and require substantial investments.

#### Commercial challenges with CCS technology

The construction of a pilot plant in Schwarze Pumpe, Germany, which began operating in September 2008, marked an important milestone for Vattenfall's CCS development efforts. The next step is a full-scale demonstration plant of a size sufficient to evaluate commercial conditions in Jänschwalde. Vattenfall has also built a pilot plant using pre-combustion technology to capture  $CO_2$  emissions at the Willem Alexander power plant in Buggenum, the Netherlands.

However, there is still some way to go before CCS technology can be used on a commercial scale to reduce  $CO_2$  emissions from existing power plants. One of the major com-

mercial challenges is to reduce energy consumption in the separation process, which significantly lowers the plant's efficiency. Another challenge is to hold down the investment costs for CCS technology. Vattenfall is currently collaborating with numerous stakeholders to develop the necessary social, legal and financial conditions. Provided that research and investments continue, it is estimated that CCS can be operating commercially by around the 2020 at the earliest.

# **Natural** gas

A bridging fuel to an environmentally sustainable energy system and a prioritised investment area for Vattenfall.

Natural gas currently accounts for a relatively small share of Vattenfall's total electricity generation (about 8% in 2010), but it is a priority area for investment in the coming years. Vattenfall's involvement in the gas market increased substantially in July 2009 through the acquisition of Dutch energy group N.V. Nuon Energy. Vattenfall is mainly active in trading and sales of gas.

Natural gas is a versatile energy source and is used in a variety of industrial processes, where it is converted to heat and electricity. It is also used by households for heating and cooking. Another area of application that has become more prevalent in recent years is fuel for motor vehicles. The fastest growing area of application for natural gas in the EU is cogeneration of power and heat in CHP plants. Currently more than 55% of natural gas is produced within the EU. The rest is imported, mainly from Russia and Algeria. Europe's largest producers of natural gas are Norway, the UK and the Netherlands.

#### A bridging fuel to a sustainable energy system

Natural gas is a fossil fuel and produces  $CO_2$  when combusted, but the  $CO_2$  emissions are significantly lower than for other fossil fuels. Several of Vattenfall's markets, such as Germany, Poland and the Netherlands, are currently heavily dependent on fossil fuels for their electricity generation. Gas-fired power can be regarded as a bridging fuel to a sustainable energy system while maintaining a stable energy supply at a reasonable price.

Another important characteristic of natural gas is its flexibility, which makes it suitable for balancing intermittent electricity generation from renewable energy sources such as wind and solar power – a quality that will be increasingly important as these energy sources account for an increasing share of total volume in the energy system. In addition, natural gas can be used in power plants that can be run on other sources of gas, such as biogas and gasified coal (with CCS technology).

#### Large price variations

Natural gas is subject to wide price variations. Since the cost of fuel constitutes such a large proportion of the total cost of production in a gas-fired power plant, electricity generation is sensitive to fluctuations in the price of gas. Taxes, fees and quotas on  $CO_2$  emissions are other factors that affect the price of gas-based electricity generation. Since natural gas produces lower  $CO_2$  emission than other fossil fuels, the costs for  $CO_2$  emission allowances are lower than for coal and oil, for example. Investments in natural

Share of Vattenfall's	Share of electricity		Vattenfall's 10	largest gas-fired	power plants		
electricity generation 2010	n generation EU (2008), % Vattenfall (2010), %	23 8	Country	Gas fired power plant	Installed capacity, MW	Average annual output, TWh	Year commissioned
	Vattenfall's generation in 2010		Netherlands	Velsen	834	3.0	1974
8%	Electricity, TWh Heat , TWh	13.8 8.3	Netherlands	Lage Weide and Merwedekanaal	663	2.5	1978
<u> </u>	Total installed capacity EU27+2 <sup>1</sup> .MW	19,272	Netherlands	Hemweg 7	579	0.7	1978
	Vattenfall, MW	4,755	Germany	Mitte	444	2.0	1964
	Investment programme 2011–2 SEK billion	<b>015</b> , 30	Germany	Lichterfelde	432	0.7	1972
	1) Power Statistics 2010 (Eurelectric).		Netherlands	Diemen	249	1.4	1995
			Netherlands	IJmond	144	0.7	1997
			Netherlands	Almere	114	0.6	1987
			Denmark	Hillerød <sup>1</sup>	77	0.3	1991
			Netherlands	Purmerend	72	0.2	1989

1) The sale of Hillerød is currently being completed.

gas-fired power plants are characterised by comparatively low capital costs, and low operating and maintenance costs. Gas-fired plants are also relatively simple to operate, the technological risks are lower and production lead times are shorter than for other types of power plants.

#### Ongoing investments

Natural gas is a priority sector for investment in the coming years for Vattenfall. Currently, Vattenfall is building the following gas-fired power plants:

- Hemweg 9 in Amsterdam, the Netherlands. A new more efficient, combined cycle 435 MW power plant will replace an older gas-fired plant with a capacity of 600 MW, which will be decommissioned. The plant is scheduled to be in operation by year-end 2012.
- Diemen 34, a new gas-fired 435 MW CHP plant in the Netherlands. In connection with this, a heat transportation line will be installed between the towns of Diemen and Almere to utilise surplus heat for residential heating.
- Magnum, a new multi-fuel power plant in the Eemshaven in Groningen, the Netherlands, with a capacity of 1,311 MW.



#### Natural gas

Natural gas is a fossil fuel formed by the slow degradation of biological material over millions of years. Odourless and colourless, it consists of about 90% methane. Natural gas is extracted from subsurface reservoirs both on land and offshore, either in connection with oil extraction or from separate natural gas deposits. Natural gas can be handled in two ways after it is pumped up out of the bedrock. The least expensive, easiest and most common way is transportation through large pipelines. Natural gas can also be converted to liquid form, LNG (Liquefied Natural Gas), and be transported in specially designed tankers with massive cooling systems. LNG can then be stored in cisterns or special tanks. In certain locations, natural gas is also stores in depleted oil fields or in underground salt caverns.

# Wind

Vattenfall will continue to expand in offshore wind power in the North Sea countries - the UK, Germany and the Netherlands - and onshore in prioritised markets.

Vattenfall is the largest operator of wind power in Sweden and the second largest operator of offshore wind power in Europe, with roughly 900 turbines operating in Sweden, Denmark, Germany, Poland, the Netherlands, Belgium and the UK. Construction of nine wind farms in six countries from 2009 to 2011 will double Vattenfall's wind power generation from 2 to 4 TWh. In partnership with Scottish Power Renewables. Vattenfall has been awarded one of the zones in the UK's Round Three for the development of offshore wind power.

### Significant growth opportunities

Wind power is the fastest growing source of renewable energy in Europe and has risen steadily over the last 15 years with annual average growth of 23%. A key factor behind this strong growth is the EU's goal to reduce CO<sub>2</sub> emissions by 20% from 1990 levels by the year 2020.

Share of Vattenfall's electricity generation 2010	Share of electricity generation EU (2008), % Vattenfall (2010), %	4 1
1%	<b>Vattenfall's generation in 2010</b> Electricity, TWh Heat, TWh	2.2
	<b>Total installed capacity</b> EU 27+2 <sup>1</sup> , MW Vattenfall, MW	64,013 1,448
	Investment programme 2011–2 SEK billion	2 <b>015</b> , 27
	1) Power Statistics 2010 (Eurelect	tric).

Vattenfall sees significant growth opportunities in wind power. In offshore wind power, Vattenfall has a competitive advantage and is poised for further growth. Wind power has no fuel cost, although the total cost per produced kilowatt hour is affected by the initial investment cost and investments in network capacity. Today, wind power is dependent on support systems. Offshore wind farms require a higher level of investment than onshore wind farms. Technological development and higher prices for CO<sub>2</sub> emission allowances will make wind power more cost competitive.

#### Support systems promote expansion of European wind power

The EU countries all have different support systems for renewable energy to promote its development and enable it to become as competitive as conventional, established sources of energy. Most European countries, including

### Vattenfall's 10 largest wind farms

Country	Wind farm	Installed capacity, MW	Average annual output, TWh	Year commissioned
UK	Thanet	300	1.0	2010
Denmark	Horns Rev	160	1.0	2002
Sweden	Lillgrund	110	0.3	2007
Netherlands	Noordzeewind <sup>1</sup>	108	0.3	2006
UK	Kentish Flats	90	0.3	2005
Sweden	Stor-Rotliden	78	0.2	2010
Netherlands	De Bjirmen	49	-	1995
UK	Edinbane	41	0.1	2010
Denmark	Nørrekær Enge	30	0.1	2009
Poland	Zagórze	30	0.1	2003

1) valteniali s ownersnip is 50% (through Nuon), but it receives 100% or generated electricity

Germany and Denmark, use "feed-in" tariffs under which producers of renewable electricity are guaranteed a fixed rate and have a guaranteed market for the electricity generated. These contracts often span a long period of time (15-25 years). Sweden uses an electricity certificate system. based on legislation from 2003, which was amended in 2010. Producers of renewable electricity receive electricity certificates for each MWh of generated electricity; these can then be sold on the market at fair market value. Electricity trading companies must have a certain quota of electricity certificates in order to be able to sell electricity. This creates a market in which the certificates are traded.

Smart grids - important tool for increasing wind power As electricity generation from wind power and other sources intermittent generation increases, a need is growing for intelligent, flexible and reliable networks. Today's electric

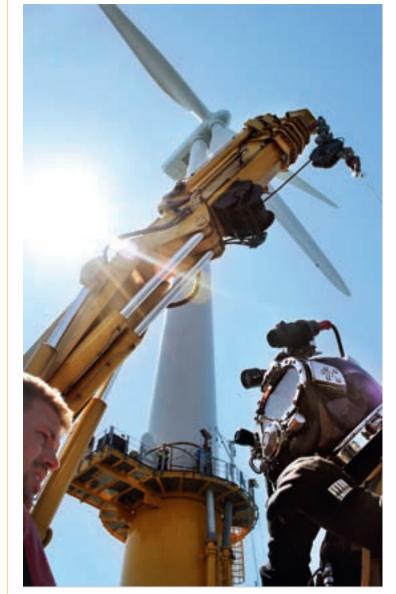
grids were originally planned and built primarily for centralised, largescale electricity generation and distribution. Demands on flexibility of electric grids have increased. This fact, along a number of other development trends surrounding energy use and energy policies – has resulted in the development of smart grid technology. Vattenfall is conducting several smart grid technology R&D projects aimed at ensuring secure and reliable network services.

#### Major investments in wind power

Six wind farm projects were completed in 2010, and Vattenfall is currently building new wind farms in several markets.

- In September 2010 Vattenfall inaugurated Thanet, the world's largest offshore wind farm offshore England's southeast coast. The 100 wind turbines have a total capacity of 300 MW.
- Germany's first offshore wind farm, "alpha ventus", was inaugurated in April 2010. The wind farm comprises twelve 5 MW turbines and is a collaboration project between EWE, E.ON and Vattenfall.
- Vattenfall's first onshore wind farm in the UK, Edinbane, was commissioned on 1 July 2010. The wind farm has total installed capacity of 41.4 MW.
- In Denmark, Vattenfall inaugurated Dræby Fed, the largest wind farm on the island of Fyn. The four new 2.3 MW turbines replaced older turbines and can deliver up to seven times as much electricity as the older ones.
- In September, Vattenfall's largest land-based wind farm Stor–Rotliden in Åsele, Sweden was commissioned. The 40 turbines have total installed capacity of 78 MW.
- The Oom Kees wind farm in Wieringermeer, the Netherlands, was commissioned in September 2010. The wind farm consists of two 3 MW wind turbines.

In 2010, construction was started of nine 2 MW turbines at the Östra Herrestad wind farm outside Simrishamn, Sweden. Vattenfall and Stadwerke München (SWM) decided to build Dan Tysk, an offshore wind farm in the North Sea. Total installed capacity is 288 MW, and the first turbines are scheduled to be operating by 2013. Vattenfall owns 51% and SWM 49% of the shares. Vattenfall is responsible for the construction, which is expected to start in 2012, and operation of the wind farm. The wind farm is scheduled for completion at year-end 2013/start of 2014.



## Offshore vs. onshore wind power

Good wind conditions are a prerequisite for a wind farm to be successful and profitable. and offshore sites are usually optimal in terms of wind strength. However, construction of offshore wind farms entails high investment costs as well as technical challenges and requirements for special equipment. Another issue is offshore grid connection. In addition, regulations on who pays for the connecting lines differ between European countries - the wind power company is liable in Sweden, while the grid operator is liable in Denmark, the UK and Germany. However, higher wind speeds offshore also mean greater potential for electricity generation. The opportunities for offshore wind are by far the greatest and best in the countries around the North Sea (the UK, followed by Germany and the Netherlands). Vattenfall has a leading position in this area.

# **Biomass**

Vattenfall is currently conducting several major biomass projects and intends to increase co-combustion of biomass in existing coal-fired plants to reduce  $CO_2$  emissions.

Vattenfall has a long history of working with biomass in producing heat and plans to increase co-combustion of biomass and coal to reduce emissions of fossil carbon dioxide. Vattenfall currently has more than 40 heat and power plants that are fuelled in full or in part by biomass. Many power plants in Denmark, Poland and Germany have started co-firing biomass with coal or are planning to do so. In all, Vattenfall uses more than 3 million tonnes of biomass a year. The use of biomass in Vattenfall's plants is steadily increasing, and Vattenfall is one of the world's leading companies in this area.

Of the biomass used by Vattenfall, more than 60% consists of domestic and industrial waste, which otherwise would not come to any benefit. By-products and residues from the forest industry account for 30%, while the remainder is primarily made up of agricultural by-products. As biomass gains a greater share of the energy mix, production of biomass for energy as well as international trade in biomass will have to increase to a corresponding degree. Vattenfall is therefore working with the entire value chain, from tree planting to power plants.

#### The use of biomass is steadily increasing

Biomass is the third most important renewable energy source in Europe's energy mix after hydro power and wind power. Together with wind power, it is the renewable energy source that is growing the fastest. Unlike fossil fuels, biomass is carbon-neutral and therefore does not contribute to the greenhouse effect in the long run.

Since biomass can be burned together with coal in coal-

Vattenfall's 10 largest biomass-fired nower plants

fired power plants, it is an effective way of rapidly reducing  $\rm CO_2$  emissions. For countries that generate a high proportion of their electricity using coal, an increase in co-combustion can make a significant contribution towards meeting national targets for renewable energy.

The competitiveness of biomass today is largely dependent on economic support systems and biomass production prices. Rising prices for  $CO_2$  emissions would make biomass less expensive relative to fossil fuels. Large-scale production, technological development and increased international trade are expected to boost the competitiveness of biomass.

#### Several new biomass plants

Vattenfall has earmarked significant resources and efforts to building a substantial, highly reliable and sustainable

Share of Vattenfall's electricity generation 2010	Share of electricity generation EU (2008), % Vattenfall (2010), %	3 1
1%——	Vattenfall's generation in 2010 Electricity, TWh Heat , TWh	1.5 8.7
	Total installed capacity EU27+2 <sup>1</sup> ,MW Vattenfall, MW	19,272 448
	Investment programme 2011-2 SEK billion	2 <b>015</b> , 3
	1) Power Statistics 2010 (Eurelec	tric).

valternalis to largest domass-lifed power plants							
Country	Biomass fired power plant	Installed capacity, electricity,MW	Installed capacity, heat, MW	Average annual output (electricity), TWh	Average annual output (heat), TWh	Year commissioned	
Finland	Myllykoski	-	300	0.1	0.6	1988	
Sweden	Uppsala	120	240	0.2	0.4	1973	
Germany	Borsigstraße	-	100	0.2	0.7	1994	
Finland	Vanaja	54	162	0.3	0.5	1939	
Germany	Rüdersdorf	35	118	0.2	-	2009	
Sweden	ldbäcksverket	35	268	0.1	0.4	1997	
Germany	Rugenberger Damm	24	146	0.1	0.6	1999	
Sweden	Jordbro	20	326	0.1	0.5	1968	
Germany	Lauta	16	80	0.1	0.01	2004	
Germany	VERA	12	9	0.1	0.1	1997	

biomass supply chain, and is constantly working to increase the use of biomass in its coal-fired power plants. Vattenfall is currently conducting several major biomass projects. In Germany, plans have been drawn up for biomass-fired power plants in Berlin and Hamburg. In the Netherlands, projects are planned to increase the amount of biomass co-fired with coal in power plants in Amsterdam and Buggenum.

The largest increase in the use of biomass will be in heat production. In 2010, two new biomass-fired CHP plants were inaugurated in Denmark. In Copenhagen, unit 1 at the Amager power station was commissioned, while in Odense, unit 8 at the Fyn power station was commissioned. At the same time, two biomass-fired boilers began operating in the Nordic region –one in Vanaja, Finland, and one in Jordbro, Sweden.

During the year, Vattenfall and Swedfund, a Swedish state-owned development finance institution that focuses on investment in developing countries, together acquired a 30% stake in Buchanan Renewables Fuel in Liberia. The company produces biomass from waste rubber trees from rubber tree plantations. By making wood chips out of the depleted trees, the farmers receive payment and the waste trees are put to use. Vattenfall's goal is to secure long-term supply of biomass.

#### Major investments in new power plants

Vattenfall will be investing substantially in biomass in the years ahead, partly through new biomass-fired power plants and partly through increased co-combustion of biomass in existing coal-fired CHP plants. In R&D, Vattenfall's focus is primarily on new processing techniques. Biofuels produced through thermal treatment (so-called black pellets) and the use of such fuels is one major focus area.



Fyn power station, Denmark.

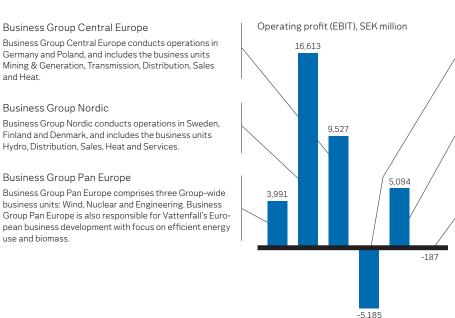
# **Administration report**

The Board of Directors and President of Vattenfall AB (publ), Swedish corporate identity number 556036–2138, herewith submit the annual report and consolidated accounts for 2010, encompassing pages 44–135, which have been translated from the Swedish original.

#### Group vision, operations and structure

Vattenfall's new vision is to develop a sustainable, diversified European energy portfolio with long-term increased profits and significant growth opportunities. At the same time, Vattenfall will be among the leaders in developing environmentally sustainable energy production. Vattenfall's main products are electricity, heat and gas. In electricity and heat, Vattenfall works in all parts of the value chain: generation, distribution and sales. In gas Vattenfall is mainly active in sales. Vattenfall is also engaged in energy trading and lignite mining. The Group has slightly more than 38,000 employees. The Parent Company, Vattenfall AB, is 100%-owned by the Swedish state. Operations in 2010 were conducted in Sweden, Denmark, Finland, Germany, Poland, the UK, the Netherlands and Belgium.

### Group operating profit 2010



#### | Business Group Benelux

Business Group Benelux conducts operations in the Netherlands and Belgium, and includes the business units Exploration & Production, Power, Heat & Services, and Sales.

#### Supply & Trading

Supply & Trading has Group-wide responsibility for market access, price hedging, fuel purchasing and dispatching for the German and Dutch power plants, and trading for own account within the mandate issued by the Executive Group Management.

#### Other

"Other" includes Treasury operations and other Group functions. Operating profit also includes unrealised changes in the fair value of energy trading contracts, which according to IAS 39 may not be recognised using hedge accounting. The Group's operations in 2010 were conducted primarily in five operating segments consisting of four Business Groups – Pan Europe, Nordic, Central Europe and Benelux – and Supply & Trading.

### A new business-led organisational structure

On 1 January 2011 Vattenfall implemented a new business-led organisational structure to support its new strategic direction and to capture cost, personnel and knowledge synergies. The previous geographically-based organisational structure has been replaced by five new Business Divisions: Asset Development, Production, Asset Optimisation & Trading, Distribution & Sales, and Renewables.

## Important events 2010

# 8/1 Vattenfall granted rights to develop offshore wind power in the UK

Vattenfall and ScottishPower Renewables were granted the rights to develop a large wind farm – East Anglia – offshore Britain's east coast in the North Sea. Fully utilised, the wind farm has the potential to generate approximately 7,200 MW. Provided that the necessary regulatory approvals are granted, construction can begin in 2015 and will be conducted in stages.

**12/3**Vattenfall sells its German transmission grid Vattenfall signed an agreement to sell its subsidiary 50Hertz Transmission GmbH, which owns and operates Vattenfall's high voltage transmission grid in Germany, to the Belgian transmission system operator Elia and the Australian company Industry Funds Management (IFM). The sale was completed on 19 May 2010. The proceeds from the sale of the shares amounted to EUR 465 million. In addition, the buyers redeemed shareholder loans of EUR 320 million from Vattenfall.

**18/3**Sale of Nuon Deutschland GmbH Vattenfall completed the sale of N.V. Nuon Energy's German subsidiary Nuon Deutschland GmbH to ENERVIE – Südwestfalen Energie und Wasser AG, with retroactive effect from 1 January 2010. The European Commission had approved the acquisition of N.V. Nuon Energy under the condition that Vattenfall sold all of its shares in Nuon Deutschland GmbH.

12/4 Øystein Løseth new CEO of Vattenfall Øystein Løseth took office as President and CEO

of Vattenfall AB.

**27/4** Germany's first offshore wind farm inaugurated Germany's first offshore wind farm, "alpha ventus", was inaugurated. Alpha ventus is a pilot project 45 kilometres off the coast of the island of Borkum. The plant comprises 12 turbines of 5 MW each and is a collaboration between Vattenfall, EWE and E.ON.

# **16/6**Vattenfall acquires stake in Liberian biomass company

In June Vattenfall and Swedfund, a financial institution that is 100%-owned by the Swedish state, acquired 30% of the shares in Buchanan Renewables Fuel in Liberia. The company produces biomass from depleted rubber trees from rubber tree plantations. The acquisition is part of Vattenfall's efforts to secure long-term supply of biomass.

### 17/6<sup>Swedish</sup> parliament lifts ban on new construction of nuclear reactors in Sweden

Sweden's parliament lifted the ban on new construction of nuclear reactors in Sweden, effective 1 January 2011. The condition is that one new reactor may be built to replace an existing one, and that no more than a total of ten reactors may be operating in Sweden.

# 23/8 Amendment to Articles of Association for Vattenfall AB

The Swedish parliament decision on 3 June clarifying Vattenfall AB's assignment was formally adopted through an amendment of Vattenfall AB's Articles of Association at an Extraordinary General Meeting of Vattenfall AB. The aim of the amendment was to clarify the owner's (the Swedish state) assignment with respect to its requirement for a market rate of return and to the fact that Vattenfall is a company with operations spanning a large part of Europe.

# 5/9 Lifetime extensions of German nuclear power plants and new tax on nuclear fuel

In September the German government reached an agreement with Germany's nuclear power operators to extend the lifetime of the country's existing nuclear power plants by an average of 12 years. For Vattenfall this entails lifetime extensions of 14 years for the Krümmel and Brokdorf nuclear power plants and 8 years for the Brunsbüttel plant. At the same time the introduction of a new nuclear fuel tax and an obligation for the nuclear power operators to make payments to an investment fund for renewable energy projects was announced. The nuclear fuel tax is expected to raise a total of EUR 2.3 billion per year, and for Vattenfall it is estimated to amount to approximately EUR 165 million per year through 2016. The new rules were approved by Germany's parliament on 28 October and took effect on 1 January 2011. Vattenfall's share of total installed nuclear power capacity in Germany is 7.2%.

# 21/9<sup>New strategic direction and new</sup>

Vattenfall presented a new strategic direction resting on four pillars: greater focus on profitability and value creation; focus

on three core markets – Sweden, Germany and the Netherlands; focus on three main products – electricity, heat and gas; and reduced carbon dioxide exposure and growth in low  $CO_2$ -emitting energy production, including gas. In addition, a new business-led organisational structure was presented with effect from 1 January 2011.

# **23/9**Vattenfall inaugurates world's largest offshore wind farm

Vattenfall inaugurated Thanet – the world's largest offshore wind farm offshore England's southeast coast. The wind farm comprises 100 turbines with total installed capacity of 300 MW.

**21/10** Decision made to proceed with the DanTysk Vattenfall took the decision to build DanTysk, an offshore wind farm in the North Sea together with Stadtwerke München (SWM). The wind farm will consist of 80 turbines with total installed capacity of 288 MW and is expected to be completed at year-end 2013/start of 2014. Vattenfall is the majority owner with a 51% interest and will be responsible for the plant's construction.

**15/12**Vattenfall and E.ON agree on joint optimisa-Following changes in Germany's nuclear energy laws, Vattenfall and E.ON increased their co-operation regarding the jointly owned Krümmel and Brunsbüttel nuclear power plants. In the months ahead, the two companies will conduct a thorough review of all available options to quickly resume generation at the nuclear plants and further optimise the facilities' operations. The review also aims to determine whether E.ON will take over operational responsibility for both facilities.

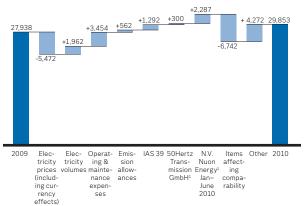
### 15/12 Vattenfall sells assets in Germany and Denmark

Vattenfall sold its 24.9% stake in the German municipal energy company Städtische Werke AG Kassel to Thüga AG. The transaction was completed on 15 December. In addition, an agreement was reached to sell the natural gas-fired Hillerød CHP plant in Denmark to Hillerød Forsyning. The transaction is expected to be completed in the early months of 2011.

# **Group – Financial overview and analysis**

Amounts in SEK million, unless otherwise stated	2010	2009	Change, 9
Net sales	213,572	205,407	4.0
Profit before depreciation/amortisation (EBITDA)	60,706	51,777	17.
Operating profit (EBIT)	29,853	27,938	6.
Operating profit excl. items affecting comparability	39,952	31,294	27.
Financial items, net	-8,430	-10,204	17.
Profit before tax	21,423	17,734	20.
ncome tax expense	-8,238	-4,286	92.
Profit for the year	13,185	13,448	-2.
- of which, attributable to owners of the parent	12,997	12,896	0.
- of which, attributable to minority interests	188	552	-65.

Factors affecting the change in operating profit (EBIT) SEK million



1) Excluding items affecting comparability.

### Net sales

Consolidated net sales rose 4% to SEK 213,572 million (205,407). N.V. Nuon Energy, which has been consolidated in the Group since 1 July 2009, contributed SEK 45.1 billion (21.4) in sales in 2010. The divestment of the German transmission business, 50Hertz Transmission GmbH in May 2010 led to a drop in the Group's net sales by SEK 17.9 billion compared with 2009. Currency effects reduced net sales by SEK 16.9 billion as a result of the stronger Swedish krona.

#### Operating profit (EBIT)

Operating profit rose 6.9% to SEK 29,853 million (27,938). The improvement is mainly attributable to higher production volumes, lower operating and maintenance expenses, lower costs for sales and administration, and an improved result for the trading operations. Average lower prices received had a negative effect on consolidated operating profit, by approximately SEK 5.5 billion. Currency movements had a negative effect on operating profit by SEK 0.7 billion. Excluding items affecting comparability, totalling SEK -10,099 million, operating profit increased by SEK 8,658 million. Items affecting comparability consisted of:

- Capital gains SEK 194 million
- Capital losses SEK 444 million
- Impairment losses SEK 11,151 million mainly impairment of goodwill related to Business Group Benelux, totalling SEK 4.3 billion, and impairment related to 50Hertz Transmission GmbH, totalling SEK 5.1 billion.
- Reversed impairment losses SEK 1,302 million, mainly attributable to electricity network and electricity generation assets in Germany.

### Financial items, net

Net financial items amounted to SEK -8,430 million (-10,204). The improvement is mainly attributable to a positive change in the value of derivatives and to certain extent also lower interest expenses for loans. The higher interest expense is attributable to the stronger Swedish krona.

### Taxes

The tax expense increased by SEK 3,952 million to SEK 8,238 million (4,286). The effective tax rate as per the income statement was 38.5% (24.2), which is mainly due to non-deductible items affecting comparability, mainly related to 50Hertz Transmission GmbH and impairment of goodwill related to Business Group Benelux. The effective tax rate excluding items affecting comparability was 26.5%, which is close to the Group's theoretical tax rate of 27%.

### N.V. Nuon Energy (Nuon)

The operations of N.V. Nuon Energy (Nuon) affected 2010 operating profit by SEK -900 million. Excluding impairment of goodwill, amortisation of surplus value and other acquisition adjustments, Nuon had a positive effect on consolidated operating profit of SEK 6,900 million. Through December 2010, Vattenfall's management and reporting of Nuon's operations were as follows: Nuon's wind power operations are part of the Wind business unit of Business Group Pan Europe. The energy trading operations are part of Supply & Trading. Nuon's other operations – conducted in the business units Exploration & Production; Power, Heat & Services; and Sales – are included in Business Group Benelux.

#### Non-current assets

Non-current assets decreased by 7.9%, mainly due to impairment of goodwill, totalling SEK 4.3 billion related to Business Group Benelux and SEK 13.8 billion related to divested operations, and currency effects.

#### Current assets

Short-term investments, cash and cash equivalents decreased by 22.9%, from SEK 56,940 million to SEK 43,873 million. The decrease is mainly attributable to a reclassification of "Short-term investments" to "Advance payments to suppliers", totalling approximately SEK 14 billion as per 1 January 2010. The reclassification pertains to paid margin calls. See also Note 2 to the consolidated accounts. In addition to short-term investments, as per 31 December 2010 Vattenfall had SEK 9,102 million (10,453) in committed credit facilities and SEK 6,860 million (10,342) in other credit facilities at its disposal.

#### Financial assets at 31 December 2010

Amounts in SEK million	
Cash and cash equivalents,	
and short-term investments	43,873
Confirmed credit facilities (unutilised)	9,102
Other credit facilities (unutilised)	6,860

#### Current and non-current liabilities

Total interest-bearing liabilities decreased by 11.8%, from SEK 213,494 million to SEK 188,277 million. Currency effects accounted for SEK 21.7 billion of the total decrease of SEK 25.2 billion. Consideration for the remaining 51% of N.V. Nuon Energy (Nuon) is reported as a liability to Nuon's shareholders and is thus included in interest-bearing liabilities. The remaining consideration will be paid in three tranches during the coming five years (in July 2011, 2013 and 2015).

Interest-bearing liabilities also include SEK 8,929 million (10,250) in Capital Securities, which were 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%).

Further, interest-bearing liabilities include SEK 10,493 million (16,711) in loans from Vattenfall's minority-owned German nuclear power companies, and SEK 9,327 million (7,975) in loans from minority owners in Vattenfall's Swedish nuclear

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

Non-current assets	388,263	404 400	
	500,205	421,493	-7.9
Current assets	153,169	180,634	-15.2
Total assets	541,432	602,127	-10.1
Non-current liabilities	278,693	314,402	-11.4
Current liabilities	129,188	145,321	-11.1
Equity incl. minority interests	133,621	142,404	-6.2
Total equity and liabilities	541,432	602,127	-10.1

#### power plants, among others.

The Group's reported net debt decreased by SEK 10,878 million, from SEK 154,987 million to SEK 144,109 million.

#### Net debt

Amounts in SEK million	2010	2009
Capital Securities	-8,929	-10,250
Bond issues, commercial paper and		
liabilities to credit institutions	-110,038	-122,086
Present value of liabilities pertaining to		
acquisitions of subsidiaries	-43,438	-49,447
Liabilities to associated companies	-10,493	-16,711
Liabilities to minority owners	-9,327	-7,975
Other liabilities	-6,052	-7,025
Total interest-bearing liabilities	-188,277	-213,494
Cash and cash equivalents	12,595	10,555
Short-term investments	31,278	46,385
Loans to minority owners in foreign		
subsidiaries	295	1,567
Net debt	-144,109	-154,987

### Adjusted gross debt and net debt

When rating agencies and analysts assess a company's financial position, they commonly 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 table below shows adjusted figures for gross and net debt calculated by Vattenfall, but according to principles applied by analysts in the market. There is no uniform method for such adjustment, however, the calculation presented below can be considered to be conservative.

#### Adjusted gross debt and net debt

	Amounts in SEK million	2010	2009
)	Total interest-bearing liabilities	-188,277	-213,494
)	50% of Capital Securities	4,464	5,125
	Present value of pension obligations	-19,992	-21,197
5	Provisions for mining, gas and wind operations and other environment-		
7	related provisions	-12,760	-14,463
-	Provisions for nuclear power (net)	-12,794	-6,776
5	Currency derivatives for hedges of		
5	loans in foreign currency	2,668	1,345
ļ	Margin calls received	5,149	5,545
5	Liabilities to minority owners related to		
5	consortium agreements	8,923	7,588
	Adjusted gross debt	-212,619	-236,327
7	Reported cash and cash equivalents		
,	and short-term investments	43,873	56,940
	Unavailable liquidity	-4,663	-25,641
	Adjusted cash and cash equivalents		
	and short-term investments	39,210	31,299
	Adjusted net debt	-173,409	-205,028

#### Equity

The Group's equity decreased by SEK 8,783 million to SEK 133,621 million. The change in equity is mainly attributable to currency effects.

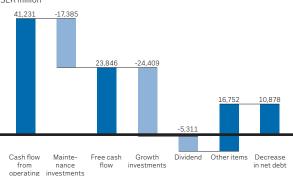
### Condensed cash flow statement<sup>1</sup>

Amounts in SEK million unless indicated otherwise	2010	2009	Change, %
Funds from operations (FFO)	40,108	36,700	9.3
Cash flow from changes in operating assets and operating liabilities	1,123	9,546	-88.2
Cash flow from operating activities	41,231	46,246	-10.8
Cash flow from investing activities	-34,783	-83,040	-58.1
Cash flow from financing activities	-5,147	27,822	-
Cash flow for the year	1,301	-8,972	-
Free cash flow <sup>2</sup>	23,846	27,566	-13.5

1) See complete Cash flow statement on page 87.

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

Factors affecting the change in cash flow SEK million



#### activities

#### Funds from operations (FFO)

Funds from operations (FFO) increased by SEK 3.4 billion during the year, mainly due to a SEK 3.7 billion higher pre tax profit and an improved underlying profit from N.V. Nuon Energy (i.e., N.V. Nuon Energy's profit excl. impairment of goodwill, amortisation of surplus value and other acquisition adjustments). Higher paid tax in the amount of approxi mately SEK 4.2 billion had a negative effect on FFO. The higher tax payment is attributable to an unusually low tax charge in 2009.

#### Changes in operating assets and operating liabilities

Changes in working capital had a positive effect on cash flow by SEK 1.1 billion. As per 1 January 2010 a reclassifica tion was made of "Short-term investments" to "Advance pay ments to suppliers" for margin calls. These are now reported under changes in working capital.

#### Cash flow from operating activities

Cash flow from operating activities amounted to approxi mately SEK 41.231 million, which was SEK 5.015 million lower than a year earlier.

#### Cash flow from investing activities

Cash flow from investing activities was SEK -34,783 million (-83,040). Total investments in 2010 amounted to SEK 41,794 million, broken down as follows: Business Group Pan Europe SEK 13 billion, Business Group Nordic SEK 4.9 billion, Business Group Central Europe SEK 13.5 billion, Business Group Benelux SEK 9.5 billion, and other items approximately SEK 1 billion. The item "Shares" in 2009 pertains mainly to the acquisition of 49% of N.V. Nuon Energy, totalling approximately SEK 52 billion, and the acquisitions of the Polish state's minority interests in the subsidiaries GZE S.A. and Vattenfall Heat Poland S.A., for SEK 3.3 billion. Divestments during the year amounted to SEK 7.197 million. Of this amount, SEK 5,200 million is attributable to sales of shareholdings, of which the most part pertains to the sale of 50Hertz Transmission GmbH

#### Investments

Amounts in SEK million	2010	2009
Maintenance investments	17,385	18,680
Growth investments	24,409	84,309
– of which, shares	1,085	56,562
Total investments	41,794	102,989

#### Divestments

Amounts in SEK million	2010	2009
Divestments	7,197	5,542
– of which, shares	5,200	3,832

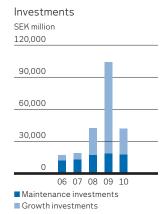
#### Cash flow from financing activities

Cash flow from financing activities was SEK -5,147 million (27,822). Loans raised during the year amounted to SEK 13.325 million. Loan amortisation totalled SEK 12.389 million.

For further information about Vattenfall's borrowing activities, see the section Risks and risk management, page 77–83.

### Specification of Vattenfall's investments

		ess Group Europe		ss Group rdic		ss Group al Europe		ss Group Ielux	0	ther	Elimi- nations	Т	otal
SEK million	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2010	2009
Electricity													
generation													
Hydro power	-	-	899	1,346	52	113	-	-	-	-	-138	813	1,459
Nuclear power	4,688	4,090	-	-	-	-	-	-	-	-	-	4,688	4,090
Fossil-based power	-	-	-	4	5,323	7,327	7,148	3,000	-	-	-	12,471	10,331
Wind power	7,303	7,731	-	-	-	-	-	-	-	-	-	7,303	7,731
Biomass, waste	-	-	-	-	152	151	51	-	-	-	-	203	151
Other	309	444	-	-	1,606	2,884	-	-	-	-	-	1,915	3,328
Total Electricity													
generation	12,300	12,265	899	1,350	7,133	10,475	7,199	3,000	-	-	-138	27,393	27,090
Heat													
Fossil-based power	5	_	291	470	1,300	1.549	104	383	_	_	_	1.700	2,402
Biomass, waste	5	_	472	1.220	1,300	29	104	505			_	538	1,249
Other	_	_	219	206	534	619	42	_	_	2	_	794	827
Total Heat	5		982	1.896	1,900	2.197	146	383		2		3,032	4,478
Total Heat	5	-	502	1,090	1,900	2,197	140	303	-	2	-	3,032	4,470
Electricity networks													
Electricity networks	-	-	2,876	3,116	2,388	3,790	-	-	140	_	-	5,405	6,906
Other	-	-	-	-	-	-	-	-	-	-	-	-	-
Total Electricity													
networks	-	-	2,876	3,116	2,388	3,790	-	-	140	-	-	5,405	6,906
Purchases of shares	392	346	9	-	30	48	180	-	479	56,169	-5	1,085	56,562
Other, excl. shares	285	348	168	206	2,059	4,205	2,015	2,787	543	407	-192	4,879	7,954
Total	12,982	12,959	4,935	6,568	13,511	20,714	9,540	6,170	1,162	56,578	-335	41,794	102,989

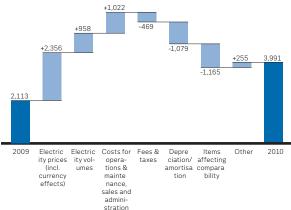


# **Business Group Pan Europe**

Amounts in SEK million, unless indicated otherwise	2010	2009	Change, 9
Net sales	24,481	21,113	16.
External net sales <sup>1</sup>	8,620	8,239	4.
Operating profit	3,991	2,113	88.
Operating profit excl. items affecting comparability	5,012	1,968	154.
Electricity generation, TWh	45.8	43.2	6.
– of which, nuclear power	43.6	41.5	5.
– of which, wind power	2.2	1.7	29.
Number of employees, full-time equivalents	5,817	5,667	2.

Business Group Pan Europe comprises the three Group-wide business units: Wind, Nuclear and Engineering. Business Group Pan Europe is also responsible for Vattenfall's European Business Development unit, focusing on efficient use of energy and biomass. Anders Dahl: Head of Business Group Pan Europe.

Factors affecting the change in operating profit (EBIT)  $\ensuremath{\mathsf{SEK}}\xspace$  million



### **Operating profit**

Operating profit improved by SEK 1,878 million, to SEK 3,991 million (2,113). Excluding items affecting comparability, operating profit improved by SEK 3,044 million, to SEK 5,012 million (1,968).

#### Items affecting comparability:

Amounts in SEK million	2010	2009
Operating profit excl. items affecting		
comparability	5,012	1,968
Capital gains	5	1
Capital losses	-183	-
Impairment	-843	-1,122
Other items affecting comparability	-	1,266
Operating profit	3,991	2,113

Operating profit for the Nuclear business unit improved, mainly as a result of higher average prices received and higher generation volumes due to higher availability at the Swedish nuclear power plants during the fourth quarter. Operating and maintenance expenses were lower, espe cially in the German operations, due to lower provisions and reversed provisions for costs for nuclear waste. The loss of revenue<sup>1</sup> in 2010 caused by the outages at the Krümmel and Brunsbüttel nuclear power plants in Germany is estimated at approximately EUR 445 million (approximately SEK 4.3 bil lion) (2009: approx. SEK 4.1 billion). The corresponding loss of revenue from unplanned outages at the Swedish nuclear power plants is estimated at approximately SEK 3.9 billion (2009: SEK 2.3 billion). Operating profit in 2009 for the Wind business unit was affected by the recognition of SEK 1,266 million in negative goodwill, pertaining to the Thanet wind farm in the UK

### Electricity generation 2010

Electricity generation increased by 6.0% to 45.8 TWh (43.2). The increase is mainly attributable to higher nuclear power generation as a result of greater availability at the Swedish nuclear power plants. The Brunsbüttel nuclear power plant in Germany remained offline, which was also the case during 2009. The outage at the 50%-owned Krümmel nuclear power plant in Germany did not affect consolidated generation volumes, since the plant is not consolidated in Vattenfall's accounts. Wind power generation increased by 29.4% to 2.2 TWh. The 300 MW Thanet offshore wind farm in the UK and the 78 MW Stor-Rotliden onshore wind farm in Sweden were commissioned during the second half of 2010.

1) Calculation of the loss of revenue is theoretical and is based on the average level of spot prices and planned generation during the period.

#### Investments

Vattenfall is striving to develop its generation portfolio towards low CO<sub>2</sub>-emitting energy production and in gas. Business Group Pan Europe, with responsibility for both nuclear power and wind power, plays a central role in this work. Following is a description of a few of the major investment projects that are in progress or are planned:

- A long-term investment programme totalling SEK 50 billion is ongoing for the Forsmark and Ringhals nuclear power plants in Sweden. The investment programme, is being conducted in collaboration with the plants' other owners and covers measures to improve safety, extend the plants' useful life, and raise capacity. Of Vattenfall's investment programme for 2011–2015, SEK 3–5 billion is earmarked each year.
- Construction of the Östra Herrestad wind farm outside Simrishamn, Sweden. Östra Herrestad is expected to be commissioned in spring 2011. Comprising nine 2 MW turbines, Östra Herrestad will be able to generate electricity for approximately 11.000 households.
- Vattenfall has obtained a building permit for the onshore Ray Wind Farm in Northumberland, UK. The wind farm will comprise 16 turbines with a potential capacity of up to 56 MW.
- Vattenfall has received the required regulatory approval to build the onshore Clashindarr wind farm, near Huntly in Aberdeenshire, UK. The project comprises 18 wind turbines with a total capacity of 41.4 MW.
- Vattenfall took the decision to build Dan-Tysk, an offshore wind farm in the North Sea, together with Stadtwerke München (SWM). The wind farm will comprise 80 turbines with total installed capacity of 288 MW. Vattenfall owns 51% and SWM 49%.

#### Highlights - Business Group Pan Europe

- In June, Vattenfall and Swedfund, a financial institution wholly owned by the Swedish state, together acquired 30% of the shares in Buchanan Renewables Fuel in Liberia. The company produces biomass from depleted rubber trees from rubber tree plantations. The investment is part of Vattenfall's efforts to secure long-term supply of biomass.
- The Wind business unit conducted extensive activities during the year. Among other things, Vattenfall inaugurated several wind farms: "alpha ventus", Germany's first offshore wind farm, in the North Sea; Edinbane, Vattenfall's first onshore wind farm in the UK; Thanet, the world's largest offshore wind farm offshore Britain's southeast coast; and Draeby Fed in Denmark. In addition, Sweden's largest onshore wind farm, Stor-Rotliden, in Åsele, Sweden, began operating. At the same time, construction is proceeding of the Östra Herrestad wind farm in Simrishamn, Sweden; the Ormonde offshore wind farm in the Irish Sea; and the DanTysk offshore wind farm in the North Sea. Additional wind farm projects are planned or have been started.
- In September the German government reached an agreement with the country's nuclear power operators to extend the lifetime of existing nuclear power plants by an average of 12 years. For Vattenfall this entails lifetime extensions of 14 years for the Krümmel and Brokdorf nuclear power plants and 8 years for the Brunsbüttel plant. At the same time the introduction of a new nuclear fuel tax and an obligation for the nuclear power operators to make payments to an investment fund for renewable energy projects was announced. It is estimated that the nuclear fuel tax will raise a total of EUR 2.3 billion per year, and for Vattenfall it is estimated to amount to approximately EUR 165 million per year through 2016. The new rules were approved by Germany's parliament on 28 October and took effect on 1 January 2011. Vattenfall's share of the total installed nuclear power capacity in Germany is 7.2%.
- In response to changes in Germany's nuclear energy laws, Vattenfall and E.ON agreed to expand their collaboration with respect to the Krümmel and Brunsbüttel nuclear power plants.



Thanet offshore wind farm, UK.

The two companies will conduct a thorough, joint review of all available options to quickly resume generation at the nuclear plants and further optimise the facilities' operations. The review also aims to determine whether E.ON will take over operational responsibility for both facilities.

- In September, the "One Tonne Life" project was launched at the initiative of the three companies A-hus, Vattenfall and Volvo Car Corporation. The project aims to demonstrate how an ordinary family can reduce its carbon footprint to a level of 1 tonne of carbon dioxide per person/year (compared with an average of 6–8 tonnes per person/year in Sweden) and still maintain their ordinary lifestyle.
- Vattenfall is continuing its e-mobility venture. In addition to previously started co-operation projects with BMW Group and Volvo Car Corporation, Vattenfall and the City of Stockholm began co-operating in a national procurement process for electric cars and rechargeable hybrids for early establishment in the Stockholm market. The procurement initiative is intended to make it easier and faster to procure electric cars and rechargeable hybrids at better terms.

# **Business Group Nordic**

Amounts in SEK million, unless indicated otherwise	2010	2009	Change, %
Net sales	45,058	42,393	6.3
External net sales <sup>1</sup>	53,621	45,064	19.0
Operating profit	16,613	7,504	121.4
Operating profit excl. items affecting comparability	16,741	11,117	50.6
Electricity generation, TWh	40.6	38.8	4.6
– of which, hydro power	32.2	31.2	3.2
– of which, fossil-based power	7.6	7.3	4.1
– of which, biomass and waste	0.8	0.3	166.7
Sales of heat, TWh	13.3	11.1	19.8
Transited volume, excluding production transiting	79.9	74.5	7.2
Number of employees, full-time equivalents	5,250	5,544	-5.3

Business Group Nordic conducts operations in Sweden, Finland and Denmark. The following business units are included in the segment: Hydro, Distribution, Sales, Heat and Services. Torbjörn Wahlborg: Head of Business Group Nordic.

Factors affecting the change in operating profit (EBIT) SEK million





#### **Operating profit**

Operating profit improved by SEK 9,109 million to SEK 16,613 million (7,504). Excluding items affecting comparabil ity, operating profit increased by SEK 5,624 million, to SEK 16,741 million (11,117).

#### Items affecting comparability:

<b>o</b> 1 <i>y</i>		
Amounts in SEK million	2010	2009
Operating profit excl. items affecting		
comparability	16,741	11,117
Capital gains	81	688
Capital losses	-2	-13
Impairment	-207	-4,094
Other items affecting comparability	-	-194
Operating profit	16,613	7,504

The earnings improvement is mainly attributable the Hydro business unit and is due to higher average prices received, higher generation volumes and lower costs. The Distribution business unit also showed improved profit as a result of higher volumes, higher tariffs and lower costs. The Heat business unit showed an improvement as a result of higher volumes and lower depreciation, due to the impairment charge for Danish heating assets that was made in the fourth quarter of 2009.

#### Electricity generation and sales of heat 2010

Electricity generation increased by 4.6% to 40.6 TWh (38.8), of which hydro power generation increased by 3.2% and fossil-based power – mainly from thermal plants in Denmark – increased by 4.1%. Biomass-based generation increased to 0.8 TWh (0.3). Sales of heat increased by 19.8% to 13.3 TWh (11.1), of which 7.0 TWh (5.2) is attributable to Denmark. Transited volume within Distribution increased by 7.2%, which can be credited mainly to the rise in demand for electricity from Swedish industry.

#### Investments

The following major investment projects are in progress or are planned for Business Group Nordic:

- An extensive investment programme for hydro power. During a ten-year period, Vattenfall is investing in the modernisation and upgrading of 30 existing hydro power stations, with an anticipated capacity increase of 400 GWh by 2014. Vattenfall will be investing roughly SEK 4 billion between 2011 and 2014.
- Parallel with this, an extensive dam safety programme is under way. In addition, work is being conducted on finding effective solutions for increasing dam safety and for reducing environmental impact without impinging generation capacity.
- In September 2010, construction was started of Abelvattnet hydro power plant in Storumans municipality, Sweden. This will be Vattenfall's first newly built hydro power station in more than 15 years. The nearly SEK 100 million that is being invested in the project will result in a small power station with installed capacity of 5 MW.
- At Akkats hydro power plant in Sweden, two new 75 MW units will be installed and will replace an older 150 MW unit in order to enhance the plant's flexibility.

#### **Highlights Business Group Nordic**

- The Distribution business unit communicated its goal of being the best among electricity distribution companies, with respect to both customer satisfaction and quality. Examples of customer pledges include compensation for electricity outages lasting six hours or more, compared with twelve hours previously, and a deduction on customer invoices in the event of delay in new service.
- Two new biomass-fired combined heat and power plants were inaugurated in Denmark during the second quarter of 2010: unit 1 at Amager power station (Amagerværket) in Copenhagen and unit 8 at Fyn power station (Fynsværket) in Odense. Each year more than 300,000 straw bales replace 100,000 tonnes of coal as fuel.
- In Uppsala, a new turbine was commissioned at a waste incineration plant, resulting in approximately 85 GWh of new electricity generation. The plant is fuelled primarily using biomass.
- Vattenfall and ABB, together with the Swedish Royal Institute of Technology and Uppsala University, started a collaboration to run the Swedish part of InnoEnergy, the world's largest innovation factory for creating new products in the energy sector. In Sweden, priority will be given primarily to two research areas – smart grids and electricity storage. The first step in this collaboration will involve a joint effort surrounding a large demonstration project involving smart grids on the Swedish island of Gotland.
- The Nordic Heat business area signed an agreement with Uppsala municipality in Sweden on long-term close cooperation in energy generation and use, which will lead to more sustainable use of resources in the municipality. Under



#### Fyn power station, Denmark.

the terms of the agreement, Vattenfall will maintain close and regular contact with the municipality to review and discuss about energy solutions in association with new construction of housing and other properties in Uppsala.

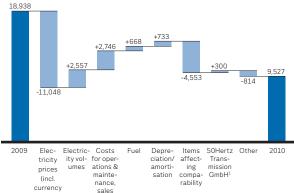
• Vattenfall signed a number of electricity supply contracts with Swedish industrial companies. Among other things, Vattenfall's contract with Holmen was extended to cover 0.9 TWh/year for six years. A new, one-year contract was signed with Borealis for electricity supply in Finland and Sweden. Borealis and Vattenfall have had a long-standing co-operation that covers – in addition to electricity – electricity networks, heat and service.

# **Business Group Central Europe**

Amounts in SEK million, unless indicated otherwise	2010	2009	Change, %
Net sales	132,994	163,476	-18.6
External net sales <sup>1</sup>	94,310	116,466	-19.0
Operating profit	9,527	18,938	-49.7
Operating profit excl. items affecting comparability	13,515	18,373	-26.4
Electricity generation, TWh	72.6	68.9	5.4
– of which, fossil-based power	68.8	65.2	5.5
– of which, hydro power	3.1	2.5	24.0
– of which, biomass and waste	0.7	1.1	-36.4
Sales of heat, TWh	29.5	26.3	12.2
Transited volume, excluding production transiting	41.1	40.7	1.0
Number of employees, full-time equivalents	20,410	21,713	-6.0

Business Group Central Europe conducts operations in Germany and Poland. The operating segment consists of the following business units: Mining & Generation, Transmission, Distribution, Sales and Heat. Tuomo Hatakka: Head of Business Group Central Europe.





#### **Operating profit**

Operating profit decreased by SEK 9,411 million to SEK 9,527 million (18,938). Excluding items affecting comparability, operating profit decreased by SEK 4,858 million to SEK 13,515 million (18,373).

#### Items affecting comparability:

2010	2009
13,515	18,373
108	208
-210	-848
-5,130	-123
1,244	1,328
9,527	18,938
	13,515 108 -210 -5,130 1,244

The earnings decline is attributable in part to an impairment charge of SEK 5,085 million for assets in Vattenfall's German transmission company 50Hertz Transmission GmbH, which was sold on 19 May 2010. Operating profit for the Mining & Generation business unit deteriorated, mainly due to lower average prices received. Despite a higher gross margin, the Heat business unit showed a lower operating profit due to a provision for restructuring costs. Currency movements resulting from the stronger Swedish krona had a negative effect on the change in operating profit by approximately SEK –960 million, net.

#### Electricity generation and sales of heat 2010

Electricity generation increased by 5.4% to 72.6 TWh (68.9), which is mainly due to higher electricity generation in cogeneration with heat and to the start of operations at a biomass-fired electricity/thermal plant in Rüdersdorf, Germany. Sales of heat increased by 12.2% to 29.5 TWh (26.3) as a result of colder weather than in 2009. Transited volume in the distribution operations increased by 1.0%.

1) Excluding items affecting comparability.

and administration

effects)

#### Investments

The following major investment projects are in progress or are planned for Business Group Central Europe:

- The Moorburg coal-fired combined heat and power plant in Hamburg, Germany. Total installed capacity will be 1,640 MW. The plant is expected to be commissioned in 2012/2013.
- Expansion of the Boxberg lignite-fired power plant in Sachsen, Germany, with a new 675 MW unit, which is expected to be commissioned in 2012.
- A CCS demonstration plant in Jänschwalde, Germany. A new boiler using oxyfuel technology is planned, as is the fitting of the two existing boilers with post-combustion technology. The demonstration plant is expected to be operating by 2015 at the earliest.
- In close co-operation with the agriculture company Bauern AG in Neißetal, Germany, Vattenfall began construction of a 700 kW biogas plant in Brandenburg. Bauern AG will be a part-owner together with Vattenfall and will also be responsible for providing the plant with biofuel derived from agricultural byproducts.

#### Highlights Business Group Central Europe

- Vattenfall divested its subsidiary 50Hertz Transmission GmbH, which owned and operated Vattenfall's German transmission grid, to the Belgian transmission system operator Elia and the Australian Industry Funds Management (IFM). The sale was completed on 19 May 2010. Consideration for the share amounted to EUR 465 million. In addition, the buyers redeemed a shareholder loan of EUR 320 million from Vattenfall.
- Vattenfall Europe Innovation GmbH was formed to be active in e-mobility, hydrogen-powered vehicles and intelligent systems. In Berlin, Vattenfall provides charging stations for the new Mercedes-Benz Vito E-cell fully electric van, which is being supplied with certified green electricity and intelligent charging technology, reducing both CO<sub>2</sub> emissions and costs. In addition, Vattenfall will be using ten test cars during the next four years. In Hamburg, Vattenfall is seeking to increase its involvement in the "Electromobility – Hamburg drives with green power" co-operation project and plans to install half of the 50 charging stations that are planned for various public locations in Hamburg.
- Vattenfall Europe New Energy Services GmbH was established in April 2010. The new unit will be involved primarily in marketing electricity services in Hamburg's district heating sector. In addition to district heating, the company also offers local supply solutions such as combined heat and power stations, heat pumps and solar energy.
- In July Vattenfall started work on providing a residential area in Berlin's Reinickendorf district with more than 10,000 smart meters in conjunction with the launch of Germany's largest



Pipe work at the Moorburg CHP plant in Hamburg, Germany.

smart metering pilot project. For the first time in Germany, customers can now see their electricity consumption in real time on their TV screens, iPhones and iPod touches or via an online portal. Smart metering is one of several projects that Vattenfall is conducting to reduce CO<sub>2</sub> emissions.

• Vattenfall and the German government reached an agreement to end the international arbitration proceedings surrounding the construction of the Moorburg combined heat and power plant in Hamburg. Vattenfall is proceeding with the construction and will use new technical solutions for an advanced type of cooling tower.

# **Business Group Benelux**

Amounts in SEK million, unless indicated otherwise	2010	Q3-Q4 2009
Net sales	49,184	24,290
External net sales <sup>1</sup>	41,961	20,446
Dperating profit	-5,185	-644
Dperating profit excl. items affecting comparability	-229	-205
Electricity generation, TWh	13.4	8.0
- of which, fossil-based power	13.3	7.9
- of which, hydro power	0.1	0.2
Sales of heat, TWh	1.7	0.6
Sales of gas, TWh	63.1	19.7
Number of employees, full-time equivalents	5,556	6,009
) Excluding intra-Group transactions.		

Business Group Benelux conducts operations in the Netherlands and Belgium and consists of the business units Exploration & Production (mainly gas production), Power, Heat & Services, and Sales. Nuon's wind power and energy trading operations are now part of Business Group Pan Europe and the Supply & Trading segment, respectively. Huib Morelisse: Head of Business Group Benelux.

In its local accounts, Business Group Belenux reported a positive operating result of EUR 197 million for 2010 (SEK 1,885 million). However, in Vattenfall's consolidated accounts, a negative operating result of SEK -5,185 million (EUR -542 million) is reported for Business Group Benelux. The difference is due to impairment of goodwill, totalling SEK 4,306 million, amortisation of surplus value and other acquisition adjustments, totalling SEK 2,650 million, and other totalling SEK 115 million.

### **Operating profit**

The operating result was SEK -5,185 million. Excluding items affecting comparability, the operating result was SEK -229 million. Items affecting comparability consist primar ily of SEK 4.3 billion in goodwill impairment. The impairment charge was recognised as a result of deteriorated market conditions in the wake of the global financial and economic crisis, which led to lower margins than what were originally anticipated for Vattenfall's operations in Benelux.

#### Items affecting comparability:1

Amounts in SEK million	2010	Q3–Q4 2009
Operating profit excl. items affecting		
comparability	-229	-205
Capital gains	-	36
Capital losses	-43	-
Impairment	-4,971 <sup>1</sup>	-220
Reversal of impairment	58	-
Other items affecting comparability	-	-255
Operating profit	-5,185	-644
1) Of which goodwill CEK 4206 million		

1) Of which, goodwill SEK -4,306 million.

Amortisation of surplus value and other acquisition adjustments amounted to SEK 2,650 million (1,468). Currency movements caused by the stronger Swedish krona had a negative effect on the change in the operating result by approximately SEK 580 million, net.

#### Electricity generation, and sales of heat and gas 2010

Electricity generation in 2010 amounted to 13.4 TWh, sales of heat totalled 1.7 TWh, and sales of gas to end customers amounted to 63.1 TWh.

#### Investments

The following major investment projects are in progress or planned in Business Group Benelux:

- The Magnum multi-fuel power plant in the Netherlands, with installed capacity of 1,311 MW. The plant is expected to be commissioned in late 2013.
- The gas-fired Hemweg 9 power plant in Amsterdam, which will replace an older unit that will be decommissioned. The new 435 MW plant is scheduled to be operating by year-end 2012.
- The Diemen 34 gas-fired CHP plant in the Netherlands. A heat line will be installed between Diemen and Almere to utilise surplus heat for residential heating.
- Expansion of a gas storage facility in Epe, Germany. The first stage began operating in early December 2010. This entails a capacity increase of approximately 40 million m<sup>3</sup> of natural gas, to 180 million m<sup>3</sup>. The expansion will result in greater flexibility to handle daily fluctuations in supply and demand in the gas market. The entire expansion is expected to be operating by year-end 2011 and is expected to increase storage capacity to 280 m<sup>3</sup>.

#### Highlights Business Group Benelux

- On 1 July 2010 Huib Morelisse took office as new Head of Business Group Benelux and CEO of N.V. Nuon Energy.
- The European Commission gave its approval to the Dutch authorities to provide support to Nuon worth EUR 10 million for construction of a pilot plant for pre-combustion technology for carbon capture and separation. The plant is currently being built at the Willem Alexander power plant in Buggenum, the Netherlands.
- On 21 June 2010, Almere Sun Island was commissioned in the Netherlands. In an area covering 7,000 sq.m. Nuon has built 520 solar collectors that capture the heat of the sun to supply heat for 2,700 homes.
- In early July, Vattenfall expanded its several-year agreement with Volvo Car Corporation, via Nuon. The agreement, which took effect in 2010, covers annual supply of 100 GWh of electricity and also includes Volvo's plant in Gent, Belgium.
- In July a new product, "CO<sub>2</sub> OK Energy", was launched for customers with both gas and electricity contracts. All CO<sub>2</sub> emissions resulting from customers' use of gas is offset by investments in renewable energy development projects. The electricity is generated by CO<sub>2</sub>-neutral energy sources, such as wind, solar and hydro.



Willem Alexander power station, Buggenum, Netherlands.

 In the Netherlands, interest continues to grow in value added services, such as energy savings advice, insulation services, installation of double-paned windows, and installation of efficient heating systems and solar panels.

# **Supply & Trading**

Amounts in SEK million, unless indicated otherwise	2010	2009	Change, %
Net sales	84,577	70,781	19.5
External net sales <sup>1</sup>	14,738	14,593	1.0
Operating profit	5,094	1,571	224.3
Operating profit excl. items affecting comparability	5,100	1,585	221.8
Number of employees, full-time equivalents	424	363	16.8

The Supply & Trading operating segment has Group-wide responsibility for market access, price hedging, fuel purchasing, dispatching for the German and Dutch power plants, and trading for own account (proprietary trading) within mandates issued by the Executive Group Management. Stephen Asplin: Head of the Supply & Trading operating segment.

### **Operating profit**

A large share of Supply & Trading's business generates earnings for other business units (in other operating segments) of the Vattenfall Group. Operating profit for Supply & Trading therefore consists mainly of realised trading transactions. Operating profit does not include unrealised changes in fair value as prescribed by IAS 39. These are reported in "Other".

Operating profit improved by SEK 3,523 million to SEK 5,094 million (1,571). The improvement is mainly attributable to electricity, gas and oil trading combined with higher gas volumes associated with cold weather, which had a favourable impact on gas business.

### Highlights Supply & Trading

- Vattenfall Energy Trading received a Top 3 ranking in four areas in a survey conducted by Energy Risk magazine. Vattenfall Energy Trading was ranked as the best electricity trading company in the Netherlands and number two in Belgium. In both Nordic and German electricity trading, Vattenfall Energy Trading was ranked number three. The survey is based on a ranking of players in the market with respect to price, liquidity and trading opportunities.
- Vattenfall Energy Trading established the Vattenfall Carbon Fund to gather knowledge and experience within the Group in the CDM/JI area. Through financing and participation in CDM (Clean Development Mecha-

nism) and JI (Joint Implementation) projects, Vattenfall Carbon Fund will provide the Group with  $\rm CO_2$  emission allowances from these projects.

- In mid-May Vattenfall Energy Trading began serving as market maker on the Dutch APX-ENDEX TTF spot market.
- In August 2010 Vattenfall Energy Trading became the first market maker on the Polish electricity exchange, PPX.
- Vattenfall signed its first gas management contract with a customer. Städtische Werke AB, Kassel buys portfolio management services from Vattenfall Europe Power Management, under which Vattenfall is to deliver annual gas volume of 250 GWh.

## Other

mounts in SEK million, unless otherwise indicated	2010	2009	Change, %
let sales	1,515	2,127	-28.8
xternal net sales <sup>1</sup>	322	599	46.2
Dperating profit	-187	-1,544	87.9
Operating profit excl. items affecting comparability	-187	-1,544	87.9

"Other" includes Treasury operations and Other Group functions. Operating profit also includes unrealised changes in fair value of energy trading contracts, which according to IAS 39 may not be recognised using hedge accounting.

#### Operating profit

Vattenfall strives to use hedge accounting as far as possible for energy trading contracts. The changes in fair value that are recognised in the Group's profit pertain to trading for own account (proprietary trading) and price hedging contracts that are not effective hedges. Energy trading contracts are administered by Supply & Trading, but are reported in Other until the amounts are realised. When the amounts are realised, they affect the segments for which the contracts were taken out.

The operating result improved by SEK 1,357 million to SEK -187 million (-1,544) and is mainly attributable to unrealised changes in fair value in the derivatives portfolio.

## **Non-financial disclosures**

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

Vattenfall's new strategic direction builds on the clarification of Vattenfall's assignment from the company's owner, the Swedish state, see page 7. As a European energy company, Vattenfall's commitment to the development of environmentally sustainable energy production is aligned with the goals of the European Union. In the medium-term, the EU's goals of reducing greenhouse gas emissions by 20% (from 1990 levels), increasing the use of renewable energy to 20% of total, and reducing energy use through improvements in overall energy efficiency by 20% set the framework for Vattenfall's business until 2020. Vattenfall supports these goals and the related policies at the European and national levels.

Vattenfall's owner wants the company to be a leader in each of these areas. Using the EU's 20-20-20 targets as a guide, Vattenfall will assess its performance in the following areas:

#### Specific emissions from Vattenfall's portfolio:

The target is to reduce Vattenfall's emissions to  $350 \text{g} \text{CO}_2 \text{e/kWh}$  by 2020.

#### Renewable energy production:

The target is to achieve 8 TWh of electricity generation from wind and biomass by 2020, compared with 3.9 TWh in 2010.

#### More efficient energy use:

The target is to achieve continuous improvement in the efficiency of Vattenfall's own plants and to help customers improve their efficiency of energy use.

For more information, see Vattenfall's 2010 CSR Report, pages 8–9.

#### Impact of environmental issues on the Group

Environmental issues in society and the environmental impact of energy companies have such significance that Vattenfall's earnings and financial position are affected by how the company chooses to act. In the area of climate change, Vattenfall's ambition is to reduce the company's  $CO_2$  exposure to a total of 65 million tonnes by 2020,

compared with 90 million tonnes in 2009. More long-term, Vattenfall's target is to halve its  $CO_2$  emissions by 2030 compared to 1990 levels, and the company's climate vision is that its entire operations will be climate-neutral by 2050. In the operations that Vattenfall owns today, specific  $CO_2$  emissions (grams per kWh) have decreased by 26% (from 566 to 417  $CO_2$  e/kWh) since 1990 for total electricity and heat production.

The impact of environmental issues is both direct and indirect. Vattenfall works proactively in its efforts to stay abreast of new environmental findings at an early stage in order to be able to draw its own conclusions to the challenges and thereby be in a position to predict tomorrow's customer demands, laws and economic environmental policy instruments.

National and European goals for the transition of energy supply to a higher share of renewable energy affect Vattenfall. The same applies for goals to reduce  $CO_2$  emissions. In pace with ever-stronger demands on environmental considerations and growing expectations among the general public for environmental responsibility, environmental standards are evolving to become statutory requirements that must be fulfilled. Economic environmental policy instruments are also being introduced that have a direct bearing on the company's cash flow and earnings.

Vattenfall needs the general public's acceptance and trust regarding the company's environmental impact in order to be able to run and develop its operations. Stakeholder dialogues on pertinent environmental issues are an important tool in this respect.

#### Impact of policy instruments and taxes

Economic environmental policy instruments and the issuance of permits for operations subject to a permit requirement are factors that have great impact on Vattenfall's earnings and financial position. The European Trading System for  $CO_2$  emission allowances, the fee system for nitrogen oxides in Sweden, trading in the Netherlands in nitrogen oxides emission allowances and sulphur taxes imposed in certain countries are examples of economic environmental policy instruments that affect the Group's operations and earnings. Vattenfall believes that the trading system for  $CO_2$ emission allowances is the environmental policy issue that has the greatest impact on the company's position in both the long and short term. 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, based on EU directives. Development of legislation for transporting and storing  $CO_2$  will be important to carry out Vattenfall's CCS strategies.

#### Environmental impact of operations

Vattenfall's environmental work is focused on managing resources in an effective and responsible manner while taking sustainability aspects into account. Vattenfall uses several different energy sources and a wide range of technologies. Vattenfall's operations have significant environmental impact with respect to the climate, air quality, the use and protection of land and water, nuclear power safety, waste management and biological diversity. The greatest single environmental impact of Vattenfall's operations results from the generation of electricity and heat at power plants. The main environmental impact of Vattenfall's nuclear power operations is associated with the handling of radioactive waste. For combustion plants the main environmental impact results from emissions of the greenhouse gas carbon dioxide and other air emissions, and land use in open-cast lignite mining. The main environmental impact of hydro power, wind power and the network activities is water and land use. Other significant environmental impact includes the production of waste and solid residuals, the use of water for cooling at power plants, and impact of gas production in the North Sea.

#### Changes in plant portfolio

During 2010 several projects to increase the use of biomass as fuel in Vattenfall's power plants generated results. In Denmark, the converted biomass-fired boiler at the Amager power station and the new biomass-fired boiler at the Fyn power station were officially commissioned, and two additional boilers at the Amager and Nordjylland power stations will be converted to use biomass as fuel. In Finland, a new biomass-fired boiler has been installed in Käenoja. In Sweden, a combined heat and power station in Jordbro for combustion of biomass and waste wood was commissioned.

In Poland, the ability to co-fire biomass at the Siekierki plant has been enhanced through new installations. A number of further investments to improve the environmental performance at the Siekierki plant, particularly with respect to sulphur emissions, have been carried out or are planned.

Vattenfall's wind power portfolio has expanded through several projects. The wind farms Stor-Rotliden in Sweden, Dræby in Denmark, "alpha ventus" in Germany, and Edinbane and Thanet in the UK were all officially commissioned. Thanet is today the world's largest offshore wind farm.

During the year, the governments in Sweden and Germany made it clear that nuclear power is part of the countries' future energy mix; in response to this, Vattenfall has launched a large long-term investment programme to modernise its nuclear power plants. Extensive activities were conducted in this area in 2010.

#### Operations requiring permits

Vattenfall conducts operations that require permits under national legislation in Sweden, Finland, Denmark, Germany, Poland, the Netherlands, Belgium and the UK.

The Parent Company conducts operations that require permits in accordance with the Swedish Environmental Code. These consist primarily of electricity and heat production plants that require permits and/or registration, and wind turbines that are located separately as well as in groups. The Parent Company also has numerous large-scale hydro power plants with associated water regulation facilities that are subject to review outside of the jurisdiction of the Swedish Environmental Code, as well as fish farms requiring permits.

Vattenfall's hydro power generation is conducted in 56 large scale and 48 small scale plants in Sweden and Finland, and in addition three small scale conventional hydro power stations and eight pumped storage plants in Germany. Vattenfall's hydro power operations are currently in a development phase, and the company will be investing approximately SEK 6.8 billion in upgrades and dam safety enhancement measures by 2015. Refurbishment of turbines, generators, transformers and control facilities is leading to improved capacity and extended useful life of the facilities. Measures to improve dam safety are also being conducted within the framework of the investment programmes. These measures often require permits, and review by the Environmental Court is required. One area of uncertainty that will affect Vattenfall's hydro power operations in Sweden is the ongoing preparations for national implementation of the EU's Water Framework Directive. The Swedish water authorities' action plans that were circulated for review in autumn 2009 point to extensive measures which. apart from major investment costs, also entail a risk for lower access to renewable energy in the form of large scale hydro power generation.

Other operations requiring permits in accordance with the

Swedish Environmental Code that make up a significant part of operations are conducted primarily by subsidiaries. Forsmarks Kraftgrupp AB and Ringhals AB generate electricity in nuclear power plants. The Swedish Nuclear Fuel and Waste Management Company (SKB) operates an installation for final storage of low- and medium-level nuclear waste in Forsmark and an installation of intermediate storage of spent fuel in Oskarshamn. In several subsidiaries, electricity and heat are generated primarily in combustion plants. The Group conducts network operations via Swedish subsidiaries for the distribution of electricity, in accordance with concessions.

Specific events regarding operations subject to environmental permits in 2010: In Sweden, the Kalix thermal plant received a permit to use demolition wood as fuel, and similar applications have been filed for plants in Motala, Vänersborg and Götene. A permit application process is in progress for a new biomass-fired boiler at the Fisksätra thermal plant and for a renewed permit for an underground oil storage facility in Uppsala. In a case concerning compensation for private fishing in the Lule River, Vattenfall was ordered to pay SEK 19 million. Vattenfall has appealed the ruling. An application for a new spillway for the Bergeforsen power plant has been issued to the authorities. All private property in the area of the outlet channel has been successfully bought out.

A considerable share of the permit procedures in the rest of the Group during 2010 were related to activities to increase the use of biomass in Vattenfall's power plants. For example, the conversion to biomass as fuel at the Amager and Nordjylland power stations in Denmark, increase of biomass combustion in the Żerań plant in Poland, several biomass and biogas projects in the Berlin and Hamburg areas in Germany, and biomass co-combustion at plants in the Netherlands.

There were also a number of permit processes in the area of water and waste. In Denmark, it was not possible to obtain a new wastewater permit for the Nordjylland power station. The wastewater permit for the Amager power station and the permit to discharge cooling water from the Fyn power station have come under revision. In Poland, new permits were received concerning water intake for the Pruszków plant and the Zawady ash deposit, and a new permit was granted for the Żerań plant to discharge sewage to the municipal system. In Germany, several water permit processes are under way for the Reuter West cogeneration plant and several mining sites, and a permit process is also ongoing for an increase of the ash deposit at the Jänschwalde open-cast mine.

Permit processes are in progress for a number of major projects, including the Moorburg CHP plant in Hamburg, the Berlin Energy Concept project, the CCS demonstration project in Jänschwalde, Germany, including CO<sub>2</sub> storage, the Magnum project in the Netherlands, investments in the Siekierki plant in Poland, and further studies of CO<sub>2</sub> storage in Nordjylland in Denmark.

A permit was received to relocate and expand the wastewater treatment plant at Forsmark nuclear power plant. An application for expansion of the Svalören landfill at the Forsmark nuclear power plant has been filed with the authorities. An assessment report for possibilities to use surplus heat in cooling water from the Forsmark nuclear power plant for district heating was filed with the authorities. Final conditions concerning the use of hypochlorite in cooling water systems, energy efficiency and the landfill for radioactive operational waste were stipulated for the Ringhals nuclear power plant. Negotiations concerning noise levels at night at the Ringhals nuclear power plant have been held.

The limit for emissions of ammonia to the air was exceeded by 4% at Ringhals in 2010. The incident was reported to the authorities and actions were taken to prevent future occurrence.

Permit processes for about 20 wind farm projects and for wave power development in Scotland and Ireland are in progress.

#### Research and development (R&D) at Vattenfall

Vattenfall's R&D plays a vital role in supporting the Group's strategic ambition to increase electricity generation and heat production from low-emitting energy sources, reduce  $CO_2$  exposure, and be among the leaders in sustainable development. The company's R&D includes energy efficiency improvements across the entire value chain for energy supply, from fuel extraction to consumers' use of electricity, heat and gas. A key part of Vattenfall's R&D encompasses activities intended to meet previously made obligations, such as the final storage of spent nuclear fuel from Vattenfall's nuclear power plants in Sweden.

Vattenfall's governance model entails that each Business Unit is responsible for R&D directly coupled to develop the unit's own operations. Other R&D activities that are not a natural part of a business unit's operations are handled and performed by the Group's R&D unit. These activities are considered to be of a more long-term character and support the Group's overall strategic objectives. R&D activities in 2010 focused on six main areas: renewable energy sources, Carbon Capture and Storage (CCS), operating efficiency improvement, more efficient energy use, nuclear power and new energy conversion technologies.

Calculated in proportion to the Group's sales, Group-wide

R&D expenditure was approximately 0.7% (0.6%) in 2010, which is in parity with Vattenfall's competitors. This share is reasonable considering that Vattenfall is a technology-using, rather than product-developing company.

In 2010, Vattenfall spent a total of SEK 1,545 million (1,322) on R&D. Of this, SEK 371 million (375) pertained 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.

#### Renewable energy sources

One important way of reducing  $CO_2$  emissions is to replace coal with biomass in combined heat and power plants and conventional power plants, since it is the quickest way to achieve a substantial reduction of fossil  $CO_2$ . Increasing the share of biomass used by Vattenfall is the common goal for the Group's biomass programmes, which are conducted through close co-operation between Vattenfall R&D and Business Development. The Group's R&D programme for biomass is working on improving techniques in existing and new conventional power plants, through development of new technological solutions for using biomass as an energy source and through fuel upgrades.

R&D work in the area of wind power area is focused on supporting implementation of commercial large-scale wind power. The objective is to increase the level of expertise in owning, operating and maintaining large-scale wind farms. R&D work also includes optimising the geographic location of wind farms and improving systems and methods for maintenance and operations in preparation for continued investments in large offshore wind farms. A large number of development projects are in progress in which new technologies are being tested for various components. Enhancing value and lowering the risk associated with wind power are central goals.

Vattenfall continued its R&D activities in ocean energy undiminished strength in 2010 compared to 2009. The technology is still in the development phase and is not expected to be commercially viable until some time after 2020. Vattenfall has decided to localise its development of commercial ocean energy electricity generation in Scotland due to the favourable conditions at the selected sites. A large part of the work is devoted to securing suitable sites for demonstration projects and acquiring permits for commercial installations. Aside from this, work with the chosen technologies and strategic environmental assessments were in focus 2010.

#### Continued greater investment in CCS technology

Vattenfall's R&D in Carbon Capture and Storage (CCS)

technology continued in 2010 as the largest programme area in the Group. The programme, which spans over many years, is based on developing, scaling up and demonstrating cost-effective technology to capture and permanently store the carbon dioxide produced in the Group's coal-fired power plants. The project has direct significance for Vattenfall's efforts to reduce its  $CO_2$  exposure. The goal is to have a fully developed commercial CCS concept by 2020.

Operation of the CCS pilot plant in Schwarze Pumpe, Germany, continued in 2010. The tests have been successful and given anticipated results. The function and processes of oxyfuel technology have been fully verified. The programme will be concluded in 2013, after which complementary operation to support the demonstration plant at Jänschwalde will begin. In 2010, the small CCS pilot plant based on precombustion technology began operating at a coal gasification plant in Buggenum, the Netherlands. Also during the year, Vattenfall became a partner in a pilot plant using postcombustion technology in Scotland. This work will continue in 2011.

Plans to inject and store the captured carbon dioxide from the Schwarze Pumpe plant in a depleted gas field in Altmark, Germany, in collaboration with Gaz de France, have been further delayed partly due to German ratification of the EU's directives and implementation of these in national legislation governing CCS.

In January 2010 Vattenfall signed a contract with the European Commission worth EUR 180 million as partial funding of a CCS demonstration plant in Jänschwalde, Germany. The intention is to build a new 250 MW oxyfuel boiler and also to retrofit one of 12 existing boilers with a small post-combustion CCS unit and thereby demonstrate CCS technology on a full scale. Parallel with the planning work for this plant, preparatory studies are also being conducted at two locations east of Berlin for geological, permanent storage of captured carbon dioxide. The carbon dioxide will be transported via pipeline. The investment is estimated at more than EUR 1.5 billion, and it is estimated that the plant can begin operating in 2015.

CCS activities at the Nordjylland power station in Denmark continued in 2010 with small-scale geological and other studies. CCS technology can be operating here by 2020 at the earliest.

#### Energy efficiency, energy storage and smart grids

Several of Vattenfall's R&D programmes address energy efficiency and how to handle the growing amount of intermittent generation sources like wind and solar, which result in non-controllable electricity generation. The work in these areas is performed in co-operation with Vattenfall's Business Development unit and is closely tied to customers' preferences and demands.

Vattenfall's development of smart grid technologies is focused on how to strike a balance between generation and consumption and thereby to guarantee availability of highquality electricity as the amount of intermittent generation sources increases, but also to create a system that enables consumers to feed in and get credit for electricity generated from small-scale household systems. To counteract situations of under- or overproduction, Vattenfall is analysing possibilities to develop local energy storage solutions, such as batteries, but also through co-ordinated use of smart solutions, such as heat pumps.

Another consequence of the rising demand for more renewable generation is the further development of distributed generation concepts. Vattenfall has also studied the potential for distributed generation in a modern denselypopulated urban environment. The aim is to find sustainable solutions for Vattenfall customers that can reduce energy demand, save costs and curb emissions from the consumption of electricity and heat. This has been the focus of the Sustainable Cities R&D programme, which aims to ensure that Vattenfall's offerings meet the market's needs for sustainable and efficient energy solutions while improving the customer satisfaction.

In the e-mobility R&D programme, a great deal of effort has been devoted to smart charging solutions and ways to conveniently charge electric vehicles in remote areas as well as in high-density urban areas where people live in apartment buildings. As a result of this R&D work, several products that are ready for use by customers were delivered in 2010. Vattenfall's co-operation with Volvo Car Corporation also successfully continued during 2010 and will result in the launch of a plug-in hybrid car in 2012. The car was unveiled at a car show in Geneva in early 2011. Vattenfall's participation in the project has been in the development of the drive train, charging system, battery management and energy control.

#### New technological solutions

Vattenfall's R&D engineers continuously assess a multitude of new technologies, of which a few proceed to a second step. Most new ideas that emerge either do not work in practice or have no significance as energy technologies. Some very promising technologies have been discovered, however. For example, a new turbine concept has been



Number of employees

discovered that can result in significantly higher efficiency from biomass, lower generation costs for gas and lower CCS costs, as well as lower costs for the actual turbine.

#### Human resources

#### Talent management

Talent management at Vattenfall aims at securing succession and high performance of executives at various levels in the Group.

In addition, Vattenfall works strategically with competence planning to ensure that the company has access to the competence needed for its operations. The annual strategic competence planning process is mandatory throughout the organisation and couples business plans with future competency needs. Vattenfall takes an active role initiating and participating in initiatives aiming at securing future availability of competence.

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 the 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 was 4.1% (3.1) in 2010. Employee turnover is 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.

#### Co-determination

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.

## **Parent Company**

On 1 May 2010 Vattenfall Treasury AB merged with Vattenfall AB. Vattenfall Treasury's activities are included in Vattenfall AB's income statement as from 1 January 2010. See also Note 2 to the Parent Company accounts, page 127.

Sales amounted to SEK 36,538 million (29,745).

Profit before appropriations and tax amounted to SEK 33,775 million (8,144). The earnings improvement compared with a year earlier is attributable to intra-Group dividends of approximately SEK 20 billion and positive currency effects of approximately SEK 7 billion. During the fourth quarter, Vattenfall AB's shareholding in N.V. Nuon Energy was written down by SEK 4,898 million.

The balance sheet total was SEK 341,722 million (284,019). The increase in the Parent Company's total assets is attributable to the merger with Vattenfall Treasury AB. Investments during the period amounted to SEK 2,286 million (60,878).

Cash and cash equivalents and short-term investments amounted to SEK 34,222 million (281). The increase is attributable to the merger with Vattenfall Treasury AB.

Effective 1 January 2011, Vattenfall AB transferred its hydro power operations to separate, wholly owned subsidiaries.

# **Events after the balance sheet date**

On 20 January 2011 Vattenfall signed an agreement for a new five-year revolving credit facility for EUR 2.55 billion (approximately SEK 23 billion). The facility is intended to serve as a liquidity back-up.

On 1 February 2011 Vattenfall sold its 25% stake in the Rostock coal-fired power plant to RheinEnergie AG. The plant has installed capacity of 553 MW. The sale generated a capital gain.

## Changes in the Board of Directors and Executive Group Management

Lars Westerberg decided, on 18 March 2011, after consultation with the Ministry of Finance, to leave his post as Chairman of the Board of Directors of Vattenfall AB. Björn Savén was appointed acting Chairman of the Board, as well as deputy Chairman of Vattenfall AB until the Annual General Meeting of Vattenfall on 27 april 2011. Lars Gejrot left on 18 March 2011 his position as Senior Vice President, Staff Function Human Resources and Member of the Executive Group Management (EGM).

# **Corporate governance report**

Following is information on corporate governance in accordance with the Swedish Code of Corporate Governance ("the Code") for the 2010 financial year. Vattenfall's Articles of Association, previous corporate governance reports, material from the most recent general meetings and other documents are available on Vattenfall's website, www.vattenfall.com, under "Corporate Governance".

2010 year's corporate governance report has been read by the company's auditors, without comment (see Auditor's report on the corporate governance statement in the Audit report, page 135).

#### Important internal and external regulatory systems

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 (AGM). The Board, in turn, appoints the President and CEO, who is responsible for the day-to-day administration of the company in accordance with the Board's guidelines and instructions. The AGM also decides on Vattenfall AB's Articles of Association, which specifies the object of the company's business, among other things.

Corporate governance in the Group is based on:

- Swedish and foreign legal rules;
- The Swedish state's ownership policy and other owner directives;
- The Swedish Code of Corporate Governance ("the Code"),
- The Articles of Association;
- The Board's Rules of Procedure, including the CEO instruction and instructions on reporting to the Board of Directors:
- Internal documents particularly Vattenfall Management System (VMS); and
- The Swedish Annual Accounts Act.

Vattenfall also adheres to the stipulations that apply for companies registered on Nasdaq OMX Stockholm, in Swe-

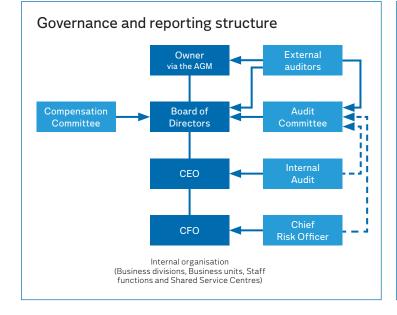
den, as well as in the other marketplaces in which Vattenfall has securities registered.

The deviations 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. Moreover, due to these ownership conditions, certain stipulations are not even applicable for Vattenfall.

Deviations from the Code are specified in the table below.

#### Annual General Meeting and owner

According to Vattenfall's Articles of Association, the Annual General Meeting (AGM) shall be held within six months after the end of each financial year. The AGM elects, on the recommendations of the owner, the Board of Directors 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.



### Deviations from the Code

Vattenfall's corporate governance for the 2010 financial year deviates from the requirements stipulated in the Swedish Code of Corporate Governance on the following points.

Code requirement	Description	Chosen solution and justification
1.3 The Board's quorums at Extraordinary General Meetings	As many board mem- bers shall be present at general meetings that the Board has a quorum.	A majority of the board members were present, but not as many so as to constitute a quorum as stipulated in the Articles of Association.
1.4 Chairman to preside over the Annual General Meeting	The nomination com- mittee shall propose a person to serve as AGM chairman.	Due to its ownership structure, Vattenfall has no nomination com- mittee. Election of an AGM chairman is instead done at the AGM in accordance with the stipulations of the Swedish Companies Act. This is also in line with the Swedish state's ownership policy.
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. Nor are the references to the nominat- ing committee in points 1.3, 4.6, 8.1 and 10.2 thereby applicable either. However, information on the nomination of board members for new elec- tion or re-election is posted on the website in accordance with point 2.6.

Vattenfall's Annual General Meeting was held on 29 April 2010, in Stockholm. The AGM adopted the annual report and consolidated financial statements for 2009 submitted by the Board of Directors and CEO, resolved to distribute the company's profit and discharged the members of the Board and the CEO from liability.

All re-elected and newly elected directors were in attendance at the AGM, except for Eli Arnstad, who was not able to attend. As in previous years, the meeting was open to the general public, and an open Q&A session was arranged, in accordance with the Swedish 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 aired live via webcast. A recorded version of the AGM can be viewed on Vattenfall's website, along with the minutes and other material from the AGM.

Due to Vattenfall's ownership structure, no information is provided on the company's website on shareholders' opportunity to submit items of business for the AGM. The Code's stipulations about this are not applicable for Vattenfall.

#### **Extraordinary General Meeting**

On 23 August 2010 Vattenfall held an Extraordinary General Meeting, at which a resolution was passed to amend the Articles of Association. The reason for this was that on 3 June 2010 Sweden's parliament (the Riksdag), pursuant to a government bill (2009/10:179), decided in favour of a clarification of the assignment for Vattenfall AB. According to the Riksdag's decision, the company's assignment shall be to generate a market rate of return by operating a commercial energy business that enables the company to be among the leaders in developing environmental sustainable energy production. The operational description in the Articles of Association was amended to reflect this changed assignment. The new Articles of Association are posted on Vattenfall's website, www.vattenfall.com, under "Corporate governance".

#### The Board's composition

**Appointment of the Board** For enterprises that are wholly owned by the

Name	Function	Nationality	Independence in relation to the company and com pany management (according to the Code)	Committee assignments	Total fees/ (SEK 000s) per year 2010	Attendance at board meetings	Attendance at committee meetings
Lars Westerberg	Chairman of the Board	Swedish	Yes	Remuneration Committe	580	14/14	7/7
Carl-Gustaf Angelin	Employee represen- tative	Swedish	-		13	13/14	
Eli Arnstad	Director	Norwe- gian	Yes		280	12/14	
Johnny Bernhardsson	Employee represen- tative	Swedish	-		13	14/14	
Christer Bådholm	Director	Swedish	Yes	Audit Committee (chair)	350	14/14	5/5
Lars Carlsson	Employee represen- tative, deputy	Swedish	-		13	13/14	
Ronny Ekwall	Employee represen- tative, from 12 April 2010	Swedish	-		-	10/10	
Lone Fønss Schrøder	Director	Danish	Yes	Audit Committee	350	12/14	4/5
Lars-Göran Johansson	Employee represen- tative, deputy	Swedish	-		13	14/14	
Patrik Jönsson	Director, from 29 April 2010	Swedish	Yes	Remuneration Committe, Audit Committee, both from 29 April 2010	-	10/10	CC: 4/4 AC: 3/3
Per-Ove Lööv	Employee represen- tative, deputy, from 12 April 2010	Swedish	-	Audit Committee, from 12 April 2010	-	10/10	4/4
Björn Savén	Director	Swedish	Yes		280	14/14	
Cecilia Vieweg	Director	Swedish	Yes	Remuneration Committe (chair) from 29 April 2010	280	13/14	7/7
Viktoria Aastrup	Director, through 29 April 2010	Swedish	Yes	Remuneration Committe (chair), Audit Committee; both through 29 April 2010	117	4/4	CC: 3/3 AC: 2/2

Swedish state and that are not listed in a marketplace, uniform and joint principles for a structured nomination process are applied, which take the place of the Code's rules on drafting work for decisions on the nomination of board members and auditors. The nomination process is co-ordinated by the State Enterprises Division of the Ministry of Finance. A work group analyses competency needs based on the company's operations, situation and future challenges, as well as the composition of the respective boards. Thereafter, any recruitment needs are determined and recruitment work is initiated. Board members are chosen from a broad recruitment base in the aim of benefiting from the expertise of women and men as well as of individuals with varying backgrounds and experience. Once this process has been completed, any nominations are to be publicly announced in accordance with the Code's guidelines; however, no report is made on the directors' independence with respect to the state as a major shareholder. Vattenfall provides orientation training for new directors who are elected by the AGM.

Additional stipulations on the nomination of board members are set forth in the Swedish state's ownership policy (N2010.24).

#### Board members

Vattenfall's Articles of Association stipulate that the Board shall have a minimum of five and a maximum of ten members, for the part of the Board that is elected by the AGM. In 2010 Vattenfall's board included seven AGM-elected directors. By law, the unions are entitled to appoint three board members plus three deputies. Through 12 April 2010 the unions had two members and two deputies on the Board, and for the time thereafter three members and three deputies. No members of the Executive Group Management (EGM) are members of the board. Thus in accordance with the Swedish state's ownership policy, nor is the CEO a member of the Board. Of the board members, three are women and two are foreign citizens. The average age of board members in 2010 was 56.

#### The work of the Board

#### 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 set Vattenfall's strategy;
- to ensure that Vattenfall has effective management and to monitor and control the organisation and administration of the Executive Group Management;

- to ensure that Vattenfall has good internal control, including risk management, and to stay continuously informed about and evaluate how the systems of internal control work;
- to continuously assess Vattenfall's financial situation;
- to ensure that the organisation of Vattenfall's bookkeeping and treasury management include means of maintaining satisfactory control; and
- to continuously control the extent to which the CEO is fulfilling his responsibility for the day-to-day administration. In addition, the Board shall approve major investments, acquisitions and divestments, and set central policies and instructions.

Each year the Board establishes its Rules of Procedure. Apart from mandatory items stipulated by the Swedish Companies Act, the Rules of Procedure regulate such matters as the Chairman's duties, information provided 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 leads 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.

The Board has established within itself an audit committee and a Remuneration Committe, along with rules of procedure for the committees. 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.

#### Assuring the quality of financial reporting

In the section on internal control (page 71), the Board has reported on the company's internal control structure for the financial reporting routines. The Audit Committee's work is a part of this control exercised by the Board. At all Audit Committee meetings in 2010, external and internal auditors reported 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.

#### The Board's risk management process

Vattenfall's Chief Risk Officer (CRO) is responsible for organisation of risk management within the Group. The CRO is responsible for this organisation at Group level and is responsible for informing the Audit Committee about his/her observations regarding the Group's risks. The Board sets the overall risk mandates for the Group in the areas of energy and commodity trading, as well as for financial, insurance and credit risks. At each meeting, the Board receives information about the Group's financial position, including a report on outstanding guarantees and risks. The Board also holds an annual risk management seminar at which a more in-depth review is made of the Group's financial and operational risks.

For a more detailed description of Vattenfall's risks and risk management, see pages 77–83.

#### Description of the Board's work

The Board's Rules of Procedure stipulate that five to eight 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 are to be included on the agenda once a year:

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

In addition, at every regular meeting a report is presented on important business events since the previous meeting as well as 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 met 14 times in 2010, including the statutory meeting. A quorum existed at all meetings. According to the Rules of Procedure, at least one meeting every year is to be held at another location than the head offices. In 2010 a meeting was held in Stora Sjöfallet and Gällivare, Sweden. This meeting was combined with a visit to Vattenfall's hydro power facilities in the area.

In addition to the items of business prescribed for a board decision by the Rules of Procedure, in 2010 the Board dealt with and decided on the following matters:

- New strategic direction (see below);
- Appointment of a new CEO; and
- The Group's nuclear power operations.

#### Board decision on new strategic direction

On 24 August and 20 September 2010, the Board decided on a new strategic direction, organisational structure and business model for the Vattenfall Group. These decisions were prompted by, among other things, the amendment to the Articles of Association that was adopted by the Extraordinary General Meeting on 23 August.

The new strategic direction is intended to increase focus on profitability and value creation as well as focus on the core markets (Germany, Sweden and the Netherlands), on three main products (electricity, heat and gas) lower  $CO_2$ exposure, and growth in low  $CO_2$ -emitting energy production and in gas. Vattenfall thereby aims to be a leader in developing environmental sustainable energy production. The decision entails that Vattenfall will continue to be an integrated European company with a diversified energy portfolio. The geographic focus shall be on Sweden, Germany and the Netherlands. Vattenfall also decided to introduce a business-led organisational structure.

#### 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 14–15 December 2010.

#### Committees

#### Audit Committee

The Audit Committee is a board committee that is tasked with the following duties, among others:

- Assisting the Board on matters pertaining to financial risk and reporting, as well as external and internal audit;
- Conducting preparatory work for the Board in quality assuring Vattenfall AB's financial reporting;
- Monitoring the effectiveness of internal control, internal audit and risk management;
- Assisting the owner in the selection of auditors and setting of fees for the audit activities;
- · Evaluating the work of the external auditors;
- Setting guidelines for other services than auditing that Vattenfall AB and the Group may purchase from the company's auditors; and
- Approving the internal audit plan.

The Audit Committee has special responsibility for the work on application of the Code and for preparing required

reports. The CFO, the Head of Internal Audit and the Chief Risk Officer make presentations at Audit Committee meetings. In addition, the company's auditors attend all meetings and 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 the third quarter of 2010 and first quarter of 2011, 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. In addition to this authorisation, the Audit Committee has the right to approve Internal Audit's budget and yearly plan as well as the guidelines for procuring services from the auditors. In other respects, the committee has no decision-making right.

The Board has adopted rules of procedures for the Audit Committee. The committee reports its work to the Board through the committee chair, who informs about the committee's decisions, and by submitting meeting notes to the Board.

#### **Remuneration Committe**

The Board has established a Remuneration Committe that is tasked with the following, main duties:

- Ensure implementation and compliance with the guidelines for terms of employment for senior executives that have been adopted by the Annual General Meeting;
- Conduct drafting work for the Board's proposed principles for compensation of the CEO and other senior executives ahead of the 2011 Annual General Meeting;
- Conduct drafting work for the Board's proposal for updated guidelines when a need arises;
- Conduct drafting work for ongoing matters concerning compensation and other terms of employment for the CEO, ahead of the Board's decisions, and to serve as a control body for the CEO's proposal for compensation and other terms of employment for senior executives (encompassed within the annual salary review);
- Where applicable, to conduct drafting work for any special reasons that may exist in an individual case to deviate from the guidelines; and
- Review the Board's report on compensation of senior executives in the Annual Report and, ahead of the 2011 Annual General Meeting, to monitor and follow-up the auditors' review.

The Remuneration Committe has evaluated the application of the guidelines for compensation of senior executives in

2010 and conducted drafting work for the Board's reporting and proposals ahead of the Annual General Meeting.

The Head of Human Resources and employee responsible for salaries and benefits in Group Function Human Resources make presentations at the committee's meetings. The Board has adopted rules of procedure for the commitee's work. The committee reports its work to the Board through the committee chair, who informs the Board about the committee's decisions, and by distribution of meeting notes to the members of the Board of Directors. The Board has not delegated decision-making right to the Remuneration Committe, and it is thus the entire Board's responsibility to decide on such matters as employment of the CEO, setting the level of compensation for the CEO and deciding on other terms of employment.

#### Compensation guidelines

#### Directors' fees

Directors' fees and fees for committee work are set by the AGM, based on the Swedish state's ownership policy. For information on directors' fees in 2010, see the table "Composition of the Board and meeting attendance" on page 65, and Note 50 to the consolidated accounts in the Annual Report.

#### Compensation of senior executives

The AGM has resolved (in 2009 and 2010) that the Swedish government's guidelines (20 April 2009) for terms of employment for senior executives of state-owned companies (government's guidelines) shall apply to Vattenfall AB. The government's guidelines pertain to companies in which the state, through its ownership, has a controlling interest, such as by owning more than 50% of the votes.

Such companies shall apply the guidelines in their subsidiaries. By subsidiary is meant in the government's guidelines such legal entities referred to in Ch. 1 1 of the Companies Act (2005:551).

One aspect of the government's guidelines is that variable salary shall not be paid to senior executives, and that contracts including provisions for variable salary shall be renegotiated. By senior executives is meant in the government's guidelines the CEO and other members of the company's management. This group corresponds to the persons referred to in Ch. 8 § 51 of the Companies Act. For example, it includes persons included on management teams or similar bodies and managers who are directly subordinate to the CEO.

At the AGM, the Board shall report on whether previously decided guidelines have been adhered to or not, and the reasons for any deviations from the guidelines. The Board

shall also report on any special reasons that may exist in a specific case for deviating from the guidelines.

In application of the government's guidelines, Vattenfall deviates from them with respect to how they have been applied in Vattenfall's subsidiaries. The Board is of the opinion that the following, special reasons exist for deviating from the government's guidelines.

Vattenfall's main reasons for deviating from the government's guidelines are the difficulties and costs associated with renegotiating existing contracts for executives who, according to the government's guidelines, should have been defined as senior. In the view of Vattenfall's board, renegotiation of a large number of contracts with national variations would be very time-consuming, entail a significant risk of losing key competence, and involve unreasonable costs.

For commercial and legal reasons, the Vattenfall Group has more than 400 subsidiaries. A very large number of executives would thereby be considered to be senior in application of the government's guidelines also in subsidiaries. Moreover, like other international groups, Vattenfall governs its operations based on a commercial focus (via the business areas) and not primarily according to the legal company structure.

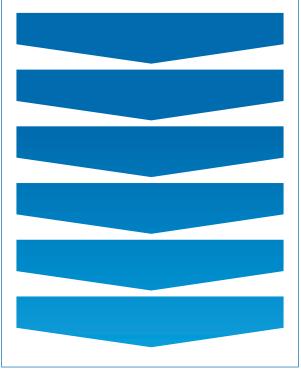
To determine in a systematic way which executives can be considered senior in the Vattenfall Group, the established international ranking model IPE (International Position Evaluation) has been used. In this context, size in the form of sales, number of employees and number of levels in the value chain, as well as demands on innovation, knowledge, strategic/visionary role and international responsibility of the executive have played a decisive role. In addition to serving as a guide in defining senior executives, the international ranking model IPE has also been used as support for comparing managers' salaries in a systematic way and as documentation for the setting of salaries and management planning for senior executives. Aside from use of the IPE model, external experts have been consulted to analyse practice regarding the relation between fixed and variable salary in the countries in which the Vattenfall Group is active. Expertise in international labour law has been consulted to obtain a picture of the legal status, including opportunities to renegotiate existing contracts.

Vattenfall's conclusion of the analysis is that, in addition to the Executive Group Management, managers with positions from IPE 68 and above shall be considered to be senior within the Group. However, all senior executives (as defined in the government's guidelines) of all subsidiaries were included in Vattenfall's analysis. Fifteen positions have thereby been identified for 2010. Of these, ten individuals are members of the Executive Group Management, and the others are executives employed by subsidiaries who have an IPE ranking of 68 or higher. Principles and computations for converting variable to fixed salary have been drawn up. In connection with the annual review of senior executives' salaries in 2010, individual reviews were performed.

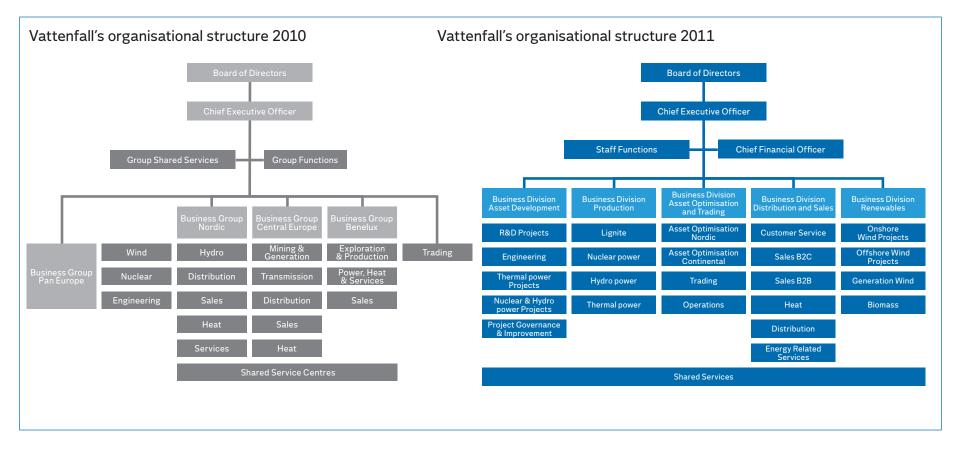
In addition, Vattenfall's German subsidiaries have a number of employment contracts with senior executives active in those companies which deviate from the government's guidelines' stipulations on the maximum permissible notice period and severance pay. According to the government's guidelines, the notice period for a senior executive in the event the company serves notice shall not exceed six (6) months. The government's guidelines also allow, in cases where the company serves notice, payment of severance pay equivalent to a maximum of eighteen (18) months' salary. In the event the individual in question accepts new employment or receives income from business activities, the remuneration from the company serving notice shall be reduced by an amount corresponding to the new income during the time termination salary and severance pay are paid out. Vattenfall's German subsidiaries have a number of employment contracts with senior executives active in those companies, which have fixed contract periods and which therefore do not contain stipulations for a notice period or severance pay and thus do not include any stipulations on deduction of income from new employment from remuneration from the company serving notice in connection with termination. Practice in Germany for these contracts has entailed a contract period of sixty (60) months, i.e., five years; however, the trend is moving increasingly toward shorter contract periods - often for thirty-six (36) months, i.e., three years. The contracts cannot – except for under exceptional circumstances - be cancelled prematurely and could therefore entail, with respect to senior executives who have more than twentyfour (24) months remaining in their employment contracts, a cost for the companies that deviates from the guidelines in the event the companies should want to terminate the executives' employment before the end of the contract period. This situation has already arisen in three cases, where in accordance with German rules and contracts, the companies have been obligated to pay remuneration that deviates from the government's guidelines in connection with termination of the senior executives' assignments.

Further deviations from the government's guidelines pertain to two aspects of the conditions for pension benefits for

# Building blocks of the management system



the senior executives active in Vattenfall's German subsidiaries. According to the government's guidelines, defined benefit pension solutions shall follow the applicable collective pension plan, which must be interpreted as the pension plan that follows from the applicable (Swedish) collective bargaining agreement. These conditions are, for obvious reasons, not fulfilled in relation to five senior executives with defined benefit pension solutions in accordance with German practice. Furthermore, it is prescribed in the government's guidelines that the retirement age shall not be below 62 years of age. Three senior executives of Vattenfall's German subsidiaries are entitled to early retirement from the age of 59. However, two of these executives will not reach the age of 59 during the term of employment. The third individual is relieved from his duties during the remaining part of the term of employment.



In addition, three senior executives of these companies are entitled to early retirement in case of permanent incapacity to work, without any connection to a certain age.

The reason for the deviations is that the contracts between the German Group companies and the senior executives active in those companies have been drawn up in accordance with German law and German practice, which entail that long fixed-term contracts are an important component in the security systems that make it possible for Vattenfall to attract and retain senior executives in Vattenfall's operations in Germany. In recent years Vattenfall has made an adjustment entailing that, as a rule, Vattenfall offers three-year assignments instead of five-year assignments as previously. In the future, Vattenfall will continue this adaptation in order to find solutions that ensure adherence to the government's guide-

lines while still giving Vattenfall the opportunity to attract and retain senior executives in Germany.

A description of the remuneration paid out to the former President and CEO in connection with his resignation is set out in Note 50 to the consolidated accounts.

For senior executives, as defined by Vattenfall, only fixed salaries exist. In addition, no share-based or share price– related incentive programmes exist for the Board of Directors or Executive Group Management. Taxable remuneration and benefits and pension costs for the Chairman of the Board, board members, the CEO and members of the Executive Group Management, and compliance with the guidelines set by the 2010 AGM for compensation of senior executives, are described in more detail in Note 50 to the consolidated accounts.

#### 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. 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. In accordance with the Act on Audits of State Enterprises, the Swedish National Audit Office can appoint one or more auditors to participate in the annual audit. When re-election of auditors is being considered, the auditors' work is always evaluated.

The 2008 Annual General Meeting appointed the audit-

ing firm Ernst & Young AB as auditor, with Authorised Public Accountant Hamish Mabon as auditor-in-charge. This appointment applies for a term until the 2012 AGM. Apart from his assignment for Vattenfall, Hamish Mabon is auditor for the following companies: Hexagon AB, Scania-Bilar Sverige AB, Softronic AB and Ambea AB.

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 also the National Audit Office's auditor for SJ AB.

None of the auditors has assignments for companies that affect their independence as an auditor of Vattenfall.

The auditors reported on their audit of the year-end bookclosing to the entire board at the board meeting on 11 March 2010, and also reported on their remarks at the board meeting on 14–15 December 2010. In connection with the report on 11 March 2010, the Board met the auditors 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 numerous occasions during the year.

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. 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 Group's auditing costs are described in more detail in Note 53 to the consolidated accounts and Note 40 to the parent company accounts in the Annual Report. Consulting provided by Ernst & Young AB from 2008 to 2010 pertained primarily to taxation and accounting issues, as well as to studies regarding project routines.

#### Management and management system

#### CEO and Executive Group Management

The President of Vattenfall AB, who is also CEO of the Vattenfall Group, is responsible for the day-to-day administration in accordance with the Swedish Companies Act. The President has appointed decision-making bodies for the Group and makes decisions independently or with the support of these decision-making bodies.

Lars G. Josefsson was President and CEO through 11 April 2010. The Board decided on 11 March to appoint Øystein Løseth as President and CEO effective 12 April.

The Executive Group Management (EGM) focuses on the

Group's overall direction and decides – within the framework of the CEO's mandate from the Board of Directors – on matters of importance for the Group, such as certain acquisitions, investments and divestments (compare with the section "The work of the Board", on page 66). Information on the members of the Executive Group Management is provided on pages 74–75.

#### Governing business ethics

The Executive Group Management decided on 12 August 2010 that Vattenfall's core values shall be Safety, Performance and Co-operation.

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

Vattenfall's Group-wide 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. Work is currently in progress on drawing up a new Code of Conduct. In 2010 Vattenfall also completed the introduction of a Group-wide whistleblowing function with locally appointed external ombudsmen (advocates) to whom employees, consultants and contractors can turn to report suspected, serious improprieties that the "whistleblower" for some reason does not want to report internally via the normal reporting channels. Further information on guiding business ethics is provided in Vattenfall's Corporate Social Responsibility Report.

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

In 2010 the Group was governed with a focus on value creation and long-term overarching goals and requirements for the Business Groups and business units. The Business Groups proposed short-term goals for each business unit, which were 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). 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 68) and is documented in binding governing documents. The Group's management processes for strategic planning, business planning and follow-up have been central governance tools for the Executive Group Management. The Group functions have been responsible for proposing, developing and following up binding governance documents. The Group's Quality function has had a co-ordinating role for the management system and has had a decision-making committee tasked with establishing adherence and improvements to the VMS. In addition, certain central documents have been approved the Vattenfall AB Board. All units within Vattenfall are obligated to comply with the management system's governing documents.

Special routines are in place to ensure that the VMS is also applied by subsidiaries. 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.

#### Organisation and processes

The following applied in 2010 with respect to Vattenfall's organisation and processes. (For information about the new organisational structure for 2011, see the subheading that follows).

During the year, Vattenfall's organisational model was 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 were conducted with full transparency in accounting, control, profitability and value creation.

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

- Business activities handled by the Business Groups and their business units;
- Functions that supported their respective management teams; and
- Shared Service units, which provided and developed services that supported the business units and other users' efforts to optimise their business activities.
   The organisation for 2010 is illustrated on page 69.

A number of important processes have been in place to facilitate governance within the Group. Each process is managed by a process owner, usually a member of the EGM, who is responsible for developing the process. In 2010 the following Group processes were in place: strategic and business

planning, reporting and follow-up, risk management, M&As, investments, communications, management development and asset management.

The strategic and business planning process culminates in yearly strategic and business plans. This process includes the analysis, evaluation and assessment of strategic issues along with EGM decisions on selection, formulation and priorities. Strategic planning includes the Group's long-term operations as well as its financial performance. Each year a 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 one-year plan and a five-year plan containing a strategic direction. These plans are subject to the ultimate approval of the EGM. The Group's financial plan for the following calendar year is ultimately adopted by the Board.

#### New organisational structure

On 24 August and 20 September 2010 the Board decided on a new strategic direction, organisational structure and business model for the Vattenfall Group. As part of this, a new, business-led organisational structure is also being introduced for the Vattenfall Group. The new organisational structure took effect on 1 January 2011 and entails the primarily the following:

- Replacing the existing organisation, structured mainly according to the value chain in the respective geographic regions, by a functionally led organisation structured in cross-border Business Divisions and Business Units;
- A number of functional areas have been identified. Responsibility for these is delegated to cross-border Staff Functions, which take over for the former functions at the Group level as well as the Business Group and Business Unit levels;

• Establishment of a Group-wide Shared Service unit. The organisational chart that applies from 1 January 2011 is illustrated on page 69.

In autumn 2010 an extensive project was carried out to prepare for implementation of the new organisation. Part of this project also involved increased process orientation and updating the Vattenfall Management System, and reshaping it into a more effective tool for governance. This project continues until the second quarter of 2011 (throughout 2011 for the VMS) and focuses particularly on organisation and governance, finance, personnel matters, functional areas, shared services, systems and on the transition to the new organisational structure.

## Internal control of the 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 laid forth 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, and norms for the employees. The Vattenfall Management System (VMS), which has been established by the CEO, contains governing documents that include, among other things, Group instructions for authorisations, governance, risk management and internal control.

Vattenfall applies the "three lines of defence" model, in accordance with the Basel II recommendations, where management and control of risks are divided into three lines of defence. The first line of defence consists of the Business units, which own and manage risks. The risk organisation makes up the second line of defence and is responsible for monitoring risks. The auditor and the internal auditor is the third line of defence and performs an independent review and oversight of both the first and second lines of defence.

#### **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 central risk committee. 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 VMS includes a framework for internal control that identifies and defines material risks related to financial reporting. The Finance Compliance function within the Staff function finance performs yearly analyses of risks related to financial reporting and is responsible for updating this framework.

#### Control activities and follow-up

The Board monitors the Parent Company's and Group's financial position and addresses this matter at every ordinary board meeting. The EGM has regular follow-up meetings on the financial outcome with the management and finance functions of Vattenfall's various Business Divisions, Staff functions and Shared Service Units. The VMS contains governing documents for the essential financial reporting processes. The VMS serves as a platform for internal control for all units within the Group.

The Finance Compliance function is responsible for overseeing self assessments, follow-up, reporting and improvements in the control activities for financial reporting. These control activities are intended to prevent, discover and correct errors in the financial reporting. The Finance Compliance function reports to Vattenfall's CFO and 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 is posted on Vattenfall's intranet, which is accessible to all employees in the Group. The Group's accounting and reporting policies are laid out in the Group reporting manual. Updates and changes of these policies are communicated on a continuous basis via Vattenfall's intranet as well as at meetings with representatives of Vattenfall's Business Divisions, Staff functions and Shared Service units.

# **Board of Directors**







Carl-Gustaf Angelin

Lars Westerberg (born 1948), was Chairman of the Board during the period from 29 April 2008 until 17 March 2011. 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, AB Volvo and Sandvik 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 then 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 (Høgskolen i Nord-Trandelag). 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. She is Vice Chairman of Sparebank 1 Midt-Norge and Posten Norway. She is also a director on the board of Senter för ekonomisk forskning at NTNU, AF-gruppen, Stiftelsen Nidarosdomens Restaureringsarbeider, and the University for Environment and Bioscience at Ås.

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 supplementary coursework in economics from TBV. He has held various positions within the Vattenfall Group since 1970.





Christer Bådholm

Lars Carlsson

Christer Bådholm (born 1943) is a director and was elected 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, Adtranz GmbH and Bombardier Transportation GmbH. He has had his own consultancy business since 2002. He is also a director of Svevia AB, and is Chairman of Bombardier Transportation Sweden AB, Balfour Beatty Rail AB and VINN Group AB.

Lars Carlsson (born 1951) is an employee representative for Unionen and was elected as a deputy member of 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

Lone Fønss Schrøder

Lars-Göran Johansson

Patrik Jönsson

Per-

Per-Ove Lööv

Björn Savén

Cecilia Vieweg

Ronny Ekwall (born 1953) was elected to the Board in 1999 as an employee representative for SEKO Facket för Service och Kommunikation. He received his education as an electrician at Stora Kopparberg Vocational College. From 1969 to 1977 he worked for Stora Kopparberg as a master fitter, and after worked as a fitter for the Vattenfall Group.

Lone Fønss Schrøder (born 1960) is a director and was elected in 2003. She has a 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 during the years 2005–2010 she served as Managing Director of Wallenius Lines AB. From 2003 to 2005 she was an executive director of AKER-Kvaerner. Lone Fønss Schrøder is also director on the boards of Svenska Handelsbanken AB (audit committee), Volvo Car Corporation (audit committee chair), Aker ASA (audit committee deputy chair), Aker Solution (audit committee) and NKT A/S.

Lars-Göran Johansson (born 1953) was elected to the Board in 2008 as an employee representative for Ledarna (the Association and Management and Professional Staff) and deputy. He has a secondary school education and has worked as a technician and work leader within the Vattenfall Group since 1971. Patrik Jönsson (born 1971) was elected as a director in 2010. He has a Master of Science in Business and Economics from Stockholm University. During the years 1997–1998 he served as a controller at Svenska Statoil. From 1998 to 2000 he was employed as account manager at Trevise Unibank Investment Management, and from 2001 to 2003 he served as an investment analyst at Bure AB. Since 2003 Patrik Jönsson is Deputy Director at the Unit for State Ownership at the Ministry of Finance. He is also responsible for administration and board member of Svevia AB. He is a former board member and head of administration for Sveaskog (2008–2010), Vin & Sprit (2007–2008), Skeppshypotekskassan and AB Göta Kanal (2005– 2008). He has also participated in the owner's administration of such companies as SAS, Sweden Post, Green Cargo and SJ AB.

**Per-Ove Lööv** (born 1961) was elected as a deputy member of the Board in 1999 as an employee representative for SEKO. He received his education in business economics at Luleå University of Technology and in engineering at Midskogsskolan, Luleå. He has held various positions within the Vattenfall Group since 1987. Björn Savén (born 1950) was elected as a director in 2009. He has a B.Sc. Econ. degree from the Stockholm School of Economics (1972), and an MBA from Harvard Business School (1976). He also holds an honorary doctorate (1999) from the Hanken School of Economics in Helsinki, Finland. From 1976 to 1988 he held numerous senior positions with the Esselte Group in Stockholm, London and New York, and prior to that he spent two years (1972–1974) with Gulf Oil. He served as Chairman and CEO of IK Investment Partners (IK) since the company's establishment in 1989 until 2008. He is also a director of Nordea Bank AB (publ) and several of IK's companies.

Cecilia Vieweg (born 1955) was elected as a director in 2009. From 1987 to 1990 she worked as an attorney for Berglund & Co Advokatbyrå. Thereafter she served as a company lawyer for AB Volvo, until 1992, when she became general counsel of Volvo Car Corporation. In 1998 she was an attorney and partner of Wahlin Advokatbyrå, and in 1999 she joined Electrolux as a member of the executive management with responsibility for legal affairs, intangible rights, risk management and security. She is Company Secretary for AB Electrolux and a director of Haldex AB and PMC Group AB. She is also a member of the Swedish Securities Council.

#### Person who left the Board of Directors in 2010

Viktoria Aastrup (born 1971) was elected as a director in 2008 and resigned at the 2010 Annual General Meeting.

## **Executive Group Management**



Øvstein Løseth

Dag Andresen

Øystein Løseth (born 1958), President of Vattenfall AB and CEO since 12 April 2010. Master of Civil Engineering, Technical University of Trondheim (Norges Tekniske Høyskole), Trondheim, Norway; studies in economics at Bedriftsøkonomisk Intitutt, Bergen, Norway. 1983–1993 Statoil, Norway. 1993–1994 Planning Manager, Alliance Gas, London. 1994–1997 Commercial Director, Naturkraft, Oslo. 1997–2003 various positions for Statkraft in Norway and the Netherlands, including assignment as board member from 2002. Joined Nuon nv, Amsterdam, in 2003 as Managing Director of Nuon Energy Sourcing and board member of Nuon nv. Appointed CEO of N.V. Nuon Energy in April 2008. From 12 April 2010 until year-end 2010 Øystein Løseth did not have any significant shareholdings companies with which Vattenfall has business relations.

Dag Andresen (born 1964), Chief Financial Officer of Vattenfall AB since October 2008. Graduate Naval Officer, the Royal Naval Officer School (1984); High-level Officer degree from the Royal Norwegian Air Force Academy (1988); MBA, Norwegian School of Economics and Business Administration (Norges Handelshøyskole – 1994); Executive MBA, Helsinki School of Economics and Business Administration (2000); Studies at Harvard Business School (2006) and Stan-



Lars Geirot

Anders Dahl

Anders Dahl (born 1957), Senior Vice President, Business Division Renewables. Acting Head of Business Group Pan Europe (excl. Nuclear) from 15 March–31 December 2010. Head of Wind business unit from 2005 to 2010. M.Sc., Eng., Royal Institute of Technology, Stockholm. Anders Dahl served as Production Director for Vattenfall's Polish CHP operations from 2002 until 2005. Head of Hydro Power operations for Birka Energi from 1997 to 2002 and Plant Manager for CHP Hässelby. Various positions in heat production operations for Stockholm Energi from 1985 to 1996.

Lars Gejrot (born 1954), was during the period from 2 February 2009 until 17 March 2011, Senior Vice President, Staff Function Human Resources. Acting Director of Communications from August 2009 to December 2009. Officer's examination, Military School Karlberg; Tuomo Hatakka

university studies in sociology, psychology and pedagogy; numerous management courses. Lars Gejrot served 18 years for IKEA, holding several foreign assignments and management positions, mainly in Human Resources, most recently as Human Resources Manager for IKEA Group, from 2001 to 2008. Prior to this he worked for four years as a consultant for Mercuri Urval, and 10 years as a Swedish Army officer.

Tuomo Hatakka (born 1956), Senior Vice President, Business Division Production. Executive Vice President of Vattenfall AB since 26 October 2005. 2008–2010 Head of Business Group Central Europe. 2002–2007 Head of Business Group Poland. Economics studies at the Helsinki School of Economics and Business Administration and Instituto de Estudios Superiors de la Empresa, Barcelona, Spain. Tuomo Hatakka has worked as a consultant for Bain Company, London, Executive Vice President and partner of Enterprise Investors, Warsaw, and President and CEO of Elektrim Kable SA, Warsaw.

Harald von Heyden (born 1971), Senior Vice President, Business Division Asset Optimisation and Trading. Head of Trading and Co-ordination of Generation Management from 3 May to 31 December 2010.



Harald von Hevden

Huib Morelisse

B.Sc. Management Sciences, Warwick Business School, Coventry, and M.Phil. Management Studies, University of Cambridge. 1995-1999 consultant for McKinsey & Company, Norway. 1999–2003 Managing Director of Statkraft Continental Markets in Germany and the Netherlands. Founder and Managing Director of EGL Nordic AS, Norway, 2007–2009 Chief Trading Officer and director on the board of EGL AG, Zurich.

Huib Morelisse (born 1964), Senior Vice President Business Division Asset Development, CEO of N.V. Nuon Energy since 1 July 2010. M.Sc. Mechanical Engineering. Huib Morelisse has held several positions at Booz Allen & Hamilton, MBA, Columbia Business School. 2002-2005 Goldman Sachs & Co. 2005-2007 Vice President Corporate Strategy, RWE. 2007–2009 CEO of RWE's Dutch entities. 2009–2010 Chief Technology Officer for Essent, the Netherlands.

Andreas Regnell (born 1966), Senior Vice President, Staff Function Strategies and Environment. Head of Group Function Strategies from October to December 2010, B.Sc. Econ., Stockholm School of Economics/Wharton Graduate School of the University of Pennsylvania, 1989–1992 Citibank, Stockholm and New York, From 1992

Andreas Regnell

until he joined Vattenfall he worked for The Boston Consulting Group, where he was Managing Director of the Nordic region from 2005 to 2010.

Elisabeth Ström (born 1962), Senior Vice President, Staff Function External Relations and Communications. Head of Group Function Communications in 2010. Degree in Marketing Economics, Berghs School of Communication. Head of curriculum at Berghs School of Communication, 1985-1988, rector 1996-1997. 1991-1995 Marketing Manager, Nordiska Kompaniet; 1997–2000 member of executive management of Föreningssparbanken (today Swedbank). Recruited in 2000 as Vice President for the Swedish Co-operative Union (KF) and Vice President of Coop Sverige AB. 2003–2005 Deputy CEO and Vice President of Posten AB. 2005-2009 active in own consulting business as adviser in business development and branding.

Torbjörn Wahlborg (born 1962), Senior Vice President, Business Division Distribution and Sales. Executive Vice President of Vattenfall AB since 3 February 2010, Head of Business Group Nordic in 2010, M.Sc., Eng., Chalmers University of Technology, Gothenburg. 1988–1990 Nynäs Petroleum, Nynäshamn, Sweden. 1990–1994 Head of Elec-



2008-2009.

#### Persons who left the Executive Group Management in 2010

Lars G. Josefsson (born 1950) resigned as President and CEO of Vattenfall AB in April 2010. He left Vattenfall in October 2010, when he retired.

Helene Biström (born 1962) left Vattenfall In August 2010.

Hans-Jürgen Meyer (born 1957) left Vattenfall in April 2010.

Helmar Rendez (born 1962) left the Executive Group Management in May 2010, when he became Head of the Distribution business unit for Business Group Central Europe.

## **AGM proposal**

Proposed distribution of profit See page 135.

The Board's proposed guidelines for compensation and other terms of employment for senior execu tives, for approval by the Annual General Meeting The Board of Directors proposes that, with respect to the matter of compensation and other terms of employ ment, Vattenfall AB shall apply the principles set by the government in its "Guidelines for terms of employment for senior executives of state-owned companies", which were approved by the government on 20 April 2009 (N9008), with the following deviation. The government's guidelines are available in their entirety on the Swedish government's website, www.regeringen.se. According to the government's guidelines, a company shall also apply the guidelines for its subsidiaries.

In application of the government's guidelines, it is pro posed that Vattenfall deviate from these with respect to how they are applied for Vattenfall's subsidiaries. Vattenfall's board of directors proposes that positions which in Vat tenfall's subsidiaries are to be regarded as senior shall be defined based on whether they have significant impact on the Group's earnings, and not based on the definition in the Swedish Companies Act. By application of the International Position Evaluation (IPE) model, managers with positions from IPE 68 and higher shall be considered to be senior. All senior executives (as defined in the Swedish Companies Act) of all subsidiaries will be covered by the review.

To ensure that the levels set by the Board for the compa ny's costs for remuneration of senior executives of the com pany are not exceeded, and that they are in compliance with the guidelines set by the Annual General Meeting, the fol lowing applies. Based on the documentation that has served as the basis for the Board's original decisions on compensa tion, and based on the Board's corporate governance report, the company's auditors shall perform a review to ensure that the set compensation levels and other terms of employ ment are not exceeded. In addition, the company's auditors shall, in a special report to the Board once a year prior to the Board's meeting in connection with the yearly book-closing, report their observations regarding whether the terms of employment of senior executives and other employees are in accordance with the Board's decision and the guidelines set by the Annual General Meeting. If, in the auditors' opinion, the guidelines have not been adhered to, the reasons for this opinion shall be stated.

Before a decision on an individual's compensation can be made, written documentation shall be on hand that shows the company's total cost.

The Board's explanation for deviations from the guidelines In application of the government's guidelines, the Board proposes that Vattenfall deviate from how these are applied by Vattenfall's subsidiaries. The Board believes that the following, special reasons exist for deviating from the guidelines.

Vattenfall's main reasons for the deviation are the difficulties and costs associated with renegotiating existing contracts for executives who, according to the government's guidelines, should have been defined as senior. In the view of Vattenfall's board, renegotiation of a large number of contracts with national variations would be very time-consuming, entail a significant risk of losing key competence, and involve unreasonable costs.

For commercial and legal reasons, the Vattenfall Group has more than 400 subsidiaries. A very large number of executives would thereby be considered to be senior in application of the government's guidelines also for subsidiaries. Moreover, like other international groups, Vattenfall governs its operations based on a commercial focus (via the business areas) and not primarily according to the legal company structure.

Vattenfall's board therefore proposes that the positions in the Vattenfall Group that can be regarded as being senior shall be defined on the basis of whether they have significant impact on the Group's earnings, and not based on the definition in the Swedish Companies Act. Moreover, such a definition reflects the company's operations and governance. In this context, size in the form of sales, number of employees and number of levels in the value chain, as well as demands on innovation, knowledge, strategic/visionary role and international responsibility of the executive are decisive.

The International Position Evaluation (IPE) model has been used as support for confirming in a systematic manner which positions can be considered to be senior. Vattenfall's conclusion is that, in addition to the Executive Group Management, managers with positions from IPE 68 and higher shall be considered to be senior within the Group. Sixteen positions have thus been identified for 2011. Of these, ten individuals are members of the Executive Group Management and the other six individuals are executives employed by subsidiaries and who have an IPE position of 68 or higher.

The use of a generally recognised ranking model instead of the definition set forth in the Swedish Companies Act of a senior executive entails a deviation from the government's guidelines, insomuch as with respect to Vattenfall AB's subsidiaries.

Vattenfall has performed a special analysis to arrive at the aforementioned definition, as described in more detail in the corporate governance report. The matter has also been addressed by the Board's Remuneration Committe.

# **Risks and risk management**

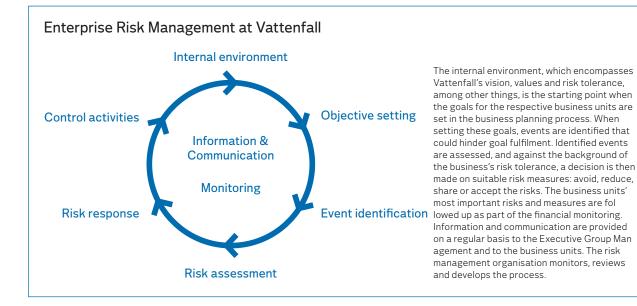
The recent financial crisis and turbulent market underscore the need for transparency, clear governance and control of all aspects of operations.

Companies today are active in a market with new conditions and a considerably faster pace of change. The need of an independent risk function with the right staffing and competence has never been greater. In accordance with Vattenfall's Articles of Association, a framework for risk management has been established to ensure acceptable risk exposure, independent oversight of Vattenfall's governance, and to ensure a transparent analysis of Vattenfall's risks. During the year, Vattenfall developed the Enterprise Risk Management (ERM) process and established a functionally organised risk organisation, which has created a solid foundation for the Group's work in this area.

#### Enterprise Risk Management at Vattenfall

Vattenfall creates value when it exceeds the required rate of return on net assets with a set level of balanced risk. In the course of its operations, Vattenfall is exposed to financial risks (such as price and credit risks) as well as non-financial risks (such as political, technical and environmental risks). ERM is a continuous process for identifying, assessing, managing and following up risks in the business at an early stage (see below).

ERM is based on the risk management standards of the Committee of Sponsoring Organizations of the Treadway Commission (COSO) and is conducted on a continous basis in connection with the company's financial reporting. ERM enables quantification and comparability of financial and



non-financial risks. This provides strong support to decisionmakers in managing risks and opportunities, and has led to greater transparency and risk awareness throughout the entire organisation.

An important improvement that was made in the ERM process in 2010 is the direct connection to the business planning and financial follow up processes. In accomplishing this, Vattenfall has ensured that risk management is fully integrated in all parts of the Group's operations.

#### A strengthened risk function

The Board of Directors has overarching responsibility for risk management within Vattenfall. The risk function's independence is ensured in such way that the Chief Risk Officer (CRO) keeps the Board informed about risk issues. The CRO has overall responsibility for the ERM process. Risk decisions of strategic importance are made by the Vattenfall Risk Committee (VRC), which is chaired by the Group CEO.

Since 2010 the risk management organisation has been functionally organised and clearly segregated from the business owners. In addition, enhanced quality work ensures that the risk framework is fully implemented and aligned with Vattenfall's overall governance.

The risk function's proximity to operations is ensured through risk managers, who support the business in risk management and control. In addition, all business units have designated risk co-ordinators who co-ordinate the ERM process locally.

Vattenfall applies the "three lines of defence" model, in accordance with the Basel II recommendations, where management and control of risks are divided into three lines of defence. The first line of defence consists of the business units, which own and manage risks. The risk organisation makes up the second line of defence and is responsible for monitoring risks. Both the auditor and the internal auditor make up the third line of defence and perform an independent review and oversight of both the first and second lines of defence.

#### Market and financial risks

Vattenfall's board of directors has given the CEO a risk mandate for the Group, which is delegated onward to the business units. To ensure transparency and clear governance, the CRO is responsible for co-ordinating and docu menting the risk mandate delegation process. Every business unit has scope to manoeuvre within its mandate and is responsible for ensur ing that appropriate risk measures are under taken.

Within Vattenfall, the vast majority of expo sures within the proprietary trading portfolio are mark-to-market. In cases where market prices cannot be observed, modelled prices are used (mark-to-model). Mark-to-model positions occur primarily in the asset and sales-related portfolios. An example is that a market valu ation of production from the plants or sales demand requires the derivation of an hourly forward curve. This granularity cannot be observed in the market and hence these posi tions are mark-to-model. Approval of these valuation models is strictly regulated and moni tored by the risk organisation.

#### Electricity price risk

The price of electricity has the single greatest bearing on Vattenfall's earnings. Electricity prices are determined by fundamental fac tors such as supply (water levels and available generation capacity, etc.), demand (steered by electricity use, which in turn can be affected by weather and the economy), fuel prices and the price of  $CO_2$  emission allowances. Vattenfall analyses these factors on a continuous basis in order to be able to optimally manage electricity price risk.

Vattenfall hedges its electricity generation and sales with the help of physical and financial forward contracts. Such hedging is done while taking into account liquidity in the market at different periods in time. As the sharp fluctuations in elec tricity prices have shown in recent years, as shown in the sensitivity analysis table on page 79, trading in the futures market is an important way of smoothing out and balancing the major electricity price risk in the business. The amount that is hedged varies, as shown in the graph on page 79.

#### Vattenfall's risk categories and risk areas Market & Politics & Personnel & Technology Infrastructure laws & Risks related to all Risks related to all financial society Regulations organisation technology that is infrastructure that Risks related to com-Risks that are Risks related to all Risks related to Vatneeded to produce. Vattenfall needs for laws and regulations petition, prices and affected by regional tenfall's organisa distribute and sell its operations. This sales volumes, interand global political that apply for Vatten tion, processes and includes IT infrastruc electricity, gas, heat est rates, currencies, and social trends. fall employees, such as and other related ture (hardware and credit and counter-See page 82. See page 82. company culture, products and ser software) telecomparties. leadership and motimunications, buildings vices. See page 78. vation. and safety systems. See page 81. See page 83. See page 82. Examples of risks in the respective risk areas (which are described on the following pages): Electricity Operational IT and Political risk Legal risks **Risk of losing** price risk risks of assets information expertise and Investment Environmental security risks key persons Volume risk Environmental risk (political risks risks decisions) Organisational Price area risk Change Investment risk Fuel price risk Risks in health (technology) Credit risk and safety Liquidity risk Fraud Interest rate risk Currency risk Investment risk (financing) Risk measures Avoid Reduce Share Accept

Vattenfall also enters into long-term contracts with major industrial customers. These contracts pertain to time hori zons in which there is no possibility to hedge prices in the wholesale market and stretch as far as to 2022. The total hedged volume for the period 2014–2022 is 92 TWh. The level of hedging for electricity generating units is decided by the VRC; within the risk mandate given by the Board of directors. Vattenfall conducts its hedging in the various markets through Vattenfall Energy Trading, which hedges its own positions in external markets via electricity exchanges, such as Nord Pool and the European Energy Exchange (EEX), as well as through bilateral trading with other counterparties. Vattenfall Energy Trading's mandate is monitored on a daily basis. To measure electricity price risk, Vattenfall uses methods such as Value at Risk (VaR) and Gross Margin at Risk along with various stress tests.

#### Sensitivity analysis of electricity and commodities

Market-quoted	Impact on profit before tax, SEK million, for the three-year period 2011–2013	Calculated yearly volatility
Electricity	+/-13,000	17
Coal	+/-800	17
Gas	+/-700	22
CO <sub>2</sub>	+/-1,200	31
Uranium	+/-< 100	_

1) Impact on profit before tax (SEK million) for the three-year period 2011–2013, given a price movement of +/-10%, based on Vattenfall's degree of hedging as per 31 December 2010.

The sensitivity analysis reflects the impact of a variation in market quotes of factors that affect Vattenfall's earnings: electricity, coal, gas, uranium and  $\rm CO_2$  emission allowances. In the analysis, it was assumed that the risks are independent of each other. The exposure to electricity includes the Nordic countries, Germany, the Netherlands and Poland. The volatilities are the annualised daily market movements in 2010 of the considered commodities and are based on a three-year contract and assumed 252 trading days in a year. Regarding electricity, annual volatility is a weighted average of Vattenfall's open position for the corresponding volatilities. All data considered in the analysis, prices and positions, are as per 31 December 2010.

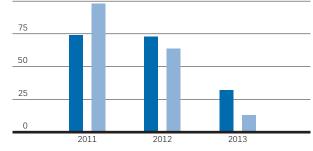
#### Volume risk

Volume risk is the risk of deviations between the forecast and the actual volume. In hydro power generation, volume risk is managed by analysing and forecasting such factors as precipitation and snowmelt. The models are based on extensive weather history and other key factors. Volume risk also arises in the sales activities as deviations in anticipated vs. actual volumes delivered to customers. This risk is managed by improving and developing forecasts of electricity consumption. The sensitivity of Vattenfall's electricity generation volume is inherent in the electricity price sensitivity, since there is a correlation between price and volume. See the sensitivity analysis table above.

#### Price area risk

Price area risk arises when the price of electricity differs between various geographic areas. Vattenfall's price area risk is centralised and managed by Vattenfall Energy Trading. In the Nordic countries, Nord Pool provides financial instruments – price area swaps (Contracts for Differences, CfDs) – which can be used to manage price area risk. Vattenfall Energy Trading also acts as a CfD price area market maker Vattenfall's degree of price hedging in various markets per 31 December 2010





Nordic countries Central Europe

The chart shows Vattenfall's price hedging of planned electricity gen eration in the Nordic countries and Continental Europe. Vattenfall con tinuously hedges its electricity generation through sales in the futures market.

#### Average price hedges as per 31 December 2010

EUR/MWh	2011	2012	2013
Nordic countries	45	44	44
Continental Europe	55	54	59

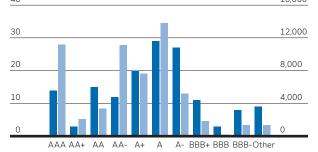
on Nord Pool. Through this undertaking, liquidity is ensured in these financial instruments. Price differences also exist between the various areas in which Vattenfall is active. These are managed through contracts in these price areas and contracts for transmission capacity. In comparison, the price area risk is less than, for instance, electricity price risk.

#### Credit risk

Credit risk is the risk of loss if a counterparty or customer cannot or will not fulfill its obligations. Vattenfall is exposed to credit risks in connection with electricity trading, commodity trading, sales activities and investments.

Vattenfall strictly adheres to instructions and policies governing the company's approach to credit risk as sanctioned by the Board of Directors. These instructions and processes ensure a consistent application of credit risk measures throughout the Vattenfall Group and provide a framework for managing credit risk. Vattenfall's exposures are aggregated in the table on page 79. Exposures resulting from electricity and commodities are reported separately from financial market exposures. Counterparties, number and exposure, SEK million,





Number of counterparties Total exposure (right axis)

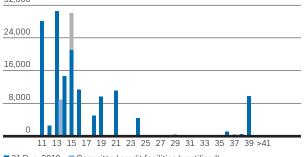
The chart shows Vattenfall's counterparties where Vattenfall's exposure is greater than SEK 50 million per counterparty. "Other" consists of exceptions for contracts that have existed for a long time and which Vattenfall has taken over in connection with acquisitions. Sales and heat exposure in Benelux, and procurement exposures, are not included.

A number of tools are used for qualitative and quantitative analysis. Existing and potential future exposures are measured. In-depth analyses of counterparties are performed, including time series analyses, analyses of annual reports and analyses of future performance. In addition to internal ratings, the credit ratings provided by the major credit rating agencies are used. Credit exposures per rating class, according to Standard & Poor's rating system, are shown in the Counterparties per Rating Class graph.

Vattenfall uses a variety of instruments to manage and mitigate credit risks, such as Master Netting Agreements (based on standards such as ISDA – International Swaps and Derivatives Association and EFET – The European Federation of Energy Traders) and collateral requirements of Credit Support Annexes (CSA). Credit risk exposure is managed on an aggregated basis within the Vattenfall Group and is reported and monitored on a daily basis.

#### Maturity structure, debt portfolio1





31 Dec. 2010 Committed credit facilities (unutilised)
 Capital Securities

1) Excl. loans from minority owners and associated companies.

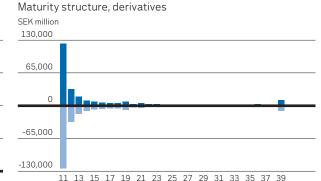
#### Credit risks

Type of instrument	Exposure
Exposure from electricity and commodity	
transactions – positive market values	10,586
Exposure from electricity and commodity	
transactions – settlement risks	7,265
Interest and currency derivatives	
– positive market values	1,521
Fixed-income investments, including large bank	
balances	37,941
Shares	677
Total	57,990

Total credit exposure from electricity and commodity transactions taking into account netting under agreements amounted to SEK 17,515 million. The reporting threshold is set to SEK 50 million per individual exposure. Exposure in interest and currency derivatives adjusted for netting under ISDA agreements or the equivalent amounts to SEK 1,521 million (921). This calculation takes into account margin security requirements under CSA agreements, totalling SEK 5,128 million (2,680). Without adjustment for ISDA and CSA agreements, the exposure amounts to SEK 11,724 million (8,903).

#### Fuel price risk

Fuel prices pertain to the risk of a change in earnings due to a change in fuel prices. Fuel prices are primarily affected by macroeconomic factors. Fuel price risk is minimised through analysis of the various commodity markets and diversification of contracts with respect to price model and terms. Both financial and physical instruments such as coal, gas and oil are used to smooth Vattenfall's earnings over time. Most of Vattenfall's coal-fired plants in Germany use lignite from Vattenfall's own mines. Regarding coal-fired electric-



Positive cash flows Negative cash flows

The chart shows the maturity structure for all of Vattenfall's derivatives (gross amounts).

ity generation, hedges on electricity and coal prices are
 co-ordinated to secure margins. Uranium is used as fuel in
 Vattenfall's nuclear power plants. However, the price risk is
 limited, since uranium makes up a relatively small proportion
 of the total cost of generation. The sensitivities of Vatten fall's fuel prices are displayed in the sensitivity analysis table
 on page 79.

#### Liquidity risk

Liquidity risk pertains to the risk of not being able to pursue the trading strategy due to insufficient liquidity in the market. This is managed through proxy hedging (hedging with the help of an instrument that correlates with the risk to be hedged) and collateral agreements as well as by securing an optimal number of counterparties. Liquidity risk can also be described as the risk for a financing crisis, where Vattenfall does not have the ability to finance its capital needs. In this respect, liquidity risk is mitigated by maintaining an even maturity structure and a long average remaining term in the company's debt portfolio. Liquidity risk is also mitigated by Vattenfall's treasury operations, having several types of debt issuance programmes and thereby ensuring access to capital and flexibility. The Group has a target for the shortterm accessibility to capital; funds that shall be available in the form of liquid assets or committed credit facilities. The target is that funds corresponding to no less than 10% of the Group's sales, or at least the equivalent of the next 90 days maturities, shall be available.

For a capital-intensive company like Vattenfall, it is important to have access to financing in the international credit market at favourable terms. One prerequisite for this is that Vattenfall maintains a good credit rating from leading credit ratings agencies such as Moody's and Standard & Poor's.

#### Remaining fixed rate term in loan portfolio

Excl. loans from minority owners and associated companies.

				Committed credit facili-
			Capital	ties
SEK million	Liability	Derivatives	Securities	(unutilised)
< 1 year	27,792	130	-	100
1 year–5 years	70,390	-1,187	9,002	9,002
> 5 years	56,795	-1,720	-	_
Total	154,977	-2,777	9,002	9,102

#### Borrowing programmes and credit facilities

	Maximum					
	aggre-			Used	Reported	
	gated	Cur-	Matu-	propor-	external	
SEK million	amount	rency	rity	tion, %	liability	
Borrowing programmes						
Commercial Paper	15,000	SEK	-	30	4,495	
Euro Commercial Paper	2,000	EUR	-	-	-	
Euro Medium Term Note	15,000	EUR	-	70	99,391	

#### Committed credit

facilities					
Revolving Credit Facility <sup>1</sup>	1,000	EUR	2013	-	-
Bank overdraft facilities	100	SEK	2011	-	-
Other credit facilities					
Bank overdraft facilities	9,544	SEK	-	28	1,341
and other lines of credit					
Total				1	05.227

1) Backup facility for short-term borrowing.

#### Benchmark bonds

Туре	Currency	Amount C	oupon, %	Maturity	
Euro Medium Term Note	EUR	850	5.750	2013	
Euro Medium Term Note	EUR	500	4.125	2013	
Euro Medium Term Note	EUR	1,350	4.250	2014	
Euro Medium Term Note	EUR	1,100	5.250	2016	
Euro Medium Term Note	EUR	500	5.000	2018	
Euro Medium Term Note	EUR	650	6.750	2019	
Euro Medium Term Note	GBP	350	6.125	2019	
Euro Medium Term Note	EUR	1,100	6.250	2021	
Euro Medium Term Note	EUR	500	5.375	2024	
Euro Medium Term Note	GBP	1,000	6.875	2039	
The table above shows the largest issues made under Vattenfall's bor					
rowing programmes.					

#### Interest rate risk

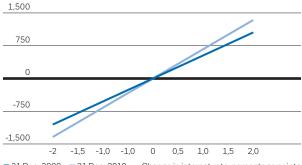
Interest rate risk in Vattenfall's debt portfolio is measured in terms of duration, which is permitted to vary from a norm of four years by up to 12 months either way. The duration of the company's debt portfolio at year-end was 3.87 years. Including Capital Securities the duration was 3.88 years. To adjust the duration of borrowing, Vattenfall uses interest rate swaps, interest rate forwards and options, among other instruments. See the table below for the remaining fixed rate term in Vattenfall's loan portfolio.

#### Remaining fixed rate term in loan portfolio

Excluding Capital Securities and loans from minority owners and associated companies. Nominal amounts.

SEK million	SEK	EUR	Other	Total
< 3 months	814	69,075	10	69,899
3 months–1 year	10,973	13,049	_	24,022
1 year–5 years	170	23,168	607	23,945
> 5 years	7,012	27,318	4	34,334
Total	18,969	132,610	621	152,200
Average financing interest rate, %	4.4	3.3	4.3	3.4

Interest rate sensitivity, excluding Capital Securities and loans from minority owners and associated companies SEK million



= 31 Dec. 2009 = 31 Dec. 2010 Change in interest rate, percentage points The chart 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.

#### Remaining fixed rate term in loan portfolio

Excluding Capital Securities and loans from minority owners and associated companies. Nominal amounts. Negative amounts are explained by the use of derivatives like interest rate swaps and interest rate forwards. The sum of derivatives is not equal to zero due to currency effects.

SEK million	Debt	Derivatives	Total
< 3 months	8,526	61,373	69,899
3 months–1 year	22,367	1,655	24,022
1 year–5 years	68,446	-44,501	23,945
> 5 years	55,638	-21,304	34,334
Total	154,977	-2,777	152,200

#### Currency risk

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 or balance sheet exposure). Vattenfall's loan portfolio per currency is displayed in the table below. The objective in managing the company's 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.

#### Loan portfolio, breakdown per currency

Including loans from minority owners and associated companies but excluding Capital Securities. Nominal amounts.

Original currency	Debt	Derivatives	Total
CHF	4,160	-4,160	-
DKK	607	-	607
EUR	125,032	18,093	143,125
GBP	14,243	-14,239	4
JPY	4,389	-4,389	-
NOK	2,621	-2,621	-
PLN	10	-	10
SEK	23,736	4,539	28,275
Total	174,798	-2,777	172,021

Vattenfall has limited transaction exposure, since most generation, distribution and sales of energy take place in the respective local markets, see the table Consolidated operating revenues and expenses per currency. In the Nordic operations, most transaction exposures arise in conjunction with hedging of electricity prices, primarily on Nord Pool, since trading is conducted partly in EUR. In the German and Danish subsidiaries, transaction exposures arise primarily in conjunction with purchases of fuel. In both cases, currency risk is managed through the use of forward exchange contracts.

#### Consolidated operating income and expenses per currency, %

Currency	Revenues	Expenses
EUR	68	77
SEK	15	14
PLN	8	1
DKK	5	7
Other	4	-
Total	100	100

Values are calculated based on a statistical compilation of external operating income/expenses. Changes in inventory and investments are not included in the compilation.

The business units are required to hedge contracted transaction exposure when it exceeds the equivalent of SEK 10 million. Hedges are made through Vattenfall's Treasury department, where currency risks are managed within established risk limits for interest rates and currencies. With respect to translation exposure, a 5% change in exchange rates would affect the Group's equity by approximately SEK 5,196 million (5,590). The Group's of translation exposure is displayed below. Reporting of translation exposure is described in Note 3 to the consolidated accounts, Accounting policies, under the headings Derivative instruments and Hedge accounting.

#### Translation exposure

Currency	Equity	Hedging after tax	Net exposure after tax
EUR	165,412	92,892	72,520
PLN	16,940	2,509	14,430
DKK	9,492	-	9,492
GBP	7,479	-	7,479
Other	1	-	1
Total	199,324	95,402	103,922

#### Technology

#### Operational asset risks

Vattenfall's largest operational asset risks are associated with the operation of power generation and heat production plants, which can be damaged as a result of incidents such as breakdowns or failures of components and equipment. This could give rise to volume losses and outage costs. These operational risks are mitigated through measures such as maintenance, training, advanced planning of the renewal of plants and effective administrative routines. A rolling inspection programme for the largest plants is an important part of the continuous risk management work.

Vattenfall has identified nuclear power safety as a particular focus area. Vattenfall's Chief Nuclear Officer (CNO) is responsible for overseeing nuclear safety at Group level. The ambition is to be world-leading when it comes to nuclear safety. This is achieved by promoting a strong safety culture, by training employees and by establishing clear and effective processes. Detailed analyses are conducted of Vattenfall's nuclear power plants to identify risks. These analyses are updated continuously in consultation with the safety authorities in the respective countries and form the basis for continuous improvement work. Vattenfall also participates in research and development, and in various forms of external co-operation activities to ensure that the company is using best practice solutions in nuclear power.

Dam safety is another focal area involving substantial investments. Much of the work associated with traditional hydro power today focuses on increasing the safety of dams and minimising adverse effects on the surrounding natural environment. Safety aspects are primarily aimed at preventing dam leakage and ruptures. Advances in meteorology and hydrology have increased hydro power plant risk awareness, and Vattenfall is investing in improving dam safety at many older plants. Several of these plants have been fortified to be able to handle water flows that are so high that, statistically speaking, they occur only one year every 10,000 years. Further operational assets risks include damage to machinery and other equipment at Vattenfall's open-cast lignite mines. A disruption in mining operations could cause a halt in lignite deliveries, which could lead to a disruption in generation and loss of revenue for Vattenfall. Risks associated with operational assets concern not only electricity generation but also damage to distribution networks. In the Nordic countries Vattenfall is continuously working to make electricity networks less vulnerable by replacing power lines above ground with underground cables. This work has already been done for the German networks.

#### Risk mitigation through insurance

Vattenfall protects itself against economic loss to the greatest extent possible through insurance. Vattenfall has two captive insurance companies (company's that insure the Group's own risks exclusively) – Vattenfall Insurance and Vattenfall Reinsurance (Luxembourg). Vattenfall Insurance optimises the risk financing of insurable risks within the company. Reinsurance is procured in the international reinsurance market and provides Vattenfall Insurance with some reinsurance capacity.

Vattenfall Insurance underwrites insurance for most of the Group's property and business interruption exposure as well as for construction and design risks. Most of the actual power lines in the distribution networks are uninsured. This is due to the difficulty of finding cost-effective insurance solutions. In addition, Vattenfall Insurance provides Group-wide general liability insurance, including consultant and product liability. With respect to dam liability, Swedish dam owners have strict and unlimited liability for damage to third parties caused by dam accidents. In co-operation with other Swedish and a number of Norwegian dam owners, Vattenfall procures dam liability insurance with an insured amount of SEK 9 billion.

Property insurance for Vattenfall's nuclear power plants is issued by EMANI (the European Mutual Association for Nuclear Insurance), and for the Swedish power plants also by Nordic Nuclear Insurers. Nuclear power liability in Sweden is strict and limited to 300 million Special Drawing Rights (SDRs), corresponding to approximately SEK 3.4 billion, which means that owners of nuclear power plants are only liable for damage up to this amount. Obligatory nuclear liability insurance is issued by Nordic Nuclear Insurers and by the mutual insurance company ELINI (European Liability Insurance for the Nuclear Industry).

In Germany, nuclear liability is strict and unlimited. By law, nuclear power plants are required to have insurance or other financial guarantees for up to EUR 2.5 billion. The German Atomic Insurance Pool issues insurance for up to EUR 256 million. Thereafter, the nuclear power plants and their German parent companies (in Vattenfall's case, Vattenfall Europe AG) are liable for amounts exceeding this level, in proportion to the respective ownership interest the parent companies have in the nuclear power plant. It is not until these resources are exhausted that a solidarity agreement ("Solidarvereinbarung") between the German nuclear power plant owners (Vattenfall, E.ON, RWE and EnBW) would take force for up to EUR 2.5 billion. Since the liability is unlimited, the nuclear power plants and their German parent companies are ultimately liable also for amounts in excess of this level.

#### Infrastructure

IT plays a key role in nearly all parts of operations, and a

disruption in a network or application could have a major impact on the company's performance. For example, a breakdown in the customer management system could lead to a loss of trust in Vattenfall, while a disruption in a trading system could lead to lost opportunities, fines and trading losses. To manage dependence on IT systems, major focus is put on security controls to ensure the information's confidentiality, integrity, availability and traceability.

Vattenfall also works extensively to secure the technical IT infrastructure that is used for production and distribution of electricity and heat. An example is security in Supervisory Control and Data Acquisition (SCADA) systems, an area in which Vattenfall works closely with national authorities and other national organisations since the company is part of the national critical infrastructure.

#### Politics and society

#### Political risk

Political risk is defined as the business risk that can arise as a result of political decisions, such as price regulations in electricity distribution, uncertainty regarding a new political majority, or changes in finance policies. In connection with acquisitions and other investments, this type of risk is considered by adjusting the cost of capital and through scenario analyses for instance.

Another type of political risk stems from changes in legislation and in the rules and regulations that govern the energy industry. These can be factors such as changes in taxes, environmental surcharges, environmental legislation and permit requirements, as well as changes in how natural monopolies are regulated and political objectives regarding the composition of the energy system. To protect itself from this risk, Vattenfall conducts business intelligence activities and maintains contacts with decision-makers. In addition, Vattenfall belongs to various national and international trade organisations to safeguard the company's interests.

A third area concerns the public acceptance of Vattenfall's operations, such as the lifetime extensions of nuclear power plants in Germany, CCS technology or procurement of biomass from developing countries.

#### Law and regulations

#### Legal risks

Legal risk can be defined as the risk of loss of value due to non-compliance with relevant laws, regulations, Code of Conduct, or (contractual) claims by third parties, or changes in legislation.

The Legal Affairs Group function supports the business

units in formulating their legal risks via the Vattenfall Enterprise Risk Management system. Vattenfall mitigates legal risks through the Legal Affairs Group function, which performs legal analyses and participates in the decision-making process. In addition, Legal Affairs is involved, together with the risk co-ordinators, in the process to mitigate and manage legal risks by establishing appropriate measures, including procedures, standards, guidelines and training.

Vattenfall's General Counsel regularly provides a Claims & Litigation report to the Executive Group Management and the Board of Directors.

#### Personnel and organisation

#### **Risk of losing unique expertise and key persons** Vattenfall has unique expertise and key persons in certain areas, where the impact would be particularly tangible if the individuals in question were to leave Vattenfall. To manage this risk, a record is kept of where persons with these qualities work in the organisation, and the risk is mitigated through efforts to spread their expertise. Vattenfall takes a structured approach to succession and competence planning, as well as to leadership and management development programmes, especially in view of the demographic trend

#### Organisational change

and competition for specialists.

2010 was characterised by preparations for the new organisational structure, which has been in place since 1 January 2011. From a risk perspective, Vattenfall has several factors to take into consideration: a reorganisation takes time and effort, which may cause business activities to lose pace and focus as employees are encountered with changes that may affect their motivation and performance. The aim of the reorganisation of Vattenfall's operations, combined with the integration of N.V. Nuon Energy, is to achieve major scale benefits and synergy effects. To realise the full potential of these activities, Vattenfall has established a project management organisation to work with the organisational change.

#### Health and safety

Health and safety are important elements in Vattenfall's corporate culture and an integrated part of the company's business strategy. Vattenfall takes a preventive approach and implements best practices in its health and safety work to reduce risk. Quantitative targets are defined and evaluated based on Vattenfall's Health and Safety policy, and all managers are responsible for preventing work-related accidents and health hazards. Furthermore, Vattenfall's production sites adhere to a high level of process safety to ensure the safety of both employees and society in general.

#### Fraud

The Group's security organisation works with preventive security measures and crisis management in order to protect personnel, assets, IT systems and information, and to safeguard production and distribution of electricity and heat from fraudulent activities. Fraud is prevented by – among other things – always applying the so-called four eyes principle in all processes and decisions, which entails that decisions must be approved by at least two persons.

## Risks that are a part of several risk areas Investment risk

Vattenfall is a highly capital-intensive company and has an extensive investment programme. Before every investment decision, a risk analysis is performed. By simulating various outcomes created by changes in e.g., price and costs, by delays and the cost of capital, risks are estimated for an investment. Several different types of investment risk exist in the various risk areas, such as procurement risk, financing risk, risk in the choice of technology and the risk of changes regarding environmental permits.

Vattenfall's Group Asset Management department ensures that capital is invested in a manner that maximises long-term economic value. In addition to a strategic investment roadmap, a list of prioritised investment projects is continuously updated to provide the Executive Group Management with guidance in the investment decision process. Projects are ranked according to a number of criteria, including support of Vattenfall's overall strategic direction, consequences for the existing generation portfolio, risk profile and profitability.

#### Environmental risk

The Vattenfall Environmental Committee, under the direction of the Group's Head of Environmental Affairs, follows-up and evaluates environmental risk management. The general concept of environmental risk can be subdivided into three categories: environmental risks, legal and regulatory risks, and environmental liabilities.

Environmental liabilities are cases where emissions, use of chemicals and other substances, or the use of technology in accordance with currently applicable environmental legislation, requires remedial measures. It can also be a case in which demands are made on financial reporting of provisions. The business units' reporting on environmental liabilities cover the following areas, among others: air and water pollution, oil-filled cables with lead encapsulation, mercury in electrical equipment, asbestos and PCB in thermal power plants and CHP plants, and measurement of magnetic fields from transformers and power lines.

Every year a compilation is made of the company's environmental risks, environmental liabilities, as well as of any provisions and measures that may be needed. This compilation is based on Group-wide reporting standards in accordance with set definitions. The analysis covers a general evaluation of the risk situation and trend in recent years. The business units are responsible for identifying and reporting environmental risks so as to create a holistic picture of the Group's environmental risks.

The work on continuously preventing and controlling the effect of measures is largely conducted locally and is based on the knowledge and experience that exists within Vattenfall. Advance planning in this respect is a way of strengthening the Group's competitiveness over the long term. For example, provisions have been made for contaminated land areas as well as for the restoration of land after lignite mining.

#### Dynamic change

Effective risk management is a good way of managing an uncertain future. In 2010 Vattenfall implemented a number of measures, including an organisational change and adoption of a holistic approach to risk management through Enterprise Risk Management. Vattenfall's risk management organisation drives risk awareness and motivation, and ensures that risks with potential impact on the organisation are followed up in an effective manner. Vattenfall has distinct internal control and works according to a set of best practice, which together form the cornerstones of sound company management.

# **Consolidated income statement**

Amounts in SEK million, 1 January–31 December	Note	2010	2009
Net sales	7, 8, 9, 10	213,572	205,407
Cost of products sold <sup>1</sup>	11	-159,098	-162,564
Gross profit		54,474	42,843
Other operating income	12	2,169	3,790
Selling expenses		-7,451	-6,441
Administrative expenses		-11,098	-10,159
Research and development costs		-1,545	-1,322
Other operating expenses	13	-7,320	-2,083
Participations in the results of associ-			
ated companies	8, 26, 54	624	1,310
Operating profit (EBIT) <sup>2</sup>	8, 14, 15, 16, 52,53	29,853	27,938
Financial income <sup>3</sup>	17	2,514	2,814
Financial expenses <sup>4</sup>	18	-10,944	-13,018
Profit before tax <sup>5</sup>		21,423	17,734
Income tax expense	20	-8,238	-4,286
Profit for the year <sup>6</sup>		13,185	13,448
Attributable to:			
Owners of the Parent Company		12,997	12,896
Minority interests	21	188	552
Total		13,185	13,448
Earnings per share			
Number of shares in Vattenfall AB, thousand	S	131,700	131,700
Earnings per share, basic and diluted, SEK	-	98.69	97.92
Dividend, SEK million		6,500 <sup>7</sup>	5.240
Dividend per share, SEK		49.357	39.79

Amounts in SEK million, 1 January–31 December	2010	2009
Supplementary information		
Operating profit before depreciation and amortisation (EBITDA)	60,706	51,777
Financial items, net excl. discounting effects attributable to		
provisions and return from the Swedish Nuclear Waste Fund	-6,179	-7,994
1) Of which, depreciation, amortisation and impairment losses related to		
intangible assets (non-current) and property, plant and equipment	-25,260	-23,238
2) Of which, depreciation, amortisation and impairment losses related to		
intangible assets (non-current) and property, plant and equipment	-30,853	-23,839
<ol><li>Including items affecting comparability attributable to:</li></ol>		
Capital gains/losses, net	-250	58
Impairment losses and impairment losses reversed, net	-9,849	-4,231
Other items affecting comparability	-	817
<ol><li>Including return from the Swedish Nuclear Waste Fund</li></ol>	1,011	1,188
<ol> <li>Including interest components related to pension costs</li> </ol>	-1,138	-1,297
<ol> <li>Including discounting effects attributable to provisions</li> </ol>	-3,262	-3,398
5) Including items affecting comparability attributable to:		
Capital gains/losses, net	-247	103
Impairment losses and impairment losses reversed, net	-9,849	-4,231
Other items affecting comparability	-	817
6) Including items affecting comparability stated above adjusted for tax	-10,009	-2,606
7) Proposed dividend.		

# **Consolidated statement of comprehensive income**

Amounts in SEK million, 1 January–31 December	2010	2009
Profit for the year	13,185	13,448
Other comprehensive income:		
Cash flow hedges:		
Changes in fair value	-1,189	-1,399
Dissolved against the income statement	-684	8,238
Transferred to cost of hedged item	246	-1,509
_ Tax attributable to cash flow hedges	494	-1,576
Total cash flow hedges	-1,133	3,754
Hedging of net investments in foreign operations	19,831	8,111
Tax attributable to hedging of net investments in foreign operations	-5,215	-2,133
Total hedging of net investments in foreign operations	14,616	5,978
Translation differences	-30,727	-11,393
Total other comprehensive income, net after tax	-17,244	-1,661
Total comprehensive income for the year	-4,059	11,787
Total comprehensive income for the year attributable to:		
Owners of the Parent Company	-3,717	11,920
Minority interests	-342	-133
Total	-4,059	11,787

# **Consolidated balance sheet**

Amounts in SEK million	Note	31 Dec. 2010	31 Dec. 2009	Amounts in SEK million	Note	31 Dec. 2010	31 Dec. 2009
Assets	8			Equity and liabilities			
Non-current assets				Equity attributable to owners of the Parent Company			
Intangible assets: non-current	10,22	49,787	64,431	Share capital		6,585	6,585
Property, plant and equipment	10, 23	285,631	303,025	Translation reserve		-7,568	8,090
Investment property	10,24	626	723	Reserve for cash flow hedges		-1,315	-259
Biological assets		4	-	Retained earnings incl. profit for the year		129,002	121,204
Participations in associated companies and				Total equity attributable to owners of the Parent Compa	ny	126,704	135,620
joint ventures	26	12,949	14,916 <sup>1</sup>	Equity attributable to minority interests		6,917	6,784
Other shares and participations	27	4,954	5,007	Total equity		133,621	142,404
Share in the Swedish Nuclear Waste Fund	28	26,791	26,027				,
Current tax assets, non-current	20	1,184	1,197	Non-current liabilities			
Prepaid expenses		171	215	Capital Securities	37	8,929	10.250
Deferred tax assets	20	1,397	1,820	Other interest-bearing liabilities	38	144,599	174,428
Other non-current receivables	29	4,769	4,132	Pension provisions	39	18,137	20,690
Total non-current assets		388,263	421,493	Other interest-bearing provisions	40	62,494	65.601
				Deferred tax liabilities	20	36,125	35,953
Current assets				Other noninterest-bearing liabilities	41	8,409	7,480
Inventories	30	16,825	14,848	Total non-current liabilities		278,693	314,402
Intangible assets: current	31	8,330	12,432			270,000	014,402
Trade receivables and other receivables	32	36,380	42,152	Current liabilities			
Advance payments to suppliers		3,904	542	Trade payables and other liabilities	42	33.184	42,106
Derivatives with positive fair values	44	29,338	39,170	Advance payments from customers	-12	1.912	401
Prepaid expenses and accrued income	33	10,597	9,807	Derivatives with negative fair values	44	25,216	36,802
Current tax assets	20	2,311	1,376	Accrued expenses and deferred income	43	24,804	30,637
Short-term investments	34	31,278	46,385	Current tax liabilities	20	2.062	1.086
Cash and cash equivalents	35	12,595	10,555	Interest-bearing liabilities	38	34,749	28.816
Assets held for sale	36	1,611	3,367 <sup>1</sup>	Interest-bearing provisions	40	7,191	4.809
Total current assets		153,169	180,634	Liabilities associated with assets held for sale	36	-	-,000
Total assets		541,432	602,127	Total current liabilities		129,118	145.321
				Total equity and liabilities		541,432	602,127

See also information on the Group's Pledged assets (Note 47), Contingent liabilities (Note 48) and Commitments under consortium agreements (Note 49).

1) The amount is adjusted compared to previously published information. See Note 2 to the consolidated accounts.

# **Consolidated statement of cash flows**

Amounts in SEK million, 1 January – 31 December	Note	2010	2009
Operating activities			
Profit before tax		21,423	17,734
Depreciation, amortisation and impairment losses		30,853	23,839
Tax paid		-8,901	-4,739
Other adjustment items	45	-3,267	-134
Funds from operations (FFO)		40,108	36,700
Changes in inventories		-2,407	-1,597
Changes in operating receivables		-12,612	-9,710 <sup>1</sup>
Changes in operating liabilities		5,681	22,147 <sup>1</sup>
Other changes		10,461	-1,294
Cash flow from changes in operating assets and operat-			
ingliabilities		1,123	9,546
Cash flow from operating activities		41,231	46,246
Investing activities			
Acquisitions in Group companies	5	-577	-56,193
Investments in associated companies and other shares			
and participations	5	-508	-368
Other investments in non-current assets	45	-40,709	-46,428
Total investments		-41,794	-102,989
Divestments	45	7,197	5,542
Cash and cash equivalents in acquired companies		111	14,937
Cash and cash equivalents in divested companies		-297	-530
Cash flow from investing activities		-34,783	-83,040
Cash flow before financing activities		6,448	-36,794
Financing activities			
Changes in short-term investments		-1,919	-25,611
Changes in loans to minority owners in foreign subsidi-			
aries		1,135	-529
Loans raised <sup>2</sup>	45	13,325	72,543
Amortisation of debt		-12,389	-11,601
Dividends paid to owners		-5,311	-6,980
Contribution from minority interests		12	
Cash flow from financing activities		-5,147	27,822
Cash flow for the year		1,301	-8,972

Amounts in SEK million, 1 January – 31 December	Note	2010	2009
Cash and cash equivalents			
Cash and cash equivalents at the beginning of the year		10,555	20,904
Cash and cash equivalents included in assets held for			
sale at 31 December 2009		653	-653
Cash flow for the year		1,301	-8,972
Translation differences		86	-724
Cash and cash equivalents at the end of the year		12,595	10,555
Supplementary information			
Cash flow before financing activities		6,448	-36,794
Financing activities			
Dividends paid to owners		-5,311	-6,980
Contribution from minority interests		12	-
Cash flow after dividend		1,149	-43,774
Analysis of change in net debt			
Net debt at beginning of the year		-154,987	-66,000
Changed calculation of net debt <sup>3</sup>		-11,252	-
Cash flow after dividends		1,149	-43,774
Changes as a result of valuation at fair value		-1,743	1,475
Change in interest-bearing liabilities for leasing		111	406
Interest-bearing liabilities/short-term investments			
acquired/divested		4,002	-2,046
Liabilities pertaining to acquisitions of subsidiaries		-749	-51,392
Cash and cash equivalents included in assets held for			
sale at 31 December 2009		653	-653
Translation differences on net debt		18,707	6,997
Net debt at the end of the year		-144,109	-154,987
Free cash flow (Cash flow from operating activities less			
maintenance investments)		23,846	27,566

1) The amount is adjusted compared to previously published information. See Note 2 to the consolidated accounts.

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

3) As of 2010 bilateral margin calls are recognised as Advance payments to suppliers/Advance payments from customers. Earlier these were recognised as Short-term investments and Current interest-bearing liabilities, respectively. See Note 2 to the consolidated accounts.

# **Consolidated statement of changes in equity**

	Attributable to equity owners of the Parent Company					Attributable to minority interests	Total equity	
		Reserve for cash	Translation	Retained		minority interests	Total equity	
Amounts in SEK million	Share capital	flow hedges	reserve	earnings	Total			
Balance brought forward 2009	6,585	-4,054	12,861	114,469	129,861	11,025	140,886	
Dividends paid to owners	-	_	-	-6,900	-6,900	-80	-6,980	
Group contributions from minority, net after tax	-	-	-	-	-	342	342	
Changes in ownership	-	-	-	739	739	-4,370	-3,631	
Cash flow hedges:								
Changes in fair value	-	-1,344	-	-	-1,344	-55	-1,399	
Dissolved against income statement	-	8,238	-	-	8,238	-	8,238	
Transferred to cost of hedged item	-	-1,509	-	-	-1,509	-	-1,509	
Tax attributable to cash flow hedges	-	-1,590	-	-	-1,590	14	-1,576	
Total cash flow hedges	-	3,795	-	-	3,795	-41	3,754	
Hedging of net investments in foreign operations	-	-	8,111	-	8,111	-	8,111	
Tax attributable to hedging of net investments in foreign operations	-	-	-2,133	-	-2,133	-	-2,133	
Total hedging of net investments in foreign operations	-	-	5,978	-	5,978	-	5,978	
Translation differences	-	-	-10,749	-	-10,749	-644	-11,393	
Profit for the year	-	-	-	12,896	12,896	552	13,448	
Total comprehensive income for the year	-	3,795	-4,771	12,896	11,920	-133	11,787	
Balance carried forward 2009	6,585	-259	8,090	121,204	135,620	6,784	142,404	
Dividends paid to owners	_	_	_	-5,240	-5,240	-71	-5,311	
Group contributions from minority, net after tax	-	-	-	-	-	402	402	
Changes in ownership	-	-	-	41	41	144	185	
Cash flow hedges:								
Changes in fair value	-	-1,086	-	-	-1,086	-103	-1,189	
Dissolved against income statement	-	-684	-	-	-684	-	-684	
Transferred to cost of hedged item	-	247	-	-	247	-1	246	
Tax attributable to cash flow hedges	-	467	-	-	467	27	494	
Total cash flow hedges	-	-1,056	-	-	-1,056	-77	-1,133	
Hedging of net investments in foreign operations	-	-	19,831	-	19,831	-	19,831	
Tax attributable to hedging of net investments in foreign operations	-	-	-5,215	-	-5,215	-	-5,215	
Total hedging of net investments in foreign operations	-	-	14,616	-	14,616	-	14,616	
Translation differences	-	-	-30,274	-	-30,274	-453	-30,727	
Profit for the year	-	-	-	12,997	12,997	188	13,185	
Total comprehensive income for the year	_	-1,056	-15,658	12,997	-3,717	-342	-4,059	
Balance carried forward 2010	6,585	-1,315	-7,568	129,002	126,704	6,917	133,621	

See also Note 46 to the consolidated accounts, Specifications of equity.

# Notes to the consolidated accounts

#### Contents

Not		Sidan	Not Sida	lan
1	Company information	89	40 Other interest-bearing provisions 11	13
2	Adjustment of comparative figures for 2009, changed		41 Other noninterest-bearing liabilities (non-current) 11	14
	accounting for margin calls and changed calculation		42 Trade payables and other liabilities 11	14
	of net debt	89	43 Accrued expenses and deferred income 11	14
3	Accounting policies	89	44 Financial instruments by category and related effects	
4	Important estimations and assessments in the		on income 11	14
	preparation of the financial statements	96		16
5	Acquired and divested operations	97		16
6	Exchange rates	97		17
7	Net sales	98	10 00111180111100 11	17
8	Operating segments	98		18
9	Information about products and services	99		18
10	Information about geographical areas	99	51 Gender distribution among senior executives 12	22
11	Cost of products sold	100	52 Leasing 12	22
12	Other operating income	100	53 Auditors' fees 12	22
13	Other operating expenses	100		22
14	Depreciation and amortisation	100	55 Events after the balance sheet date 12	23
15	Impairment losses and reversed impairment losses	100		
16	Operating costs according to type	101		
17	Financial income	101		
18	Financial expenses	101		
19	Ineffectiveness of hedges recognised in profit or loss	101	for publication on 9 February 2011 in accordance with a decision b	зy
20	Income tax expense	101	the Board of Directors . The Annual Report was approved in accord	
21	Minority interests	102	ance with a decision by the Board of Directors on 29 March 2011.	
22	Intangible assets: non-current	103	The Parent Company, Vattenfall AB, is a limited liability company	
23	Property, plant and equipment	104	with its registered office in Stockholm and with the address	
24	Investment property	106	5 SE-162 87 Stockholm, Sweden. The consolidated balance sheet an	۱d
25	Shares and participations owned by the Parent		income statement disclosed in the Annual Report will be submitted	Ł
	Company Vattenfall AB and other Group companies	106		
26	Participations in associated companies and joint ventures	5 107		
27	Other shares and participations	108	consolidated accounts, Operating segments.	
28	Share in the Swedish Nuclear Waste Fund	109		
29	Other non-current receivables	109		
30	Inventories	110		
31	Intangible assets: current	110	figures for 2009, changed	
32	Trade receivables and other receivables	110	accounting for margin calls and	
33	Prepaid expenses and accrued income	111	changed calculation of net debt	
34	Short-term investments	111	-	
35	Cash and cash equivalents	111		
36	Assets held for sale	111		
37	Capital Securities	111	shown that certain non-cash transactions concerning CO <sub>2</sub> -certifi-	
38	Other interest-bearing liabilities	111	cates have been accounted gross, where net accounting more cor-	
39	Pension provisions	112	rectly reflects the respective changes in operating receivables and liabilities. For 2010, changes in operating receivables and operating	

rectly reflects the respective changes in operating receivables and liabilities. For 2010, changes in operating receivables and operating

liabilities have therefore been adjusted compared with previously published information without changing the respective period's total working capital.

An associated company which since 31 December 2009 was classified as an asset held for sale but which no longer meets the criteria to be classified as such is, as of the third quarter 2010, once again accounted for using the equity method. The carrying amount according to the balance sheet, included in Assets held for sale, has been reversed to Participations in associated companies for balance sheets published since 31 December 2009. Since the accumulated impact on profit for the first half of 2010 is marginal, the income statements for the first guarter of 2010 and the first half of 2010 have not been adjusted. A margin call (received or paid) is a marginal security (collateral) that the holder of a derivative position receives or must pledge to cover the credit risk, either bilaterally via OTC or through an exchange. In Vattenfall's business activities, margin calls occur in energy trading and the in treasury operations. For 2009 all margin calls received were recognised in the balance sheet as Current interest-bearing liabilities, while margin calls paid were recognised as Short-term investments. In the statement of cash flows, all margin calls were recognised as cash flows from financing activities. Effective 2010, the accounting has been changed so that margin calls in energy trading are recognised in the balance sheet

as Advance payments from customers and Advance payments to suppliers, respectively, and are thereby recognised in the statement of cash flows as cash flows from changes in operating assets and operating liabilities. Thus, as of 2010, Vattenfall shows a slightly changed calculation of net debt. Comparative figures for 2009 have not been adjusted.

## Note 3 Accounting policies

#### Conformity with standards and regulations

The consolidated accounts have been prepared in accordance with the International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) as well as the interpretations issued by the 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 – Supplementary Accounting Policies for Groups, issued by the Swedish Financial Reporting Board (RFR), has been applied. RFR 1 specifies the mandatory additions to

#### Note 3 continued

the IFRS disclosure requirements in accordance with the Swedish Annual Accounts  $\mbox{Act}.$ 

#### Basis of measurement

Assets and liabilities are reported at cost, with the exception of certain financial assets and liabilities and inventories held for trading, which are stated at fair value. Financial assets and liabilities stated at fair value consist of derivative instruments and other financial assets that are stated at fair value.

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

#### Estimations and assessments

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

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

#### Accounting policies

The accounting policies of the Group detailed below, with exception for what is stated below under the heading New IFRSs and interpretations effective 2010, have been applied consistently for all periods presented in the consolidated financial statements.

#### New IFRSs and interpretations effective as of 2010

The new standards and amendments to standards and interpretations described below, and endorsed by the EU, are effective as of the 2010 financial year. Amendments to IFRS 1 – *First-time Adoption of IFRS* have been omitted as these are not relevant for Vattenfall.

Amendments in IFRS 2 – *Share-based Payment*, "Group Cashsettled Share-based Payment Transactions" clarify the accounting for certain intra-Group share-based payments and entail that IFRIC 8 – *Scope of IFRS 2* and IFRIC 11 – *Group and Treasury Share Transactions* are incorporated in IFRS 2. IFRS 2 is not relevant for Vattenfall.

Revised IFRS 3 – *Business Combinations* continues to prescribe that the acquisition method be applied for business combinations,

with some significant changes. For example, all payments to purchase a business are to be recorded at fair value at the acquisition date, with contingent payments classified as liabilities subsequently remeasured through profit or loss. There is a choice on an acquisition-by-acquisition basis to measure the minority interest in the acquiree at fair value or at the minority interest's proportionate share of the acquiree's net assets. All acquisition-related costs shall be expensed. Vattenfall applies the revised IFRS 3 prospectively for all business combinations from 1 January 2010.

Amendments in IAS 27 – *Consolidated and Separate Financial Statements* require the effects of all transactions with minority interests to be recorded in equity if there is no change in control and these transactions will no longer result in goodwill or gains and losses. The standard states that when a parent company's control is lost, any remaining interest in the entity is remeasured to fair value, and the gain or loss is recognised in profit for the year. Vattenfall applies the amended IAS 27 for transactions with minority interests from 1 January 2010

Amendment in IAS 39 – *Financial Instruments: Recognition and Measurement* clarifies the application of the principles for hedge accounting. It clarifies the designation of a one-sided risk in the hedged item and inflation in a hedged item. The amendment has had minimal impact on Vattenfall's financial statements.

"Improvements to IFRSs" (issued in April 2009) aim to streamline and clarify the accounting standards concerning presentation, recognition and measurement including changes in terminology or amendments of an editorial nature. These amendments have had 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 obligations and related rights and assets in service concession arrangements. The interpretation has had no impact on Vattenfall's financial statements.

IFRIC 15 – Agreements for the Construction of Real Estate clarifies when construction and sales of real estate shall be accounted for according to IAS 11 – Construction Contracts, or IAS 18 – Revenue, respectively. The interpretation has had no 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 has had no impact on Vattenfall's financial statements.

IFRIC 17 – Distribution of Non-cash Assets to Owners addresses questions regarding a situation in which a dividend is distributed by using other assets than cash. The interpretation has had no impact on Vattenfall's financial statements.

IFRIC 18 – Transfers of Assets from Customers. The interpretation clarifies the accounting treatment of assets or cash transferred from a customer and thereafter used to provide the customer with goods and services. The interpretation is applied prospectively as of 2010 and has resulted in a change in the accounting for certain connection fees received by Vattenfall, which has had a marginal impact on Vattenfall's financial statements.

#### New IFRSs and interpretations not yet adopted

New standards, amendments to standards and interpretations endorsed by the EU as per 31 December 2010, which are effective as of the 2011 financial year or later and which have not been applied prospectively:

Amendments in IAS 32 – *Classification of Right Issues*. Rights denominated in a currency other than the company's functional currency are classified as equity instruments under certain conditions. The amendments are not relevant for Vattenfall.

Revised IAS 24 – *Related Party Disclosures.* The revised standard includes certain clarifications and simplifications of the definition of a related party and provides relief for government-related entities to disclose details of transactions with other government-related entities. However, transactions with other government-related entities do not represent a significant part of the Vattenfall Group's net sales, purchasing or earnings. The amendments in IAS 24 are not expected to have any impact on Vattenfall's financial statements.

Amendment in IFRIC 14, *Prepayments of a Minimum Funding Requirement*, corrects an unintended consequence of IFRIC 14 and provides guidance on determining the recoverable value of a "net pension asset". The amendment will have no or minimal impact on Vattenfall's financial statements.

IFRIC 19 – Extinguishing Financial liabilities with Equity Instruments. The interpretation deals with the accounting of lenders that settle liabilities by issuing equity instruments, but is not relevant for Vattenfall.

New standards, amendments to standards and interpretations issued by IASB/IFRIC which at 31 December 2010 had not yet been endorsed by the EU:

Amendments in IFRS 7 – *Financial Instruments: Disclosures.* The amendments will require additional quantitative and qualitative disclosures of recognised financial instruments. If transferred assets are not derecognised in their entirety, this fact shall be disclosed, as well as if the entity has a continuing involvement in the derecognised asset. Vattenfall is currently analysing the effects, if any, that application of the amendments will entail.

IFRS 9 – *Financial Instruments: Recognition and Measurement.* This standard is part of a complete revision of the present standard IAS 39 – *Financial Instruments: Recognition and Measurement.* The standard involves a reduction in the number of measurement categories of financial assets, and the main categories for measurement are amortised cost and fair value through profit or loss, respectively. For certain investments in equity instruments, it is allowed to recognise them at fair value with the value changes recognised in other comprehensive income for the year and with no recycling to profit for the period when they are disposed of.

Rules on impairment, hedge accounting and derecognition will be added to the standard subsequently.

Awaiting the completion of all parts of the standard, Vattenfall

has not yet evaluated the effects of the new standard.

"Improvements to IFRSs" (issued in May 2010) aims to streamline and clarify the accounting standards concerning presentation, recognition and measurement including changes in terminology or amendments of an editorial nature. These amendments will have no or minimal impact on Vattenfall's financial statements.

#### Segmental information

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

#### Classification of current and noncurrent assets and liabilities

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

All other assets are classified as non-current assets.

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

All other liabilities are classified as non-current liabilities.

#### Assets held for sale

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

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

#### Principles of consolidation Subsidiaries

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

Business combinations are accounted for using the purchase

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

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

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

All acquisition-related costs are expensed

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

Acquisitions and divestments of minority interests in subsidiaries are recognised in equity.

When the Group ceases to have control in a subsidiary, any retained interest in the entity is remeasured to its fair value, with the change in carrying amount recognised in profit or loss. The fair value is the initial carrying amount for the purposes of subsequently accounting for the retained interest as an associated company, joint venture or financial asset.

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

#### Associated companies

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

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

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

#### Joint ventures

In the accounts, joint ventures are activities in which the Group has 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 upon consolidation

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

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

#### Foreign currencies

#### Transactions in foreign currencies

Transactions in foreign currencies are translated to the functional currency at the exchange rate on the day of the transaction. On the balance sheet date, monetary assets and liabilities in foreign currencies are translated to the functional currency at the exchange rate applicable on that day. Exchange rate differences arising from translation of currencies are reported in the income statement. Operationally derived exchange gains and losses are shown under Other operating income and Other operating expenses, respectively. Financially derived exchange gains and losses are shown as financial income and expenses, respectively.

#### Financial reporting of foreign activities

Assets and liabilities of foreign activities, including goodwill and other consolidated surplus and deficit values, are translated to SEK at the exchange rate in effect on the balance sheet date. Income and expenses of foreign activities are translated to SEK using an average exchange rate. Translation differences arising from foreign currency translation of foreign activities are reported in Other comprehensive.

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

Continued on page 92

#### Note 3 continued

#### Revenue recognition

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

#### Sales of electricity, heat and gas

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

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

The change in fair value of derivatives, including commodity derivatives, that does not qualify for hedge accounting is reported in gross profit.

#### 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 are not required to cover future obligations.

#### Government grants

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

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

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

#### Operating expenses Operating leases

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

#### Financial income and financial expenses Financial income

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

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

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

#### Financial expenses

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

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

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

Leasing fees pertaining to finance leases are distributed between interest expense and amortisation of the outstanding debt. Interest expenses are distributed over the leasing period so that each accounting period is charged in the amount 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 in active financial markets, the fair value is set at the rate applicable when the market closes on the balance sheet date. The same rule applies for fixing the fair value of bilaterally traded financial instruments (OTC trading). For unlisted financial instruments, fair value is set by discounting estimated future cash flows. Discounting is done using discounting factors based on return curves in the cash flows of the respective currencies. The return curves are based on the market interest rates, such as swap rates, that apply on the balance sheet date.

#### Financial assets

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

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

#### Financial assets at fair value through profit or loss

This category includes assets classified as held for the purpose of trading, which means that the intention is for them to be divested in the near term. Derivative instruments not held for hedging purposes are always regarded as held for trading.

Vattenfall also includes short-term liquid investments in this category, since Vattenfall monitors and assesses these based on fair values. The category also includes short-term investments whose original terms exceed three months.

The assets are restated on a continuous basis to fair value, with changes in value stated through profit or loss.

#### Loans and receivables

Loans and receivables are financial assets with fixed payments or payments whose amounts can be determined. Receivables arise when the company provides money, goods and services directly to the debtor without the intention of trading in the receivable rights. Acquired receivables are also covered. Loans and receivables are measured at amortised cost. Amortised cost is defined as the value at which a financial asset or liability is stated when it is initially recorded 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 doubtful debts. Impairment losses on trade receivables are reported under operating expenses. Trade receivables have a short anticipated term and are therefore valued at a nominal amount without discounting.

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

#### Available-for-sale financial assets

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

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

#### **Financial liabilities**

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

Financial liabilities at fair value through profit or loss Derivative instruments not held for hedging purposes are always classified in this category. These financial liabilities are measured at fair value with changes in value recognised in profit or loss.

#### Other financial liabilities

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

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

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 commodity price risks.

Derivative instruments with a positive fair value are reported as a separate line item in the balance sheet under current assets, while derivative instruments with a negative fair value are reported as a separate line item under current liabilities.

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

#### Embedded derivatives

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

#### Hedge accounting

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

#### Cash flow hedges

For derivative instruments that constitute a hedge instrument in a cash flow hedge, the effective part of the change in value is reported in Other comprehensive income while the ineffective part is recognised directly in profit or loss. The part of the change in value that is reported in Other comprehensive income is then transferred to the income statement 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 in Other comprehensive income is transferred to and included in the cost of the asset or liability.

If the conditions for hedging are no longer met, the accumulated changes in value that were reported in Other comprehensive income are transferred to the income statement/balance sheet 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 recognised directly in profit or loss. If the hedged transaction is no longer expected to occur, the hedge's accumulated changes in value are immediately transferred from Other comprehensive income to the income statement.

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

#### Hedges of fair value

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

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

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

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

#### Intangible assets: non-current Capitalised development costs

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

#### Goodwill

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

Goodwill is 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 or joint ventures is included in the carrying amount of Participations in associated companies and joint ventures.

#### Exploration and evaluation assets

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

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

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

#### Note 3 continued

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

#### Other non-current intangible assets

Other non-current intangible assets such as concessions, patents, licences, trademarks and similar rights as well as renting rights, mining rights and similar rights acquired by the Group are reported at cost less accumulated amortisation and impairment losses.

#### Principles for amortisation

Amortisation for other non-current intangible assets than goodwill and exploration and evaluation assets is reported on a straight-line basis in the income statement over the estimated useful life of the asset, provided the useful life not is indefinite. Estimated useful lives are unchanged compared with a year ago and are further described in Note 22 to the consolidated accounts, Intangible assets: non-current. Assessments of the residual value and useful life of an asset are conducted at least annually.

#### Property, plant and equipment Owned assets

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

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

Cost includes the purchase price and costs directly attributable to putting the asset in place and in a suitable condition for use in accordance with the 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, and for gas operations in the Netherlands, cost at the time of the acquisition includes a calculated present value for estimated costs for restoring undertakings.

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

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

#### Leasing

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

#### Leased assets

Assets leased under finance leases are reported as assets 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 recognising the leasing charge 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 lease payments.

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

#### Subsequent costs

Subsequent costs for property, plant and equipment are only added to the acquisition cost if it is likely that there will be future financial benefits associated with the asset for the company and the cost can be calculated in a reliable manner. All other 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 the acquisition cost is whether the cost concerns the replacement of identified components, or parts of them, whereby such costs are capitalised. Also in cases where new components are created, the cost is added to the cost of the asset. Any undepreciated reported values of replacement components, or parts of components, are retired and carried as an expense in connection with the replacement. Repairs are expensed as incurred.

#### Depreciation principles

Depreciation is reported on a straight-line basis in the income statement over the estimated useful life of the asset except for depreciation related to the German nuclear power plants and to gas operations in the Netherlands (see below). The Group applies component depreciation, which means that the components' estimated useful life provides the basis for the straight-line depreciation. Estimated useful lives are unchanged compared with last year for all property, plant and equipment. Estimated useful lives are further described in Note 23 to the consolidated accounts, Property, plant and equipment. Assessments of the residual value and useful life of an asset are conducted annually.

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

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

Land and water rights are not subject to depreciation.

#### Investment property

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

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

#### **Biological assets**

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

Biological assets are reported on the balance sheet as a noncurrent asset and are measured at fair value less costs to sell.

#### Inventories

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

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

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

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

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

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

#### Intangible assets: current Emission allowances

Since 2005, a trading system applies in the EU (the Emission Trading Scheme – ETS) with the purpose of reducing emissions of the greenhouse gas carbon dioxide. Within the framework of this system, 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 held for own use are reported as intangible assets under current assets at cost less accumulated impairment losses, while emission allowances that have been received free of charge from the respective countries' authorities are stated at a value of SEK nil. As carbon dioxide is emitted, an obligation arises to deliver emission allowances (EUAs, CERs, ERUs) to the authorities in the respective countries. An expense and a liability are recognised only in cases where the emission allowances that were received free of charge do not cover this obligation. This liability is valued in the amount at which it is expected to be settled.

#### Certificates

With the aim to increase renewable energy sources for electricity generation, Sweden and Poland have so-called electricity certificate systems. Plants included in these systems 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. The corresponding amount is recognised as revenue under Net sales. Purchased certificates held for own use are reported at cost less accumulated impairment losses.

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

#### Impairment losses

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 or as soon an indication is present that an asset has decreased in value.

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

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

For actuarial gains and losses, the so-called corridor rule is applied. Actuarial gains and losses arise from the effects of changes in actuarial assumptions. The corridor rule entails that the part of the net amount of the accumulated actuarial gains and losses that exceeds 10% of the greater of the obligations' present value and the fair value of plan assets is reported 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. 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 the time value of money, the corresponding amount is reported as a financial expense. See also above under the heading Property, plant and equipment/ Owned assets.

Provisions are also reported for onerous contracts, i.e., where

#### Note 3 continued

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 in Other comprehensive income, whereby the associated tax effect is also reported in Other comprehensive income.

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

Deferred tax is calculated in accordance with the balance sheet method on the basis of temporary differences between the reported and taxable values of assets and liabilities. The following temporary differences are not taken into account: 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.

Deferred tax is not recognised on temporary differences relating to investments in subsidiaries and associated companies to the extent that they will probably not be reversed in the foreseeable future.

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

Preparation of the financial statements in accordance with IFRS requires the company's executive management and board of directors to make estimations and assessments as well as to make assumptions that affect the application of the accounting policies 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. Important estimations and assessments are described below.

#### Assessing whether there is any indication that intangible assets and property, plant and equipment may be impaired

The Group has substantial values reported in the balance sheet regarding intangible assets and property, plant and equipment. These are tested for impairment in accordance with the accounting policies described in Note 3 to the consolidated accounts, Accounting policies. The recoverable amount for cash-generating units is determined by calculating the value in use of fair value less costs to sell. For these calculations, certain estimations must be made regarding future cash flows and other adequate assumptions regarding the required rate of return, for example. Applied significant assumptions in testing the need to recognise impairment are described in Note 22 to the consolidated accounts, Intangible assets.

For 2010 the Group has reported impairment losses including reversed impairments in the amount of SEK 9,849 million. These impairment losses are further described in Note 15 to the consolidated accounts, Impairment losses and reversed impairment losses.

#### Pension provisions

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

For pension provisions in Sweden, the discount rate has been raised to 4.5% (2009: 4.0%) compared with the preceding year. For Sweden, through 2009 the judgement has been made that in the absence of an effective market for high-grade corporate bonds, the interest rate for government bonds has been used as the discount rate. For 2010, the judgement is that the discount rate should be based on mortgage bonds having high credit rating, which market is both larger and more liquid than the market for corporate bonds.

In Germany, where the discount rate is based on high-grade corporate bonds, the discount rate has been lowered to 5.0% (2009: 5.75%) compared with the preceding year.

For further information on pension provisions, see Note 39 to the consolidated accounts.

#### Provisions for future expenses of nuclear operations

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

For provisions for future expenses of nuclear operations in Sweden, the discount rate has been lowered to 4.25% (2009: 4.5%) compared with the preceding year. The corresponding discount rate in Germany has been reduced to 4.75% (2009: 5.25%) compared with the preceding year.

For further information on provisions for future expenses of nuclear operations, see Note 40 to the consolidated accounts.

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

For other types of provisions, such as provisions for future expenses of mining, gas and wind operations and other environmental measures/undertakings, and for personnel-related provisions for nonpension purposes, provisions for tax and legal disputes, or other provisions, the following discount rates are used: Sweden 4.25% (2009: 4.5%), Germany 4.5%–4.75% (2009: 5.0%–5.25%), Netherlands 3.5% (2009: 4.25%), Finland 4.0% (2009: 4.5%), Poland 5.5% (2009: 5.5%) and the UK 5.0% (2009: 5.0%).

For further information on these provisions, see Note 40 to the consolidated accounts.

#### Income taxes and deferred taxes

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

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

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

For further information on taxes, see Note 20 to the consolidated accounts.

#### Valuation of embedded derivatives

As shown in Note 3 to the consolidated accounts, Accounting poli cies, Vattenfall's long-term business agreements include embedded derivatives. For example, the price in an electricity contract may have couplings to the price trend for other commodities than elec tricity and indirectly also to exchange rate movements, since the current commodity prices are quoted in foreign currency. Such con tracts 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 struc ture 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, the value of the portion of these embedded derivatives that pertains to the period extending beyond April 2013 has been set to zero.

### Note 5 Acquired and divested operations

Acquisitions of Group companies in 2010

In 2010, SEK 478 million of Vattenfall's outstanding liability to the part-owners of N.V. Nuon Energy was paid.

The Belgian wind power company Les Eoliennes des Perwez was acquired for SEK 93 million.

In addition, Vattenfall Biomass Liberia AB was acquired for SEK 122 million.

Small companies/minority interests were acquired for combined consideration of SEK 8 million.

#### Acquisitions of associated companies and other shares in 2010

In 2010 a total of SEK 508 million was invested in associated com panies and other shares and participations. The largest investment, SEK 287 million, pertained to Buchanan Renewables Fuel Group Liberia B.V.

#### Acquisitions of Group companies in 2009

On 1 July 2009 Vattenfall acquired 49% of the shares and took over operational control and a controlling influence of the Dutch energy group N.V. Nuon Energy (Nuon) which six months results (July– December) was consolidated in Vattenfall Group's 2009 accounts. For the first half of 2009 Nuon published in its interim report net sales of EUR 2,985 million and an operating profit of EUR 294 mil lion. See also Note 3 to the consolidated accounts in Vattenfall's 2009 Annual Report.

Also in 2009, Vattenfall acquired the Polish state's minority inter est (25%) in the subsidiaries GZE S.A. and Vattenfall Heat Poland S.A., for a combined consideration of approximately SEK 3,300 million.

## Acquisitions of associated companies and other shares and participations in 2009

In 2009, a total of SEK 368 million was invested in associated com panies and other shares and participations, of which DOTI Deutsche Offshore Testfeld und Infrastruktur GmbH & Co. KG accounted for SEK 333 million.

	F	air value
Acquired operations	2010	2009
Intangible assets: non-current	-	13,471
Property, plant and equipment	148	35,839
Participations in associated companies		
and joint ventures	-	1,379
Deferred tax assets	-	1,579
Other non-current assets	-	258
Inventories	-	977
Intangible assets: current	-	4,202
Trade receivables and other receivables	6	12,049
Derivatives with positive fair values	-	31,263
Short-term investments	-	3,498
Cash and cash equivalents	111	14,937
Borrowings	-26	-5,544
Provisions	-1	-2,135
Deferred tax liabilities	-37	-10,186
Trade payables and other liabilities	-8	-14,320
Derivatives with negative fair values	-	-29,831
Total net assets	193	57,436
Acquisition of minorities	5	3.287
Goodwill	23	46,937
Part payment of the Nuon investment	478	-
Total purchase consideration	699	107,660
Liabilities pertaining to acquisitions of		
subsidiaries	122	51,467
Cash flow for the year	577	56,193

#### Divestments in 2010

In May 2010 the sale was completed of Vattenfall's high voltage transmission grid in Germany, owned by the subsidiary 50Hertz Transmission GmbH. The sales price was EUR 465 million. In addition, the buyers redeemed shareholder loans of EUR 320 million from Vattenfall.

In December, Vattenfall sold its holding in the German asso ciated company Stadtwerke Kassel, and in November, 49% of the holding in the wind power company DanTysk Offshore Wind GmbH was sold. The combined consideration for these two divestments was EUR 53 million. Vattenfall retains 51% of the shares in DanTysk Offshore Wind GmbH.

#### Divestments in 2009

The Swedish associated companies Piteå Energi AB, Luleå Energi AB and Swepol Link AB were sold for combined consid eration of SEK 550 million.

The subsidiary WEMAG AG, in Germany, was sold for a price of approximately SEK 1,800 million.

Vattenfall also sold its stake in Jämtkraft AB, for SEK 550 million, as well as its shares in the Dutch gas storage project Zuidwending, for approximately SEK 1,300 million.

.471		Carr	ying amount
839	Divested operations	2010	2009
	Intangible assets: non-current	333	15
,379	Property, plant and equipment	14,325	3,007
,579	Participations in associated companies		
258	and joint ventures	-	433
977	Deferred tax assets	6	-
202	Other non-current assets	95	1,395
049	Inventories	16	14
263	Trade receivables and other receivables	8,262	2,060
498	Cash and cash equivalents	297	530
,937	Assets held for sale	391	-
544	Borrowings	-4,028	-
,135	Provisions	-966	-86
186	Deferred tax liabilities	-1,480	-231
320	Trade payables and other liabilities	-6,645	-1,993
831	Impairment of net assets	-5,315	
436	Total net assets	5,291	5,144
,287	Minority interests	181	-646
,937			
-	Proceeds of sale	5,200	4,414
660			
	Capital gain/loss according to the		
467	income statement	-272	-84
193			

## Note 6 Exchange rates

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

		Average rate		Balance she	et date rate
	Currency	2010	2009	31 Dec. 2010	31 Dec. 2009
Europe	EUR	9.5694	10.6354	9.0020	10.3530
Denmark	DKK	1.2850	1.4282	1.2075	1.3915
Norway	NOK	1.1920	1.2105	1.1520	1.2430
Poland	PLN	2.3831	2.4546	2.2700	2.5000
UK	GBP	11.1573	11.8664	10.5475	11.4850
USA	USD	7.2152	7.6431	6.8025	7.2125

### Note 7 Net sales

	2010	2009
Sales including excise taxes		
sale of goods (electricity, heat, gas, etc.)	209,644	203,018
rendering of services	8,396	6,466
Excise taxes	-4,468	-4,077
Net sales	213,572	205,407

## Note 8 Operating segments

The Group's activities were until 31 December 2010 conducted primarily in four operating segments (Business Groups). In addition to the geographical breakdown of operations into Business Group Nordic (Sweden, Finland and Denmark), Business Group Central Europe (Germany and Poland) and Business Group Benelux (The Nederlands and Belgium), Business Group Pan Europe is established with responsibility for wind power, nuclear power and technological development in all countries in which Vattenfall has operations. Business Group Pan Europe is also responsible for European business development with focus on efficient use of energy and biomass. Business Group Benelux, which was established as of the third quarter of 2009, consisting of business activities (excl. wind power, trading and treasury operations) in the acquired and thereby consolidated company N.V. Nuon Energy. In addition to these are the operating segment Supply & Trading, which is responsible for all energy trading, and Other (Treasury operations and Other Group functions).

Net sales and operating profit for Other include unrealised changes in market value (fair value) in accordance with IAS 39 for energy trading contracts administered by Supply & Trading. When the amounts are realised the segment for which the contract is signed is affected.

Deliveries of electricity, heat and gas 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.

All operating segments are followed up and steered according to operating profit (EBIT), which is why financial items and expenses as well as taxes are reported in their entirety under the heading Other, as shown below. All segments apply IFRS with the exception of unrealised changes in market values according to above.

Effective 2011, the Group's operating segments will be reported as follows:

- Business Division Asset Development
- Business Division Production
- Business Division Asset Optimisation and Trading
- Business Division Distribution and Sales
- Business Division Renewables
- Other

#### Operating segments

				. ·					
9		Business	Business	Business Group	Business				
		Group	Group	Central	Group	Supply &			
8	2010	Pan Europe	Nordic	Europe	Benelux	Trading	Other	Eliminations	Total
6	External net sales	8,620	53,621	94,310	41,961	14,738	322	-	213,572
	Internal net sales	15,861	-8,563	38,684	7,223	69,839	1,193	-124,237	_
7 7	Total net sales	24,481	45,058	132,994	49,184	84,577	$1,515^{1}$	-124,237	213,572
	Operating profit (EBIT)	3,991	16,613	9,527	-5,185	5,094	-187 <sup>1</sup>	_	29,853
	<ul> <li>including items affecting compa-</li> </ul>								
	rability	-1,021	-128	-3,988	-4,956	-6	-	-	-10,099
	Financial income and expenses	-	-	-	-	-	-8,430	-	-8,430
	Profit before tax	3,991	16.613	9,527	-5,185	5.094	-8,617	-	21,423
	Income tax expense	-	_	_	_	-	-8,238	_	-8,238
	Profit for the year	3,991	16,613	9,527	-5,185	5,094	-16,855	_	13,185
	Participations in the results of asso-								
	ciated companies	403	1	231	-11	_	_	_	624
	Depreciation and amortisation	3,465	3,827	9,563	3,831	148	170	_	21,004
	Impairment losses affecting Operat-	3,403	5,027	5,505	5,051	140	1/0		21,004
	ing profit (EBIT)	843	207	5.130	4.971	_	_	_	11,151
	Reversed impairment losses affect-	040	207	0,100	4,071				11,101
	ing Operating profit (EBIT)	-	-	1,244	58	_	-	-	1,302
t d	Investments	12,982	4,935	13,511	9,540	425	738	-337	41,794
4	Assets	164,440	121,115	189,080	85,384	61,332	201,298 <sup>2</sup>	-281,217	541,432
	Net assets	66,205	61,847	77,393	57,515	23,694	-1,249	-252	285,153
		,	,	,			_/_ · · ·		
				Business					
		Business Group	Business Group	Group Central	Business Group	Supply &			
	2009	Pan Europe	Nordic	Europe	Benelux	Trading	Other	Eliminations	Total
	External net sales	8,239	45,064	116,466	20,446	14,593	599	-	205.407
	Internal net sales	12,874	-2,671	47,010	3,844	56,188	1,528	-118,773	
	Total net sales	21,113	42,393	163,476	24,290	70,781	2.127 <sup>1</sup>	-118,773	205,407
С			,	200, 0	,	,	_//		200, 107
	Operating profit (EBIT)	2,113	7,504	18,938	-644	1,571	-1,544 <sup>1</sup>	_	27,938
	<ul> <li>including items affecting compa-</li> </ul>	2,220	,,	10,000	0.4	1,0,1	2,0 . 4		27,000
	rability	145	-3,613	565	-439	-14	_	_	-3,356
	Financial income and expenses	-	- 0,010	-		-	-10,204	_	-10,204
	Profit before tax	2,113	7,504	18,938	-644	1,571	-11,748	_	17,734
	Income tax expense	2,110	-,,004	- 10,000		- 1,071	-4,286	_	-4,286
	Profit for the year	2,113	7,504	18,938	-644	1,571	-16,034		13,448
	i tonctor the year	2,113	7,504	10,000	-044	1,571	10,034	-	10,440

2009	Business Group Pan Europe	Business Group Nordic	Business Group Central Europe	Business Group Benelux	Supply & Trading	Other	Eliminations	Total
Participations in the results of asso-								
ciated companies	627	221	476	-	-14	-	-	1,310
Depreciation and amortisation Impairment losses affecting Operat-	2,386	4,300	10,922	1,799	61	140	-	19,608
ing profit (EBIT) Reversed impairment losses affect-	1,122	4,094	123	220	-	-	-	5,559
ing Operating profit (EBIT)	-	-	1,328	-	-	-	-	1,328
Investments	13,593	6,572	20,977	6,250	1,325	56,498	-2,226	102,989
Assets Net assets	157,777 53,249	113,737 70,964	247,169 92,351	103,550 60,949	73,716 26,578	200,429 <sup>2</sup> -3,366	-294,251 2	602,127 300,727

with IAS 39 in total net sales SEK -677 million (2009: SEK 258 million) and in operating profit SEK 978 million (2009: SEK -315 million).
2) Chiefly concerns Treasury's liquid assets and financial receivables

1) Of which unrealised changes in market value (fair value) in accordance

from Business Groups.

## Note 9 Information about products and services

Products and services

2010	Electricity Generation <sup>1</sup>	Supply & Trading	Electricity Networks	Heat	Other	Elimi- nations	Total
External net sales	57,104	14,738	37,924	20,247	115,909	-32,350 <sup>2</sup>	213,572
Internal net sales	29,727	69,839	9,541	13,770	12,295	-135,172	-
Total net sales	86,831	84,577	47,465	34,017	128,204	-167,522	213,572
Operating profit (EBIT) – including items	23,373	5,094	1,562	4,312	-4,488	-	29,853
affecting comparability	-4,645	-6	-4,973	-436	-39	-	-10,099

	Electricity	Supply &	Electricity			Elimi-	
2009	Generation1	Trading	Networks	Heat	Other	nations	Total
External net sales	40,516	14,593	54,491	19,390	98,027	-21,610 <sup>2</sup>	205,407
Internal net sales	43,781	56,188	16,755	12,739	11,889	-141,352	-
Total net sales	84,297	70,781	71,246	32,129	109,916	-162,962	205,407
Operating profit (EBIT) – including items	27,674	1,571	5,800	-609	-6,498	-	27,938
affecting comparability	392	-14	648	-4,154	-228	-	-3,356

1) Electricity Generation consists of the business units Wind, Nuclear, Hydro, Mining & Generation, Exploration & Production and Power, Heat & Services.

2) Refer to Electricity Generation's sales to Nord Pool, the Nordic electricity exchange.

## Note 10 Information about geographical areas

#### Geographical areas

2010	Nordic	Germany and	Netherlands	Others		Takal
2010	countries	Poland	and Belgium		liminations	Total
External net sales	59,829 <sup>1</sup>	95,974	41,990	15,779	-	213,572
Internal net sales	-4,368	40,402	7,338			
Total net sales	55,461	136,376	49,328	86,778	-114,371	213,572
Operating profit (EBIT) – including items affecting com-	21,196	9,908	-5,570	4,319	-	29,853
parability	-148	-3,989	-5,153	-809	-	-10,099
Intangible assets: non-current, Property, plant and equipment and Investment property	111,109	124,232	63,087	37,616	-	336,044
	Nordic	Germany and	Netherlands			
2009	countries	Poland	and Belgium	Other E	Eliminations	Total
External net sales	50,987 <sup>1</sup>	118,420	20,457	15,543	_	205,407
Internal net sales	717	47,565	3,999	57,702	-109,983	-
Total net sales	51,704	165,985	24,456	73,245	-109,983	205,407
Operating profit (EBIT) – including items affecting com-	11,820	16,624	-1,757	1,251	-	27,938
parability	-3,752	565	-1,421	1,252	-	-3,356
Intangible assets: non-current, Property, plant and equipment and Investment property	106,159	152,074	72,960	36,986	_	368,179
1) Of which Swodon SEK 50 638 millio	n (2000 CEK	11 104 milli	(an)			

1) Of which Sweden SEK 50,638 million (2009: SEK 41,104 million).

Vattenfall did not have transactions in 2009 or 2010 with a single external customer where revenues amounted to more than 10% of the Group's total net sales.

## Note 11 Cost of products sold

Direct costs include production taxes and duties of SEK 5,848 million (2009: SEK 5,811 million) and property taxes of SEK 1,854 million (2009: SEK 1,658 million).

## Note 12 Other operating income

Other operating income comprises capital gains from the sale of non-current assets, emission allowances and certificates, SEK 823 million (2009: SEK 399 million) operationally derived exchange rate gains, rental income and SEK 138 million (2009: SEK 149 million) in governmental grants, and insurance compensation.

## Note 13 Other operating expenses

Other operating expenses primarily comprise capital losses from the sale of non-current assets, emission allowances and certificates, SEK 1,028 million (2009: SEK 629 million) operationally derived exchange rate losses, and closure and restructuring expenses. In Other operating expenses is also included the impairment loss of assets in Vattenfall's German transmission company, 50Hertz Transmission GmbH.

## Note 14 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:

	2010	2009
Cost of products sold	20,460	19,011
Selling expenses	327	337
Administrative expenses	196	238
Research and development costs	8	7
Other operating expenses (investment		
property)	13	15
Total	21,004	19,608

Amortisation of non-current intangible assets is included in Cost of products sold above in the amount of SEK 1,695 million (2009: SEK 934 million), Selling expenses in the amount of SEK 57 million (2009: SEK 75 million) and Administrative expenses in the amount of SEK 82 million (2009: SEK 63 million).

## Note 15 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:

	2010	2009
Cost of products sold	6,061	5,555
Administrative expenses	-	4
Other operating expenses	5,090	-
Total	11,151	5,559

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

	2010	2009
Cost of products sold	1,264	1,328
Selling expenses	38	-
Total	1,302	1,328

The following large impairment losses and reversals of impairment losses are included under the heading above:

#### Business Group Pan Europe

As part of the calculated value in connection with the acquisition of N.V. Nuon Energy, the present value of synergies in the wind power operations was based on an investment plan that pertained to the start of 2009. In 2010, the investment plans for wind power were scaled back further as estimated synergies were judged to be difficult to achieve or could not be achieved at the pace that had been assumed. Future profitability has also been judged to be lower. Consequently, in 2010, an impairment loss of SEK 261 million has been recognised for wind power assets in the UK. In addition, an impairment loss of SEK 189 million was recognised for goodwill. In the calculations, value in use has been based on projected cash flows during the coming 24 years, which have been discounted at a rate of 7.0% after tax.

A decision has also been made to dismantle a wind farm in the Netherlands, and in connection with this an impairment loss of SEK 129 million was recognised.

An impairment loss of SEK 144 million was recognised for the Ormonde gas field project, since it is no longer judged to be profitable to produce gas at the field.

#### **Business Group Nordic**

I December 2010 an agreement was signed to sell the natural gas-fired combined heat and power plant in Hillerød, Denmark. The buyer is expected to take over the plant formally during the first quarter 2011. The power plant has been impaired by SEK 116 million, to fair value.

#### Business Group Central Europe

During the first quarter of 2010, prior to the sale of Vattenfall's high-voltage transmission grid in Germany, an impairment of assets and liabilities in the subsidiary 50Hertz Transmission GmbH was made to fair value. For the full-year 2010 this impairment loss amounts to SEK 5,085 million.

Previous years' impairment losses for the cash generating unit Peak Load in Germany have been partly reversed in the amount of SEK 958 million (2009: reversal of SEK 760 million). The reversal is mainly attributable to lower estimated transmission costs and a lower discount rate used to calculate value in use. In the calculations, value in use has been based on the projected cash flow for the remaining useful life, which was discounted at a rate of 5.3% after tax (2009: 6.2% after tax).

Previous years' impairment losses for the distribution network in Berlin have been reversed in the amount of SEK 202 million (2009: reversal of SEK 547 million). The reversal is mainly due to improved market conditions and a lower discount rate used to calculate value in use. With the reversal made in 2010, all previous impairment losses for the distribution network in Berlin have been reversed. In the calculations, value in use has been based on a perpetually projected cash flow that has been discounted at a rate of 5.0% after tax (2009: 5.4% after tax).

#### Business Group Benelux

Due to deteriorated market conditions as a result of the financial and economic crisis, which has lead to lower than assumed margins in Vattenfall's Benelux operations, it was decided to post an impairment charge of goodwill for SEK 4,306 million related to Business Group Benelux. Following this impairment loss, this goodwill amounts to SEK 16,793 million. The impairment charge was made to the estimated value in use. In the calculations, value in use has been based on the projected cash flow, judged on the basis of the assets' useful life, discounted at a rate of 5.75% after tax. A change in the chosen discount factor by +/- 0.5% would affect estimated value in use by approximately SEK -/+ 4,800 million. See also Note 22 to the consolidated accounts, Intangible assets: non current.

An impairment loss of SEK 280 million has been recognised for heat production plants in Business Group Benelux as a result of poorer market conditions caused by, among other things, recently renegotiated purchasing prices and lower estimated future sales prices, which negatively affects future profitability for the production plants. An impairment charge has been made to the higher of the fair value and estimated value in use. In the calculations, value in use has been based on the production plants' remaining useful life, which varies between 2015 to 2021. Cash flow has been discounted at a rate of 5.75% after tax.

As a result of poorer market conditions, an impairment loss of SEK 370 million was recognised for a solar cell project in the Netherlands.

### Note 16 Operating costs according to type

	2010	2009
Personnel costs	26,020	24,830
Depreciation and amortisation	21,004	19,608
Impairment losses of non-current assets	11,151	5,559
Reversed impairment losses of		
non-current assets	-1,302	-1,328
Other operating costs incl. input		
commodities	129,639	133,900
Total	186,512	182,569

## Note 17 Financial income

	2010	20
Dividends	109	10
Interest income attributable to		
investments, etc.	1,131	1,20
Return from the Swedish Nuclear		
Waste Fund	1,011	1,18
Exchange rate differences, net	-	!
Net change in value from reassessment of		
derivatives	249	
Net change in value from reassessment of		
other financial assets	8	1!
Capital gains from divestments of shares		
and participations	6	4
Total	2,514	2,8

## Note 18 Financial expenses

2010	2009
6,447	7,464
1,138	1,297
3,262	3,398
96	-
-	854
1	5
10,944	13,018
	6,447 1,138 3,262 96 - 1

## Note 19 Ineffectiveness of hedges recognised in profit or loss

2,569		2010	2009
	Ineffectiveness of fair value hedges <sup>1</sup>	-536	494
	Ineffectiveness of cash flow hedges	13	32
	Ineffectiveness of hedging of net invest-		
2009	ments in foreign operations	-5	44
165	Total	-528	570
1,202	<ol> <li>Ineffectiveness of fair value hedges is distributed as follows:</li> </ol>		
1,188 57	Gains(+)/losses(-) from hedging		
57	instruments	171	-1,517
	Gains(+)/losses(-) from hedged items	-707	2,011
_	Total	-536	494

#### 153

49

### Note 20 Income tax expense

2,814 Profit before tax amounted to:

	2010	2009
Sweden	11,510	4,191
Other countries	9,913	13,543
Total	21,423	17,734

#### The reported income tax expense breaks down as follows:

na		2010	2009
)9	Current tax		
4	Current taxes related to the period: Sweden	-1,941	215
	Other countries	4,990	3,638
7	Adjustment of current tax for prior periods:		
8	Sweden	130	50
_	Other countries	-117	-43
4		3,062	3,860
	Deferred tax		
5	Sweden	5,345	724
5 8	Other countries	-169	-298
		5,176	426
	Total income tax expense	8,238	4,286

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

encourre tax rate is explained as ronoms.		
Per cent (%)	2010	2009
Swedish income tax rate	26.3	26.3
Difference in tax rate in foreign		
operations	0.7	1.7
Current tax adjustment for previous		
periods	0.1	-
Utilisation of previously non-valued		
losses and other temporary differences	-0.8	-2.1
Tax-loss carryforwards from current year		
	0.2	0.5
· · · · · · · · · · · · · · · · · · ·		
	0.1	-4.0
	107	
•		-
6		_
		5.8
		-4.0
Effective tax rate	38.5	24.2
	Per cent (%) Swedish income tax rate Difference in tax rate in foreign operations Current tax adjustment for previous periods Utilisation of previously non-valued losses and other temporary differences	Swedish income tax rate26.3Difference in tax rate in foreign operations0.7Current tax adjustment for previous periods0.7Utilisation of previously non-valued losses and other temporary differences0.1Tax-loss carryforwards from current year that are not valued0.2Revaluation of tax-loss carryforwards and other temporary differences0.1Non-deductible expenses impairment losses112.7Changed tax rates-0.7Non-deductible expenses24.2Non-taxable income3-4.3

1) See Note 15 to the consolidated accounts, Impairment losses and reversed impairment losses.

2) Concerns, predominantly, an effect of non-deductible interest expenses reported by the Parent Company, Vattenfall AB.

3) Includes participations in the results of associated companies.

Continued on page 102

#### Note 20 continued

Accumulated tax-loss carryforwards are broken down as follows:

	2010	2009
Sweden	42	43
Other countries	2,474	3,588
Total	2,516	3,631

#### The tax-loss carryforwards fall due as follows:

	2010	
2011	30	
2012–2015	174	
2016 and beyond	247	
No time limit	2,065	
Total	2,516	

In the balance sheet, unrecognised tax-loss carryforwards represent a tax value of SEK 189 million (2009: SEK 229 million).

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

Balance sheet reconciliation - Current tax <sup>1</sup>	2010	2009
Balance brought forward	1,988	1
Current portion of provisions	649	-
Translation differences	-30	-200
Acquired companies	_	824
Divested companies	-187	109
Equity hedging	5,216	2,133
Change via income statement	3,062	3,860
Taxes paid, net	-8,901	-4,739
Balance carried forward	1,797	1,988

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

2009	Balance sheet reconciliation – Deferred tax	Balance brought forward 2010	Translation differences	Acquired companies	Divested companies	Change via income statement	Change via Other comprehensive income	Balance carried forward 2010
43	Non-current assets	42,927	-3,009	37	-1,061	5,766	_	44,660
588	Current assets	6,837	-323	-	. 8	-4,096	-	2,426
631	Provisions	-10,037	266	-	18	-743	-	-10,496
	Other non-current liabilities	-40	75	-	12	3,374	-	3,421
	Current liabilities	-4,859	192	-	-457	789	-	-4,335
	Cash flow hedges	-45	79	-	-	-	-494	-460
	Tax losses carried forward	-650	76	-	-	86	-	-488
	Total	34,133	-2,644	37	-1,480	5,176	-494	34,728

Balance sheet reconciliation – Deferred tax	Balance brought forward 2009	Translation differences	Acquired companies	Divested companies	Change via income statement	Change via Other comprehensive income	Balance carried forward 2009
Non-current assets	35,988	-1,210	7,923	-47	273	-	42,927
Current assets	6,675	-103	990	7	-732	-	6,837
Provisions	-9,318	124	-120	-5	-718	-	-10,037
Other non-current liabilities	268	15	-41	-88	-194	-	-40
Current liabilities	-6,366	52	4	-99	1,550	-	-4,859
Cash flow hedges	-1,726	105	-	-	-	1,576	-45
Tax losses carried forward	-782	35	-150	-	247	-	-650
Total	24,739	-982	8,606	-232	426	1,576	34,133

### Note 21 Minority interests

_		2010	2009
00	Minority interests in profit before tax	266	674
24	Minority interests in income tax expense	-78	-122
09	Total	188	552

### Note 22 Intangible assets: non-current

	Developm not yet ca			talised ment costs	Go	odwill		ation and ion assets	similar ı	sions and ights with seful lives	Renting rig rights and s with finite (	imilar rights	Т	otal
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Cost														
Cost brought forward	161	101	1,907	1,839	46,088	946	2,785	-	17,124	6,130	4,807	5,014	72,872	14,030
Acquired companies	-	-	-	-	23	46,937	-	2,018	-	11,519	-		23	60,474
Investments	49	117	286	86	-	29	18	28	293	306	32	70	678	636
Advance payments capitalised	-	-	-	-	-	-	-	-	4	13	-	2	4	15
Divestments/Disposals	-5	-1	-6	-	-	-	-	-	-21	-305	-2	-42	-34	-348
Reclassifications	-97	-48	73	51	11	-136	-855	835	378	25	-143	-4	-633	723
Assets held for sale	-	-	-	-	-	-	-	-	45	-47	-	-	45	-47
Divested companies	-	-	-2	-	-	-	-	-	-416	-74	-	-6	-418	-80
Translation differences	-16	-8	-190	-69	-5,943	-1,688	-313	-96	-1,996	-443	-514	-227	-8,972	-2,531
Accumulated cost carried forward	92	161	2,068	1,907	40,179	46,088	1,635	2,785	15,411	17,124	4,180	4,807	63,565	72,872
Accumulated amortisation according to plan $^1$														
Amortisation brought forward	-	-	-1,436	-1,396	-	-	-	-	-3,088	-2,701	-2,043	-1,957	-6,567	-6,054
Acquired companies	-	-	-	-	-	-	-	-	-	-44	-	-	-	-44
Amortisation for the year	-	-	-94	-102	-	-	-	-	-1,536	-755	-204	-216	-1,834	-1,073
Divestments/Disposals	-	-	-	-	-	-	-	-	-4	295	2	19	-2	314
Reclassifications	-	-	3	-	-	-	-	-	17	-4	-	5	20	1
Assets held for sale	-	-	-	-	-	-	-	-	-25	26	-	-	-25	26
Divested companies	-	-	1	-	-	-	-	-	102	54	-	6	103	60
Translation differences	-	-	152	62	-	-	-	-	377	41	256	100	785	203
Accumulated amortisation carried forward	-	-	-1,374	-1,436	-	-	-	-	-4,157	-3,088	-1,989	-2,043	-7,520	-6,567
Impairment losses														
Impairment losses brought forward	-	-	-195	-195	-1,112	-	-	-	-52	-20	-527	-528	-1,886	-743
Acquired companies	-	-	-	-	-	-	-	-	-	-38	-	-	-	-38
Impairment losses for the year	-	-	-	-	-4,518	-1,142	-	-	-246	-	-	-	-4,764	-1,142
Divestments/Disposals	-	-	-	-	-	-	-	-	-1	-	-	-	-1	-
Divested companies	-	-	-	-	-	-	-18	-	-	5	-	-	-18	5
Translation differences	-	_	-	-	385	30	-	-	16	1	-	1	401	32
Accumulated impairment losses carried forward	-	-	-195	-195	-5,245	-1,112	-18	-	-283	-52	-527	-527	-6,268	-1,886
Residual value according to plan carried forward	92	161	499	276	34,934	44,976	1,617	2,785	10,971	13,984	1,664	2,237	49,777	64,419
Advance payments to suppliers													10	12
Total													49,787	64,431

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 2010, contractual commitments for the acquisition of non-current intangible assets amounted to SEK 131 million (2009: SEK 1,488 million).

Goodwill is mainly allocated to Supply & Trading, SEK 17,352 million (2009: SEK 19,956 million), Business Group Benelux, SEK 16,793 million (2009: SEK 24,013 million), and the wind operations of Business Group Pan Europe, SEK 498 million (2009: SEK 729 million).

Goodwill is not subject to amortisation, but is tested annually for impairment. During the year, an impairment loss of SEK 4,306 million (2009: SEK 142 million) was recognised for Busi-

ness Group Benelux, while an impairment loss of SEK 212 million (2009: SEK 1,000 million) was recognised for Business Group Pan Europe.

Earnings performance for Vattenfall's Business Groups is shown in Note 8 to the consolidated accounts, Operating segments.

The main assumptions that Company management has used in calculating projections of future cash flows for the wind

#### Note 22 continued

operations in Business Group Pan Europe are based on fore casts for the respective assets' useful life and commercialisa tion of planned projects within the existing investment plan. The calculated revenues in these forecasts are based on Vattenfall's long-term pricing projections, which is the result of a very large number of simulations. Future cash flows have been discounted to value in use using a discount rate of 7.0% (2009: 7.0%) after tax. In the year's impairment testing, the carrying amount exceeds the calculated value in use, and an impairment loss of SEK 212 million has therefore been recognised. A change of the discount rate by +/- 0.5% would effect the estimated value in use by approximately SEK -/+ 400 million for assets with remain ing values for goodwill after above mentioned impairments, and should not require further impairment.

The main assumptions that Company management has used in calculating projections of future cash flows are for Business Group Benelux, for the production plants, based on forecasts for the respective assets' useful life and in other respects are based on the business plan for the coming five years, after which a residual value is taken into account. The calculated rev enues in these are based on Vattenfall's long-term price projec tion, which is the result of a very large number of simulations. In

calculations of the value of power-generating assets in Business Group Benelux, a so-called flexibility value is taken into account. Most of the power-generating assets have a technical degree of flexibility that gives the owner a chance to react to the actual market price environment. In cases of low spot prices, a power plant can reduce its generation or even go off line for the period where power generation would be uneconomical. On the other hand, a power plant can be come back on line or be ramped up in cases where spot prices allow for positive production margins. In option theory, this asymmetry in potentially earned margins results is an additional value component. This flexibility value is mainly dependent on two key elements: the volatility of future energy prices, and the technical flexibility of the power plants. which affects decisions in the daily production optimisation. Both elements were analysed and thoroughly modelled in 2010 in a Group-wide process involving experts from Group Asset Management, Vattenfall Energy Trading, Group Risk Manage ment and Energy Business Management. The main driving force behind the estimated flexibility value for the assets in Business Group Benelux consists of the effects of the production opti misation; however, the calculation of the flexibility value is also affected by a multitude of simulation scenarios for future elec

tricity, fuel and  $CO_2$  prices. The calculation of these scenarios takes into account fundamental market dynamics, including the historical as well as the anticipated future level of volatility. Future cash flows have been discounted to value in use using a discount rate of 5.75% (2009: 6.5%) after tax. In the year's impairment testing, the carrying amount exceeds the calculated value in use, and an impairment loss of SEK 4,306 million has therefore been recognised. A change of the discount rate by +/-0.5% would affect the estimated value in use by approximately SEK -/+ 4,800 million.

The main assumptions that Company management has used in calculating the projected future cash flows for Supply & Trading are based on the business plan for the coming five years and residual value. Future cash flows have been discounted to value in use using a discount factor of 5.75% (2009: 6.5%) after tax. In the year's impairment testing, the calculated value in use exceeds the carrying amount, which is why no impairment has been recognised. A change of the discount rate by +/- 0.5% would affect the estimated value in use by approximately SEK -/+ 1,900 million and should not require further impairment.

	l and an	d buildings <sup>1</sup>		and other installations		t, tools, and and fittings	Constructio	on in progress <sup>2</sup>		Total
	2010	2009			2010 2009		2010	2009	2010	2009
Cost										
Cost brought forward <sup>3</sup>	81,622	79,938	464,967	443,391	20,374	10,169	55,553	30,424	622,516	563,922
Acquired companies	19	3,675	167	27,870	-	9,478	-	9,790	186	50,813
Investments <sup>4</sup>	161	380	4,395	5,069	913	2,519	33,604	33,176	39,073	41,144
Advance payments capitalised	50	13	1,193	767	8	2	5,015	1,352	6,266	2,134
Capitalised/Reversed future expenses										
for decommissioning, restoration, etc.	-40	-9	4,476	1,793	-	-	-	-	4,436	1,784
Transfer from construction in progress	1,520	1,371	32,004	14,233	775	332	-34,299	-15,936		-
Divestments/Disposals	-516	-424	-2,637	-4,514	-1,717	-1,150	-172	-397	-5,042	-6,485
Other reclassifications	-422	59	3,471	437	-3,309	141	-1,104	-222	-1,364	415
Assets held for sale	-71	-84	201	-1,590	18	-18	3	-3	151	-1,695
Divested companies	-1,225	-401	-25,859	-3,986	-642	-280	-912	-1,002	-28,638	-5,669
Translation differences	-6,674	-2,896	-44,194	-18,503	-2,057	-819	-5,315	-1,629	-58,240	-23,847
Accumulated cost carried forward	74,424	81,622	438,184	464,967	14,363	20,374	52,373	55,553	579,344	622,516

### Note 23 Property, plant and equipment

	Land and buildings <sup>1</sup>			and other I installations		it, tools, and and fittings	Constructio	on in progress <sup>2</sup>		Total
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Accumulated depreciation according to plan <sup>5</sup>								· · ·		
Depreciation brought forward	-38,924	-38,414	-265,427	-259,986	-12,180	-8,123	-	-	-316,531	-306,523
Acquired companies	-	-513	-17	-7,573	-	-4,804	-	-	-17	-12,890
Depreciation for the year	-1,704	-1,903	-16,257	-15,648	-1,196	-969	-	-	-19,157	-18,520
Divestments/Disposals	148	346	2,295	4,047	491	942	-	-	2,934	5,335
Other reclassifications	535	-30	-1,575	33	1,613	11	-	-	573	14
Assets held for sale	61	44	-86	1,083	-9	9	-	-	-34	1,136
Divested companies	436	122	13,770	1,593	472	237	-	-	14,678	1,952
Translation differences	3,482	1,424	25,823	11,024	1,286	517	-	-	30,591	12,965
Accumulated depreciation carried forward	-35,966	-38,924	-241,474	-265,427	-9,523	-12,180	-	-	-286,963	-316,531
Impairment losses										
Impairment losses brought forward	-1,287	-1,218	-9,403	-6,018	-178	-67	-136	-7	-11,004	-7,310
Acquired companies	-	-32	-	-1,722	-	-343	-	-	-	-2,097
Impairment losses for the year	-117	-213	-871	-4,171	-134	100	-175	-133	-1,297	-4,417
Reversed impairment losses for the year	26	6	1,275	1,322	1	-	-	-	1,302	1,328
Divestments/Disposals	95	37	69	125	47	122	-	4	211	288
Other reclassifications	-6	-	-13	-	15	-	-	-	-4	-
Divested companies	19	64	96	646	-	-	-	-	115	710
Translation differences	25	69	1,144	415	26	10	10	-	1,205	494
Accumulated impairment losses carried forward	-1,245	-1,287	-7,703	-9,403	-223	-178	-301	-136	-9,472	-11,004
Residual value according to plan carried forward	37,213	41,411	189,007	190,137	4,617	8,016	52,072	55,417	282,909	294,981
Advance payments to suppliers									2,722	8,044
Total									285,631	303,025

#### Total

- 1) Cost for land and buildings includes cost of land and water rights amounting to SEK 14,883 million (2009: SEK 16,064 million), which are not subject to depreciation.
- 2) Interest during the construction period has been reported as an asset in the amount of SEK 874 million (2009: SEK 738 million) for the year. The average interest rate for 2010 was 5.16% for borrowings in SEK and 4.07% for borrowings in EUR.
- 3) Government grants received, balance brought forward, amount to SEK 4,983 million (2009: SEK 6,439 million). Accumulated interest reported as an asset totalling SEK 2,524 million (2009: SEK 1,650 million) is included in cost of buildings.
- 4) Government grants received during the year amounted to SEK 178 million (2009: SEK 241 million).
- 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 year, 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.

#### Tax assessment values (for Swedish real estate)

	2010	2009
Buildings	58,432	57,881
Land	25,387	25,630
Total	83,819	83,511

Distribution lines and transformer stations are not subject to tax assessment values.

At 31 December 2010, contractual commitments for the acquisition of property, plant and equipment amounted to SEK 37,444 million (2009: SEK 31,946 million).

## Note 24 Investment property

	2010	2009
Cost		
Cost brought forward	2,027	2,218
Investments	37	4
Divestments/Disposals	-81	-78
Reclassifications	-6	-
Translation differences	-262	-117
Accumulated cost carried forward	1,715	2,027
Accumulated depreciation		
according to plan <sup>1</sup>	500	000
Depreciation brought forward	-560	-606
Depreciation for the year	-13	-15
Divestments/Disposals	30	27
Translation differences	70	34
Accumulated depreciation	470	500
carried forward	-473	-560
Impairment losses		
Impairment losses brought forward	-744	-800
Impairment losses for the year	-5	-
Divestments/Disposals	30	14
Reclassifications	6	-
Translation differences	97	42
Accumulated impairment losses		
carried forward	-616	-744
Residual value according to		
plan carried forward	626	723
Estimated fair value	746	896

## Note 25 Shares and participations owned by the Parent Company Vattenfall AB and other Group companies

Shares and participations owned by Parent Company Vattenfall AB

37         4         Identity Number         office         2010         2010           -6         Bergeforsens Kraft AB         556044-8887         Sundsvall         3,240         6           -262         -117         Boda Kraft 4 AB         556014-8887         Sundsvall         3,240         6           1/715         2,027         Borås Elhandel AB         556010-0819         Atvidaberg         400,000         10           1/715         2,027         Borås Elhandel AB         556010-0819         Atvidaberg         400,000         10           Forssatröms Kraft AB         556010-0819         Atvidaberg         400,000         10           Forssäkrings AB Vattenfall Insurance         516401-8321         Stockholm         200,000         10           -560         -606         Gotlands Energi AB         55602-551         Bispården         74,300         10           70         34         Produktionsbalans PBA AB         55658-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         36         36           -744         -800         Vattenfall Biomass Liberia AB         556639-0689         Stockholm         100 </th <th>2010</th> <th>Participation in %</th> <th>Number of shares</th> <th>Registered</th> <th>Corporate</th> <th></th> <th>2 218</th> <th>2027</th>	2010	Participation in %	Number of shares	Registered	Corporate		2 218	2027
-81         -78         Nordic countries           -6         -         Bergeforsens Kraft AB         556044-8887         Sundsvall         3,240         6           -262         -117         Boda Kraft AB         556013-7755         Borås         1,000         10           1,715         2,027         Borås Elhandel AB         556010-0819         Åtvidaberg         400,000         10           Forsakrings AB Vattenfall Insurance         516010-6819         Åtvidaberg         400,000         10           -560         -606         Gotlands Energi AB         556014-6391         Stockholm         200,000         10           -560         -606         Gotlands Energi AB         556023-25551         Bisgården         74,327         7           70         34         Produktionsbalans PBA AB         556545-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         30           -744         -800         Vattenfall Nuclear Fuel AB         556439-0609         Stockholm         100         100           -50         Svensk Kärnbränslehantering AB         556439-6614         Stockholm         100,000         100<			2010					
-6         Bergeforsens Kraft AB         556044-8887         Sundsvall         3,240         6           -262         -117         Boda Kraft 4 AB         556744-6496         Stockholm         1,000         10           1,715         2,027         Borås Elhandel AB         556613-7765         Borås         1,000         10           Forsaströms Kraft AB         556010-0819         Atvidaberg         400,000         10           Forsäkrings AB Vattenfall Insurance         516401-8321         Stockholm         200,000         10           -560         -606         Gotlands Energi AB         556008-2157         Gotland         112,500         7           -13         -15         Haparanda Värmeverk AB         5566241-9209         Haparanda         200         5           30         27         Kraftgården AB         556528-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>3</sup> 556175-2014         Stockholm         360         30           -474         -800         Vattenfall Nuclear Fuel AB         556439-8689         Säffle         8,000         100           -5         Vattenfall A/S         21 311 332         Copenhagen         10,040,000	3	2010	2010	onice	identity Number	Nordia countrios		
-262         -117         Boda Kraft 4 AB         556744-6496         Stockholm         1,000         10           1,715         2,027         Borås Elhandel AB         556613-7765         Borås         1,000         10           Forsakröms Kraft AB         556010-0819         Åtvidaberg         400,000         10           Forsäkröms Kraft AB         556017-8525         Östhammar         198,000         6           Försäkrings AB Vattenfall Insurance         516401-8391         Stockholm         200,000         10           -560         -606         Gotlands Energi AB         556032-5551         Bispgården         74,327         7           30         27         Kraftgården AB         556632-5551         Bispgården         74,327         7           70         34         Produktionsbalans PBA AB         556528-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         33           32ffle Årjäng Energi AB         556439-0619         Stockholm         100         100         100           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         5,000	5	60	3 2/10	Sundavall	556011-8887			
1,715         2,027         Borås Elhandel AB         556613-7765         Borås         1,000         10           1,715         2,027         Borås Elhandel AB         556613-7765         Borås         1,000         10           Forsaströms Kraft AB         556010-0819         Atvidaberg         400,000         10           -560         -606         Gotlands Energi AB         556017-8525         Östhammar         198,000         60           -13         -15         Haparanda Värmeverk AB         556241-9209         Haparanda         200         55           30         27         Kraftgården AB         556524-9209         Haparanda         200         55           30         27         Kraftgården AB         5565425-8134         Stockholm         4,800         100           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         10           -744         -800         Vattenfall A/S         21 311 332         Copenhagen         10,040,000         10           -5         -         Vattenfall Business Ervices Nordic AB         556439-0614         Stockholm         100         10           -616         -744         Vattenfall Business Ervices Nord						0		
Forsaströms Kraft AB         556010-0819         Åtvidaberg         400,000         10           Forsmarks Kraftgrupp AB         556174-8525         Östhammar         198,000         6           Försäkrings AB Vattenfall Insurance         516401-8391         Stockholm         200,000         10           -560         -606         Gotlands Energi AB         556008-2157         Gotland         112,500         7           -13         -15         Haparanda Värmeverk AB         556525-551         Bispgården         74,327         7           70         34         Produktionsbalans PBA AB         556525-551         Bispgården         74,327         7           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         4,800         100           -474         -800         Vattenfall Nuclear Fuel AB         556439-6889         Säffle         8,000         100           -5         Vattenfall Business Services Nordic AB         556643-90614         Stockholm         100         100           30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         0,000         100           97         42         Vattenfall Roldiggingar AB         556617-5661								
Forsmarks Kraftgrupp AB         556174-8525         Östhammar         198,000         66           -560         -606         Gotlands Energi AB         556008-2157         Gotland         112,500         77           1.3         -15         Haparanda Värmeverk AB         556024-19209         Haparanda         200         55           30         27         Kraftgården AB         556532-5551         Bispgården         74,327         77           70         34         Produktionsbalans PBA AB         556425-8134         Stockholm         4,800         100           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         33           33         27         Kraftgården Fuel AB         556499-8689         Säffle         8,000         100           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         100         100           -474         -800         Vattenfall Nuclear Fuel AB         556499-8689         Säffle         8,000         100           -5         Vattenfall Business Liberia AB         556649-8609         Stockholm         1,000         100           30         14         Vattenfall Bunäggningar A							2,027	1,/15
Försäkrings AB Vattenfall Insurance         516401-8391         Stockholm         200,000         10           -560         -606         Gotlands Energi AB         556008-2157         Gotland         112,500         7           -13         -15         Haparanda Värmeverk AB         556241-9209         Haparanda         200         55           30         27         Kraftgården AB         556532-5551         Bispgården         74,327         7           -0         34         Produktionsbalans PBA AB         556558-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>3</sup> 556175-2014         Stockholm         360         3           -474         -800         Vattenfall Nuclear Fuel AB         556499-8689         Säffle         8,000         100           -544         -800         Vattenfall Biomass Liberia AB         556649-669         Stockholm         5000         100           30         14         Vattenfall Biomass Liberia AB         556627-5661         Sundsvall         1,000         100           30         14         Vattenfall Elaliägningar AB         556612-9252         Jockholm         30,000         100           30         14								
-560         -606         Gotlands Energi AB         556008-2157         Gotland         112,500         7           -13         -15         Haparanda Värmeverk AB         556241-9209         Haparanda         200         5           30         27         Kraftgården AB         556532-5551         Bispgården         74,327         77           70         34         Produktionsbalans PBA AB         556528-8134         Stockholm         4,800         100           Ringhals AB         556558-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         3           Säffle Årjäng Energi AB         556400-2609         Stockholm         100         100         100           -744         -800         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         5,000         100           30         14         Vattenfall Business Services Nordic AB         556257-5661         Sundsvall         1,000         100           6         -         Vattenfall Elaliäggningar AB         556528-2562         Jokkmokk         3,000         100           97         42         Vattenfall Elalitäributio		66				0 11		
-13         Haparanda Värmeverk AB         556241-9209         Haparanda         200         55           30         27         Kraftgården AB         556532-5551         Bispgården         74,327         77           70         34         Produktionsbalans PBA AB         556532-5551         Bispgården         74,327         77           70         34         Produktionsbalans PBA AB         556558-7036         Varberg         248,572         77           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         33           -744         -800         Vattenfall A/S         21 311 332         Copenhagen         10,040,000         100           -5         -         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         100         100           30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         100         100           30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         100         100           6         -         Vattenfall Business Services Nordic AB         55612-4214         Stockholm         8,000         100								
30         27         Kraftgården AB         556532-5551         Bispgården         74,327         7           70         34         Produktionsbalans PBA AB         5565425-8134         Stockholm         4,800         10           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         33           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         10           -474         -800         Vattenfall A/S         21 311 332         Copenhagen         10.040,000         10           -5         -         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         500         100           30         14         Vattenfall Blainess Services Nordic AB         556417-0800         Stockholm         100         100           30         14         Vattenfall Elanläggningar AB         556527-5661         Sundsvall         1,000         100           97         42         Vattenfall Flanidsgring AB         556512-4214         Stockholm         30,000         100           97         42         Vattenfall Ralix Fjärvärme AB         556529-7065         Stockholm         30,000         100		75				0		
70         34         Produktionsbalans PBA AB         556425-8134         Stockholm         4,800         10           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         3           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         3           -473         -560         Svensk Kärnbränslehantering AB         556440-2609         Stockholm         360         10           -744         -800         Vattenfall A/S         21 311 332         Copenhagen         10,040,000         10           -5         -         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         1,000         10           30         14         Vattenfall Business Services Nordic AB         556417-5661         Sundsvall         1,000         10           97         42         Vattenfall Flankäggningar AB         556528-2562         Jokkmokk         3,000         10           97         42         Vattenfall Islandskraft AB         556528-2562         Jokkmokk         3,000         10           97         42         Vattenfall Kalix Fjärrvärme AB         556529-7065         Stockholm         100,000		50						
Ringhals AB         556558-7036         Varberg         248,572         7           -473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         3           -744         -800         Vattenfall Nuclear Fuel AB         556499-8689         Säffle         8,000         100           -744         -800         Vattenfall A/S         21 311 332         Copenhagen         10,040,000         100           -5         -         Vattenfall Biomass Liberia AB         556439-8609         Stockholm         5,000         100           30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         10,040,000         10           6         -         Vattenfall Elanläggningar AB         556257-5661         Sundsvall         1,000         10           97         42         Vattenfall Elanläggningar AB         556528-2562         Jokkmokk         3,000         10           -616         -744         Vattenfall Kalix Fjärrvärme AB         556529-7065         Stockholm         10,000         10           vattenfall Kundservice AB         556785-9383         Stockholm         100,000         10           746         896         Vattenfall Poland		74		10				
-473         -560         Svensk Kärnbränslehantering AB <sup>1</sup> 556175-2014         Stockholm         360         3           -744         -800         Vattenfall Nuclear Fuel AB         556499-8689         Säffle         8,000         100           -744         -800         Vattenfall Nuclear Fuel AB         556440-2609         Stockholm         100         100           -5         -         Vattenfall Biomass Liberia AB         556809-8809         Stockholm         5,000         100           30         14         Vattenfall Elanläggningar AB         556439-0614         Stockholm         100         100           6         -         Vattenfall Elanläggningar AB         556417-0800         Stockholm         1,000         100           97         42         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         100           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         100           vattenfall Kundservice AB         556529-7065         Stockholm         100,000         100           626         723         Vattenfall POland AB         55673-59383         Stockholm         10,000         100           vattenfall Poland AB<		100					34	70
Säffle Årjäng Energi AB         556499-8689         Säffle         8,000         10           -744         -800         Vattenfall Nuclear Fuel AB         556440-2609         Stockholm         100         100           -5         –         Vattenfall Biomass Liberia AB         556809-8809         Stockholm         5,000         100           30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         5,000         100           6         –         Vattenfall Elanläggningar AB         556257-5661         Sundsvall         1,000         100           97         42         Vattenfall France Holding AB         556147-0800         Stockholm         30,500         100           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         100           -616         -744         Vattenfall Nudservice AB         556529-7065         Stockholm         100,000         100           626         723         Vattenfall Oy         1071366-1         Helsinki         10,000         100           746         896         Vattenfall Poland AB         556383-5619         Stockholm         12,500         100           tyranges from <td< td=""><td></td><td>70</td><td></td><td>0</td><td></td><td>0</td><td></td><td></td></td<>		70		0		0		
Vattenfall Nuclear Fuel AB         556440-2609         Stockholm         100         10           -744         -800         Vattenfall A/S         21 311 332         Copenhagen         10,040,000         10           -5         -         Vattenfall Biomass Liberia AB         556809-8809         Stockholm         5,000         10           30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         100         10           6         -         Vattenfall Elaläggningar AB         556257-5661         Sundsvall         1,000         10           97         42         Vattenfall France Holding AB         55615-4214         Stockholm         8,000         10           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         10           -616         -744         Vattenfall Kalix Fjärrvärme AB         55612-9958         Kalix         1,880         9           Vattenfall Nudservice AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Poland AB         556785-9383         Stockholm         1,000         10           746         896         Vattenfall Poland AB		36				0	-560	-473
-744       -800       Vattenfall A/S       21 311 332       Copenhagen       10,040,000       10         -5       -       Vattenfall Biomass Liberia AB       556809-8809       Stockholm       5,000       10         30       14       Vattenfall Business Services Nordic AB       556439-0614       Stockholm       100       10         6       -       Vattenfall Elanläggningar AB       556257-5661       Sundsvall       1,000       10         97       42       Vattenfall Eldistribution AB       556417-0800       Stockholm       8,000       10         -616       -744       Vattenfall Inlandskraft AB       556528-2562       Jokkmokk       3,000       10         -616       -744       Vattenfall Nadskraft AB       556529-7065       Stockholm       100,000       10         -626       723       Vattenfall Qy       1071366-1       Helsinki       10,000       10         746       896       Vattenfall POland AB       556383-5619       Stockholm       12,500       10         ryranges from       Vattenfall Power Consultant AB       556538-56393       Stockholm       12,500       10         99: 124) properties       Vattenfall Research & Development AB       556390-5891       Älvkarleby		100						
		100			556440-2609	Vattenfall Nuclear Fuel AB		
30         14         Vattenfall Business Services Nordic AB         556439-0614         Stockholm         100         10           6         Vattenfall Elanläggningar AB         556257-5661         Sundsvall         1,000         10           97         42         Vattenfall Eldistribution AB         556417-0800         Stockholm         8,000         10           97         42         Vattenfall France Holding AB         556417-0800         Stockholm         30,500         10           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         10           -616         -744         Vattenfall Nundservice AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Oy         1071366-1         Helsinki         10,000         100           746         896         Vattenfall Poland AB         556383-5619         Stockholm         12,500         100           ty ranges from         Vattenfall Power Consultant AB         556573-5940         Stockholm         6,570         100           99: 124) properties         Vattenfall Research & Development AB         556242-0959         Luleå         26,000         100           99: 124) pr		100	10,040,000	Copenhagen	21 311 332	Vattenfall A/S	-800	-744
ood         -         Vattenfall Elanläggningar AB         556257-5661         Sundsvall         1,000         10           97         42         Vattenfall Eldistribution AB         556417-0800         Stockholm         8,000         10           vattenfall France Holding AB         556815-4214         Stockholm         30,500         10           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         10           vattenfall Kalix Fjärrvärme AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Oy         1071366-1         Helsinki         10,000         10           746         896         Vattenfall Poland AB         556383-5619         Stockholm         100         10           ry ranges from         Vattenfall Power Consultant AB         556383-5619         Stockholm         12,500         10           vy ranges from         Vattenfall Research & Development AB         556390-5891         Älvkarleby         14,000         10           vy ranges from         Vattenfall Research & Development AB         55629-2059         Luleå         26,000         10           vy ranges from         Vattenfall Research & Development AB         5	314	100	5,000	Stockholm	556809-8809	Vattenfall Biomass Liberia AB	-	-5
97         42         Vattenfall Eldistribution AB         556417-0800         Stockholm         8,000         10           -616         -744         Vattenfall France Holding AB         556815-4214         Stockholm         30,500         10           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         10           Vattenfall Kalix Fjärrvärme AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Oy         1071366-1         Helsinki         10,000         10           746         896         Vattenfall Poland AB         5565485-9383         Stockholm         100         10           ry ranges from         Vattenfall Power Consultant AB         556573-5940         Stockholm         12,500         10           vy ranges from         Vattenfall Research & Development AB         55630-5891         Älvkarleby         14,000         10           vy ranges from         Vattenfall Services Nordic AB         556242-0959         Luleå         26,000         10           vy tatenfall Research & Development AB         556242-0959         Luleå         26,000         10	130	100	100	Stockholm	556439-0614	Vattenfall Business Services Nordic AB	14	30
value         Vattenfall France Holding AB         556815-4214         Stockholm         30,500         10           -616         -744         Vattenfall Inlandskraft AB         556528-2562         Jokkmokk         3,000         10           Vattenfall Kalix Fjärrvärme AB         556512-9958         Kalix         1,880         9           Vattenfall Kundservice AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Oy         1071366-1         Helsinki         10,000         10           746         896         Vattenfall Poland AB         5566785-9383         Stockholm         100         10           746         896         Vattenfall Poland AB         556573-5940         Stockholm         12,500         10           ry ranges from         Vattenfall Power Consultant AB         556573-5940         Stockholm         6,570         10           vy ranges from         Vattenfall Research & Development AB         556390-5891         Älvkarleby         14,000         10           99: 124) properties         Vattenfall Services Nordic AB         556242-0959         Luleå         26,000         10	1	100	1,000	Sundsvall	556257-5661	Vattenfall Elanläggningar AB	-	6
-616       -744       Vattenfall Inlandskraft AB       556528-2562       Jokkmokk       3,000       10         Vattenfall Kalix Fjärrvärme AB       556012-9958       Kalix       1,880       9         Vattenfall Kundservice AB       556529-7065       Stockholm       100,000       10         626       723       Vattenfall Oy       1071366-1       Helsinki       10,000       10         746       896       Vattenfall PleV Holding AB       556785-9383       Stockholm       100       10         746       896       Vattenfall Power Consultant AB       556383-5619       Stockholm       12,500       10         ty ranges from       Vattenfall Power Management AB       556390-5891       Älvkarleby       14,000       10         Vattenfall Research & Development AB       556242-0959       Luleå       26,000       10         Vattenfall Services Nordic AB       556242-0959       Luleå       26,000       10         Vattenfall Epergy Trading A/S       3181181       Conpenhagen       500       10	11	100	8,000	Stockholm	556417-0800	Vattenfall Eldistribution AB	42	97
Vattenfall Kalix Fjärrvärme AB         556012-9958         Kalix         1,880         9           Vattenfall Kundservice AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Oy Vattenfall PHEV Holding AB         556785-9383         Stockholm         100,000         10           746         896         Vattenfall Poland AB         556647-0643         Uppsala         1,000         10           746         896         Vattenfall Poland AB         556383-5619         Stockholm         12,500         10           ty ranges from         Vattenfall Power Consultant AB         556573-5940         Stockholm         6,570         10           vy ranges from         Vattenfall Research & Development AB         556390-5891         Älvkarleby         14,000         10           v9: 124) properties         Vattenfall Services Nordic AB         556242-0959         Luleå         26,000         10	6	100	30,500	Stockholm	556815-4214	Vattenfall France Holding AB		
Vattenfall Kalix Fjärrvärme AB         556012-9958         Kalix         1,880         9           Vattenfall Kundservice AB         556529-7065         Stockholm         100,000         10           626         723         Vattenfall Oy Vattenfall PHEV Holding AB         556785-9383         Stockholm         100,000         10           746         896         Vattenfall Poland AB         556467-0643         Uppsala         1,000         10           vattenfall Power Consultant AB         556573-5940         Stockholm         12,500         10           cy ranges from         Vattenfall Power Management AB         556390-5891         Klvkarleby         14,000         10           ovattenfall Research & Development AB         556242-0959         Luleå         26,000         10           vattenfall Services Nordic AB         556242-0959         Luleå         26,000         10	4	100	3,000	Jokkmokk	556528-2562	Vattenfall Inlandskraft AB	-744	-616
626         723         Vattenfall Oy Vattenfall PHEV Holding AB         1071366-1         Helsinki         10,000         10           746         896         Vattenfall Poland AB         556785-9383         Stockholm         100         100           746         896         Vattenfall Poland AB         556467-0643         Uppsala         1,000         10           747         896         Vattenfall Power Consultant AB         556383-5619         Stockholm         12,500         10           79: ranges from         Vattenfall Power Management AB         556390-5891         Älvkarleby         14,000         10           79: 124) properties         Vattenfall Services Nordic AB         556242-0959         Luleå         26,000         10           79: 124) properties         Vattenfall Energy Trading A/S         3181181         Conpenhagen         500         10	-	94	1,880	Kalix	556012-9958	Vattenfall Kalix Fjärrvärme AB		
Vattenfall PHEV Holding AB556785-9383Stockholm10010746896Vattenfall Poland AB556467-0643Uppsala1,00010Vattenfall Power Consultant AB556383-5619Stockholm12,50010Tyranges fromVattenfall Power Management AB556573-5940Stockholm6,57010Vattenfall Research & Development AB556390-5891Älvkarleby14,000109: 124) propertiesVattenfall Services Nordic AB556242-0959Luleå26,00010	_	100	100,000	Stockholm	556529-7065	Vattenfall Kundservice AB		
Vattenfall PHEV Holding AB556785-9383Stockholm10010746896Vattenfall Poland AB556467-0643Uppsala1,00010Vattenfall Power Consultant AB556383-5619Stockholm12,50010varages fromVattenfall Power Management AB556573-5940Stockholm6,57010Vattenfall Research & Development AB556390-5891Älvkarleby14,000109: 124) propertiesVattenfall Services Nordic AB556242-0959Luleå26,00010Vattenfall Energy Trading A/S3181181Conenhagen50010	1,483	100	10,000	Helsinki	1071366-1	Vattenfall Oy	723	626
Vattenfall Power Consultant AB 556383-5619 Stockholm 12,500 10 vyranges from Vattenfall Power Management AB 556573-5940 Stockholm 6,570 10 Vattenfall Research & Development AB 556390-5891 Älvkarleby 14,000 10 Vattenfall Services Nordic AB 556242-0959 Luleå 26,000 10 Vattenfall Epergy Trading A/S 3181181 Copenhagen 500 10	_	100	100	Stockholm	556785-9383	Vattenfall PHEV Holding AB		
Vattenfall Power Consultant AB 556383-5619 Stockholm 12,500 10 ty ranges from Vattenfall Power Management AB 556573-5940 Stockholm 6,570 10 Vattenfall Research & Development AB 556390-5891 Älvkarleby 14,000 10 Vattenfall Services Nordic AB 556242-0959 Luleå 26,000 10 Vattenfall Energy Trading A/S 3181181 Conenhagen 500 10	_	100	1,000	Uppsala	556467-0643	Vattenfall Poland AB	896	746
Vattenfall Research & Development AB 556390-5891 Älvkarleby 14,000 10 Vattenfall Services Nordic AB 556242-0959 Luleå 26,000 10 9: 124) properties Vattenfall Energy Trading A/S 3181181 Copenhagen 500 10	15	100	12,500	Stockholm	556383-5619	Vattenfall Power Consultant AB		
Vattenfall Research & Development AB 556390-5891 Älvkarleby 14,000 10 Vattenfall Services Nordic AB 556242-0959 Luleå 26,000 10 99: 124) properties Vattenfall Energy Trading A/S 3181181 Conenhagen 500 10	12	100	6,570	Stockholm	556573-5940	Vattenfall Power Management AB	rom	tv ranges f
9: 124) properties Vattenfall Services Nordic AB 556242-0959 Luleå 26,000 10	17	100	14,000	Älvkarleby	556390-5891	-		, 0
9: 124) properties Vattenfall Energy Trading A/S 3181181 Conenhagen 500 10	19	100			556242-0959	Vattenfall Services Nordic AB		
		100						
nany. The estimated Vattenfall Treasury Financing AB 556752-2858 Stockholm 100 10		100						
Which the con- Vattenfall Tuggen AB 55650/1-2826 Stockholm 9.317 9		93						
en knowledgeable, Vettenfall Vettenkreft AP 556910 1520 Stockholm 1.000 10		100				00	0 .	
m. The fair value cal-		100						
all's owill assessors.		100					bunted to SEK 105 Vattenfall Vätter El AB the concerned Västerbergslagens Kraft AB	
		58						
of the concerned		51						
		50				0 0 0		
is related to prop		50 50					d to prop-	) is relate
		100						
ns to purchase, con- 3C – Combat Climate Change AB 556765-0444 Stockholm 100 10		TOO	T00	SLUCKHOIM	000700-0444	50 – Compat Cimate Change AB		

1) The estimated useful life for investment property 25–50 years.

Investment property encompasses 119 (2009 located in Berlin, Hamburg and eastern Germa fair value has been defined as the amount at v cerned property could be exchanged between willing partners in an arm's length transaction culations have mainly been made by Vattenfal

Rental income from external customers am million (2009: SEK 115 million). Direct costs for properties amounted to SEK 215 million (2009 of which SEK 83 million (2009: SEK 73 million) erties that did not generate rental income.

At 31 December 2010, contractual obligations struct or develop investment property or for repairs, maintenance or enhancements amounted to SEK 104 million (2009: SEK 203 million).

	Corporate Identity Number	Registered office	Number of shares 2010	Participation in % 2010	Carrying amount 2010
Germany					
Vattenfall (Deutschland) GmbH	(HRB) 124048	Berlin	2	100	64,066
Vattenfall Energy Trading GmbH	(HRB) 80335	Hamburg	5,000	100	1,245
Poland					
Vattenfall Heat Poland S.A.	0000025667	Warsaw	24,591,544	99,84	4,855
GZE S.A.	0000013196	Gliwice	1,249,693	99,99	6,925
Vattenfall Poland Sp.z.o.o.	0000270893	Warsaw	10,000	100	5
Vattenfall Energy Trading Sp.z.o.o.	0000233066	Warsaw	80,000	100	9
Netherlands					
Vattenfall Nederland B.V.	34116939	Hoofdorp	200	100	_
N.V. Nuon Energy	33292246	Amsterdam	136,794,964	49 <sup>2</sup>	98,076
Other countries					
Vattenfall Reinsurance S.A., Luxembourg	(B) 49528	Luxembourg	13,000	100	111
Pandion Ocean Power Limited, Ireland	E0461126	Maynooth	51	51	6
Aegir Wave Power Limited, Scotland	SC367232	Edinburgh	100	100	_
Total					189,449

1) The Group owns a further 20% through Forsmarks Kraftgrupp AB.

2) The remaining 51% of the shares will be paid in three tranches: in July 2011, 2013 and 2015. According to agreement Vattenfall has the majority of the votes in the company.

### Larger shareholdings owned by other Group companies than the Parent Company Vattenfall AB

When calculating the participation percentages, consideration is made of the minority ownership in each company respectively.

	Registered office	Participa- tion in % 2010		Registered office	Participa tion in % 2010
Nordic countries			MVR Müllverwertung Rugenberger		
Barsebäck Kraft AB, Sweden	Malmö	70	Damm GmbH & Co. KG	Hamburg	55
Pamilo Oy, Finland	Uimaharju	100	Vattenfall Europe AG	Berlin	100
Vattenfall Indalsälven AB, Sweden	Bispgården	74	Vattenfall Europe Wärme AG	Berlin	100
Vattenfall Sähköntuotanto Oy, Finland	Helsinki	100	Vattenfall Europe Business Services Gmbl	Hamburg	100
Vattenfall Verkko Oy, Finland	Helsinki	100	Vattenfall Europe Distribution		
Vattenfall Vindkraft A/S, Denmark	Esbjerg	100	Berlin GmbH	Berlin	100
Vattenfall Vindkraft Nørrekær Enge A/S,	, 0		Vattenfall Europe Distribution		
Denmark	Esbjerg	96	Hamburg GmbH	Hamburg	100
Vattenfall Vindkraft Sverige AB, Sweden	Stockholm	100	Vattenfall Europe Generation AG	Cottbus	100
C C			Vattenfall Europe Mining AG	Cottbus	100
Germany			Vattenfall Europe Netzservice GmbH	Berlin	100
DanTysk Offshore Wind GmbH	Hamburg	51	Vattenfall Europe Nuclear Energy GmbH	Hamburg	100
Fernheizwerk Märkisches Viertel GmbH	Berlin	100	Vattenfall Europe Sales GmbH	Hamburg	100
Fernheizwerk Neukölln AG	Berlin	80	Vattenfall Europe New Energy GmbH	Hamburg	100
Kernkraftwerk Brunsbüttel GmbH &			Nuon Energie und Service GmbH	Heinsberg	100
Co. oHG	Hamburg	67	Nuon Epe Gasspeicher GmbH	Heinsberg	100
Kraftwerke Schwarze Pumpe GmbH	Spremberg	100	Vattenfall Europe Technology		
Müllverwertung Borsigstrasse GmbH	Hamburg	85	Research GmbH	Cottbus	100
			Vattenfall Europe Windkraft GmbH	Hamburg	100

	Registered office	Participa- tion in % 2010
Poland		
Vattenfall Distribution Poland S.A.	Gliwice	100
Vattenfall Wolin-North Sp.z.o.o	Szczecin	100
Netherlands		
Emmtec Services B.V.	Emmen	100
Nuon Exploration & Production		
The Netherlands B.V.	Amsterdam	100
Nuon Power Generation B.V.	Utrecht	100
Nuon Storage B.V.	Amsterdam	100
Nuon Epe Gas Service B.V.	Amsterdam	100
N.V. Nuon Energy Sourcing	Amsterdam	100
N.V. Nuon Sales Nederland	Amsterdam	100
N.V. Nuon Warmte	Amsterdam	100
N.V. Nuon VAS	Amsterdam	100
Nuon Renewables NSW I B.V.	Amsterdam	100
N.V. Nuon Sales	Amsterdam	100
Vattenfall Energy Trading Netherlands N.V.	Amsterdam	100
UK		
Vattenfall Wind Power Ltd	Hexham	100
Kentish Flats Ltd	London	100
Eclipse Energy UK Plc	Grantham	100
Thanet Offshore Wind Ltd	London	100
Nuon UK Ltd	Cornwall	100

Belgium Nuon Belgium N.V.

# Note 26 Participations in associated companies and joint ventures

00		2010	2009
	Balance brought forward	10,927	15,925
00	Acquired companies	272	1,107
00	Assets held for sale	3,468	-1,761
00	New share issues and shareholders' con-		
00	tributions	104	913
00	Divested companies	-	-433
00	Reclassifications from other shares and		
00	participations	68	-
00	Other changes	-320	-218
00	Profit participations and dividends	-239	241
	Translation differences	-1,331	-858
00	Balance carried forward	12,949	14,916
00			

Continued on page 108

100

Vilvoorde

#### Note 26 continued

Shares and participations owned by the Parent Company Vattenfall AB or by other Group companies.

	Corporate Identity Number	Registered office	Partici- pation in % 2010	Carrying amount Group 2010	Carrying amount Parent Company 2010
Associated companies and joint ven- tures owned by the Parent Company Vattenfall AB					
Nordic countries Preem Gas AB, Sweden	556037-2970	Stockholm	30	14	6
Associated companies and joint ventures owned by other Group companies than the Parent Company Vattenfall AB					
Nordic countries					
Ensted Havn I/S, Denmark Taggen Vindpark AB, Sweden V² Plug-In Hybrid Vehicle	29636223 556739-6287	Aabenraa Sölvesborg	50 50	599 -	
Partnership HB, Sweden	969741-9175	Gothenburg	50	243	-
<b>UK</b> East Anglia Offshore Wind Ltd	06990367	Hexham	50	20	_
Germany					
GASAG Berliner Gaswerke AG DOTI Deutsche Offshore Testfeld	HRB 965	Berlin	32	3,541	-
und Infrastruktur GmbH & Co. KG Kernkraftwerk Krümmel GmbH &	A 200395	Oldenburg	26	562	-
Co. oHG	HRB 15033	Hamburg	50	4,274	-
Kernkraftwerk Stade GmbH & Co. oHG Kernkraftwerk Brokdorf GmbH &	HRB 12163	Hamburg	33	730	-
Co. oHG	HRB 17623	Hamburg	20	1,774	-
EHA Energie Handels Gesellschaft mbH & Co.KG	HRA 92729	Hamburg	50	79	-
Netherlands					
B.V. NEA	09018339	Dodewaard	23	14	-
C.V. De Horn	34227063	Amsterdam	42	2	-
C.V. Groettocht	37085868	Amsterdam	50	5	-
C.V. Oudelandertocht	37085867	Amsterdam	50	10	-
C.V. Waardtocht	37085866	Amsterdam	50	5	-
C.V. Waterkaaptocht	37085865	Amsterdam	50	8	-
C.V. Windpoort	34122462	Heemskerk	40	19	-
Wagendorp C.V.	37073928	Middenmeer		2	-
Westpoort Warmte B.V.	34121626	Amsterdam	50	-2	-
Windpark Willem-Annapolder B.V.	22049359	Ede	33	3	_

	Corporate Identity Number	Registered office	Partici- pation in % 2010	Carrying amount Group 2010	Carrying amount Parent Company 2010
V.O.F. Windpark Oom Kees	09210903	Ede	13	1	-
NoordzeeWind c.v.	34195602	Oegstgeest	50	811	-
<b>Other countries</b> Buchanan Renewables Fuel Group Liberia B.V.	343005514	Amsterdam	30	235	_
Total	0.0000011			12,949	6

Amounts pertaining to Vattenfall-owned participation of associated companies' revenues, profit, assets and liabilities:

	Revenues 2010	Profit 2010	Assets 31 Dec. 2010	Liabilities 31 Dec. 2010
Kernkraftwerk Krümmel GmbH & Co. oHG, Kernkraftwerk Stade GmbH & Co. oHG and				
Kernkraftwerk Brokdorf GmbH & Co. oHG	2,028	337	19,049	11,827
Other companies	6,899	175	9,987	6,247
Total	8,927	512	29,036	18,074

Amounts relating to Vattenfall-owned participation of joint ventures' revenues, profit, assets and liabilities:

	Revenues 2010	Expenses 2010	Non-current assets 31 Dec. 2010	Current assets 31 Dec. 2010	Non-current liabilities 31 Dec. 2010	Current liabilities 31 Dec. 2010
NoordzeeWind c.v.	202	73	766	43	125	12
V² Plug-In Hybrid Vehi						
cle Partnership HB	-	218	290	57	-	104
Total	202	291	1,056	100	125	116

# Note 27 Other shares and participations

	2010	2009
Balance brought forward	5,007	5,439
Acquired companies	-	138
Investments	99	3
New share issues and shareholders' contributions	19	33
Profit from private partnerships	-	23
Divested companies	-55	-597
Reclassifications to participations in		
associated companies	-68	-
Translation differences	-48	-32
Balance carried forward	4,954	5,007

	Participa tion in % 2010	Carrying amount Group 2010	Carrying amount Parent Company 2010
Shares and participations owned by the Parent Company Vattenfall AB			
ENEA S.A., Poland Other companies	19	4,602 7	4,602 7
Shares and participations owned by other Group compa nies than the Parent Company Vattenfall AB			
Germany			
BEU Berliner Energie Umweltsfonds GbR EHA Energie Handels	50	56	-
Gesellschaft mbH & Co. KG	50	-	-
European Energy Exchange Sulfurcell Solartechnik GmbH	2 5	14 18	-
GNS Gesellschaft für Nuk lear-Service GmbH Other companies	6	23 23	-
Netherlands			
Energie Service Noord West C.V.	30	15	-
Electrisk Verzekerings maatschappij	21	23	
P21 GmbH	13.2	32	_
Cuculus GmbH	17.3	14	-
Locamation Control Systems	20		
B.V. Tri-O-Gen Group B.V.	39 18.85	23 24	_
ELINI	13 <sup>1</sup>	29	-
Other companies		11	-
Other countries/companies			
Asikkalan Voima Oy, Finland	50	28	-
Other companies		12	-
Total		4,954	4,609

## Note 28 Share in the Swedish Nuclear Waste Fund

	2010	2009
Balance brought forward	26,027	25,250
Payments	490	364
Disbursements	-737	-775
Returns	1,011	1,188
Balance carried forward	26,791	26,027

According to the Swedish Nuclear Activities Act (1984:3), any organisation in Sweden with a permit to own or run a nuclear installation is obliged to dismantle the plant in a safe manner, to manage spent fuel and other radioactive waste and to conduct necessary research and development. The permit holder shall also finance said management, etc.

The financing of future fees for spent nuclear fuel, etc., is currently ensured by the Act on the Financing of Future Expenses of Spent Nuclear Fuel, etc. (2006:647). Pursuant to this law, the

## Note 29 Other non-current receivables

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 2010, the fair value of the Vattenfall Group's share of the Swedish Nuclear Waste Fund was SEK 27,321 million (2009: SEK 26,885 million).

As stated in Note 40 to the consolidated accounts, provisions for future expenses for decommissioning, etc. within Swedish nuclear power operations amount to SEK 34,345 million (2009: SEK 29,323 million).

Contingent liabilities attributable to the Swedish Nuclear Waste Fund are described in Note 48 to the consolidated accounts.

Receivables from						
	asso	ciated companies	Othe	er receivables		Total
	2010	2009	2010	2009	2010	2009
Balance brought forward	76	377	4,056	3,990	4,132	4,367
New receivables	18	46	110	1,384	128	1,430
Payments received	293	-36	-92	-959	201	-995
Impairment losses	-	-	-3	-41	-3	-41
Divested companies	-2	-5	-2	-805	-4	-810
Reclassifications	-	-304	633	603	633	299
Translation differences	-3	-2	-315	-116	-318	-118
Balance carried forward	382	76	4,387	4,056	4,769	4,132
Breakdown of non-current receivables:						
	2010	2009	2010	2009	2010	2009
Non-current interest-bearing receivables	382	76	433	588	815	664
Non-current noninterest-bearing receivables	-	-	3,954	3,468	3,954	3,468
Total	382	76	4,387	4,056	4,769	4,132

1) The share of voting rights is 7%.

# Note 30 Inventories

	2010	2009
Inventories held for own use		
Nuclear fuel	7,139	5,907
Materials and spare parts	3,236	3,394
Fossil fuel	2,138	3,472
Other	928	958
Total	13,441	13,731
Inventories held for trading		
Fossil fuel	1,769	806
Emission allowances	1,615	311
Total	3,384	1,117
Total inventories	16,825	14,848

# Note 31 Intangible assets: current

<sup>09</sup> Attributable to emission allowances and certificates held for own use.

		Emis	sion allowances	(	Certificates	Total		
907		2010	2009	2010	2009	2010	2009	
394	Balance brought forward	11,410	2,182	1,022	1,103	12,432	3,285	
,472	Acquired companies	-	4,202	-	31	-	4,233	
958	Purchases	4,576	12,147	2,191	1,932	6,767	14,079	
,731	Received free of charge	-	-	642	564	642	564	
	Sold	-2,027	-678	-1,627	-1,407	-3,654	-2,085	
	Redeemed	-3,748	-5,397	-1,160	-1,130	-4,908	-6,527	
806	Disposals	-1,076	-503	-14	-49	-1,090	-552	
311	Reclassification to inventories	-511	-	-	-	-511	-	
,117	Impairment losses	-	-152	-	-	-	-152	
	Reversed impairment losses	-	21	-	-	-	21	
848	Translation differences	-1,317	-412	-31	-22	-1,348	-434	
	Balance carried forward	7,307	11,410	1,023	1,022	8,330	12,432	

Inventories recognised as an expense in 2010 amount to SEK 18,711 million (2009: SEK 22,259 million). Inventory writedowns amounted to SEK 3 million (2009: SEK 141 million) during the year. Reversed write-downs amounted to SEK 22 million (2009: SEK 86 million).

# Note 32 Trade receivables and other receivables

	2010	2009
Accounts receivable-trade	30,222	32,508
Receivables from associated companies	1,099	311
Other receivables	5,059	9,333
Total	36,380	42,152

#### Age analysis

The collection period is normally between 10 and 30 days.

The concertor period is normally o		,	2010			2009
	Receivables, gross	Receivables impaired	Receivables, net	Receivables, gross	Receivables impaired	Receivables, net
Accounts receivable-trade						
Not due	27,653	42	27,611	28,835	12	28,823
Past due 1–30 days	1,332	37	1,295	1,868	47	1,821
Past due 31–90 days	573	45	528	744	65	679
Past due > 90 days	2,293	1,505	788	2,839	1,654	1,185
Total	31,851	1,629	30,222	34,286	1,778	32,508
Receivables from associated						
companies						
Not due	1,091	-	1,091	303	-	303
Past due 1–30 days	3	-	3	9	2	7
Past due 31–90 days	4	-	4	1	-	1
Past due > 90 days	3	2	1	2	2	-
Total	1,101	2	1,099	315	4	311
Other receivables						
Not due	5,031	-	5,031	9,299	-	9,299
Past due 1–30 days	5	-	5	17	6	11
Past due 31–90 days	3	-	3	5	-	5
Past due > 90 days	35	15	20	185	167	18
Total	5,074	15	5,059	9,506	173	9,333

#### Receivables impaired as above:

	2010	2009
Balance brought forward	1,955	1,242
Acquired companies	-	746
Provision for impairment losses	369	329
Impairment losses	-340	-246
Reversed impairment losses	-39	-37
Reclassifications	8	15
Divested companies	-219	-8
Translation differences	-88	-86
Balance carried forward	1,646	1,955

# Note 33 Prepaid expenses and accrued income

	2010	2009
Prepaid insurance premiums	33	85
Prepaid expenses, other	930	4,544
Prepaid expenses and accrued income,		
electricity	4,663	2,704
Accrued income, other	4,971	2,474
Total	10,597	9,807

# Note 34 Short-term investments

	2010	2009
Interest-bearing investments	31,278	46,385
Total	31,278	46,385

# Note 35 Cash and cash equivalents

	2010	2009
Cash and bank balances	7,655	7,127
Cash equivalents	4,940	3,428
Total	12,595	10,555

# Note 36 Assets held for sale

Refer to assets in a German associated company together with certain non-current assets owned by Vattenfall Europe AG. See also Note 2 to the consolidated accounts.

	2010	2009
Intangible assets: non-current	-	20
Property, plant and equipment	484	544
Other non-current assets	1,127	1,768
Inventories	-	1
Trade receivables and other receivables	-	375
Prepaid expenses and accrued income	-	6
Cash and cash equivalents	-	653
Total assets	1,611	3,367
Pension provisions	_	11
Other interest-bearing provisions	-	66
Deferred tax liabilities	-	8
Trade payables and other liabilities	-	126
Accrued expenses and deferred income	-	453
Total liabilities	-	664

# Note 37 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 unsubordinated 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 owners and the key ratio "Interest Coverage Trigger Ratio" amounting to at least 2.5.

	2010	2009
Balance brought forward	10,250	10,811
Discount allocation	5	15
Translation differences	-1,326	-576
Balance carried forward	8,929	10,250

The Interest Coverage Trigger Ratio key ratio is calculated as follows:

53		2010	2009
67	Funds from operations (FFO)	40,108	36,700
	Interest paid	4,866	7,404
11 66	FFO plus interest paid (a)	44,974	44,104
8 26	Interest expenses (b)	6,447	7,464
53 64	Interest Coverage Trigger Ratio (a/b)	6.98	5.91

## Note 38 Other interest-bearing liabilities

		Non-current portion, maturity 1–5 years		Non-current portion, maturity >5 years		Total non-current portion		Current portion		Total	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	
Bond issues	33,696	46,115	57,008	62,040	90,704	108,155	8,688	5,843	99,392	113,998	
Commercial papers	-	-	-	-	-	-	4,495	-	4,495	-	
Liabilities to credit institutions	4,040	6,096	770	813	4,810	6,909	1,341	1,179	6,151	8,088	
Liabilities pertaining to acquisitions of subsidiaries <sup>1</sup>	30,119	27,202	-	22,245	30,119	49,447	13,319	-	43,438	49,447	
Liabilities to minority owners	150	150	8,803	7,447	8,953	7,597	374	378	9,327	7,975	
Liabilities to associated companies	9,228	1,206	-	-	9,228	1,206	1,265	15,505	10,493	16,711	
Other liabilities	704	998	81	116	785	1,114	5,267	5,911	6,052	7,025	
Total	77,937	81,767	66,662	92,661	144,599	174,428	34,749	28,816	179,348	203,244	
Undiscounted future cash flows including interest for the interest-bearing liabilities listed above including	107.015		00 700		000.045		41.000		0.44,000.4		
Capital Securities <sup>2</sup> according to Note 37 amount to:	107,315		92,730		200,045		41,289		241,334		

 The liability pertaining to the acquisition of the remaining 51% of the shares in N.V. Nuon Energy, SEK 43,324 million, shall according to agreement be paid in three tranches: in July 2011, 2013 and 2015.

2) Floating interest cash flows with future fixing dates are estimated using the forward interest rates expected by the market at year end for each business- and interest fixing date. Any future cash flows in foreign currency is translated to SEK using the balance sheet date rate at year end.

# Note 39 Pension provisions

#### General

Vattenfall's pension obligations in the Group's Swedish, German and Dutch companies are predominantly defined benefit pension obligations. The concerned pension plans are primarily retirement pensions, disability pensions and family pensions. The assets in these funds (the plan assets) are reported at fair value. There are also pension plans in these and other countries that are defined contribution plans.

#### Swedish pension plans

The Swedish pension plans supplement the Swedish social insurance system and are the result of agreements between employer and employee organisations. Almost all of Vattenfall's employees in Sweden are covered by a pension plan that is primarily a defined benefit plan, known as ITP Vattenfall. This pension plan guarantees employees a pension based on a percentage of their salary. These benefits are chiefly secured in a pension trust or through provisions in the balance sheet.

Certain of Vattenfall's obligations 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 98 million (2009: SEK 90 million). Alecta's surplus can be distributed among the policyholders and/or the insureds. At the end of 2010, Alecta's surplus in the form of its so-called collective funding amounted to 143% (2009: 141%). Collective funding consists of the fair value of Alecta's assets as a percentage of the insurance obligations calculated in accordance with Alecta's actuarial calculation assumptions.

#### German pension plans

The pension plans in Germany are based on collective agreements in line with market terms and conditions. Substantial defined benefit plans exist in Germany.

Two pension plans exist, both secured through Pensionskasse der Bewag, a mutual insurance company. Obligations are secured through funds from Vattenfall and its employees. One plan has been classified as a defined contribution plan and is reported as such since the benefit is based on paid–in contributions and Pensionskasse der Bewag's financial position. For employees who began their employment before 1 January 1984, there is a supplementary agreement providing employees working until retirement age with a pension equal to up to 80% of the salary on which the pension is based. Half of the statutory pension and the entire benefit from Pensionskasse der Bewag, including profits, are credited to the guaranteed amount. Vattenfall's obligations encompass the entire pension obligation. The plan assets attributable to personnel employed since before 1 January 1984 are reported as plan assets at fair value.

In addition Vattenfall has pension obligations for employees in Hamburg that mainly comprise 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.

#### Dutch pension plans

Nuon has a number of defined benefit plans and defined contribution plans for which premiums are paid to pension funds or insurance companies. The most significant pension plans have been transferred to the ABP pension fund and the 'Metaal en Techniek' pension fund. These plans can be characterised as multi-employer plans.

The pension plans offered by these funds are defined benefit plans. However, as Nuon does not have access to the required information and Nuon's participation in the multi-employer plans exposes Nuon to actuarial risks that pertain to present and former employees of other entities, both pension plans are recognised as defined contribution plans. The pension premiums paid during the financial year are accounted for as pension costs in the financial statements. If there is a contractual agreement with a multi-employer plan, determining how a surplus is distributed to the participants or a deficit is to be financed, and the plan is accounted for as a defined contribution plan, a receivable or liability following from the agreement should be recognised in the balance sheet. The resulting gains or losses are to be recognised in the income statement.

The pensions of the majority of Nuon's workforce are transferred to the ABP pension fund and the 'Metaal en Techniek' pension fund. These plans do not contain the aforementioned contractual agreements. As a result, no receivable or liability has been recognised in the balance sheet.

#### Defined benefit obligations

	2010	2009
Present value of unfunded obligations	19,355	19,560
Present value of fully or partly funded		
obligations	17,346	19,057
Present value of obligations	36,701	38,617
Fair value of plan assets	16,709	17,420
Present value of net obligations	19,992	21,197
Unrecognised actuarial gains(+)/		
losses(-) of the obligations	-2,374	-674
Unrecognised actuarial gains(+)/		
losses(-) of plan assets	519	167
Pension provisions	18,137	20,690

#### Changes in obligations

	2010	2009
Balance brought forward	38,617	39,275
Acquired companies	-	19
Divested companies	-88	-37
Benefits paid by the plan	-2,104	-2,185
Service costs	622	642
Actuarial gains(-) or losses(+)	1,910	602
Current interest expense	1,888	2,019
Translation differences	-4,144	-1,718
Balance carried forward	36,701	38,617

#### Changes in plan assets

	2010	2009
Balance brought forward	17,420	17,436
Benefits paid by the plan	-522	-1,066
Expected return on plan assets	750	722
Difference between expected and		
actual return		
(actuarial gain(+) or loss(-))	519	953
Translation differences	-1,458	-625
Balance carried forward	16,709	17,420

#### Plan assets consist of the following

	2010	2009
Equity securities	5,117	4,555
Debt instruments	9,149	10,420
Property	639	898
Other	1,804	1,547
Total	16,709	17,420

Total

2009

42.510

14.463

3.767

7,407

2,263

70,410

2010

45.428

12.760

4.239

5,195

2,063

69.685

#### Historical information

	2010	2009	2008	2007	2006
Present value of obligations Fair value of	36,701	38,617	39,275	33,757	35,647
plan assets	16,709	17,420	17,436	16,684	15,977
Present value of net obligations	19,992	21,197	21,839	17,073	19,670

Payments for contributions to defined benefit plans during 2011 are estimated at SEK 1,608 million.

#### Pension costs

	2010	2009
Defined benefit plans:		
Current service cost	528	521
Interest expense	1,888	2,019
Expected return on plan assets	-751	-722
Past service cost	88	113
Other	79	129
Total cost for defined benefit plans	1,832	2,060
Cost for defined contribution plans	644	584
Total pension costs	2,476	2,644

Pension costs are reported in the

following lines in the income statement:

	2010	2009
Cost of products sold	1,145	1,201
Selling expenses	54	45
Administrative expenses	139	101
Financial expenses	1,138	1,297
Total pension costs	2,476	2,644

In calculating pension obligations, the following actuarial assumptions have been made (%):

	Sweden		Germany		I S
	2010	2009	2010	2009	-
Discount rate	4.5	4.0	5.0	5.75	
Expected return on plan					
assets	5.25	5.25	4.0-5.0	4.25-5.0	
Future annual salary					
increases	3.5	3.5	2.5	2.5	
Future annual pension					
increases	2.0	2.0	1.0-2.6	1.0-2.6	

# Note 40 Other interest-bearing provisions

	Γ
Provisions for future expenses of nuclear operations	Γ
Provisions for future expenses of mining, gas and wind	
operations and other environmental measures/undertakings	
Personnel-related provisions for non-pension purposes	
Provisions for tax and legal disputes	
Other provisions	
Total	

In Sweden a discount rate of 4,25% (2009: 4.5%) has been used for all the below specified provisions.

In Germany a discount rate of 4,75% (2009: 5.25%) has been 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, a discount rate of 4,5% (2009: 5.0%) has been used.

See also Note 4 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 assumptions indicate that all provisions will result in disbursements later than 2026.

Current plans for the decommissioning of the German nuclear power operations entail that approximately 91% of the provisions will result in cash flows after 2012. For 2011, disbursements are estimated at about 4% of the provisions. The corresponding figure for 2012 is 5%. Provisions for future expenses of nuclear operations (changes in 2010)

Non-current portion

2009

41.992

12.954

2.748

5,815

2,092

65.601

2010

44,944

11.384

2.532

1,711

1,923

62,494

	Sweden	Germany	Total
Balance brought forward	29,323	13,187	42,510
Provisions for the period	67	-	67
Discounting effects	1,267	639	1,906
Revaluations versus			
non-current assets	4,717	-621	4,096
Provisions used	-1,029	-93	-1,122
Provisions reversed	-	-332	-332
Translation differences	-	-1,697	-1,697
Balance carried forward	34,345 <sup>1</sup>	11,083 <sup>2</sup>	45,428

Current portion

2009

518

1.509

1.019

1,592

4.809

171

2010

484

1.376

1.707

3,484

140

7.191

 Of which approximately 27% (2009: 26%) pertains to the dismantling, etc. of nuclear power plants and approximately 73% (2009: 74%) to the handling of spent radioactive fuel.

 Of which approximately 49% (2009: 57%) pertains to the dismantling, etc. of nuclear power plants and approximately 51% (2009: 43%) to the handling of spent radioactive fuel.

Provisions for future expenses of mining, gas and wind operations and other environmental measures/undertakings: Provisions are made to restore sites and for other undertakings associated with the Group's permits to conduct lignite mining in Germany, and in the Netherlands for the dismantling and removal of assets and restoration of sites where the Group conducts gas operations. Provisions are also made for restoration of sites where the Group conducts wind operations and for environmental measures/undertakings within other activities carried out by the Group.

According to current estimations, approximately 74% of the provisions will result in cash outflows later than 2013. For 2011, disbursements corresponding to 11% of the provisions are estimated, while disbursements for the years 2012 and 2013 are estimated at 9% and 6% of the provisions, respectively.

Continued on page 114

#### Notes to the consolidated accounts

#### Note 40 continued

#### Provisions for mining operations, etc. (changes in 2010)

r totisions for mining operations, etc. (onanges in 2010)		110110101101
Balance brought forward	14,463	Balance b
Provisions for the period	629	Provision
Discounting effects	551	Discounti
Revaluations versus non-current assets	-66	Revaluati
Provisions used	-561	Provision
Provisions reversed	-331	Provision
Divested companies	-31	Divested
Translation differences	-1,894	Translatio
Balance carried forward	12,760	Balance o

#### Personnel-related provisions for non-pension purposes:

Provisions are made for future costs pertaining to redundancy in the form of severance pay and other costs for giving notice to personnel.

Approximately 29% of the provisions that have been made are estimated to result in disbursements in 2011, while approximately 38% are estimated to be disbursed from 2012 to 2014. The remaining 33% is estimated to be relatively evenly distributed over the years 2015–2041.

Personnel-related provisions for non-pension purpo (changes in 2010)	oses
Balance brought forward	3,767
Provisions for the period	2,399
Discounting effects	245
Revaluations	-237
Provisions used	-1,226
Provisions reversed	-139
Divested companies	-43
Translation differences	-527
Balance carried forward	4,239

#### 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 78% of the provisions for tax and legal disputes are expected to result in disbursements in 2011 and 2012. The remaining provisions are estimated to result in cash flows during the years 2013–2014 (18%), and 4% thereafter.

Provisions for tax and legal disputes (changes in 2010)	
Balance brought forward	7,407
Provisions for the period	994
Discounting effects	258
Revaluations	25
Provisions used	-798
Provisions reversed	-1,097
Divested companies	-664
Translation differences	-930
Balance carried forward	5,195
	Balance brought forward Provisions for the period Discounting effects Revaluations Provisions used Provisions reversed Divested companies Translation differences

#### Other provisions:

Other provisions include, among others, provisions for losses on contracts, restructuring and guarantee commitments.

Approximately 63% of these provisions are estimated to result in disbursements in 2011 to 2015, while the remaining approximately 34% are estimated to result in disbursements during the years 2016–2031, and 3% thereafter.

Balance brought forward	2,262
Provisions for the period	330
Discounting effects	140
Revaluations	371
Provisions used	-246
Provisions reversed	-583
Divested companies	-26
Translation differences	-185
Balance carried forward	2,063

# Note 41 Other noninterest-bearing liabilities (non-current)

Of the total liabilities of SEK 8,409 million (2009: SEK 7,480 million), SEK 5,614 million (2009: SEK 3,694 million) falls due after more than five years. Of the total liabilities SEK 662 million (2009: SEK 721 million) refer to accrued expenses, SEK 5,032 million (2009: SEK 6,431 million) to deferred income and SEK 2,715 million (2009: SEK 328 million) to other liabilities.

## Note 42 Trade payables and other liabilities

	2010	2009
Accounts payable-trade	24,580	33,913
Liabilities to associated companies	647	1,273
Other liabilities	7,957	6,920
Total	33,184	42,106

# Note 43 Accrued expenses and deferred income

	2010	2009
Accrued personnel-related costs	3,712	5,550
Accrued expenses, emission allowances	5,452	6,144
Accrued expenses, connection fees	215	263
Accrued nuclear power-related		
fees and taxes	83	46
Accrued interest expense	4,207	4,597
Other accrued expenses	7,627	6,593
Deferred income and accrued		
expenses, electricity	3,091	6,356
Other deferred income	417	1,088
Total	24,804	30,637

# Note 44 Financial instruments by category and related effects on income

Financial instruments by category: Carrying amount and fair value

		2010		2009
	Carrying amount	Fair value	Carrying amount	Fair value
Financial assets at fair value through profit or loss				
Derivatives with positive fair values for financial assets held for trading	21,101	21,101	27,061	27,061
Short-term investments	30,602	30,602	29,619	29,619
Cash equivalents (Note 35)	4,940	4,940	3,428	3,428
Total	56,643	56,643	60,108	60,108

	Carrying	Fair	Carrying	Fair	three months (e
	amount	value	amount	value	and other receiv
Derivatives for hedging purpose (with positive fair values) for:					the fair value is
Fair value hedges	4,135	4,135	4,706	4,706	Financial inst
Cash flow hedges	4,084	4,084	6,515	6,515	at fair value are
Hedges of net investments in foreign operations	18	18	888	888	hierarcy (levels)
Total	8,237	8,237	12,109	12,109	– Level 1: Quot
					tical assets o
Loans and receivables					<ul> <li>Level 2: Input</li> </ul>
Share in the Swedish Nuclear Waste Fund	26,791	27,321	26,027	26,885	that are obse
Other non-current receivables	4,769	4,770	4,132	4,129	(that is, as pri
Trade receivables and other receivables	36,380	36,380	42,152	42,127	<ul> <li>Level 3: Input</li> </ul>
Advance payments to suppliers	3,392	3,392	-	-	observable m
Short-term investments	676	676	16,766	16,766	
Cash and bank balances (Note 35)	7,655	7,655	7,127	7,127	Financial assets
Total	79,663	80,194	96,204	97,034	value in the bala
Available-for-sale financial assets					Assets
Other shares and participations carried at fair value	4,602	4,602	4,602	4,602	Derivatives with
Other shares and participations carried at cost	352	369	405	405	fair values
Total	4,954	4,971	5,007	5,007	Short-term inve
					and cash equiva
Financial liabilities at fair value through profit or loss					Other shares ar
Derivatives with negative fair values for financial					participations
liabilities held for trading	19,619	19,619	28,409	28,409	Total assets
Total	19,619	19,619	28,409	28,409	
					Liabilities
Derivatives for hedging purpose (with negative fair values) for:					Derivatives with
Fair value hedges	645	645	1,639	1,639	fair values
Cash flow hedges	4,952	4,952	4,644	4,644	Total liabilities
Hedges of net investments in foreign operations	-	-	2,110	2,110	
Total	5,597	5,597	8,393	8,393	Financial assets value in the bala
Other financial liabilities					value in the ball
Capital Securities	8,929	10,113	10,250	11,586	Assets
Other non-current interest-bearing liabilities	144,599	166,964	174,428	188,398	Derivatives with
Other non-current noninterest-bearing liabilities	8,409	8,409	7,480	7,480	fair values
Current interest-bearing liabilities	34,749	35,020	28,816	30,038	Short-term inve
Trade payables and other liabilities	33,184	33,184	42,106	42,106	and cash equiva
Advance payments from customers	1,606	1,606	-	-	Other shares ar
Total	231,476	255,296	263,080	279,608	participations
	,,,,,	100,100	200,000	2.0,000	T-+-!

2010

2009

For assets and liabilities with a remaining maturity less than three months (e.g. Cash and bank balances, Trade receivables and other receivables and Trade payables and other payables) the fair value is considered to be equal to the carrying amount.

Financial instruments that in the balance sheet are measured at fair value are below described according to the fair value hierarcy (levels) which in IFRS 7 is defined as:

 Level 1: Quoted prices (unadjusted) in active markets for identical assets or liabilities.

 Level 2: Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices).

- Level 3: Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs).

# Financial assets and liabilities that are measured at fair value in the balance sheet at 31 December 2010

	Level 1	Level 2	Level 3	Total
Assets				
Derivatives with positive				
fair values	12,170	14,651	2,517	29,338
Short-term investments				
and cash equivalents	29,526	6,016	-	35,542
Other shares and				
participations	4,602	-	-	4,602
Total assets	46,298	20,667	2,517	69,482
Liabilities				
Derivatives with negative				
fair values	13,960	8,910	2,346	25,216
Total liabilities	13,960	8,910	2,346	25,216
Financial assets and liabili	ties that a	re measure	ed at fair	
value in the balance sheet				
	Level 1	Level 2	Level 3	Total
Assets				
Derivatives with positive				
fair values	27,216	9,425	2,529	39,170
Short-term investments				
and cash equivalents Other shares and	28,973	4,074	-	33,047

L :- L ::: A :				
Liabilities				
Derivatives with negative				
fair values	24,464	9,675	2,663	36,802
Total liabilities	24,464	9,675	2,663	36,802

4,602

60,791 13,499

Continued on page 116

Total assets

4,602

2,529 76,819

#### Note 44 continued

#### Changes in level 3 financial instruments

Financial instruments at fair value through profit or loss

	2010	2009
Balance brought forward	-134	_
Acquired companies	-	1,163
Gains and losses recognised		
in profit or loss	306	-1,290
Translation differences	-1	-7
Balance carried forward	171	-134
Total gains and losses for the period		
included in profit or loss for assets and		
liabilities held at 31 December	131	-6

# Sensitivity analysis for Level 3 contracts TGSA:

A TGSA (Troll<sup>1</sup> Gas Sales Agreement) is a large gas supply agreement (coal-indexed) that extends further ahead in time than liquid trading in the gas market. Valuation of the agreement is against the market price, as long as a market price can be observed. For deliveries beyond the market horizon, longterm price forecasts (modelled prices) are used for the relevant commodities. TGSAs are hedged with OTC forward trades of underlying products. These trades are also marked against the same market and modelled prices. The long-term price forecasts are benchmarked against reliable financial information obtained from the company Markit; this information is well-known and is used by many energy companies, which entails a fair valuation of the portion of the TGSA that cannot be valued against market prices.

#### CDM:

Clean Development Mechanism (CDM) is a Kvoto Protocol initiative under which projects set up in developing countries to reduce atmospheric carbon generate tradable carbon credits called CERs (Certified Emissions Reductions). CERs can be used by industrialised nations to offset carbon emissions at home and meet their Kyoto reduction targets. Valuation of CERs is derived from so-called Risk Adjustment Factors (RAFs). These factors are calculated using the Carbon Valuation Tool developed by Point Carbon to quantify the risk and calculate the fair value of CDM projects or contracts. The tool is based on Point Carbon's valuation methodology, which was developed by several experienced market players. The valuation methodology is strictly empirical, and all risk parameters are extracted from Point Carbon's proprietary databases of CDM project data, which entails a correct valuation of the contracts even where market prices are not listed.

1) Troll is a gas field in the North Sea west of Norway.

#### Financial instruments: Effects on income by category

Net gains(+)/losses(-) and interest income and expenses for financial instruments recognised in the income statement

2009 st Interest
st Interest
ne expenses
55 1,560
1 -
8,786
6 -7,226
75 ,54 , <b>29</b>

-6 1) In net gains/losses exchange rate gains and losses are included.

## Note 45 Specifications of the cash flow statement Other adjustment items

	2010	2000
	2010	2009
Undistributed results from participation		
in associated companies	277	-395
Unrealised foreign exchange gains	-3,279	-5,173
Unrealised foreign exchange losses	-41	36
Unrealised changes in values related		
to derivatives	-2,056	5,331
Changes in fair values for inventories	-255	-143
Capital gains	-200	-967
Capital losses	445	864
Changes in interest receivables	-424	-414
Changes in interest liabilities	1,481	1,783
Changes in the Swedish Nuclear Waste		
Fund	-764	-776
Changes in provisions	1,569	986
Revenue recognition of negative goodwill	-20	-1,266
Total	-3,267	-134

Interest paid totalled SEK 4,866 million (2009: SEK 7,404 million) and interest received totalled SEK 912 million (2009: SEK 1,103 million). Dividends received totalled SEK 760 million (2009: SEK 987 million).

#### Other investments in non-current assets

	0.01.0	
	2010	2009
Investments in intangible assets:		
non-current, including advance payments	-681	-637
Investments in property, plant and		
equipment, including advance payments	-39,991	-45,787
Investments in investment property,		
including advance payments	-37	-4
Total	-40,709	-46,428

#### Divestments 2010 09 2009 Divestments of shares and participations 5,200 4.414 95 Divestments of intangible assets: 73 non-current 50 34 36 Divestments of property, plant and 1,947 1,094 equipment 31 Total 7.197 5,542 13

## Note 46 Specifications of equity

#### <sup>14</sup> Share capital:

As of 31 December 2010 the registered share capital comprised 131,700,000 shares with a share quota value of SEK 50.

#### 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 changes in values of commodity 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:

		2010		2009
	Cash flow	Income statement	Cash flow	Income statement
Within 1 year	-1,039	-1,132	700	-281
Between 1–5 years	-731	-440	375	556
More than 5 years	37	37	-285	-285
	-1,733	-1,535	790	-10
No expected effect	201	285	-77	-135
Total	-1,532	-1,250	713	-145

Amounts that were removed from the reserve for cash flow hedges are included in the following line items in the income statement:

	2010	2009
	2010	2009
Net sales	1,791	-7,643
Cost of products sold	-895	-595
Other operating income	37	34
Other operating expenses	-243	5
Financial expenses	-6	-39
Total	684	-8,238

Amounts that were removed from the reserve for cash flow hedges are included in the following line items in the balance sheet:

	2010	2009
Property, plant and equipment	449	-113
Inventories	-203	-1,396
Total	246	-1,509

#### 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 47 Pledged assets

	2010	2009
For own liabilities and provisions		
Liabilities to credit institutions:		
Real estate mortgages as security		
for loans	604	699
Blocked bank funds as security		
for redemption of minority shares	30	51
Other	-	2
Total	634	752

Real estate mortgages as security for loans mainly pertain to a loan of DKK 500 million from Realkredit Danmark A/S to Vattenfall A/S.

## Note 48 Contingent liabilities

	2010	2009
Guarantees	643	3,147
Other contingent liabilities	3,899	3,219
Total	4,542	6,366

In certain rivers, joint regulation facilities exist for several hydro power plants. The owners of the power plants have payment obligations for their share of these regulation costs. Vattenfall has obligations to compensate certain owners of water rights, in rivers where hydro power stations are built, through the delivery of power. In 2010 such compensation deliveries amounted to 0.78 TWh (2009: 0.94 TWh), for a value of approximately SEK 443 million (2009: SEK 384 million).

Under Swedish law, Vattenfall has strict and 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 a maximum of SEK 9,000 million in benefits for these types of claims.

In its German operations, Vattenfall has conducted a number of leasing transactions involving power plants. These agreements took effect in 2001. The basis for the transactions is the right of use of power plants leased to US counterparties as part of socalled 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. At the inception of the leases, deposits were made of the present value of future lease payments, including the option amount, in financial institutions with high credit ratings. Payment of the amounts under the lease contracts is made from these deposits. In the event that the lessees or the underlying customers fail to meet their obligations under the leases, this would give rise to termination costs for Vattenfall. On the balance sheet date, these obligations amounted to a maximum of SEK 367 million (2009: SEK 476 million), which is included in Other contingent liabilities above.

In its Swedish operations, Vattenfall conducted a number of leasing transactions involving power plants in 2003 and 2005. The transactions are based on sale & leaseback agreements for each power plant, which were sold to French counterparties to be leased back for 15 years. Once the lease periods expire, Vattenfall has the right to purchase the plants through call options. The present value of the future lease payments, including the option amount, has been deposited with financial institutions with high credit ratings for the disbursement of the lease payments in accordance with the leases. In the event Vattenfall should wish to prematurely redeem the lease

agreements, this would give rise to costs for Vattenfall. On the balance sheet date, these costs amounted to a maximum of SEK 57 million (2009: SEK 65 million). This amount is not included in the reported Other contingent liabilities above.

In Germany, nuclear power operators have strict and unlimited liability to third parties. By law, nuclear power plants are required to have insurance or other financial guarantees for amounts up to EUR 2,500 million. Claims of up to EUR 256 million are covered by the German Mutual Atomic Energy Reinsurance Pool. The nuclear power plants and their German parent companies (in Vattenfall's case, Vattenfall Europe AG) are liable for amounts in excess of this, in proportion to the ownership interests the respective parent companies have in the nuclear power plants. It is not until these resources are exhausted that a joint liability insurance agreement (Solidarvereinbarung) takes force between the owners of the German nuclear power plants (Vattenfall Europe, E.ON, RWE and EnBW), for amounts up to EUR 2,500 million. Since the liability is unlimited, the nuclear power plants and their German parent companies are ultimately liable for losses that exceed this amount. See also Note 34 to the Parent Company accounts on contingent liabilities.

Atomic liability in Sweden is strict and limited to 300 million Special Drawing Rights (SDRs), corresponding to approximately SEK 3,143 million, which means that owners of nuclear power plants are only liable for damage to the surrounding environment up to this amount. The obligatory atomic liability insurance for this amount is issued by the Nordic atomic insurance pool and by the mutual company ELINI (European Liability Insurance for the Nuclear Industry).

According to the Swedish Act (2006:647) on the Financing of Future Expenses for Nuclear Waste Management, Sweden's nuclear power companies are required to guarantee to the Swedish state (the Swedish Nuclear Waste Fund) that sufficient funds exist to cover the future costs of nuclear waste management. 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 8,698 million (2009: SEK 17,113 million). Two types of guarantees have been issued. The first guarantee is intended to cover the requisite need for fees that has been decided on but not yet been paid in during the so-called earnings period (25 years of operation), so-called Financing Security, amounting to SEK 3,589 million. The second guarantee pertains to future cost increases stemming from unforeseen events (so-called Complementary Security), amounting to SEK 5,109 million. See also Note 28 to the consolidated accounts on the Share in the Swedish Nuclear Waste Fund and Note 40 on Provisions.

In 2009 Vattenfall AB, together with its subsidiary the Swedish Nuclear Fuel and Waste Management Company (SKB) and the other part-owners, signed a long-term co-operation agreement with the Östhammar and Oskarshamn municipalities. The agreement covers the period 2010–2025 and regulates development efforts in association with the implementation of the Swedish nuclear waste programme. Through development initiatives in areas such as train-

#### Note 48 continued

ing, enterprise and infrastructure, over time the parties will generate value-added worth SEK 1,500 million to SEK 2,000 million. The parties will finance the development efforts in relation to their ownership interests. The Vattenfall Group's ownership interest is 56%. Implementation of the efforts will be carried out across two periods: a period before all necessary permits have been received (Period 1), and a period during implementation and operation of the facilities (Period 2). Vattenfall has reported SEK 159 million (2009: SEK 178 million) as a provision for its share of Period 1 activities.

In the Group's operations, it occurs that certain land areas are used without leases having been signed with the landowners or that the landowners are not known.

In September 2010 the German government reached an agreement with Germany's nuclear power operators on lifetime extensions of existing nuclear power plants. The agreement carries a condition entailing an obligation for the nuclear power operators, starting in 2017, to pay contributions to an investment fund for renewable energy projects. For the years 2011–2016, payments are to be made in advance to the fund. These payments will then be offset against actual payments that will be payable from 2017 forward. Vattenfall's advance payments during the years 2011–2016 will amount to a maximum of EUR 97.5 million.

As part of the Group's continuing business activities, the Group is subject to legal processes. In addition, disputes arise in the Group's operations that do not lead to legal processes. Vattenfall's management assesses these legal processes and disputes on a regular basis and makes provisions in cases where they believe an obligation exists and this can be judged with a reasonable degree of certainty. For legal processes or disputes where at present it cannot be determined whether an obligation exists or where for other reasons it is not possible to calculate the amount of a possible provision with a reasonable degree of certainty, management makes the overall judgement that there is no risk for material impact on the Group's result of operations or position.

As part of the Group's business activities, in addition to the contingent liabilities stated here, guarantees are made for the fulfilment of various contractual obligations.

# Note 49 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 through July 2020.

# Note 50 Number of employees and personnel costs

			2010			2009
Number of employees at 31 December by country	Men	Women	Total	Men	Women	Tota
Sweden	6,924	2,445	9,369	7,094	2,477	9,571
Denmark	577	113	690	609	118	727
Finland	240	203	443	285	217	502
Germany	15,660	5,181	20,841	16,500	5,576	22,076
Poland	2,200	650	2,850	2,215	678	2,893
Netherlands	4,473	1,617	6,090	4,582	1,688	6,270
UK	49	28	77	23	16	39
France	2	1	3	-	-	-
Total	30,125	10,238	40,363	31,308	10,770	42,078
			2010			2009
Average number employees by country	Men	Women	Total	Men	Women	Tota
Sweden	6,856	2,266	9,122	6,882	2,270	9,152
Denmark	583	111	694	613	115	728
Finland	238	179	417	269	184	453
Germany	14,986	4,612	19,598	15,554	4,839	20,393
Poland	2,197	638	2,835	2,163	648	2,81
Netherlands	4,342	1,386	5,728	2,302	710	3,012
UK	41	23	64	25	19	44
France	1	-	1		_	-
Total	29,244	9,215	38,459	27,808	8,785	36,593
Personnel costs			2010			2009
Salaries and other remuneration			20,158			19,381
Social security costs			5,862			5,449
(of which pension costs)			(1,726)			(1,347
Total			26,020			24,830
			2010			2009
	Senior	Other	<b>T</b>	Senior	Other	<b>T</b> .
Salaries and other compensation	managers	employees	Total	managers	employees	Tota
Sweden	80	4,420	4,500	62	4,333	4,395
Denmark	-	502	502	-	563	563
Finland	5	209	214	6	233	239
Germany	221	10,993	11,214	166	11,819	11,98
Poland	17	562	579	17	548	56
Netherlands	-	3,092	3,092	4	1,560	1,564
UK	-	56	56	-	49	49
France	-	1	1	-	31	31
Total	323	19,835	20,158	255	19,136	19,391

Social security costs	2010	2009
Sweden	2,241	1,671
Denmark	53	58
Finland	47	57
Germany	2,781	3,168
Poland	106	100
Netherlands	622	389
UK	10	5
Total	5,860	5,448

#### Benefits to board members and senior executives of Vattenfall AB

	Directors' fees and base salary 2010 including	Other remuneration and benefits	Pension and severance	Estimated variable compensation for 2010 to
SEK thousands	vacation pay	2010	costs 2010	be paid 2011
Board of Directors	500			
Lars Westerberg, Chairman of the Board (until 17 March 2011)	580	-	-	-
Cecilia Vieweg, Board member	280	-	-	-
Christer Bådholm, Board member	350	-	-	-
Eli Arnstad, Board member	280	-	-	-
Björn Savén, Board member	280	-	-	-
Lone Fønss Schrøder, Board member	350	-	-	-
Patrik Jönsson, Board member (from 29 April 2010)	-	-	-	-
Viktoria Aastrup, Board member (until 29 April 2010)	117	-	-	-
Johnny Bernhardsson, Board member	13	-	-	-
Carl-Gustaf Angelin, Board member	13	-	-	-
Ronny Ekwall, Board member (from 29 April 2010)	-	-	-	-
Lars Carlsson, Deputy board member	13	-	-	-
Lars-Göran Johansson, Deputy board member	13	-	-	-
Per-Ove Lööw, Deputy board member (from 29 April 2010)	-	-	-	_
	2,289	-	-	-
Executive Group Management				
Øystein Løseth, President and CEO (from 12 April 2010),	9,534	167	2,815	-
Øystein Løseth, Head of Business Group Benelux, Senior Executive Vice President (until 12 April 2010)	1,053	775	909	-
Dag Andresen, CFO	5,498	109	1,621	-
Tuomo Hatakka, Senior Executive Vice President Vattenfall AB. Head of Business Group Central Europe				
(until 31 December 2010). Senior Executive Vice President, Business Division Production (from 1 January 2011)	10,532	26	2,681	-
Torbjörn Wahlborg, Head of Business Group Nordic (until 31 December 2010). Senior Executive Vice President				
Vattenfall AB (from 3 February 2010). Senior Executive Vice President, Business Division Distribution and				
Sales (from 1 January 2011)	3,661	23	1,081	-
Harald von Heyden, responsible for Trading and Coordination of Generation Management (from 3 May 2010 until				
31 December 2010). Senior Vice President, Business Division Asset Optimisation and Trading (from 1 January 2011)	2,638	145	861	-
Huib Morelisse, Head of Business Group Benelux (from 1 July 2010 until 31 December 2010).				
Senior Vice President, Business Division Asset Development (from 1 January 2011)	3,589	7,408	593	-
Anders Dahl, Head of Business Group Pan Europe (from 15 March 2010 until 31 December 2010).				
Senior Vice President, Business Division Renewables (from 1 January 2011)	1,698	34	298	-
Lars Gejrot, Senior Vice President, Staff Function Human Resources (until 17 March 2011)	3,933	69	1,117	-
Andreas Regnell, Head of Group Staff Strategies (from 1 October 2010 until 31 December 2010). Senior Vice				
President, Staff Function Strategy and Environment (from 1 January 2011)	1,000	2	-	_

Continued on page 120

Note 50 continued

SEK thousands	Directors' fees and base salary 2010 including vacation pay	Other remuneration and benefits 2010	Pension and severance costs 2010	Estimated variable compensation for 2010 to be paid 2011
Elisabeth Ström, Head of Group Function Communications (until 31 December 2010). Senior Vice President,				
Staff Function External Relations & Communications (from 1 January 2011)	4,435	130	1,331	-
Lars G. Josefsson, President and CEO (until 12 April 2010). Employment ended 29 October 2010)	10,282	84	9,456	-
Helene Biström, Head of Business Group Pan Europe (until 31 August 2010)	3,758	305	6,913	-
Hans-Jürgen Meyer, Finance Director, Vattenfall Europe AG (until 31 March 2010)	957	2	22,593	-
Helmar Rendez, Head of Group Staff Strategies (until 30 April 2010). Head of Business Unit Distribution,				
Vattenfall Europe AG (from 1 May 2010)	4,192	122	628	-
Other senior executives				
Stefan Dohler, Head of Business Unit Distribution, Vattenfall Europe AG (until 30 April 2010), Finance Director,				
Vattenfall Europe AG (from 1 April 2010)	5,634	95	1,179	-
Werner Süss, Head of Business Unit Sales, Vattenfall Europe Sales GmbH	3,876	103	657	-
Hartmuth Zeiss, Head of Business Unit Mining & Generation, Vattenfall Europe Mining AG (from 1 July 2010)	2,632	94	308	-
Frank May, Head of Business Unit Heat, Vattenfall Europe Wärme AG (from 1 April 2010)	3,876	100	-	-
Klaus Pitschke, Head of Business Unit Heat, Vattenfall Europe Wärme AG (until 31 March 2010)	4,020	106	482	-
Reinhardt Hassa, Head of Business Unit Mining & Generation, Vattenfall Europe Mining AG (until 30 June 2010)	6,462	137	1,757	-
Total	95,549	10,036	57,280	_

#### Board of Directors

In 2010, Chairman of the Board Lars Westerberg was paid a fee of SEK 580 thousand (580 thousand).

Combined fees of SEK 1,709 thousand (2,294 thousand) were paid to the other directors, broken down as shown in the table above. Of the amount reported above, a fee of SEK 70 thousand (70 thousand) was paid to each of the five non-executive directors who served on the Board's Audit Committee for the full year, and a fee of SEK 0 thousand (13 thousand) was paid to the employee representative who served in this position in 2010. No fees were paid to the members of the Remuneration Committe. No fee was paid to the board member employed by the Swedish government offices. In accordance with an AGM resolution, effective from the Annual General Meeting held on 29 April 2010, the employee representatives on the Board do not receive any fee for their board work.

#### President and Chief Executive Officer

Øystein Løseth (born 1958) is employed as President and Chief Executive Officer of Vattenfall AB, since 12 April 2010. Prior to this, Mr Løseth was the Head of Vattenfall's Business Group Benelux and CEO of N.V. Nuon Energy.

In his employment as President and CEO of Vattenfall AB in 2010, Mr Løseth received a salary of SEK 9,534 thousand. In addition, he received a housing benefit worth SEK 76 thousand, plus cost-free travel home to Oslo for a value of SEK 90 thousand.

Mr Løseth has no variable salary component in his employment as President and CEO of Vattenfall AB.

Mr Løseth has a defined contribution pension solution. The

premium for 2010 amounted to SEK 2,815 thousand, which corresponds to 30% of his salary for 2010.

Øystein Løseth's term of employment is for a set period through 31 March 2015. Prior to that date, a mutual notice period of six months applies for both parties. In the event Vattenfall serves notice, Mr Løseth is entitled to a maximum of 18 months' severance pay, but not longer than up until 31 March 2015. The amount of the severance pay shall be calculated based on the fixed salary that applied at the time the notice was served. In the event Mr Løseth accepts new employment or earns income from other business activities, the severance pay shall be reduced by an amount corresponding to the new income or other benefit received during the period in question. Severance pay is to be paid out monthly.

For the time served as Head of N.V. Nuon Energy, 1 January 2010 through 11 April 2010, Mr Løseth received salary and other compensation totalling SEK 1,828 thousand, of which SEK 775 thousand consisted of variable salary paid in accordance with his employment contract with N.V. Nuon Energy.

#### Former President and CEO

Lars G. Josefsson (born 1950) served as President and Chief Executive Officer of Vattenfall AB until 12 April 2010. From 13 April 2010 until his day of retirement, 29 October 2010, Mr Josefsson was at the Board of Director's disposal. As for 2010, Mr Josefsson received salary and other compensation, including the value of a company car, amounting to a total of SEK 10,366 thousand (12,048 thousand). As of 2005, Mr Josefsson has received no variable salary component. In connection with the audit work for 2010, it was discovered that the agreement entered into on account of Mr Josefsson's departure as CEO, which had been signed by Mr Josefsson and the company's previous Head of Staff Function Human Resources, was in breach of the employment contract from 2005.

According to his employment contract, Mr Josefsson was entitled to severance pay of 24 months' salary if his employment was terminated by Vattenfall AB. There were, however, two independent restrictions. Severance pay could only be paid out up until Mr Josefsson's regular retirement date. Furthermore, any earned income thereafter was to be deducted from the severance pay. The agreement reflected neither of these restrictions.

The matter was prepared by the Remuneration Committe on 12 April 2010. It was noted in the minutes that Mr Josefsson, through an understanding with the Chairman of the Board, would receive "50% of the contractual severance pay as from the date of his departure as CEO". Apart from this, no further compensation was specified. On 25 May 2010 the Board of Directors resolved in accordance with the recommendation of the committee as regards Mr Josefsson's compensation. Mr Josefsson resigned as CEO on 12 April 2010. Since then, Vattenfall has paid out both salary and severance pay up until Mr Josefssons's regular retirement date on 29 October 2010, in accordance with the understanding signed by Mr Josefsson and the company's previous Head of Staff Function Human Resources.

Since the agreement with Mr Josefsson was entered into on false assumptions and entails a deviation from the Swedish Government's Guidelines (20 April 2009) for terms of employment for senior executives in state-owned companies (government's guidelines), the parties reached a new agreement in March 2011 that no severance pay shall be paid out, and the part of the severance pay that had already been paid out, SEK 5,975 thousand, has at the time of this annual report been repaid.

Since the commencement of his employment, Mr Josefsson has been covered by a defined benefit pension plan. As the pension cost for such defined benefit agreement increases considerably by age and salary increases, it was agreed with Mr Josefsson in 2008 that his pensionable salary should be locked at 2007 year's level and thereafter be indexed only according to the rate of inflation.

Based on Mr Josefsson's pensionable salary in 2010, SEK 8,800 thousand, the company is obligated to provide Mr Josefsson with a pension amounting to SEK 5,720 thousand per year up until 65 years of age. Any pension entitlement earned by Mr Josefsson from previous employment shall be deducted from the company's pension obligation. Thus, the company's actual obligation pertaining to this part of the pension amounts to SEK 5,066 thousand per year.

From 65 years of age and up until the time Mr Josefsson has attained 76 years of age, the company is obligated to provide Mr Josefsson with a pension amounting to SEK 2,962 thousand per year, to be scaled back on a yearly basis thereafter and, as from the age of 80, to amount to SEK 519 thousand per year. Any pension entitlement earned by Mr Josefsson from previous employment shall be deducted from the pension commitment. Thus, the company's actual pension obligation pertaining to this part of the pension amounts to SEK 2,627 thousand per year from 65 years of age and up until the time Mr Josefsson has attained 76 years of age. Thereafter it shall be scaled back on a yearly basis and, from the age of 80, amount to SEK 185 thousand per year.

The pension commitment as a whole has been secured through insurance equivalent to the pension commitment. In 2010 the company made payments amounting to SEK 9,040 thousand pertaining to the defined benefit pension commitment. In addition, in 2010 Mr Josefsson received an amount of SEK 417 thousand (500 thousand), which he was free to choose whether it would be applied toward a salary increase or pension contribution. The company's total occupational pension obligation to Mr Josefsson is SEK 61,707 thousand, including the value of the pension premiums (SEK 900 thousand) that he received instead of a salary adjustment in connection with his 2009 and 2010 salary reviews. As from the payments made in 2010, the pension commitment is fully funded and further costs will not arise.

#### Other members the Executive Group Management Salaries and other compensation

For other senior executives who have been members of the Executive Group Management – a total of 12 individuals (10) – the sum of salaries and other compensation for 2010, including the value of company cars, was SEK 54,266 thousand

(34,539 thousand). A breakdown is shown in the table on pages 119–120.

Other compensation paid to Huib Morelisse, totalling SEK 7,408 thousand, pertained to the following: compensation for the fact that Mr Morelisse was prevented from working in accordance with a non-compete clause with his former employer, SEK 2,144 thousand; and compensation for withheld remuneration from a long-term incentive programme from his former employer, SEK 5,264 million. Payment will be made in three parts: SEK 1,723 thousand in 2010, SEK 1,723 thousand in 2011, and SEK 1,818 thousand in 2012. The payments are conditional upon Mr Morelisse's continued employment with Vattenfall at the time of payment.

For other persons defined as senior executives by Vattenfall – a total of 6 individuals – the sum of salaries and other compensation for 2010, including the value of company cars, was SEK 27,135 thousand. A breakdown is shown in the table on pages 119–120.

#### Pension benefits

The costs for pension benefits in 2010 are shown in the table on page 120.

Dag Andresen, Lars Geirot, Harald von Hevden, Andreas Regnell, Anders Dahl, Elisabeth Ström, Helene Biström, Tuomo Hatakka and Hans-Jürgen Meyer have defined contribution pension solutions. Huib Morelisse is covered by the applicable Dutch collective bargaining agreement pension solution. Certain senior executives who are employed and active in Vattenfall's German subsidiaries have defined benefit pension solutions in accordance with German practice. This applies to Helmar Rendez, Hartmuth Zeiss, Werner Süss, Klaus Pitschke and Reinhardt Hassa, According to the government's guidelines for senior executives, defined benefit pension solutions shall follow the applicable collective pension plan, which must be interpreted as the pension plan under the applicable (Swedish) collective bargaining agreement. These conditions are, for obvious reasons, not fulfilled as regards these senior executives. In addition, of the senior executives of Vattenfall's German subsidiaries. Helmar Rendez. Hartmuth Zeiss and Reinhardt Hassa are entitled to early retirement pension benefits from the age of 59. According to the government's guidelines, the retirement age shall not be below 62 years of age. However, the above-mentioned senior executives have employment contracts for set periods of time and will not, with the exception of Reinhardt Hassa, reach the age of 59 during the remaining term of employment. Mr Hassa has already reached the age of 59 and could, according to his employment contract, request early retirement. However, Mr Hassa is relieved from his duties as from 1 July 2010 and for the remaining part of his term of employment, which runs until 31 December 2013. Helmar Rendez, Werner Süss and Hartmuth Zeiss are also entitled to early retirement in case of permanent incapacity to work, regardless of at what age such incapacity were to occur.

#### Terms of notice on the part of the company

According to the government's guidelines, the notice period for a senior executive in the event the company serves notice shall not exceed six (6) months. In addition, the government's guidelines allow, in cases where the company serves notice, payment of severance pay equivalent to a maximum of eighteen (18) months' salary. In the event the individual in question accepts new employment or receives income from business activities, the remuneration from the company serving notice shall be reduced by an amount corresponding to the new income during the time termination salary and severance pay are paid out.

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 earned during the period in question. As regards Huib Morelisse, severance pay equivalent to 12 months' fixed salary and 12 monthly pension premium payments will be paid out in a lump sum if termination is made by the company. No stipulations on deduction of income from new employment from remuneration from the company serving notice are included.

Tuomo Hatakka, Huib Morelisse and Harald von Heyden have employment contracts for set periods of time.

Vattenfall's German subsidiaries have a number of employment contracts with senior executives active in those companies, which are valid for fixed contract periods and which therefore do not contain stipulations on a notice period or severance pay and thus do not include any stipulations on deduction of income from new employment from remuneration from the company serving notice in connection with a termination.

Practice in Germany for these contracts has entailed a contract period of sixty (60) months, i.e., five years; however, the trend is moving increasingly toward shorter contract periods – often for thirty-six (36) months, i.e., three years. The contracts cannot – except for under exceptional circumstances – be cancelled prematurely and could therefore entail, with respect to the senior executives who have more than twenty-four (24) months remaining in their employment contracts, a cost for the companies that deviates from the government's guidelines in the event the companies would want to terminate the senior executives' employment before the end of the contract period.

This situation has already arisen with respect to the senior executives Hans-Jürgen Meyer, Klaus Pitschke and Reinhardt Hassa. Mr Meyer's employment has, after reaching an agreement on this matter, been terminated before the end of the contract period. In connection with this, the company has, in accordance with German rules and contracts, fulfilled the terms of the contract for the entire remaining contract period, 31 March 2010 through 28 February 2013. This has entailed that severance pay amounting to SEK 21,532 thousand, correspond-

Continued on page 122

#### Note 50 continued

ing to full compensation for approximately three (3) years of remaining employment, has been paid after the conclusion of Mr Mever's employment and that no deduction will be made from income earned from new employment with another employer. Effective 1 July 2010, Mr Hassa has been relieved from his work duties and is no longer serving; however, according to his employment contract, he is entitled to salary from the company amounting to SEK 6,462 thousand per year until his contract expires on 31 December 2013. In the event Mr Hassa were to receive income from new employment or similar remuneration exceeding SEK 718 thousand per year, the exceeding amount may be deducted from the compensation Mr Hassa receives from Vattenfall. Effective 1 April 2010, Mr Pitschke is relieved from his work duties and is no longer serving; however, accord ing to his employment contract, he is entitled to salary from the company amounting to EUR 420 thousand per year until his con tract expires on 31 March 2012. In the event Mr Pitschke were to receive income from new employment or similar remuneration exceeding EUR 50 thousand per year, the exceeding amount may be deducted from the compensation Mr Pitschke receives from Vattenfall.

If the companies should want to terminate the employment for certain other executives who are employed with fixed contract periods and who are senior executives, similar situations could arise. This pertains to Stefan Dohler (whose employment con tract expires on 31 March 2013), Frank May (whose employment contract expires on 30 September 2013), Helmar Rendez (whose employment contract expires on 30 April 2013), and Hartmuth Zeiss (whose employment contract expires on 31 December 2013).

The reason for the deviations is that the contracts between the German Group companies and the senior executives active in those companies have been drawn up in accordance with Ger man law and German practice, which entail that long fixed-term contracts are an important component in the security systems that make it possible for Vattenfall to attract and retain senior executives in Vattenfall's operations in Germany. In recent years Vattenfall has made an adjustment entailing that, as a rule, Vattenfall offers three-year assignments instead of five-year assignments as previously.

In the future, Vattenfall will continue this adaptation in order to find solutions that ensure adherence to the government's guidelines while still giving Vattenfall the opportunity to attract and retain senior executives in Germany.

#### Incentive programmes

The members of the Executive Group Management and other persons defined as senior executives do not receive any variable salary component.

#### Long-term target programme (LTI)

In connection with the adoption of the new compensation guide lines (see above), the Long-term target programme (LTI), which was introduced for the period 2008–2010, was concluded pre maturely for the members of the Executive Group Management and for the other persons defined as senior executives. No pay ments were made in 2010.

# Note 51 Gender distribution among senior executives

W	omen, %	I	Men, %		
2010	2009	2010	2009		
17	17	83	83		
18	22	82	78		
	2010 17	17 17	2010         2009         2010           17         17         83		

# Note 52 Leasing

#### Leasing expenses

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

	2010	2009
Machinery/equipment		
Cost	1,077	602
Accumulated depreciation according		
to plan	-544	-130
Residual value according to plan	533	472

Future payment commitments, as of 31 December 2010, for leasing contracts and rental contracts are broken down as follows:

	Finance leasing, nominal	Finane leasing, present value	Operating leasing
2011	98	93	1,005
2012	177	168	892
2013	45	40	774
2014	43	36	706
2015	42	33	686
2016 and beyond	261	189	1,117
Total	666	559	5,180

The current year's leasing expenses for Group assets amounted to SEK 660 million (2009: SEK 467 million).

#### 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 2010, cost of assets reported under Operating leases amounted to SEK 2,707 million (2009: SEK 1,529 million). Accumulated depreciation amounted to SEK 1,317 million (2009: SEK 762 million) and accumulated impairment losses amounted to SEK 30 million (2009: SEK 30 million).

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

leasing	leasing
_	399
-	294
-	247
-	217
-	165
-	139
-	1,461
	- - - - -

# <sub>9</sub> Note 53 Auditors' fees

		2010	2009
2	Annual audit assignment		
	Ernst & Young	39	44
<u>)</u> 2	PwC	23	24
2	Swedish National Audit Office	1	1
	Total	63	69
	Audit related mandates besides the		
	annual audit assignment		
σ	Ernst & Young	3	2
в	PwC	6	5
g	Total	9	7
2 4	Tax consultancy		
ŝ	Ernst & Young	2	3
3	PwC	3	2
7	Total	5	5
7			
-	Other mandates		
	Ernst & Young	9	28
	PwC	6	24
	Total	15	52

# Note 54 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 50 to the consolidated accounts, Number of employees and personnel costs.

Disclosures of transactions with major associated companies in 2010 and associated receivables and liabilities as per 31 December 2010 are described below.

#### V<sup>2</sup> Plug-In Hybrid Vehicle Partnership HB

The company's business is to develop and sell technology related to hybrid electrical power of automobiles. Vattenfall has an obligation to contribute an additional SEK 86 million to the company.

#### Ensted Havn I/S

This is a deep-sea harbour that Vattenfall uses as a coal depot. Vattenfall's sales revenue from the company amounted to SEK 11 million, while purchases from the company amounted to SEK 127 million. Trade receivables as per 31 December amounted to SEK 1 million.

#### Kernkraftwerk Brokdorf GmbH & Co. oHG

This is a nuclear power plant from which Vattenfall purchases electricity. Purchases amounted to SEK 691 million. Sales revenue from the company amounted to SEK 1 million. Vattenfall's interest expense to the company amounted to SEK 26 million. Trade liabilities and loan liabilities as per 31 December amounted to SEK 234 million and SEK 171 million, respectively.

#### Kernkraftwerk Krümmel GmbH & Co. oHG

This is a nuclear power plant from which Vattenfall purchases electricity. Purchases amounted to SEK 1,305 million. Sales revenue from the company amounted to SEK 492 million. Vattenfall's interest expense to the company amounted to SEK 98 million. Trade receivables amounted to SEK 8 million as per 31 December. Trade liabilities and loan liabilities as per 31 December amounted to SEK 145 million and SEK 9,588 million, respectively.

#### Kernkraftwerk Stade GmbH & Co. oHG

This is a nuclear power plant that is being decommissioned. Vattenfall's sales revenue from the company amounted to SEK 514 million. Vattenfall's interest expense to the company amounted to SEK 21 million. Loan liabilities as per 31 December amounted to SEK 728 million.

#### GASAG Berliner Gaswerke AG

GASAG Berliner Gaswerke sells, distributes and stores natural gas in the Berlin area. Vattenfall received SEK 124 million in sales revenue from the company, and purchases from the company totalled SEK 1,015 million. Trade receivables and trade liabilities amounted to SEK 4 million and SEK 1 million, respectively.

#### 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 1,422 million in sales revenue from the company, while purchases amounted to SEK 42 million. Trade receivables and liabilities as per 31 December amounted to SEK 102 million.

#### 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 991 million, while purchases from the company amounted to SEK 374 million. Operating receivables as per 31 December amounted to SEK 6 million.

#### DOTI Deutsche Offshore Testfeldt und Infrastructure GmbH KG

DOTI conducts planning work and operates an offshore wind power test facility. Sales revenue from the company amounted to SEK 2 million. Operating receivables as per 31 December amounted to SEK 2 million.

# Note 55 Events after the balance sheet date

#### Vattenfall signs new five-year revolving credit facility

On 20 January 2011 Vattenfall signed an agreement for a new fiveyear revolving credit facility for EUR 2.55 billion (approximately SEK 23 billion). The facility is intended to serve as a liquidity back-up.

#### Vattenfall sells stake in coal-fired power plant in Germany

On 1 February 2011 Vattenfall sold its 25% stake in the Rostock coal-fired power plant to RheinEnergie AG. The plant has installed capacity of 553 MW. A purchase price in a low three-figure millioneuro range was agreed, resulting that Vattenfall recognises a capital gain.

# Changes in the Board of Directors and Executive Group Management

Lars Westerberg decided, on 18 March 2011, after consultation with the Ministry of Finance, to leave his post as Chairman of the Board of Directors of Vattenfall AB. Björn Savén was appointed acting Chairman of the Board, as well as deputy Chairman of Vattenfall AB until the Annual General Meeting of Vattenfall on 27 april 2011. Lars Gejrot left on 18 March 2011 his position as Senior Vice President, Staff Function Human Resources and Member of the Executive Group Management (EGM).

# **Parent Company**

# Parent Company Income Statement

Amounts in SEK million, 1 January–31 December	Note	2010	2009 <sup>1</sup>
Net sales	4, 5	36,538	29,745
Cost of products sold	6	-19,190	-17,712
Gross profit		17,348	12,033
Selling expenses		-738	-797
Administrative expenses		-1,935	-1,163
Research and development costs		-438	-159
Other operating income	7	334	139
Other operating expenses	8	-31	-93
Operating profit	9, 10	14,540	9,960
Result from participations in Group companies	11	15,456	-1,532
Result from participations in associated companies	12	2	682
Result from other shares and participations	13	73	616
Other financial income	14	10,765	6,370
Other financial expenses	15	-7,061	-7,952
Profit before appropriations and tax		33,775	8,144
Appropriations	16	-3,602	-2,680
Profit before tax		30,173	5,464
		· ·	
Income tax expense	17	-4,244	-1,634
Profit for the year		25,929	3,830
-			

# Parent Company Balance Sheet

Amounts in SEK million	Note	31 Dec. 2010	31 Dec. 2009 <sup>1</sup>
Assets			
Non-current assets			
Intangible assets	18	166	145
Property, plant and equipment	19	22,138	21,144
Shares and participations	20	194,064	199,015
Deferred tax assets	17	417	1,123
Other non-current receivables	21	55,899	9,906
Total non-current assets		272,684	231,333
Current assets			
Inventories	22	268	361
Intangible assets: current	23	660	762
Current receivables	24	33,888	51,282
Short-term investments	25	26,874	-
Cash and cash equivalents	26	7,348	281
Total current assets		69,038	52,686
Total assets		341,722	284,019

1) The Parent Company's balance sheet per 31 December 2009 has been restated compared to previously published information. See Note 2, Accounting policies, to the Parent Company accounts.

# Parent Company Statement of Comprehensive Income

Amounts in SEK million, 1 January–31 December	2010	2009 <sup>1</sup>
Profit for the year	25,929	3,830
Total other comprehensive income	-	-
Total comprehensive for the year	25,929	3,830

1) The Parent Conpany's income statement for 2009 has been restated compared to previously published information. See Note 2, Accounting policies, to the Parent Company accounts.

# Parent Company Balance Sheet cont.

Amounts in SEK million	Note	31 Dec. 2010	31 Dec. 2009 <sup>1</sup>
Equity, provisions and liabilities			
Equity			
Restricted equity			
Share capital (131,700,000 shares with a			
share quota value of SEK 50)		6,585	6,585
Statutory reserve		1,286	1,286
Non-restricted equity			
Retained earnings		43,360	44,718
Profit for the year		25,929	3,830
Total equity		77,160	56,419
Untaxed reserves	16	13,819	10,175
Provisions	27	195	183
Non-current liabilities			
Capital Securities	28	8,929	-
Other interest-bearing liabilities	29	131,234	185,618
Other noninterest-bearing liabilities	30	4,341	3,138
Total non-current liabilities		144,504	188,756
Current liabilities			
Interest-bearing liabilities	29	79,641	1,458
Current tax liabilities	17	1,394	461
Other noninterest-bearing liabilities	31	25,009	26,567
Total current liabilities		106,044	28,486
Total equity, provisions and liabilities		341,722	284,019
Pledged assets	33	86	51
Contingent liabilities	34	42,388	250,397
Commitments under consortium agreements	35		

1) The Parent Company's balance sheet per 31 December 2009 has been restated compared to previously published information. See Note 2, Accounting policies, to the Parent Company accounts.

# Parent Company Statement of Changes in Equity

Amount in SEK million	Share capital	Statutory reserve	Non-restricted equity	Total
Balance brought forward 2009	6,585	1.286	48.141	56,012
Dividend paid to owners			-6,900	-6,900
Group contributions	-	-	4,718	4,718
Tax effect of Group contributions	-	-	-1,241	-1,241
Profit for the year <sup>1</sup>	-	-	3,830	3,830
Total other comprehensive income	-	-	-	-
Balance carried forward 2009	6,585	1,286	48,548	56,419
Dividend paid to owners	_	_	-5.240	-5.240
Group contributions	_	_	-2,539	-2,539
Tax effect of Group contributions	-	_	667	667
Result of the merger with Vattenfall				
Treasury AB	-	-	1,924	1,924
Profit for the year	-	-	25,929	25,929
Total other comprehensive income	-	-	-	-
Balance carried forward 2010	6,585	1,286	69,289	77,160
<ol> <li>Profit for the year has been adjusted according to the below. See Note 2 to the Parent Com- pany accounts.</li> </ol>				

Profit for the year 2009 according to pub- lished 2009 Annual Report	6,597
Hegding of net investments in	
foreign operations	-3,755
Tax attributable to hedging of net	
investments in foreign operations	988
Profit for the year 2009 as reported above	3,830

As of 31 December 2010 the registered share capital comprised 131,700,000 shares with a share quota value of SEK 50.

# Parent Company Cash Flow Statement

Amounts in SEK million, 1 January–31 December	2010	2009
Operating activities		
Funds from operations (FFO)		
Profit for the year	25,929	3,830
Adjustments for the effect of items not included in the cash flow:		
Income tax expense	4,244	1,634
Appropriations	3,602	2,680
Depreciation and amortisation	5,759	2,723
Unrealised exchange rate effects	-9,699	-6,130
Change in provisions	10	74
Tax paid	-2,387	-233
Cash flow from changes in operating assets and operating liabilities	-9,098	-8,539
Cash flow from operating activities	18,360	-3,961
Investing activities		
Investments in Group companies, associated companies and		
other shares and participations	-462	-58,873
Investments in property, plant and	402	00,070
equipment and intangible assets: non-current	-1,597	-2,005
Investment grants received	2,007	2,000
New share issue/shareholder contribution rendered	-195	-13
Divestments of property, plant and equipment and	100	10
intangible assets: non-current	_	33
Divestments of shares and participations	457	822
Cash and cash equivalents taken over by merger	3,891	_
Cash flow from investing activities	2,101	-60,028
Cash flow before financing activities	20,461	-63,989
Financing activities		
Changes in loans	-8,154	69,480
Group contributions received		1.315
Dividend paid to owners	-5,240	-6,900
Cash flow from financing activities	-13,394	63,895
ousi now nom manong additios	10,004	00,000
Cash flow for the year	7,067	-94
Cash and cash equivalents		
Cash and cash equivalents at the beginning of the year	281	375
Cash flow for the year	7,067	-94
Cash and cash equivalents at the end of the year	7,348	281
oush and oush equivalents at the end of the year	7,540	201

Interest paid totalled SEK 5,337 million (2009: SEK 7,952 million) and interest received totalled SEK 3,431 million (2009: SEK 1,944 million). Dividends received totalled SEK 20,284 million (2009: SEK 412 million).

# Notes to the Parent Company accounts

#### Content Note Page 1 127 Company information 2 Accounting policies 127 127 3 Exchange rates 4 Net sales 127 5 Intra-Group transactions 127 6 Cost of products sold 127 7 Other operating income 128 8 Other operating expenses 128 9 Depreciation and amortisation 128 10 Impairment losses 128 11 Result from participations in Group companies 128 Result from participations in associated companies 128 12 13 Result from other shares and participations 128 14 Other financial income 128 15 Other financial expenses 128 128 16 Appropriations and untaxed reserves 17 Income tax expense 128 Intangible assets: non-current 18 129 129 19 Property, plant and equipment 20 Shares and participations 130 21 Other non-current receivables 130 22 Inventories 130 23 Intangible assets: current 130 131 24 Current receivables 25 Short-term investments 131 131 26 Cash and cash equivalents 27 Provisions 131 28 Capital Securities 131 132 29 Other interest-bearing liabilities 30 Other noninterest-bearing liabilities (non-current) 132 132 31 Other noninterest-bearing liabilities (current) 32 Financial instruments: Carrying amount and fair value 132 133 33 Pledged assets 34 Contingent liabilities 133 35 Commitments under consortium agreements 134 134 36 Average number of employees and personnel costs 37 Sickness-related absence 134 38 Gender distribution among senior executives 134 39 Leasing 134 40 Auditors' fees 134 134 Related party disclosures 41 42 Events after the balance sheet date 134

# Note 1 Company information

Vattenfall AB's 2010 Annual Report was approved in accord ance with a decision by the Board of Directors on 29 March 2011. Vattenfall AB, the Parent Company of the Vattenfall Group, is a limited liability company with its registered office in Stockholm and with the address SE-162 87 Stockholm, Sweden. The balance sheet and income statement of the Parent Com pany disclosed in the Annual Report will be submitted at the Annual General Meeting (AGM) on 27 April 2011.

# Note 2 Accounting policies

#### General

The Parent Company Vattenfall AB's accounts are prepared in accordance with the Swedish Annual Accounts Act and recom mendation RFR 2 – Accounting for Legal Entities, issued by the Swedish Financial Reporting Board (RFR). RFR 2 entails that Vattenfall AB shall apply all standards and interpretations issued by IASB and IFRIC as endorsed by the European Commission for application within the EU. This should be done as far as this is pos sible within the framework of the Swedish Annual Accounts Act by taking into consideration the relationship between accounting and taxation.

Vattenfall AB has adopted the exemption rule regarding IAS 39 according to RFR 2, which entails that financial instruments are reported at cost. As a consequence, financial instruments are not disclosed by category according to the definition of IAS 39.

The accounting policies and methods of calculations are unchanged from those applied in the 2009 Annual Accounts.

The Parent Company has made a correction, pertaining to hedge accounting of net investments in foreign operations, of the income statement and the balance sheet disclosed in the published 2009 Annual Report. The income statement for 2009 and the balance sheet per 31 December 2009 have been restated accordingly.

On 1 May 2010 Vattenfall Treasury AB was merged with the Parent Company Vattenfall AB. Vattenfall Treasury AB is respon sible for co-ordinating borrowing, liquidity management and the management of associated risk exposure for the Vattenfall Group. This organisational change means that, from this date, Vattenfall Treasury AB's counterparties deal directly with the Parent Com pany Vattenfall AB, which previously guaranteed all of Vattenfall Treasury AB's business. In the accounts, assets and liabilities of Vattenfall Treasury AB at 1 January 2010, has been transferred to the Parent Company. See further the respective Note below. The increase in the Parent Company's equity as a result of the merger was SEK 1,924 million.

Internal banking activities, which have been the responsibility of Vattenfall Treasury AB, involve borrowing/lending within the Group and buying/selling currencies from/to Group units, all on commercial terms. The interest rate on long-term internal lending is determined yearly in advance based on Vattenfall AB's estimated borrowing cost during the coming year.

New and amended accounting standards effective as of 2011 are expected to have no or minimal impact on Vattenfall AB's financial statements.

The accounting policies applied are stated in the applicable parts of Note 3 to the consolidated accounts with the following amendments for the Parent Company Vattenfall AB.

#### Depreciation and amortisation

As in the consolidated accounts, depreciation and amortisation are based on cost and are applied on a straight-line basis over the estimated useful life of the asset in question. In addition, certain accelerated depreciation/amortisation (the difference between depreciation/amortisation according to plan and depreciation/ amortisation for tax purposes) in the Parent Company is reported under Appropriations and Untaxed reserves, respectively.

#### Pension provisions

Pension obligations in the Parent Company are calculated in accordance with generally accepted Swedish actuarial principles and are recognised according to the Act on Safeguarding of Pension Obligations, ("Tryggandelagen"). The provision reported in the balance sheet corresponds to these pension obligations, recognised net against plan assets of Vattenfall's Pension Foundation.

### Foreign currency

The Parent Company applies hedge accounting for assets in a foreign currency effectively hedged by loans in a foreign currency according to the Swedish standard BFN R7 – *Measurement of assets and liabilities in foreign currency*. Effects from changes in currency rates are not recognised for loans raised for the financing of foreign subsidiaries, associated companies and joint ventures. Non-monetary assets acquired in a foreign currency are recognised at the currency rate at the time for the acquisition. The loans raised in connection with the acquisition of N.V. Nuon Energy are hedged, as in the consolidated accounts, from the date of the acquisition, 1 July 2009.

Other assets and liabilities in foreign currencies are recognised at the exchange rates of the balance sheet date.

#### Income taxes

Tax legislation in Sweden allows companies to defer tax payments by making provisions to untaxed reserves. In the Parent Company, untaxed reserves are reported as a separate item 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 6 to the consolidated accounts.

## Note 4 Net sales

	2010	2009
Sales including excise taxes		
sale of goods (electricity, heat, etc.)	35,741	29,260
rendering of services	1,076	742
Excise taxes	-279	-257
Net sales	36,538	29,745

#### Net sales per geographic area

	2010	2009
Nordic countries	34,285	27,605
Germany and Poland	2,090	2,113
Other	163	27
Total	36,538	29,745

#### Net sales for products and services

	2010	2009
Electricity Generation	9,028	6,695
Supply & Trading	889	1,368
Energy Sales	23,424	19,023
Heat	2,546	2,351
Other	651	308
Total	36,538	29,745

# Note 5 Intra-Group transactions

Of the Parent Company's total income from sales and total purchase costs, transactions with Group companies account for 9% (2009: 9%) of sales and 25% (2009: 31%) of purchase costs.

# Note 6 Cost of products sold

Direct costs include production taxes and duties of SEK 271 million (2009: SEK 245 million) and property taxes of SEK 1,265 million (2009: SEK 1,258 million).

# 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:

	2010	2009
Cost of products sold	808	769
Selling expenses	24	89
Administrative expenses	26	13
Total	858	871

Amortisation of non-current intangible assets is included above in Cost of products sold in the amount of SEK 12 million (2009: SEK 8 million), in Selling expenses in the amount of SEK 24 million (2009: SEK 89 million) and in Administrative expenses in the amount of SEK 23 million (2009: SEK 11 million).

# Note 10 Impairment losses

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

	2010	2009
Cost of products sold	3	2
Total	3	2

## Note 11 Result from participations in Group companies

	2010	2009
Dividends	20,355	318
Impairment losses	-4,898	-1,850
Capital gains/losses on divestments	-1	-
Total	15,456	-1,532

# Note 12 Result from participations in associated companies

	2010	2009
Dividends	2	4
Capital gains/losses on divestments		678
Total	2	682

# Note 13 Result from other shares and participations

	2010	2009
Dividends	73	90
Capital gains/losses on divestments	-	526
Total	73	616

# Note 16 Appropriations and untaxed reserves

## Note 14 Other financial income

	2010	2009
Interest income from Group companies	2,523	1,707
Other interest income	972	237
Foreign exchange gains	7,270	4,426
Total	10,765	6,370

# Note 15 Other financial expenses

	2010	2009
Interest expenses to Group companies	58	4,899
Other interest expenses	7,003	3,053
Total	7,061	7,952
		·

	Balance brought forward	Balance brought forward, merger	Provision/Dissolution (–)	Balance carried forward
Accelerated depreciation	602	42	471	1,115
2005 Tax allocation reserve	1,022	-	-1,022	-
2006 Tax allocation reserve	1,730	-	-	1,730
2007 Tax allocation reserve	2,307	-	-	2,307
2008 Tax allocation reserve	1,522	-	-	1,522
2009 Tax allocation reserve	2,992	-	-	2,992
2010 Tax allocation reserve	-	-	4,153	4,153
Total	10,175	42	3,602	13,819

# Note 17 Income tax expense

The reported income tax expense is broken down as follows:

2	Total	4,244	1,634
2	Deferred tax	253	492
9	Current tax	3,991	1,142
_		2010	2009

The income tax expense for the year attributable to previous years amounts to SEK 127 million (2009: SEK 23 million). The tax effect of the standard tax interest on tax allocation reserves amounts to SEK 221 million (2009: SEK 137 million).

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

Per cent (%)	2010	2009
Swedish income tax rate	26.3	26.3
Tax adjustment for previous periods	0.1	-2.0
Capital gain, non taxable	0.0	-5.8
Non-taxable income <sup>1</sup>	-18.2	-2.6
Impairment loss	4.2	8.9
Non-deductible interest	1.5	4.9
Non-deductible expenses	0.2	0.2
Effective tax rate	14.1	29.9

1) Chiefly concerns non-deductible dividends from Group companies.

# Note 18 Intangible assets: non-current

		Capitalised development costs Goodwill					nting and nilar rights		Total	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Cost										
Cost brought forward	301	301	13	13	523	369	95	47	932	730
Investments	-	-	-	-	62	167	17	48	79	215
Divestments/Disposals	-	-	-	-	-	-13	-	-	-	-13
Accumulated cost carried forward	301	301	13	13	585	523	112	95	1,011	932
Accumulated amortisation according to plan										
Amortisation brought forward	-185	-169	-13	-13	-440	-349	-33	-33	-671	-564
Amortisation for the year		-16	-	_	-58	-91	_	-	-58	-107
Accumulated depreciation carried forward	-185	-185	-13	-13	-498	-440	-33	-33	-729	-671
Impairment losses										
Impairment losses brought forward	-116	-116	-	-	-	-	-	-	-116	-116
Accumulated impairment losses carried forward	-116	-116	_	-	-	-	-	-	-116	-116
Carrying amount	-	-	-	-	87	83	79	62	166	145

At 31 December 2010 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 land <sup>1</sup> other technical installations		Equipment tools, and fixtures and fittings		Construction in progress		Total	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Cost										
Cost brought forward	17,726	17,513	16,428	15,506	114	135	2,299	1,783	36,567	34,937
Cost brought forward, merger	135	-	226	-	-	-	-	-	361	-
Investments	27	-	181	-	4	3	1,338	1,787	1,550	1,790
Grants received	-	-	-	-	-	-	-7	-8	-7	-8
Transfer from construction in progress	356	213	1,031	1,050	-	-	-1,387	-1,263	-	-
Divestments/Disposals	-6	-	-127	-128	-27	-24	-	-	-160	-152
Accumulated cost carried forward	18,238	17,726	17,739	16,428	91	114	2,243	2,299	38,311	36,567
Accumulated depreciation according to plan										
Depreciation brought forward	-6,518	-6,284	-8,814	-8,400	-83	-99	-	-	-15,415	-14,783
Depreciation brought forward, merger	-39	-	-68	-	-	-	-	-	-107	-
Depreciation for the year	-241	-235	-553	-523	-6	-6	-	-	-800	-764
Divestments/Disposals	3	1	128	109	27	22	-	-	158	132
Accumulated depreciation carried forward	-6,795	-6,518	-9,307	-8,814	-62	-83	-	-	-16,164	-15,415
Impairment losses										
Impairment losses brought forward	-2	-	-6	-6	-	-	-	-	-8	-6
Impairment losses for the year	-1	-2	-2	-	-	-	-	-	-3	-2
Divestments/Disposals	2	-	-	-	-	-	-	-	-2	
Accumulated impairment losses carried forward	-1	-2	-8	-6	-	-	-	-	-9	-8
0 1 100										

Continued on page 130

#### Note 19 continued

	Buildin	gs and land <sup>1</sup>	Plants and m other technica	achinery and al installations	Equipment tools, and fixtures and fittings		Construction in progress		Total	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Residual value according to plan carried forward	11,442	11,206	8,424	7,608	29	31	2,243	2,299	22,138	21,144
Accumulated accelerated depreciation	-	-	-	-6,197	-	-9	-	-	-	-6,206
Carrying amount	11,442	11,206	8,424	1,411	29	22	2,243	2,299	22,138	14,938

1) Cost for buildings and land includes cost for land and water rights amounting to SEK 6,619 million (2009: SEK 6,619 million), which are not subject to depreciation.

Tax assessment values

	2010	2009
Buildings	36,550	36,628
Land	21,991	22,016
Total	58,541	58,644

Distribution lines and transformer stations are not subject to tax assessment values.

At 31 December 2010 there were no contractual commitments for the acquisition of property, plant and equipment.

# Note 20 Shares and participations

	Participations in Group companies		Participations in associated companies		Other shares and participations		Total shares and participations	
	2010	2009	2010	2009	2010	2009	2010	2009
Balance brought								
forward	194,067	87,542	339	520	4,609	4,632	199,015	92,694
Merged sharehold-								
ings	-342	-	-	-	-	-	-342	-
Investments/acqui-								
sitions	462	108,980	-	-	-	-	462	108,980
Shareholder con-								
tributions <sup>1</sup>	195	13	-	-	-	-	195	13
Divestments <sup>1</sup>	-35	-618	-333	-181	-	-23	-368	-822
Impairment losses	-4,898	-1,850	-	-	-	-	-4,898	-1,850
Balance carried								
forward	189,449	194,067	6	339	4,609	4,609	194,064	199,015

1) Shareholder contributions and divestments are mainly attributable to restructuring within the Group.

For a breakdown of the Parent Company's shares and participations in Group companies, Associated companies and Other shares and participations, see Notes 25–27 to the consolidated accounts.

# Note 21 Other non-current receivables

	Receivables from Group companies		Receivables from associated companies		Other receivables		Total other non- current receivables	
	2010	2009	2010	2009	2010	2009	2010	2009
Balance brought								
forward	9,472	7,630	-	333	434	1,032	9,906	8,995
New receivables	46,036	1,842	49	-333	65	457	46,150	1,966
Payments received	-	-	-42	-	-115	-1,055	-157	-1,055
Balance carried forward	55.508	9,472	7		384	121	55.899	9.906
forward	55,508	9,472	/	-	384	434	22,899	9,906

# Note 22 Inventories

	2010	2009
Bio fuels	38	45
Fossil fuels	193	282
Materials and spare parts	37	34
Total	268	361

Inventories recognised as an expense in 2010 amount to SEK 1,023 million (2009: SEK 772 million). No impairment losses of inventories or reversal of impairment losses were recognised during the year.

# Note 23 Intangible assets: current

Attributable to emission allowances and certificates. See Note 3 to the consolidated accounts, Accounting policies.

	Emission allowances		Certif	icates	Total	
	2010	2009	2010	2009	2010	2009
Balance brought forward	43	58	719	652	762	710
Purchases	162	221	1,599	1,499	1,761	1,720
Received free of charge	-	-	235	217	235	217
Sold	-107	-177	-1,269	-1,076	-1,376	-1,253
Redeemed	-49	-59	-673	-573	-722	-632
Balance carried forward	49	43	611	719	660	762

# Note 24 Current receivables

	2010	2009
Accounts receivable-trade	3,546	3,301
Receivables from Group companies	23,856	45,486
Other receivables	909	274
Prepaid expenses and accrued income	5,577	2,221
Total	33,888	51,282

## Age analysis of Current receivables

The collection period is normally 30 days

			2010			2009
	Receivables gross	Receivables impaired	Receivables net	Receivables gross	Receivables impaired	Receivables net
Accounts receivable-trade						
Not due	3,354	-	3,354	3,125	-	3,125
Past due 1–30 days	49	-	49	48	-	48
Past due 31–90 days	16	-	16	36	-	36
Past due > 90 days	127	-	127	92	-	92
Total	3,546	-	3,546	3,301	-	3,301
Receivables from Group companies						
Not due	23,856	-	23,856	45,486	-	45,486
Total	23,856	-	23,856	45,486	-	45,486
Other receivables						
Not due	905	-	905	269	-	269
Past due 31–90 days	-	-	-	1	-	1
Past due > 90 days	4	-	4	4	-	4
Total	909	-	909	274	-	274

# Note 25 Short-term investments

	2010	200
Interest-bearing investments	26,874	
Total	26,874	

# Note 26 Cash and cash equivalents

2009		2010	2009
-	Cash and bank balances	3,117	281
_	Cash equivalents	4,231	-
	Total	7,348	281

# Note 27 Provisions

2010	2009
73	123
122	60
195	183
2010	2009
3,016	2,956
-3,016	-2,956
-	-
2,020	1,920
2,724	2,688
	73 122 195 2010 3,016 -3,016 - 2,020

The Parent Company's pension obligations are subject in their entirety to the Act on Safeguarding of Pension Obligations ("Tryggandelagen").

	2010	2009
Fair value of plan assets at the		
beginning of the year	3,349	3,362
Return on plan assets	374	-13
Fair value of plan assets at		
the end of the year	3,723	3,349
Plan assets consist of the following:		
	2010	2009
Equity securities	1,917	1,457
Debt instruments	1,031	1,222
Property	-	61
Other	775	609
Total	3,723	3,349

# Note 28 Capital Securities

See Note 37 to the consolidated accounts.

# Note 29 Other interest-bearing liabilities

		urrent portion,		urrent portion,	<b>T</b>		0			<b>T</b>
	matur	ity 1–5 years	matu	rity >5 years	Iotal non-ci	urrent portion	Curre	ent portion		Total
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Bond issues	35,782	45,005	58,898	-	94,680	45,005	8,876	-	103,556	45,005
Commercial papers	-	-	-	-	-	-	4,495	-	4,495	-
Liabilities to credit institutions	750	-	-	-	750	-	200	-	950	-
Liability pertaining to acquisition of N.V. Nuon Energy <sup>1</sup>	35,603	32,008	-	19,384	35,603	51,392	15,889	-	51,492	51,392
Liability pertaining to the acqusition of Vattenfall Biomass Liberia AB	114	-	-	-	114	-	-	-	114	-
Liabilities to Group companies	-	89,221	87	-	87	89,221	45,053	-	45,140	89,221
Liabilities to associated companies	-	-	-	-	-	-	-	1,440	-	1,440
Swedish tax account	-	-	-	-	-	-	-	18	-	18
Other liabilities		_	-	_			5,128	-	5,128	_
Total	72,249	166,234	58,985	19,384	131,234	185,618	79,641	1,458	210,875	187,076
Undiscounted future cash flows including interest for the interest- bearing liabilities listed above excluding liabilities to Group companies										
but including Capital Securities <sup>2</sup> according to Note 28 amount to:	94,056		83,176		177,232		37,649		214,881	

1) The liability pertaining to the acquisition of the remaining 51% of the shares in N.V. Nuon Energy shall according to agreement be paid in three tranches: in July 2011, 2013 and 2015.

2) Floating interest cash flows with future fixing dates are estimated using the forward interest rates expected by the market at year end for each business- and interest fixing date. Any cash flow in foreign currency is translated to SEK using the balance sheet date rate at year end.

# Note 30 Other noninterest-bearing liabilities (non-current)

	2010	2009
Liabilities to Group companies	3,910	2,695
Other liabilities	431	443
Total	4,341	3,138

Liabilities to Group companies pertain mainly 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 216 million (2009: SEK 245 million) falls due after more than five years.

# Note 31 Other noninterest-bearing liabilities (current)

2010	2009
44	47
717	748
18,087	21,089
6	7
810	600
5,345	4,076
25,009	26,567
	44 717 18,087 6 810 5,345

Breakdown of accrued expenses and deferred income:

	2010	2009
Accrued personnel-related costs	194	120
Other accrued expenses	3,951	3,030
Deferred income and accrued expenses,		
electricity	1,178	900
Other deferred income	22	26
Total	5,345	4,076

# Note 32 Financial instruments: Carrying amount and fair value

Shares and participations exclude shares and participations in Group companies and associated companies. Receivables and liabilities exclude receivables and liabilities where Group companies or associated companies are counterparties.

		2010		2009
	Carrying	Fair	Carrying	Fair
	amount	value	amount	value
Assets:				
Other shares and participations	4,615	4,615	4,948	4,948
Other non-current receivables	391	392	434	434
Current receivables	3,921	3,921	3,575	3,575
Short-term investments	26,874	26,874	-	-
Cash equivalents	7,348	7,348	281	281
Total	43,149	43,150	9,238	9,238
Liailities:				
Capital Securities	8,929	10,113	-	-
Other interest-bearing liabilities (non-current)	133,831	141,050	94,587	98,550
Other noninterest-bearing liabilities (non-current)	431	431	443	443
Other interest-bearing liabilities (current)	30,518	30,679	18	23
Other noninterest-bearing liabilities (current)	1,532	1,532	1,348	1,348
Total	175,241	183,805	96,396	100,364

## Note 33 Pledged assets

	2010	2009
Blocked bank funds as security		
for trading on Nord Pool	56	-
Blocked bank funds as security		
for redemption of minority shares	30	51
Total	86	51

## Note 34 Contingent liabilities

	2010	2009
Guarantees		
of which:		
for Vattenfall Treasury AB's:		
lending to Group companies,		
associated companies and other	-	63,253
external borrowing for Group		
companies	-	82,279
borrowing from Group companies and		
associated companies	-	61,906
for lending by:		
Group companies, associated		
companies and other	11,123	3,527
Swedish Nuclear Waste Fund	8,698	17,113
Contract guarantees	8,823	10,661
Other contingent liabilities	13,744	11,658
Total	42,388	250,397

In certain rivers, joint regulation facilities exist for several hydro power plants. The owners of the power plants have payment obligations for their share of these regulation costs.

Vattenfall has an obligation to compensate certain owners of water rights in rivers where hydro power stations are built, through delivery of power. In 2010 such compensation deliveries amounted to 0.78 TWh (0.94 TWh), for a value of approximately SEK 443 million (2009: SEK 384 million).

Under Swedish law, Vattenfall has strict and 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 a maximum of SEK 9,000 million in benefits for these types of claims.

The Parent Company's contingent liabilities pertaining to subsidiaries amounted to SEK 40,454 million (2009: SEK 248,673 million), which are included in the reported contingent liabilities. The decrease in the amount for contingent liabilities of the subsidiaries is mainly an effect of that Vattenfall Treasury AB was merged

 with the Parent Company Vattenfall AB during 2010.
 In 2009 Vattenfall AB, together with its subsidiary the Swedish Nuclear Fuel and Waste Management Company (SKB) and the

other part-owners of that company, signed a long-term co-operation agreement with the Östhammar and Oskarshamn municipalities. The agreement covers the period 2010–2025 and regulates development efforts in association with the implementation of the Swedish nuclear waste programme. Through development initiatives in areas such as training, enterprise and infrastructure, over time the parties will generate value-added worth SEK 1,500 million to SEK 2,000 million. The parties will finance the development efforts in relation to their ownership interests. The Vattenfall Group's ownership interest is 56%. Implementation of the efforts will be carried out across two periods: a period before all necessary permits have been received (Period 1), and a period during implementation and operation of the facilities (Period 2). Vattenfall has reported SEK 159 million (2009: SEK 178 million) as a provision for its share of Period 1 activities.

As security for energy trading conducted by the subsidiary Vattenfall Energy Trading GmbH, Vattenfall AB has provided guarantees with a total value of SEK 20,148 million (2009: SEK 23,345 million). On the balance sheet date, utilised guarantees totalling approximately SEK 3,835 million (2009: SEK 8,338 million) were included in reported contingent liabilities

Atomic liability in Sweden is strict and limited to 300 million Special Drawing Rights (SDRs), corresponding to approximately SEK 3,143 million, which means that owners of nuclear power plants are only liable for damage to the surrounding environment up to this amount. The obligatory atomic liability insurance for this amount is issued by the Nordic atomic insurance pool and by the mutual company ELINI (European Liability Insurance for the Nuclear Industry).

According to the Swedish Act (2006:647) on the Financing of Future Expenses for Nuclear Waste Management, Sweden's nuclear power companies are required to guarantee to the Swedish state (the Swedish Nuclear Waste Fund) 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 8,698 million (2009: SEK 17,113 million). The amounts are included in the company's reported contingent liabilities. Two types of guarantee commitments have been issued. The first guarantee is intended to cover the requisite need for fees that has been decided on but not yet been paid in during the so-called earnings period (25 years of operation), so-called Financing Security, totalling SEK 3,589 million. The second guarantee pertains to future cost increases stemming from unforeseen events (so-called Complementary Security), totalling SEK 5,109 million. 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%.

In June 2008 Vattenfall AB and its wholly owned subsidiary Vattenfall Europe AG entered into a so-called control agreement (Beherrschungsvertrag). Such control arrangements are very common in German company groups. The agreement in question gives Vattenfall AB the opportunity to effectively govern the German part of the Vattenfall Group and the opportunity to use Vattenfall Europe AG's capital and cash flow. In the event that a net loss should arise in Vattenfall Europe AG's annual report during the term of the control agreement, and such net loss cannot be compensated through the dissolution of reserves that have

Continued on page 134

#### Note 34 continued

been set off during the term of the control agreement, Vattenfall AB is obligated to cover the net loss.

See also Note 48 to the consolidated accounts on contingent liabilities.

## Note 35 Commitments under consortium agreements

See Note 49 to the consolidated accounts.

## Note 36 Average number of employees and personnel costs

			2010			2009
Average number of employees	Men	Women	Total	Men	Women	Total
Sweden	778	301	1,079	781	295	1,076
Personnel costs			2010			2009
Salaries and other						
remuneration			794			715
Social security						
expenses			571			-74
(of which pension						
costs)1			(258)			(-248)
Total			1,365			641

1) SEK 19 million (2009: SEK 16 million) 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 87 million (2009: SEK 78 million). Vattenfall AB has, during 2009, taken out compensation of SEK 500 million from the pension foundation, which explains the negative amount for 2009.

None of the board members receive any pension benefits in connection with their board duties.

			2010			2009
Calariac and other romu		Other employ-		Senior execu- e	Other	
Salaries and other remu- neration	tives <sup>1</sup>	employ-	Total	tives <sup>1</sup>	ees	Total
heration	tives	ees	TOLAI	tives	ees	TOLAI
Sweden	52	744	796	30	685	715

1) Senior executives comprise board members and senior executives but also deputy board members and vice presidents and former board members, deputy board members, presidents and vice presidents.

Total salaries and other remunerations to directors and presidents include bonuses of SEK 0 million (2009: SEK 0 million).

For benefits to senior executives at Vattenfall AB, see Note 50 to the consolidated accounts.

# Note 37 Sickness-related absence

Sickness-related absence as a percentage of normal working hours during the year.

Parent Com-

Vattenfall

	pany Vattenfall AB		Group, S opera		
	2010	2009	2010	2009	
Total sickness-related absence	1.3	2.1	2.2	2.6	
Total sickness-related absence:					
– for women	2.0	3.3	3.3	3.8	
– for men	1.0	1.7	1.8	2.2	
– for employees aged 29 and younger	0.8	1.3	2.1	2.2	
<ul> <li>for employees aged 30–49 years</li> </ul>	1.2	2.1	2.0	2.4	
<ul> <li>for employees aged 50 and above</li> </ul>	1.7	2.2	2.6	2.9	
Percentage of sickness-related					
absence lasting 60 days or more	34.7	33.3	25.9	27.4	

# Note 38 Gender distribution among senior executives

	Women, %		Me	en, %
	2010	2009	2010	2009
Gender distribution among board members	23	36	77	64
Gender distribution among other senior executives	21	31	79	69

# Not 39 Leasing

#### Leasing expenses

Future payment commitments, as of 31 December 2010, for leasing contracts and rental contracts break down as follows:

	Finance leasing	Operating leasing
2011	-	9
2012	-	6
2013	-	5
Total	-	20

Leasing expenses for the year attributable to the Parent Company amounted to SEK 10 million (2009: SEK 24 million).

#### 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 2010, the cost of assets reported under Operating leases amounted to SEK 655 million (2009: SEK 645 million). Accumulated depreciation amounted to SEK 220 million (2009: SEK 190 million) and accumulated impairment losses to SEK 30 million (2009: SEK 30 million).

#### Future payments for this type of facility break down as follows:

2.0		Finance leasing	Operating leasing
3.8	2011	-	1
2.2	2012	-	1
2.2	2013	-	1
2.4	2014	-	1
2.9	2015	-	1
	2016 and beyond	-	4
27.4	Total	-	9

# Note 40 Auditors' fees

	2010	2009
Annual audit assignment		
Ernst & Young	10	9
Swedish National Audit Office	1	1
Total	11	10
Audit related mandates besides		
the annual audit assignment		
Ernst & Young	1	-
Total	1	_
Tax consultancy		
Ernst & Young	-	1
Total	-	1
Other mandates		
Ernst & Young	1	3
Total	1	3

## Note 41 Related party disclosures

See Note 54 to the consolidated accounts.

# Note 42 Events after the balance sheet date

On 1 January 2011 Vattenfall AB transferred its hydro power operations to separate wholly owned subsidiaries. See also Note 55 to the consolidated accounts.

# **Proposed distribution** of profits

The Annual General Meeting has at its disposal retained profits, including profit for the year, totalling SEK 69,289,817,269.

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

To be distributed to the shareholders	SEK 6,500,000,000
To be carried forward	SEK 62,789,817,269

The proposed distribution corresponds to a dividend of SEK 49.35 per share. The dividend is scheduled for payment on 3 May 2011.

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

Based on the company's and Group's financial position, earnings and cash position, the Board of Directors is of the opinion that the proposed distribution of profits will not lead to any material limitation of the company's or Group's ability to make any necessary investments or to meet their obligations in the short and long term.

In view of the above, the Board finds the proposed distribution of profits, totalling SEK 6,500,000,000, 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 19).

#### The Board of Directors and President's affirmation upon signing the Annual Report for 2010

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, and give a true and fair view of the Group's and company's financial position and results of operations, and that the Administration Report for the Group and Parent Company presents a fair overview of the development of the Group's and company's operations, financial position and results of operations and describes significant risks and uncertainties that the companies in the Group face.

#### Stockholm, 29 March 2011

D.... C /

	BJOIN Saven Vice Chairman of the Board		
Carl-Gustaf Angelin	Eli Arnstad	Johnny Bernhardsson	
Director	Director	Director	
Christer Bådholm	Ronny Ekwall	Patrik Jönsson	
Director	Director	Director	
Lone Fønss S	Schrøder Cecili	a Vieweg	

Director Director

Øystein Løseth President and CEO

# Audit Report

#### To the annual meeting of the shareholders of Vattenfall AB Corporate identity number 556036-2138

We have audited the annual accounts, the consolidated accounts, except the corporate governance statement on pages 64-71, the accounting records and the administration of the board of directors and the managing director of Vattenfall AB for the year 2010. The annual accounts and the consolidated accounts of the company are included in the printed version of this document on pages 44-135. The board of directors and the managing director 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 IFRS as adopted by the EU and the Annual Accounts, the consolidated accounts 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 managing director when preparing the annual accounts and consolidated accounts as well as evaluating the overall presentation of information in the annual accounts and the consolidated accounts. As a basis for my 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 managing director. We also examined whether any board member or the managing director 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 international financial reporting standards IFRS 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. Our opinions do not cover the corporate governance statement on pages 64-71. The statutory administration report is consistent with the other parts of the annual accounts and the consolidated accounts.

We recommend to the annual meeting of shareholders that the income statement and balance sheet 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 statutory administration report and that the members of the board of directors and the managing director be discharged from liability for the financial year.

#### Auditor's Report on The Corporate Governance Statement

It is the board of directors and the managing director who is responsible for the corporate governance statement on pages 64-71 and that it has been prepared in accordance with the Annual Accounts Act. As a basis for our opinion that the corporate governance statement has been prepared and is consistent with the other parts of the annual accounts and the consolidated accounts, we have read the corporate governance statement and assessed its statutory content based on our knowledge of the company. A corporate governance statement has been prepared and its statutory content is consistent with the other parts of the annual accounts and the consolidated accounts.

#### Stockholm, 29 March 2011

Ernst & Young AB Hamish Mabon Authorised Public Accountant Swedish National Audit Office

# **Quarterly review**

				2009				2010
Amounts in SEK million	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
Income statement items								
Net sales	52,528	42,128	45,346	65,405	70,657	49,713	37,665	55,537
EBITDA	17,149	10,145	9,123	15,360	20,799	13,867	10,685	15,355
Operating profit (EBIT)	12,860	5,881	3,524	5,673	10,115	8,963	5,829	4,946
Operating profit (EBIT) <sup>1</sup>	12,857	5,805	3,515	9,117	15,376	8,936	5,908	9,732
Financial income	687	415	1,036	676	566	295	870	783
Financial expenses	-2,790	-2,823	-3,734	-3,671	-3,465	-2,427	-4,131	-921
Profit before tax	10,757	3,473	826	2,678	7,216	6,831	2,568	4,808
Profit for the period	8,091	2,625	622	2,110	3,787	5,185	1,749	2,464
<ul> <li>of which, attributable to owners of the Parent Company</li> </ul>	7,751	2,456	831	1,858	3,746	5,077	1,597	2,577
– of which, attributable to minority interests	340	169	-209	252	41	108	152	-113
Cash flow items								
Funds from operations (FFO)	18,760	2,568	3,997	11,375	9,820	11,679	6,939	11,670
Free cash flow	8,455	5,594	7,081	6,436	-1,057	14,288	7,260	3,355
Balance sheet items								
Cash and cash equivalents and short-term investments	84,097	101,874	59,966	56,940	30,190	45,644	42,855	43,873
Equity	150,485	145,060	137,668	142,404	139,461	140,215	135,605	133,621
<ul> <li>of which, attributable to owners of the Parent Company</li> </ul>	139,577	133,752	130,870	135,620	132,889	133,572	128,953	126,704
<ul> <li>of which, attributable to minority interests</li> </ul>	10,908	11,308	6,798	6,784	6,572	6,643	6,652	6,917
Interest-bearing liabilities	146,123	166,903	218,815	213,494	197,588	198,537	188,344	188,277
Net debt	60,571	63,478	157,317	154,987	165,581	151,071	145,155	144,109
Provisions	90,380	89,076	87,726	91,100	87,178	85,957	85,977	87,822
Noninterest-bearing liabilities	112,905	99,582	155,074	155,129	144,868	119,198	118,808	131,712
Net assets, weighted average value	190,355	200,168	219,202	245,016	267,998	289,487	297,163	293,298
Balance sheet total	499,893	500,621	599,283	602,127	569,095	543,907	528,734	541,432
The key ratios are presented as percentages (%) or times (x)								
Operating margin, %	24.5	14.0	7.8	8.7	14.3	18.0	15.5	8.9
Operating margin, $\%^1$	24.5	13.8	7.8	13.9	21.8	18.0	15.7	17.5
Pre-tax profit margin, %	20.5	8.2	1.8	4.1	10.2	13.7	6.8	8.7
Pre-tax profit margin, $\%^1$	20.5	8.1	1.8	9.3	17.7	13.7	7.0	17.3
Return on equity, % <sup>2</sup>	13.9	12.5	11.0	9.5	6.6	8.7	9.3	10.0
Return on equity, % <sup>1,2</sup>	14.1	12.6	11.1	11.4	12.5	14.6	15.4	17.7
Return on net assets, % <sup>2</sup>	14.9	13.9	11.7	10.0	8.1	8.6	9.2	9.1
Return on net assets, % <sup>1,2</sup>	15.1	14.0	11.8	11.4	11.4	11.6	12.1	12.5

1) Excl. items affecting comparability.

2) Last 12-month values.

				2009				2010
Amounts in SEK million	Q1	Q2	Q3	Q4	Q1	Q2	Q3	Q4
cont. The key ratios are presented as percentages (%) or times (x)								
EBIT interest cover, (x) <sup>2</sup>	4.4	3.8	3.1	3.1	2.6	3.0	3.1	4.1
EBIT interest cover, (x) <sup>1,2</sup>	4.5	3.8	3.2	3.4	3.4	3.9	3.9	5.4
FFO interest cover, (x) <sup>2</sup>	6.0	5.8	4.7	4.8	3.7	4.7	4.8	6.2
FFO interest cover, net, (x) <sup>2</sup>	7.8	7.0	5.6	5.6	4.2	5.4	5.4	7.5
Cash flow interest cover after maintenance investments, (x) <sup>2</sup>	4.5	4.7	4.2	4.3	3.0	4.1	3.9	4.6
FFO/gross debt, % <sup>2</sup>	25.8	24.5	16.5	17.2	14.0	18.6	21.1	21.3
FFO/net debt, % <sup>2</sup>	62.2	64.4	23.0	23.7	16.8	24.4	27.4	27.8
EBITDA/net financial items, (x)	11.1	6.1	4.0	6.2	6.7	10.7	3.8	-
EBITDA/net financial items, (x) <sup>1</sup>	11.1	6.0	4.0	7.6	8.9	10.7	3.8	-
Equity/total assets, %	30.1	29.0	23.0	23.7	24.5	25.8	25.6	24.7
Gross debt/equity, %	97.1	115.1	158.9	149.9	141.7	141.6	138.9	140.9
Net debt/equity, %	40.3	43.8	114.3	108.8	118.7	107.7	107.0	107.8
Gross debt/gross debt plus equity, %	49.3	53.5	61.4	60.0	58.6	58.6	58.1	58.5
Net debt/net debt plus equity, %	28.7	30.4	53.3	52.1	54.3	51.9	51.7	51.9
Net debt/EBITDA, (x)	1.3	1.3	3.3	3.0	3.3	2.8	2.6	2.4
Other information								
Investments	7,008	9,939	68,466	17,576	8,935	8,973	11,281	12,605
Electricity generation, TWh	45.2	34.4	35.6	43.7	47.9	41.4	36.8	46.4
Average number employees	33,129	33,382	40,075	36,593	38,926	38,283	38,438	38,459

1) Excl. items affecting comparability.

2) Last 12-month values.

#### Comments

Vattenfall's earnings vary sharply during the year. Normally, the large part of annual profit is generated during the first and fourth quarters, when demand for electricity and heat is at its highest.

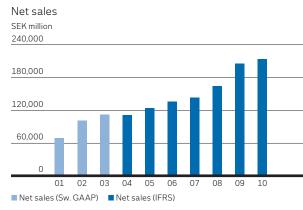
# **Ten-year review**

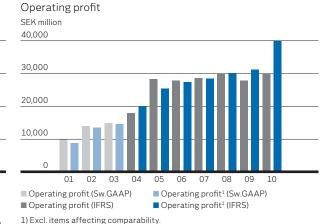
		Swedi	sh GAAP					IFRS			
Amounts in SEK million	2001	2002	2003	2004	2004	2005	2006	2007	2008	2009	2010
Income statement items											
Net sales	69,003	101,025	111,935	111,016	111,016	123,794	135,802	143,639	164,549	205,407	213,572
EBITDA	18,207	25,489	24,450	31,347	33,161	43,175	43,938	45,821	45,960	51,777	60,706
Operating profit (EBIT)	9,916	13,997	14,868	19,501	17,887	28,363	27,821	28,583	29,895	27,938	29,853
Operating profit (EBIT) <sup>1</sup>	8,779	13,550	14,605	18,682	20,102	25,377	27,448	28,497	30,220	31,294	39,952
Financial income	2,232	3,010	2,267	1,772	2,969	3,810	3,839	2,276	3,412	2,814	2,514
Financial expenses	-4,737	-6,386	-5,203	-4,020	-6,297	-6,013	-6,135	-6,926	-9,809	-13,018	-10,944
Profit before tax	7,411	10,621	11,932	17,253	14,559	26,160	25,525	23,933	23,498	17,734	21,423
Profit for the year	5,287	8,224	9,529	12,348	9,604	20,518	19,858	20,686	17,763	13,448	13,185
<ul> <li>of which, attributable to owners of the Parent Company</li> </ul>	4,190	7,566	9,123	11,776	8,944	19,235	18,729	19,769	17,095	12,896	12,997
<ul> <li>of which, attributable to minority interests</li> </ul>	1,097	658	406	572	660	1,283	1,129	917	668	552	188
Cash flow items											
Funds from operations (FFO)	13,148	17,106	18,804	24,159	24,302	31,386	35,673	34,049	30,735	36,700	40,108
Free cash flow	5,478	10,820	11,606	15,684	15,684	14,341	23,178	19,650	18,963	27,566	23,846
Balance sheet items											
Cash and cash equivalents and short-term investments	10,340	15,473	14,647	13,616	13,616	14,074	22,168	22,659	40,236	56,940	43,873
Equity	61,101	57,532	64,328	73,947	85,551	90,909	107,674	124,132	140,886	142,404	133,621
<ul> <li>of which, attributable to owners of the Parent Company</li> </ul>	42,021	47,572	54,949	64,759	75,437	80,565	96,589	111,709	129,861	135,620	126,704
<ul> <li>of which, attributable to minority interests</li> </ul>	19,080	9,960	9,379	9,188	10,114	10,344	11,085	12,423	11,025	6,784	6,917
Interest-bearing liabilities	88,723	94,838	85,631	73,013	73,013	78,663	71,575	67,189	107,347	213,494	188,277
Net debt	55,736	75,207	66,890	55,411	55,411	64,343	49,407	43,740	66,000	154,987	144,109
Provisions	-	-	-	-	61,941	65,123	66,094	73,985	89,799	91,100	87,822
Noninterest-bearing liabilities	109,219	123,906	115,006	109,955	64,700	90,373	77,823	72,930	107,795	155,129	131,712
Net assets, weighted average value	100,701	127,479	124,229	123,423	134,125	143,001	151,155	157,252	179,114	245,016	293,298
Balance sheet total	259,043	276,276	264,965	256,915	285,205	325,068	323,166	338,236	445,827	602,127	541,432
The key ratios are presented as percentages (%) or times (x)											
Operating margin, %	14.4	13.9	13.3	17.6	16.1	22.9	20.5	19.9	18.2	13.6	14.0
Operating margin, % <sup>1</sup>	12.7	13.4	13.0	16.8	18.1	20.5	20.2	19.8	18.4	15.2	18.7
Pre-tax profit margin, %	10.7	10.5	10.7	15.5	13.1	21.1	18.8	16.7	14.3	8.6	10.0
Pre-tax profit margin, %1	9.1	10.1	10.4	14.8	15.1	18.7	18.5	16.6	14.5	10.2	14.8
Return on equity, %	11.1	18.0	19.2	21.4	12.2	23.2	19.1	17.6	13.6	9.5	10.0
Return on equity, %1	9.7	17.3	18.8	20.4	13.9	19.4	18.7	17.5	13.8	11.4	17.7
Return on net assets, %	9.8	11.0	12.0	15.8	12.2	18.4	17.1	16.6	15.1	10.0	9.1
Return on net assets, % <sup>1</sup>	8.7	10.6	11.8	15.1	13.9	16.3	16.8	16.6	15.3	11.4	12.5

1) Excl. items affecting comparability.

		Swedis	sh GAAP					IFRS			
Amounts in SEK million	2001	2002	2003	2004	2004	2005	2006	2007	2008	2009	2010
cont. The key ratios are presented as percentages (%) or times	(x)										
EBIT interest cover, (x)	2.6	2.7	3.3	5.3	4.4	7.6	7.2	6.7	4.5	3.1	4.1
EBIT interest cover, (x) <sup>1</sup>	2.3	2.6	3.2	5.1	5.0	6.9	7.1	6.7	4.6	3.4	5.4
FFO interest cover, (x)	3.8	3.7	4.6	7.0	6.6	8.9	9.7	8.6	5.4	4.8	6.2
FFO interest cover, net, (x)	6.2	6.1	7.4	11.7	8.9	15.1	15.9	12.2	7.1	5.6	7.5
Cash flow interest cover after maintenance investments, (x)	2.2	2.7	3.2	4.9	5.5	5.5	7.9	6.4	4.1	4.3	4.6
FFO/gross debt, %	14.8	18.0	22.0	33.1	30.0	39.9	49.8	50.7	28.6	17.2	21.3
FFO/net debt, %	23.6	22.7	28.1	43.6	43.9	48.8	72.2	77.8	46.6	23.7	27.8
EBITDA/net financial items, (x)	7.3	7.6	8.3	13.9	10.8	19.3	18.4	15.1	9.1	6.5	9.8
EBITDA/net financial items, (x)1	6.8	7.4	8.2	13.6	11.5	18.0	18.2	15.0	9.2	6.9	11.5
Equity/total assets, %	23.7	20.9	24.4	28.8	30.0	28.0	33.3	36.7	31.6	23.7	24.7
Gross debt/equity, %	144.9	164.7	133.0	98.7	85.3	86.5	66.5	54.1	76.2	149.9	140.9
Net debt/equity, %	91.2	130.7	104.0	74.9	64.8	70.8	45.9	35.2	46.8	108.8	107.8
Gross debt/gross debt plus equity, %	59.2	62.2	57.1	49.7	46.0	46.4	39.9	35.1	43.2	60.0	58.5
Net debt/net debt plus equity, %	47.7	56.7	51.0	42.8	39.3	41.4	31.5	26.1	31.9	52.1	51.9
Net debt/EBITDA, (x)	3.1	3.0	2.7	1.8	1.7	1.5	1.1	1.0	1.4	3.0	2.4
Other information											
Dividend to owners of the Parent Company	1,030	1,675	2,400	5,600	5,600	5,800	7,500	8,000	6,900	5,240	6,500 <sup>2</sup>
Investments	43,443	39,932	11,356	12,601	12,731	24,497	17,220	18,964	42,296	102,989	41,794
Electricity generation, TWh	140,9	158,5	155,8	167,1	167,1	169,1	165,4	167,6	162,1	158,9	172,5
Average number employees	23,814	34,248	35,296	33,017	33,017	32,231	32,308	32,396	32,801	36,593	38,459

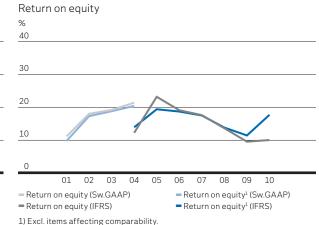
1) Excl. items affecting comparability. 2) Proposed dividend.





**Comment:** Net sales have more than trebled since 2001, mainly due to Vattenfall's substantial international expansion. From having been essentially a national, Swedish electric utility, through a number of major acquisitions primarily in Germany, Poland, Denmark, the UK and the Netherlands, Vattenfall has grown to become one of Europe's largest generators of electricity and largest producer of heat.

**Comment:** Vattenfall's operating profit has grown substantially during the last ten years due to successful integration work as well as to higher generation volumes and higher wholesale electricity prices.



**Comment:** Return on equity has varied between 9.7% (2001, Swedish GAAP) and 23.2% (2005, IFRS) during the 10-year period, compared with Vattenfall's current target return of 15% over a business cycle.

# **Definitions and calculations of key ratios**

Figures for the Group in 2010. Amounts in SEK million unless stated otherwise.

<b>EBIT</b> = Earnings Before	Interest and Tax.	Free cash flow =	Cash flow from operating activities less maintenance	investments.						
<b>EBITDA</b> = Earnings Before	Interest, Tax, Depreciation and Amortisation.		Perpetual subordinated securities, junior to all Vatten							
<b>FFO</b> = Funds From Ope	arations.	Capital Securities =	dinated debt instruments. Reported as interest-bearir liabilities.	ruments. Reported as interest-bearing non-current						
ntems affecting com- e assets, impairme	d capital losses from shares and other non-current ent losses and impairment losses reversed pertaining to ets, and other non-recurring items.	Net assets =	Balance sheet total less noninterest-bearing liabilities est-bearing receivables, funds in the Swedish Nuclear and cash equivalents, short-term investments.							
The key ratios are presented as percentag	es (%) or times (x).	Net debt =	Interest-bearing liabilities less loans to minority owner sidiaries, cash and cash equivalents, short-term invest	rs in foreign s <sup>,</sup> tments.	ub-					
Key ratios based on full year amoun	ts 2010:									
<b>o</b>	Operating profit (EBIT)			29,853	140					
<b>Operating margin</b> , <b>%</b> = 100 x	Net sales			29,853 213,572 =	14.0					
Operating margin excl items	Operating profit (EBIT) excl. items affecting comparability			39.952						
Operating margin excl. items affecting comparability, %	Net sales			39,952 213,572 =	18.7					
				01 400						
<b>Pre-tax profit margin</b> , $\% = 100 \times$	Profit before tax Net sales			21,423 213,572 =	10.0					
Pre-tax profit margin excl. items affecting comparability, %	Profit before tax excl. items affecting comparability			<u>31,519</u> =	14.8					
affecting comparability, %	Net sales			213,572						
<b>Return on equity, %</b> = 100 x	Profit for the period attributable to owners of the Parent Co	ompany		12,997 129,750 =	10.0					
Return on equity, 76 – 100 x	Average equity for the period attributable to owners of the	Parent Company excl. th	e Reserve for cash flow hedges	129,750 -	10.0					
Return on equity excl items	Profit for the period attributable to owners of the Parent Co	ompany excl. items affec	ting comparability	23,006						
Return on equity excl. items affecting comparability, %	Average equity for the period attributable to owners of the		e Reserve for cash flow hedges	129,750 =	17.7					
	Operating profit (EBIT) + discounting effects attributable to	o provisions		26,591						
Return on net assets, $\% = 100 \times$	Weighted average of net assets for the period			293,298 =	9.1					
				200,200						
Return on net assets excl. items affecting comparability, % = 100 x	Operating profit (EBIT) excl. items affecting comparability +	<ul> <li>discounting effects attr</li> </ul>		36,690 =	12.5					
affecting comparability, %	Weighted average of net assets for the period			293,298 -						
	Operating profit (EBIT) + financial income excl. discounting	effects attributable to p	rovisions and return from the							
EBIT interest cover, (x) =	Swedish Nuclear Waste Fund			31,356	4.1					
	Financial expenses excl. discounting effects attributable to		7,682 =	4.L						

EBIT interest cover excl. items _	Operating profit (EBIT) excl. items affecting comparability + financial income excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	41,455	- 4
affecting comparability, (x) $=$	Financial expenses excl. discounting effects attributable to provisions	7,682 =	5.4
FFO interest cover, (x) =	Funds from operations (FFO) + financial expenses excl. discounting effects attributable to provisions	47,790	6.2
	Financial expenses excl. discounting effects attributable to provisions	7,682 =	0.2
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	46,287	7.5
	Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	6,179	7.0
Cash flow interest cover after _	Cash flow from operating activities less maintenance investments + financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	30,390	4.6
maintenance investments, (x) $^-$	Financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	6,544	4.0
FFO/gross debt, % = 100 ×	Funds from operations (FFO)	40,108 =	21.3
	Interest-bearing liabilities	188,277 =	
<b>FFO/net debt</b> , $\% = 100 \times$	Funds from operations (FFO)	40,108 =	27.8
	Net debt	144,109 =	
EBITDA/net financial items, (x) =	Operating profit before depreciation and amortisation (EBITDA)	60,706 =	9.8
	Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	6,179 =	
EBITDA excl. items affecting comparability/net financial =	Operating profit before depreciation and amortisation (EBITDA) excl. items affecting comparability	70,805	11.5
items, (x)	Financial items excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	6,179 =	11.5
Key rations based on the balance sh	neet per 31 December, 2010:		
Equity/total assets, % = 100 ×	Equity	133,621 =	24.7
	Balance sheet total	541,432	
Gross debt/equity, % = 100 ×	Interest-bearing liabilities	188,277 =	140.9
	Equity	133,621 -	
Net debt/equity, % = 100 x	Net debt	144,109 =	107.8
	Equity	133,621 =	
Gross debt/gross debt plus equity, $\% = 100 \times$	Interest-bearing liabilities	188,277 =	58.5
pius equity, 76	Interest-bearing liabilities + equity	321,898	
Net debt/net debt plus equity, % = 100 ×	Net debt	144,109 =	51.9
	Net debt + equity	277,730	- 1.0
Net debt/EBITDA, (x) =	Net debt	144,109 =	2.4
	Operating profit before depreciation and amortisation (EBITDA)	60,706 =	

# Facts about Vattenfall's markets

	Sw	veden	Finla	and	Den	mark	Ger	rmany	Pol	and	Nethe	erlands	Belg	ium	Uł	۲	Т	otal
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Installed capacity																		
electricity, MW <sup>1</sup>																		
Hydro power <sup>2</sup>	8,510	8,510	126	126	-	-	2,880	2,880	-	-	-	-	-	-	-	-	11,516	11,516
Nuclear power	6,792	6,786	-	-	-	-	771	771	-	-	-	-	-	-	-	-	7,563	7,557
Fossil-based power	1,212	1,212	45	45	1,757	1,757	11,292	11,292	878	878	3,764	3,646	-	-	-	-	18,948	18,830
of which, gas	-	-	45	45	137	137	1,712	1,712	-	-	2,861	2,743	-	-	-	-	4,755	4,637
of which, lignite	-	-	-	-	-	-	7,123	7,123	-	-	-	-	-	-	-	-	7,123	7,123
of which, hard coal	-	-	-	-	1,620	1,620	1,826	1,826	878	878	903	903	-	-	-	-	5,227	5,227
of which, oil	1,212	1,212	-	-	-	-	631	631	-	-	-	-	-	-	-	-	1,843	1,843
Wind power	258	164	-	-	388	377	13	13	30	30	313	313	15	15	431	102	1,448	1,014
Biomass, waste	179	159	20	20	126	126	123	74	-	-	-	-	-	-	-	-	448	379
Total Electricity	16,951	16,831	191	191	2,271	2,260	15,079	15,030	908	908	4,077	3,959	15	15	431	102	39,923	39,296
Installed capacity heat, MW	2,441	2,398	930	930	2,223	2,223	10,013	10,088	4,707	4,707	2,844	2,364					23,158	22,710
fieat, WW	2,441	2,390	930	930	2,225	2,223	10,013	10,088	4,707	4,707	2,044	2,304	-	-	-	-	23,130	22,710
Generated																		
electricity, TWh																		
Hydro power <sup>2</sup>	31.9	30.8	0.3	0.4	-	-	3.1	2.5	-	-	0.1	0.2	-	-	-	-	35.4	33.9
Nuclear power	43.6	41.5	-	-	-	-	-	-	-	-	-	-	-	-	-	-	43.6	41.5
Fossil-based power	0.1	-	0.1	0.1	7.4	7.2	65.2	61.7	3.6	3.5	13.3	7.8	-	-	-	-	89.7	80.4
of which, gas	-	-	0.1	0.1	0.5	0.4	3.9	3.5	-	-	9.3	5.3	-	-	-	-	13.8	9.3
of which, lignite	-	-	-	-	-	-	52.4	50.4	-	-	-	-	-	-	-	-	52.4	50.4
of which, hard coal	-	-	-	-	6.9	6.7	8.9	7.9	3.6	3.5	4.0	2.5	-	-	-	-	23.4	20.6
of which, oil	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Wind power		0.4	-	-	0.7	0.7	0.1	0.1	-	-	0.2	0.2	-	-	0.7	0.3	2.2	1.7
Biomass, waste		0.3	0.1	-	0.2	-	0.7	1.1	-	-	-	-	-	-	-	-	1.5	1.4
Total Electricity		73.0	0.5	0.5	8.3	7.9	69.1	65.4	3.6	3.5	13.6	8.2	-	-	0.7	0.2	172.5	158.9
Heat sales, TWh																		
Fossil-based power	0.1	0.1	0.8	0.7	5.4	5.2	16.3	14.4	11.5	10.6	1.7	0.6	-	-	-	-	35.8	31.6
of which, gas	-	-	0.7	0.7	0.8	0.5	5.1	4.5	-	-	1.7	0.6	-	-	-	-	8.3	6.3
of which, lignite	-	-	-	-	-	-	4.5	4.2	-	-	-	-	-	-	-	-	4.5	4.2
of which, hard coal	-	-	-	-	4.6	4.7	6.7	5.6	11.5	10.6	-	-	-	-	-	-	22.8	20.9
of which, oil	0.1	0.1	0.1	-	-	-	-	0.1	-	-	-	-	-	-	-	-	0.2	0.2
Biomass, waste	4.5	4.3	0.9	0.8	1.6	-	1.3	1.2	0.4	0.1	-	-	-	-	-	-	8.7	6.4
Total Heat	4.6	4.4	1.7	1.5	7.0	5.2	17.6	15.6	11.9	10.7	1.7	0.6	-	-	-	-	44.5	37.9
Gas sales, TWh	-	-	0.2	0.2	-	-	0.1	0.3	-	-	58.9	18.3	4.1	1.3	-	-	63.3	20.1

	Sv	veden	Fi	nland	Denm	nark	Ge	rmany	Po	land	Nethe	rlands	Be	elgium	Uł	(		Total
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Number of retail customers, electricity	983,000	919,000	347,000	338,000	-	- 2	2,823,000	2,645,000	1,012,000 1	.,009,000	2,288,000 2	,295,000	320,000	302,000	-	-	7,773,000	7,508,000
Electricity volume, TWh retail customers	9.6	7.6	2.8	3.2	-	-	9.0	8.4	2.7	2.7	8.8	4.4	1.5	0.7	_	-	34.4	27.0
Electricity volume, TWh resellers	4.2	4.0	0.7	0.6	1.7	1.8	26.6	21.0	0.7	-	-	-	-	-	_	-	33.9	27.4
Electricity volume, TWh industries	34.2 <sup>3</sup>	33.9 <sup>3</sup>	4.9	3.2	-	_	12.74	15.05	4.1	4.2	5.8	3.3	1.8	0.6	-	-	63.5	60.2
Number of network customers	921,000	920,000	393,000	387,000	-	- 3	3,273,000	3,234,000	1,132,000 1	L,128,000	-	-	-	-	_	-	5,719,000	5,669,000
Number of gas customers	_	-	300	300	-	_	9,300	12,600	-	- :	1,935,000 1	.934,000	190,000	177,900	-	-	2,134,600	2,124,800
Electricity network Transited volume, TWh <sup>6</sup> Distribution network, km	73.4 168,000	68.4 175,000	6.4 74,000	6.1 73,000	-	-	27.1 137,000	27.7 138,000	14.0 70,000	13.0 70,000	-	-	-	-	_	-	120.9 449,000	115.2 456,000
Number of employees (full- year equivalents) Countries Group total <sup>7</sup>	9,000	9,219	398	445	687	713	19,395	20,655	2,819	2,859	5,770	6,009	-	_	58	90	38,127 38,179	39,990 40,026
Market position			Sweden		Germany		Netherlands		Denma	rk	Fin	land		Poland		Belgium		UK
Electricity generation			1		3		3			2		>10		7		n.a.		n.a <sup>8</sup>
Electricity distribution			2		4		n.a		n.			2		5		n.a.		n.a.
Electricity sales			1		4		2		n.	a.		3		5		3		n.a.
District heating			4		1		2			2		10		1		n.a.		n.a.
Gas sales			n.a.		n.a.		1		n.	a.		n.a.		n.a.		3		n.a.

1) Certain values for 2009 have been adjusted compared with previously published information.

2) Mainly pumped storage power in Germany.

3) 3.6 TWh to industries in Norway

4) 5.6 TWh to industries in France.

5) 4.7 TWh to industries in France.6) Excl. generation transiting.7) There are 52 (36) employees in other countries.8) Second largest in off-shore wind power.

# Pro rata — Generation data corresponding to Vattenfall's ownership in the respective facilities

	Sweden		Finland		Denmark		Germany		Poland		Netherlands		Belgium		UK		Total	
	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009	2010	2009
Installed capacity																		
electricity, MW <sup>1</sup>																		
Hydro power <sup>2</sup>	8,097	8,097	126	126	-	-	2,880	2,880	-	-	-	-	-	-	-	-	11,103	11,103
Nuclear power	4,645	4,641	-	-	-	-	1,469	1,469	-	-	-	-	-	-	-	-	6,114	6,110
Fossil-based power	1,212	1,212	45	45	1,757	1,757	11,292	11,292	877	877	3,764	3,646	-	-	-	-	18,947	18,829
of which, gas	-	-	45	45	137	137	1,712	1,712	-	-	2,861	2,743	-	-	-	-	4,755	4,637
of which, lignite	-	-	-	-	-	-	7,123	7,123	-	-	-	-	-	-	-	-	7,123	7,123
of which, hard coal	-	-	-	-	1,620	1,620	1,826	1,826	877	877	903	903	-	-	-	-	5,226	5,226
of which, oil	1,212	1,212	-	-	-	-	631	631	-	-	-	-	-	-	-	-	1,843	1,843
Wind power	258	164	-	-	324	313	28	28	30	30	211	211	8	8	431	102	1,290	856
Biomass, waste	179	159	20	20	126	126	100	51	-	-	-	-	-	-	-	-	425	356
Total Electricity	14,391	14,273	191	191	2,207	2,196	15,769	15,720	907	907	3,975	3,857	8	8	431	102	37,879	37,254
Installed capacity																		
heat, MW	2,304	2,261	926	926	2,223	2,223	9,896	9,952	4,699	4,699	2,844	2,364	-	-	-	-	22,892	22,425
Generated																		
electricity, TWh																		
Hydro power <sup>2</sup>	29.8	28.6	0.3	0.4	-	-	3.1	2.5	-	-	0.1	0.2	-	-	-	-	33.3	31.7
Nuclear power	29.9	28.3	-	-	-	-	2.3	2.3	-	-	-	-	-	-	-	-	32.2	30.6
Fossil-based power	0.1	-	0.1	0.1	7.1	7.1	65.1	61.9	3.6	3.5	13.2	7.8	-	-	-	-	89.2	80.4
of which, gas	-	-	0.1	0.1	0.5	0.4	3.9	3.5	-	-	9.2	5.3	-	-	-	-	13.7	9.3
of which, lignite	-	-	-	-	-	-	52.3	50.5	-	-	-	-	-	-	-	-	52.3	50.5
of which, hard coal	-	-	-	-	6.6	6.7	8.9	7.9	3.6	3.5	4.0	2.5	-	-	-	-	23.1	20.6
of which, oil	0.1	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	0.1	-
Wind power	0.5	0.4	-	-	0.7	0.7	0.1	0.1	-	-	0.4	0.3	-	-	0.7	0.3	2.4	1.8
Biomass, waste	0.5	0.3	0.5	0.2	0.4	-	0.6	0.9	0.1	-	-	-	-	-	-	-	2.1	1.4
Total Electricity	60.8	57.6	0.9	0.7	8.2	7.8	71.2	67.7	3.7	3.5	13.7	8.3	-	-	0.7	0.3	159.3	145.9
Heat sales, TWh																		
Fossil-based power	0.1	0.1	0.7	0.8	5.4	5.2	16.1	14.2	11.5	10.7	1.7	0.6	-	-	-	-	35.5	31.6
of which, gas	-	-	0.6	0.7	0.8	0.5	5.0	4.5	-	-	1.7	0.6	-	-	-	-	8.1	6.3
of which, lignite	-	-	-	-	-	-	4.5	4.0	-	-	-	-	-	-	-	-	4.5	4.0
of which, hard coal	-	-	-	-	4.6	4.7	6.6	5.6	11.5	10.7	-	-	-	-	-	-	22.7	21.0
of which, oil	0.1	0.1	0.1	0.1	-	-	-	0.1	-	-	-	-	-	-	-	-	0.2	0.3
Biomass, waste	4.3	4.0	0.9	0.8	1.5	-	1.3	0.9	0.4	0.1	-	-	-	-	-	-	8.4	5.8
Total Heat	4.4	4.1	1.6	1.6	6.9	5.2	17.4	15.1	11.9	10.8	1.7	0.6	-	-	-	-	43.9	37.4
Gas sales, TWh	-	_	-	0.2	-	-	1.1	1.4	-	-	59.0	18.3	4.1	1.3	-	-	64.2	21.2

# Financial calendar

10 February 2011	Year-end report 2010
31 March 2011	Annual Report 2010
27 April 2011	Annual General Meeting
5 May 2011	Interim report for January–March
28 July 2011	Interim report for January–June
27 October 2011	Interim report for January–September
9 February 2012	Year-end report 2011

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# Other publications



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

All reports can be ordered or downloaded from Vattenfall's websites www.vattenfall.se www.vattenfall.com

Reports can be ordered from Vattenfall AB, SE-162 87 Stockholm Tel. +46 8 739 50 00

#### Forecasts and forward-looking statements

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

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



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