

# Year-end report 2016

## January–December 2016

- Net sales of SEK 152,667 million (164,510) for Total Vattenfall<sup>1</sup>, of which SEK 139,208 million (143,576) for continuing operations
- Underlying operating profit<sup>2,3</sup> of SEK 21,693 million (20,541) for Total Vattenfall<sup>1</sup>, of which SEK 21,697 million (20,529) for continuing operations
- Operating profit<sup>3</sup> of SEK -21,205 million (-22,967) for Total Vattenfall<sup>1</sup>, of which SEK 1,337 million (-5,069) for continuing operations
- Profit for the year of SEK -26,004 million (-19,766) for Total Vattenfall<sup>1</sup>, of which SEK -2,171 million (-5,188) for continuing operations
- Electricity generation of 159.8 TWh (172.7) for Total Vattenfall<sup>1</sup>, of which 119.0 TWh (118.0) for continuing operations

## October–December 2016

- Net sales of SEK 37,913 million (45,499) for Total Vattenfall<sup>1</sup>, of which SEK 37,796 million (42,368) for continuing operations
- Underlying operating profit<sup>2,3</sup> of SEK 6,943 million (6,449) for Total Vattenfall<sup>1</sup>, of which SEK 7,095 million (6,407) for continuing operations
- Operating profit<sup>3</sup> of SEK -3,021 million (3,690) for Total Vattenfall<sup>1</sup>, of which SEK -2,841 million (3,641) for continuing operations
- Profit for the period of SEK -4,152 million (2,460) for Total Vattenfall<sup>1</sup>, of which SEK -3,960 million (4,550) for continuing operations
- Electricity generation of 32.5 TWh (45.5) for Total Vattenfall<sup>1</sup>, of which 32.6 TWh (32.5) for continuing operations

1) Total Vattenfall, including lignite operations.

2) Underlying operating profit is defined as operating profit excluding items affecting comparability. For a specification of items affecting comparability, see page 10.

3) See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

*The financial performance that is reported and commented on in this year-end report pertains to Vattenfall's continuing operations, unless indicated otherwise. In view of the divestment of Vattenfall's lignite operations, these are classified and reported as a discontinued operation, see Note 4 on page 37. Text shadowed in light blue pertains to the divestment of Vattenfall's lignite operations.*

*Rounding differences may occur in this document.*

## CEO's comments

"We entered 2016 with a number of fundamental issues that needed to be resolved in order to support the transition of the energy system and to shape a Vattenfall that is ready to take on the future. Looking back, we can conclude that significant progress has been made with a positive outcome for the company and our customers and, not least, reduced risk. Vattenfall has taken key steps to adapt the portfolio in the right direction by divesting the lignite operations and focus on growth in wind power and other business opportunities that support the energy transition. The Swedish energy policy agreement will provide greater clarity and a basis for necessary investments and long-term planning in the country's energy sector. We welcome the commitment to a fossil free future and the acknowledgement of the importance of existing nuclear and hydro power. In Germany we have achieved clarity on the responsibility for handling nuclear waste disposal. The nuclear law that was approved by the German parliament in December provides the framework for how the responsibility for intermediate and long-term storage will be transferred from nuclear operators to the government, in exchange for the nuclear power operators financing a fund to pay for the costs.

Despite a number of positive developments, the electricity business situation remains tough with low prices and continued over capacity. The entire electricity sector is under price pressure which resulted in significant impairment losses in 2016 which the majority were already announced in the second quarter. Profit for the year totalled SEK -2.2 billion for continuing operations and SEK -26 billion for Total Vattenfall, including the lignite operations.

In terms of our continuing operations we are beginning to see some positive financial result development in line with our strategic direction. In 2016 the underlying operating profit for continuing operations was SEK 21.7 billion, which is an increase of SEK 1.2 billion compared with 2015. Our focus on reducing costs was a key contributing factor, together with strong earnings performance by our Heat and Customers & Solutions business areas. Increased focus on sales also contributed to growth of our customer base by approximately 200,000 contracts in 2016.

Improved regulatory certainty combined with more stable financial conditions provide us with the financial flexibility we need to invest for the future. Vattenfall has decided to invest in lifetime extensions through independent core cooling in the reactors at Forsmark and is investigating the prospects for Ringhals reactors 3 and 4. As part of our modernisation programme in hydro power we also completed a major refurbishment and expansion of the Akkats hydro power plant near Jokkmokk, Sweden. We are investing in significant quality upgrades of our distribution network and in wind power growth. Recently Vattenfall secured several offshore wind projects in a competitive market, through greater efficiency and cost optimisation that will ensure long-term project profitability. As a final point I am excited to say that we are investing in new areas such as solar PV, battery storage, micro grids and e-mobility which all contribute to providing innovative and sustainable energy solutions for our customers.

I believe that through continuing our strong growth in renewables, improving our customers' experiences, developing decentralised electricity and heat solutions, enhancing our digitalisation expertise, reducing our climate impact, and increasing cost-efficiency in our core operations, we will create exciting future opportunities."



Magnus Hall  
President and CEO

# Key data

Amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Continuing operations</b>				
Net sales	37 796	42 368	139 208	143 576
Operating profit before depreciation, amortisation and impairment losses (EBITDA) <sup>1</sup>	3 313	7 729	27 209	30 604
Underlying operating profit before depreciation, amortisation and impairment losses <sup>1</sup>	10 880	10 222	36 144	35 229
Operating profit (EBIT) <sup>1</sup>	-2 841	3 641	1 337	-5 069
Underlying operating profit <sup>1</sup>	7 095	6 407	21 697	20 529
Profit for the period	-3 960	4 550	-2 171	-5 188
Funds from operations (FFO) <sup>1,2</sup>	7 157	9 362	28 186	29 009
Net debt <sup>1</sup>	50 724	64 201	50 724	64 201
Adjusted net debt <sup>1</sup>	124 741	137 585	124 741	137 585
Electricity generation, TWh	32.6	32.5 <sup>3</sup>	119.0	118.0 <sup>3</sup>
- of which, hydro power	7.9	10.6	34.8	39.5
- of which, nuclear power	13.1	11.2	46.9	42.2
- of which, fossil-based power <sup>4</sup>	9.5	7.8 <sup>3</sup>	30.8	29.0 <sup>3</sup>
- of which, wind power	1.9	2.0	5.8	5.8
- of which, biomass, waste <sup>4</sup>	0.2	0.9 <sup>3</sup>	0.7	1.5 <sup>3</sup>
Sales of electricity, TWh <sup>5</sup>	40.7	51.8	193.2	197.2
Sales of heat, TWh	7.6	6.1 <sup>3</sup>	20.3	20.6 <sup>3</sup>
Sales of gas, TWh	18.3	15.0	53.1	50.7
CO <sub>2</sub> emissions, Mtonnes	7.4 <sup>7</sup>	6.9	23.1	23.6
Work related accidents, number (LTIF) <sup>6</sup>	2.0	2.3	2.0	2.3
<b>Total Vattenfall</b>				
Number of employees, full-time equivalents	19 935	28 567 <sup>8</sup>	19 935	28 567 <sup>8</sup>
<b>Key ratios</b>				
Return on capital employed, continuing operations, %	0.5 <sup>9,10</sup>	- 1.8 <sup>9</sup>	0.5 <sup>10</sup>	- 1.8
Return on capital employed, total Vattenfall, %	- 8.5 <sup>9,10</sup>	- 8.2 <sup>9</sup>	- 8.5 <sup>10</sup>	- 8.2
Net debt/equity, %	60.5	55.4	60.5	55.4
FFO/adjusted net debt, continuing operations, %	21.6 <sup>9</sup>	19.5 <sup>9</sup>	21.6	19.5
FFO/adjusted net debt, total Vattenfall, %	22.6 <sup>9,11</sup>	21.1 <sup>9</sup>	22.6 <sup>11</sup>	21.1
Adjusted net debt/EBITDA, continuing operations, times	4.6 <sup>9</sup>	4.5 <sup>9</sup>	4.6	4.5
Adjusted net debt/EBITDA, total Vattenfall, times	4.4 <sup>9,11</sup>	4.2 <sup>9</sup>	4.4 <sup>11</sup>	4.2

1) See Definitions and calculations of key ratios for definitions of Alternative Performance Measure.

2) Pertains to Total Vattenfall, including the lignite operations.

3) The value has been adjusted compared with the value presented in Vattenfall's 2015 year-end report.

4) Values for 2016 are preliminary.

5) Sales of electricity also include bilateral sales to Nordpool.

6) Lost Time Injury Frequency (LTIF) is expressed in terms of the number of lost time work injuries (per 1 million hours worked), i.e., work related accidents resulting in absence longer than one day, and accidents resulting in fatality. Pertains only to Vattenfall employees and is based on last 12-month values.

7) Consolidated values for 2016. Consolidated emissions are approximately 0.5% higher than pro rata emissions, corresponding to Vattenfall's share of ownership.

8) 6,802 FTEs pertain to the lignite operations.

9) Last 12-month values.

10) The key ratio is based on average capital employed. The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016, which entails that the calculation of average capital employed excludes the lignite operations as from 30 June 2016.

11) The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016. As a result, the lignite operations are excluded from balance sheet items included in the calculations of key ratios as from 30 June 2016.

## Liability for nuclear waste costs in Germany

### Introduction

In 2016 the German federal cabinet approved a draft law under which the country's nuclear power operators will shift their liability for the transport, intermediate and final storage of nuclear waste to the state through payment of a total of EUR 23.6 billion into a public fund.

### Process

During the summer of 2015 the German government, with the support of an independent expert, began a stress test of the nuclear power operators' provisions for their obligations for the future dismantling of nuclear power in Germany. In October 2015, the German government published the review report on nuclear power provisions in Germany that the auditing firm Warth & Klein Grant Thornton AG produced under commission by the German government. In a press release the German government affirmed that the nuclear power operators have made sufficient provisions to cover all costs. In addition, the government did not find any reasons to object to the nuclear power operators' principles for calculating their provisions. However, the government decided to appoint a commission to review how the funding of nuclear power dismantling costs in Germany can be ensured.

On 27 April 2016 the commission presented its recommendations for the division of responsibility for dismantling nuclear power in Germany. According to these, the liability for intermediate and final storage of radioactive waste shall be transferred to the German state along with the necessary funds. The nuclear power operators will still bear responsibility for decommissioning and dismantling the reactors as well as packaging the radioactive waste. The German law on nuclear waste was passed by Germany's parliament in December 2016. Approval must still be obtained from the EU and is expected to be received in early 2017.

The legislative change means that the nuclear power operators are to transfer a total of EUR 17,389 million to a special fund. In addition, a risk premium of 35.47%, or EUR 6.2 billion, may be payable to cover risks for any future costs for intermediate and final storage of radioactive waste.

### Financial consequences for Vattenfall

The base amount for Vattenfall to pay to the fund amounts to SEK 12.3 billion (EUR 1.3 billion). Together with the risk premium of 35.47% and six months' interest payments at an annualised rate of 4.58% to be paid by law, Vattenfall will transfer a total of SEK 17.0 billion (EUR 1.8 billion). This also entails that the duration of remaining nuclear power provisions in Germany is calculated to be approximately 15 years, which changes the discount rate. A new discount rate of 1.75% is used for the remaining nuclear power provisions.

#### *Total effect on Vattenfall's earnings*

The earnings effect related to the risk premium of 35.47% including interest payments amount to SEK -5.4 billion (including 100% of Brunsbüttel). In addition higher provisions for decommissioning, dismantling and packaging the nuclear waste as a result of lower discount rate applied due to the shorter duration of the obligations were almost fully offset by lower anticipated cost for decommissioning and dismantling, SEK -0.2 billion, net. In total the earnings effect for Vattenfall in the fourth quarter of 2016 amounts to SEK -5.6 billion.

#### *Effect on adjusted net debt*

On a pro rata basis (corresponding to Vattenfall's share of ownership), Vattenfall's adjusted net debt has increased by SEK 5.0 billion as a result of the higher provisions, of which SEK 4.7 billion relates to the risk premium including interest. A lower discount rate and lower anticipated costs as described above resulted in a delta of SEK 0.3 billion.

### Impact on Vattenfall's future earnings

For Vattenfall this change in law entails that the financial uncertainty over future cost increases for intermediate and final storage of radioactive waste disappear.

# Targets and target achievement

(The financial and strategic targets are reported for both continuing operations and Total Vattenfall)

## Strategic targets

Vattenfall aims to contribute to a sustainable energy system across the value chain and be a truly customer-centric company. At the same time, Vattenfall is working to shift to a long-term sustainable production portfolio. Vattenfall's strategy is built upon four strategic objectives: 1) Leading towards sustainable consumption, 2) Leading towards sustainable production, 3) High performing operations, and 4) Empowered and engaged organisation. The strategic targets apply as from January 2016.

	Target 2020	Full year 2016	Full year 2015
Customer loyalty, NPS (Net Promoter Score)	+ 2 NPS relative <sup>1</sup>	+7	—
Commissioned renewables capacity accumulated from 2016	≥ 2,300 MW <sup>2</sup>	297	375
Absolute CO <sub>2</sub> emissions, pro rata, continuing operations	≤ 21 Mtonnes	23.1 <sup>3</sup>	23.6
Absolute CO <sub>2</sub> emissions, pro rata, total Vattenfall		67.6 <sup>3</sup>	83.8
Return on capital employed (ROCE), continuing operations	9%	0.5 <sup>4</sup>	-1.8
Return on capital employed (ROCE), total Vattenfall	9%	-8.5 <sup>4</sup>	-8.2
LTIF <sup>5</sup> (Lost Time Injury Frequency)	≤ 1.25	2.0	2.3
Employee Engagement Index	≥ 70% <sup>6</sup>	57	59

- 1) NPS is a tool for measuring customer loyalty and for gaining an understanding of customers' perceptions of Vattenfall's products and services. The target is a positive NPS in absolute terms +2 compared to Vattenfall's peer competitors. NPS is a new strategic target that is measured on a yearly basis.
- 2) Pertains only to completed and commissioned wind farms as per 31 December 2016.
- 3) Consolidated values for 2016. Consolidated emissions are approximately 0.5% higher than pro rata values, corresponding to Vattenfall's share of ownership.
- 4) The key ratio is based on average capital employed. The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016, which entails that the calculation of average capital employed excludes the lignite operations as from 30 June 2016.
- 5) Lost Time Injury Frequency (LTIF) is expressed in terms of the number of lost time work injuries (per 1 million hours worked), i.e., work related accidents resulting in absence longer than one day, and accidents resulting in fatality. The ratio pertains only to Vattenfall employees and is based on last 12-month values.
- 6) Documentation for measurement of target achievement is derived from the results of the My Opinion employee survey, which is conducted on an annual basis.

**Comment:** The Customers & Solutions operating segment continued its positive trend in NPS in 2016 with improvement in the end customer market in all four core markets, Sweden, Finland, Germany and the Netherlands. A total of 297 MW of new, renewable capacity was installed in 2016. New capacity is being added with the German offshore wind farm Sandbank (216 MW of a total of 288 MW), the Swedish onshore wind farms Högabjär (38 MW) and Höge Väg (38 MW) and the 5 MW of solar energy adjacent to Vattenfall's Parc Cynog onshore wind farm in Wales. CO<sub>2</sub> emissions in 2016 for continuing operations were slightly lower than in 2015. Lost Time Injury Frequency (LTIF) was lower compared with the preceding year. The My Opinion light version in 2016 showed a lower engagement score. The next full scale My Opinion survey will start in Q3 2017.

## Financial targets

The financial targets relate to profitability, capital structure and the dividend policy, and were set by the owner in November 2012. These targets are intended to ensure that Vattenfall creates value and generates a market rate of return that the capital structure is efficient, and that financial risk is kept at a reasonable level. The targets are to be evaluated over a business cycle.

	Target	Full year 2016	Full year 2015
Return on capital employed (ROCE), continuing operations	9%	0.5 <sup>1</sup>	-1.8
Return on capital employed (ROCE), total Vattenfall	9%	-8.5 <sup>1</sup>	-8.2
FFO/adjusted net debt, continuing operations	22%-30%	21.6	19.5
FFO/adjusted net debt, total Vattenfall	22%-30%	22.6 <sup>2</sup>	21.1
Net debt/equity	50%-90%	60.5	55.4
Dividend policy	40%-60% of the year's profit after tax	—	—

- 1) The key ratio is based on average capital employed. The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016, which entails that the calculation of average capital employed excludes the lignite operations as from 30 June 2016.
- 2) The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016. As a result, the lignite operations are excluded from balance sheet items included in the calculations of key ratios as from 30 June 2016.

**Comment:** Return on capital employed has been negatively affected by the recognition of impaired asset values. Excluding impairment losses and other items affecting comparability, return on capital employed was 8.7% (7.4%) for Total Vattenfall and 8.7% (7.3%) for continuing operations. FFO/adjusted net debt increased compared to 2015 and was 22.6% (21.1%) for Total Vattenfall. For continuing operations FFO/adjusted net debt was 21.6% (19.5%). Adjusted net debt decreased, mainly due to the lower net debt, at the same as the FFO decreased slightly. The debt/equity ratio is still within the target interval but increased slightly compared to 2015, mainly due to the negative result of the year. Due to the negative profit for the year, the Board of Directors has proposed – in accordance with Vattenfall's dividend policy – that no dividend be paid for 2016.

# Important events 2016

## Q1

### **Sale of Netzservice/Metering in Hamburg**

In January Vattenfall completed the sale of its network services operation in Hamburg, Germany. The sale generated a capital gain of SEK 1.2 billion.

### **Secure supply of district heating in Hamburg**

Vattenfall decided to invest EUR 83.5 million in the refurbishment of a combined heat and power (CHP) plant in the Wedel district of western Hamburg to secure the city's supply of heat for the coming years. In parallel with this, Vattenfall and the City of Hamburg are working together to achieve climate neutrality in Hamburg's heat operations by 2050.

### **Planning process for two large wind farms in the UK**

Vattenfall commenced the planning process for two wind farms in the UK (Norfolk Vanguard and Norfolk Boreas). Once an investment decision has been made, the two projects will gain combined installed capacity of 3.6 GW, corresponding to the electricity needs of more than 2.6 million British households.

### **Construction of first solar farm completed**

Vattenfall's first large-scale solar farm (5 MW), adjacent to the Parc Cynog wind farm in Wales, was completed and began generating electricity at the end of March. The solar farm has the capacity to generate 5.5 GWh of electricity per year, corresponding to the annual consumption of 1,440 average British households. The total investment amounted to approximately SEK 50 million.

### **Vattenfall, SSAB and LKAB in joint industrial development project**

In partnership with the steel company SSAB and the minerals group LKAB, Vattenfall initiated preliminary studies into the possibility of replacing coal with hydrogen gas in steelmaking processes in the aim of making Sweden's iron and steel manufacturing entirely carbon dioxide-free.

## Q2

### **Sale of German lignite operations**

Vattenfall signed an agreement to sell its lignite operations in Germany to the Czech energy company EPH and its financial partner PPF Investments. Vattenfall's owner, the Swedish state, confirmed its support of the sale. Vattenfall completed the sale in September after receiving clearance from the European Commission.

### **Impairment losses**

Vattenfall recognised impairment losses totalling SEK 30.0 billion, of which SEK 21.0 billion is attributable to Vattenfall's lignite operations, which starting with the second quarter are classified and reported as "Discontinued operations".

### **Multi-billion kronor investment in Uppsala to reduce CO<sub>2</sub> emissions**

Vattenfall decided to proceed with project planning for a new heating plant in Uppsala that will replace peat and oil with renewable biomass, which will reduce CO<sub>2</sub> emissions in Uppsala by 210,000 tonnes. The aim is to make a definitive investment decision in 2018.

### **Construction of Horns Rev 3 offshore wind farm**

During the quarter construction was started of the Horns Rev offshore wind farm (407 MW), off Denmark's west coast. Horns Rev 3 will be commissioned in 2019/20 and will supply enough electricity to power 425,000 Danish homes. The total investment will be just over DKK 7.5 billion (corresponding to approximately SEK 9.6 billion).

### **Offshore wind farm extension inaugurated in the UK**

On 6 June the extension of the Kentish Flats offshore wind farm (combined 150 MW) in the UK was inaugurated. The extension, comprising an additional 15 wind turbines (50 MW), became operational at the end of 2015.

### **SKB meets radiation protection requirements for final repository method according to SSM**

In a statement to Sweden's land and environmental court, the Swedish Radiation Safety Authority (SSM) stated that the system for final storage of spent nuclear fuel chosen by SKB (the Swedish Nuclear Fuel and Waste Company) meets existing radiation protection requirements. SKB filed an application in 2011 for permission to build the final repository for spent nuclear fuel in Forsmark, in Östhammar municipality. The application also included an encapsulation facility. In 2017 SSM will give its final assessment to the Swedish government, which will decide if the repository may be built or not. If construction starts as planned in 2019, the repository can be put into operation in 2027.

### **Gradual phase-out of tax on nuclear and lower tax on hydro power generation in Sweden**

On 10 June a parliamentary agreement on the future direction of Swedish energy policy was reached, with the ambition to create a 100% renewable energy system for the future. The agreement entails a gradual phase-out of the nuclear capacity tax over a two-year period, starting in 2017. The agreement also entails that the property tax on hydro power will be successively lowered during a four-year period starting in 2017, from 2.8% to 0.5%.

### **Vattenfall decides on investment in Forsmark**

Following the government's decision to phase out the nuclear capacity tax pursuant to the energy policy agreement, Vattenfall's board of directors decided to invest in independent core cooling in Forsmark's three nuclear reactors. A decision was also made by Forsmark Kraftgrupp AB's board of directors, after which implementation can begin.

## **Q3**

### **Decision to invest in offshore wind farm off the coast of Aberdeen**

Vattenfall decided to invest approximately GBP 335 million (corresponding to approximately SEK 3.7 billion) in an offshore wind farm (92 MW) off the coast of Aberdeen, Scotland. The wind farm is expected to be operational in 2018.

### **Acquisition of offshore wind project in Germany**

Vattenfall acquired a German offshore wind project in the North Sea (known as the Global Tech II Offshore Wind Project), with the ultimate goal of building up to 79 wind turbines. Vattenfall's goal is to further develop and prepare the project, and make it competitive in the tendering process for subsidies and permits for offshore projects, which is expected to be initiated in spring 2017.

### **Sandbank supplies its first power**

Vattenfall's Sandbank (288 MW) offshore wind farm in Germany began generating its first electricity in September, with fewer than half of all turbines installed. The wind farm delivered at full capacity in early 2017.

### **Winning bid for Danish wind power**

Vattenfall won a tender to build two near shore wind farms at two sites off the west coast of Jutland, in Denmark. Vattenfall's plan is to build two wind farms with combined capacity of 350 MW, corresponding to the electricity consumption of 375,000 Danish households.

### **Decision to phase-out coal at combined heat and power plant in Berlin**

Vattenfall decided to replace coal with natural gas at the Klingenberg combined heat and power plant in Berlin three years ahead of plan, which will result in a reduction of CO<sub>2</sub> emissions by 600,000 tonnes per year. The change will entail a total investment of approximately EUR 100 million (corresponding to approximately SEK 1 billion).

### **Application for re-extension of grid concession in Berlin**

At the end of August Vattenfall submitted an application for a re-extension of its grid concession in Berlin. In October 2015 Berlin's Senate Administration for Finance decided to resume the tendering process after it had been suspended in 2014.

## **Q4**

### **SSM presents proposal for changed calculation of nuclear waste fees in Sweden**

In a statement to the government, the Swedish Radiation Safety Authority (SSM) proposed that the nuclear waste fee for nuclear reactors shall be calculated on the basis of an operating lifetime of 50 years instead of 40 years, as currently. The government will decide on the fees for 2018-2020 during the autumn of 2017.

### **Approved draft law for nuclear waste fund in Germany**

On 19 October the German federal cabinet approved a draft law for nuclear waste fund in Germany. In December, the law was passed by Germany's parliament. Approval from the EU remains and is expected to be received in early 2017.

### **Ruling handed down by German Federal Constitutional Court**

The ruling handed down by the German Federal Constitutional Court affirms that Germany's decision on the immediate shutdown of the nuclear power plants operated by Vattenfall, without compensation, was not in compliance with German law. No decision has been made yet on the amount, type and time of compensation for Vattenfall. The closure of nuclear power as such has not been considered to be contrary to German law. Vattenfall will pursue the process at the International Centre for Settlement of Investment Disputes (ICSID) in Washington, D.C., where Vattenfall's right to compensation will be established. A decision is expected by summer 2017.

### **Launch of inCharge – a partner-based charging network**

In early November, the inCharge charging network was launched, which Vattenfall is building together with a number of partners in Sweden and northern Europe. The network will include thousands of charging stations and will make it easy for businesses, local authorities and local power companies to offer electric car charging.

### **Winning bid to build Denmark's largest offshore wind farm**

Vattenfall won the tender to build the Kriegers Flak offshore wind farm (600 MW) in Denmark. Once operational, Kriegers Flak will supply 600,000 Danish households with electricity. The total investment sum is approximately DKK 7.4-9.4 billion, pending a final investment decision by the company's board of directors.

### **New head appointed for Markets Business Area**

Anna Borg was appointed Senior Vice President of Vattenfall's Markets Business Area. She is currently Senior Vice President and head of Klarna's commercial operations in the Nordics. Before this she spent 18 years at Vattenfall, holding numerous management positions, including as head of business development for the market and trading operations. She will be a member of Vattenfall's Executive Group Management and will take up her new position on 1 April 2017.

### **Sale of two waste-to-energy power plants**

In November Vattenfall sold the two German waste-to-energy power plants Lauta and Rüdersdorf to STEAG. The deal is expected to close during the first half of 2017. The parties have agreed to not disclose the financial details of the transaction.

### **Restart of Ringhals 2 reactor**

The Swedish Radiation Safety Authority (SSM) decided to grant Ringhals AB dispensation from the Authority's regulations and the Ringhals 2 (R2) reactor has been restarted, contingent upon the fulfilment of certain requirements, and began operating after a two-year outage.

### **Vattenfall enters Danish consumer market**

In December Vattenfall acquired the Danish company Vindstød.dk, which offers 100% wind power-based electricity to Danish consumers, and has thereby made an entry into the Danish consumer sales market. Vindstød.dk offers an existing customer base, a strong IT platform and an efficient organisation, and the aim is to grow the business further. The parties have agreed to not disclose the financial details of the transaction.

### **Inauguration of wireless charging station on new electric bus route**

Vattenfall inaugurated the first hybrid electric bus route in the Nordic region with wireless bus stop charging in Södertälje, south of Stockholm. Wireless bus stop charging means that the bus parks over a charging segment hidden in the road, where charging takes place automatically. Seven minute of wireless charging is enough for the bus to run its entire 10 km route. Vattenfall owns and operates the charging station and supplies it with renewable electricity. The project is cooperation between Scania, SL, Vattenfall, Södertälje municipality and the Royal Institute of Technology (KTH) designed to develop silent and sustainable public transport.

### **Vattenfall secures nuclear fuel supply**

Vattenfall secured its future supply of nuclear fuel by signing new contracts with three different suppliers: Areva (France), Westinghouse (USA) and TVEL (Russia). The contracts are worth approximately SEK 1.2 billion and cover the period 2018–2025. Nuclear fuel procurement complies with the rules and guiding principles established by the Euroatom Supply Agency (ESA) and International Atomic Energy Agency (IAEA). In addition, Areva, TVEL and Westinghouse comply with the Vattenfall Code of Conduct for Suppliers.

### **Changes in Vattenfall's board of directors and management**

At Vattenfall's Annual General Meeting on 27 April 2016, Lars G. Nordström was re-elected as Chairman of the Board. Fredrik Arp, Viktoria Bergman, Håkan Erixon, Tomas Kåberger, Jenny Lahrin and Åsa Söderström Jerring were re-elected as board members. Staffan Bohman and Hilde Tonne were elected as new board members.

Stefan Dohler was appointed as new CFO of Vattenfall, effective 1 December 2016. He succeeded Ingrid Bonde, who left Vattenfall on her own decision. Karin Lepasoon took office as Head of Corporate Communications on 1 April 2016 and has been a member of the Executive Group Management since then.

### **Important events after the balance sheet date**

#### **Agreement signed to acquire offshore wind power project Atlantis**

Vattenfall has signed an agreement to acquire the project company PNE WIND Atlantis I GmbH, which is the owner of the offshore wind project Atlantis I located northwest of the island of Borkum in the German North Sea.

#### **New combined heat and power plant in Berlin**

Vattenfall has decided to invest in a new combined heat and power plant in Berlin, Marzahn-Hellersdorf, with capacity for 260 MW electricity and 230 MW heat. The CHP plant will be able to utilise 90% of the fuel's energy and will thus be one of the most modern and efficient plants of its kind. Start of construction is planned in April, and the plant is expected to be commissioned in summer 2020. The investment sum is 325 MEUR.

# Sales, profit and cash flow

(Reporting of figures and comments pertains to continuing operations, unless indicated otherwise)

## Net sales

Continuing operations, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	37 796	42 368	139 208	143 576

**Comment full year 2016:** Consolidated net sales decreased by SEK 4.4 billion, mainly owing to average lower prices achieved.

**Comment Q4:** Consolidated net sales decreased by SEK 4.6 billion, mainly owing to average lower prices achieved.

## Earnings

Continuing operations, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Operating profit (EBIT) <sup>1</sup>	-2 841	3 641	1 337	-5 069
Depreciation, amortisation and impairment losses	6 154	4 088	25 872	35 673
<b>Operating profit before depreciation, amortisation and impairment losses (EBITDA)<sup>1</sup></b>	<b>3 313</b>	<b>7 729</b>	<b>27 209</b>	<b>30 604</b>
Items affecting comparability excl. impairment losses and reversed impairment losses	7 567	2 493	8 935	4 625
<b>Underlying operating profit before depreciation, amortisation and impairment losses<sup>1</sup></b>	<b>10 880</b>	<b>10 222</b>	<b>36 144</b>	<b>35 229</b>
Operating profit (EBIT)	-2 841	3 641	1 337	-5 069
Items affecting comparability <sup>1</sup>	9 936	2 766	20 360	25 598
<b>Underlying operating profit<sup>1</sup></b>	<b>7 095</b>	<b>6 407</b>	<b>21 697</b>	<b>20 529</b>

1) See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

**Comment full year 2016:** The underlying operating profit increased by SEK 1.2 billion, which is explained by the following:

- Lower production margins in the Power Generation operating segment, mainly owing to lower average electricity and fuel prices achieved (SEK -1.3 billion)
- A higher earnings contribution from the heat operations as a result of lower fuel costs (SEK 1.4 billion)
- A higher earnings contribution from trading and gas sourcing activities (SEK 0.4 billion)
- Other items, net (SEK 0.7 billion)

**Comment Q4:** The underlying operating profit increased by SEK 0.7 billion, which is explained by the following:

- Lower production margins in the Nordic countries, mainly owing to hydro power (SEK -0.6 billion)
- A higher earnings contribution from the heat operations as a result of lower fuel costs (SEK 0.9 billion)
- A higher earnings contribution from trading and gas sourcing activities (SEK 0.8 billion)
- Other items, net (SEK -0.4 billion)

## Items affecting comparability with an effect on operating profit (EBIT)

Continuing operations, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Capital gains	84	75	2 152	249
Capital losses	- 277	- 126	- 376	- 369
Impairment losses	- 3 298	- 313	- 12 354	- 21 507
Reversed impairment losses	929	40	929	534
Provisions	- 8 373	- 2 150	- 8 249	- 3 463
Unrealised changes in the fair value of energy derivatives	1 015	539	- 2 417	1 558
Unrealised changes in the fair value of inventories	399	- 399	997	- 657
Restructuring costs	- 487	- 46	- 761	- 1 105
Other non-recurring items affecting comparability	72	- 386	- 281	- 838
<b>Total</b>	<b>- 9 936</b>	<b>- 2 766</b>	<b>- 20 360</b>	<b>- 25 598</b>

**Comment full year 2016:** Items affecting comparability amounted to SEK -20.4 billion (-25.6). Capital gains pertain mainly to the sale of the network services operation in Hamburg (SEK 1.2 billion) and the sale of real estate in Hamburg and Berlin (SEK 0.7 billion). Impairment of asset values amounted to SEK -12.4 billion and pertained primarily to the Moorburg power plant in Hamburg, hydro power assets in Germany, fossil-based assets in the Netherlands, and impairment of the shareholdings in the German nuclear power plants Brokdorf and Stade. Provisions pertain mainly to higher provisions for nuclear power in Germany (SEK -5.6 billion) and Sweden (SEK -2.1 billion). Other items affecting comparability pertain to capital losses (SEK -0.4 billion), unrealised changes in the fair value of energy derivatives and inventories (SEK -1.4 billion), restructuring costs (SEK -0.8 billion), and other nonrecurring items affecting comparability (SEK -0.3 billion).

Items affecting comparability in 2015 consisted mainly of impairment of asset values. These pertain mainly to impairment of Ringhals nuclear power reactors 1 and 2 in Sweden and impairment of Moorburg power plant in Hamburg, Germany. The increase in provisions pertains mainly to higher provisions for nuclear power and operations in Germany.

**Comment Q4:** Items affecting comparability amounted to SEK -9.9 billion (-2.8). The increase in provisions pertains mainly to higher provisions for nuclear power in Germany (SEK -5.6 billion) and Sweden (SEK -2.1 billion). Impairment of asset values pertains mainly to revaluation of Dutch gas assets in the Netherlands and to impairment of the shareholdings in the German nuclear power plants Brokdorf and Stade.

For further information about impairment losses attributable to the lignite operations, see Note 4, Divested operations, on page 37.

## Profit for the period

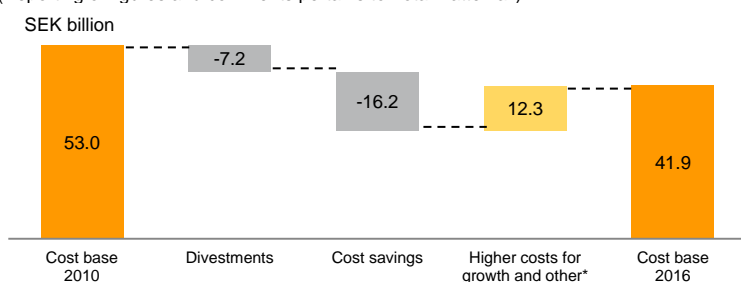
Continuing operations, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Profit for the period	- 3 960	4 550	- 2 171	- 5 188

**Comment full year 2016:** Profit for the period amounted to SEK -2.2 billion (-5.2). Impairment losses, higher provisions and other items affecting comparability had a negative impact on earnings (net after tax) of SEK -14.8 billion (-19.2).

**Comment Q4:** Profit for the period amounted to SEK -4.0 billion (4.6). Impairment losses, higher provisions and other items affecting comparability had a negative impact on earnings (net after tax) of SEK -7.5 billion (-1.9).

## Cost savings

(Reporting of figures and comments pertains to Total Vattenfall)



\* Higher costs for growth and other include among others costs related to growth, exchange rate effects and restructuring costs.

**Comment full year 2016:** Vattenfall has taken numerous measures to cut costs, and compared with the cost base in 2010, Vattenfall has lowered costs under its control by approximately 31%. The cost savings programme of SEK 2.5 billion for 2015-2016 has been completed. Vattenfall will continuously improve efficiency to further reduce costs.

## Financial items

Continuing operations, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net financial items	- 2 017	- 1 127	- 6 382	- 4 776
- of which, interest income	87	497	381	907
- of which, interest expenses	- 850	- 883	- 3 502	- 3 448
- of which, return from the Swedish Nuclear Waste Fund	104	234	866	1 168
- of which, interest components related to pension costs	- 243	- 229	- 954	- 922
- of which, discounting effects attributable to provisions	- 778	- 694	- 3 243	- 2 908
- of which, other	- 337	- 52	70	427
Interest received <sup>1</sup>	93	276	978	845
Interest paid <sup>1</sup>	- 308	- 240	- 3 421	- 3 413

1) Pertains to cash flows.

**Comment full year 2016:** Net financial items were higher in 2016, mainly owing to a higher level of net interest expenses, higher interest on provisions, and a lower return from the Swedish Nuclear Waste Fund.

**Comment Q4:** Net financial items were higher in the fourth quarter of 2016 than in the corresponding period in 2015.

## Cash flow

(Reporting of figures and comments pertains to Total Vattenfall)

Total Vattenfall, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Funds from operations (FFO)	7 157	9 362	28 186	29 009
Cash flow from changes in operating assets and operating liabilities (working capital)	3 905	233	2 597	11 925
Cash flow from operating activities	11 062	9 595	30 783	40 934

**Comment full year 2016:** Funds from operations (FFO) decreased by SEK 0.8 billion.

Cash flow from changes in working capital amounted to SEK 2.6 billion. This is mainly attributable to a positive net change in operating receivables and operating liabilities (SEK 1.3 billion), and a lower inventory of CO<sub>2</sub> emission allowances (SEK 1.2 billion).

**Comment Q4:** Funds from operations (FFO) decreased by SEK 2.2 billion. This is mainly attributable to a lower profit due to the divestment of lignite operations.

Cash flow from changes in working capital amounted to SEK 3.9 billion. This is mainly attributable to a net change in margin calls (SEK 4.5 billion).

## Financial position

Amounts in SEK million	31 Dec. 2016	31 Dec. 2015	Change, %
Cash and cash equivalents, and short-term investments	43 292 <sup>1</sup>	44 256 <sup>1</sup>	-2.2
Committed credit facilities (unutilised)	19 105	18 379	4.0

1) The amounts as per 31 December 2016 pertain to continuing operations, and the amounts as per 31 December 2015 pertain to Total Vattenfall.

**Comment:** Cash and cash equivalents, and short-term investments decreased by SEK 1.0 billion compared with the level at 31 December 2015.

Committed credit facilities consist of a EUR 2.0 billion Revolving Credit Facility that expires on 10 December 2021. As per 31 December 2016, available liquid assets and/or committed credit facilities amounted to 36% of net sales. Vattenfall's target is to maintain a level of no less than 10% of the Group's net sales, but at least the equivalent of the next 90 days' maturities.

Amounts in SEK million	31 Dec. 2016	31 Dec. 2015	Change, %
Interest-bearing liabilities <sup>1</sup>	96 667 <sup>3</sup>	110 585 <sup>3</sup>	-12.6
Net debt <sup>1</sup>	50 724 <sup>3</sup>	64 201 <sup>3</sup>	-21.0
Adjusted net debt <sup>1</sup> (see page 27)	124 741 <sup>3</sup>	137 585 <sup>3</sup>	-9.3
Average interest rate, % <sup>2</sup>	4.4	3.9	—
Duration, years <sup>2</sup>	5.6	3.9	—
Average time to maturity, years <sup>2</sup>	8.5	8.1	—

1) See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

2) Including Hybrid Capital and loans from owners with non-controlling interests and associated companies.

3) The amounts as per 31 December 2016 pertain to Continuing operations, and the amounts as per 31 December 2015 pertain to Total Vattenfall.

**Comment:** Total interest-bearing liabilities decreased by SEK 14 billion compared with the level at 31 December 2015. This is mainly attributable to maturity of bonds and repurchases.

Net debt decreased by SEK 13.5 billion compared with the level at 31 December 2015. This is mainly attributable to a positive cash flow after investments which was partly offset by effects of the sale of the lignite operations, which reduced cash holdings.

Adjusted net debt decreased by SEK 12.8 billion compared with the level at 31 December 2015. The decrease is mainly attributable to a lower level of net debt and to effects of the sale of the lignite operations, which reduced provisions for future obligations for mining operations. Higher nuclear power provisions in both Germany and Sweden increased adjusted net debt by a total of SEK 9.0 billion.

### Credit ratings

On 13 May 2016, Moody's affirmed Vattenfall's long-term A3 rating and Baa2 rating for hybrid bonds. The outlook for Vattenfall's rating is negative. On 19 May 2016 Standard & Poor's affirmed Vattenfall's long-term BBB+ rating. At the same time, Standard & Poor's affirmed Vattenfall's short-term A-2 rating. The outlook for Vattenfall's rating is negative.

# Investments and divestments

Amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Maintenance investments	4 024	3 833	10 557	12 329
Growth investments	3 770	3 708	11 561	12 709
<b>Total investments from continuing operations</b>	<b>7 794</b>	<b>7 541</b>	<b>22 118</b>	<b>25 038</b>
Accrued investments (-)/release of accrued investments (+)	- 226	- 3	- 197	738
<b>Total investments with cash flow effect from continuing operations</b>	<b>7 568</b>	<b>7 538</b>	<b>21 921</b>	<b>25 776</b>
Investments with cash flow effect from discontinued operations	10	909	1 149	2 950
<b>Total investments with cash flow effect</b>	<b>7 578</b>	<b>8 447</b>	<b>23 070</b>	<b>28 726</b>
 <b>Divestments Total Vattenfall</b>	 <b>146</b>	 <b>464</b>	 <b>4 406</b>	 <b>2 814</b>
- of which, shares	20	- 11	1 298	206

**Comment:** Investments are specified in the table below. Divestments in 2016 pertain mainly to Vattenfall's network services operation in Hamburg, Germany, the sale of real estate in Hamburg and Berlin, and the Nordjylland combined heat and power station in Denmark. Divestments in 2015 pertained primarily to combined heat and power assets in Utrecht, the Netherlands.

## Specification of investments

Amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Electricity generation</b>				
Hydro power	547	705	1 511	1 706
Nuclear power	394	1 028	2 162	4 219
Coal power	124	203	454	1 292
Gas	37	114	164	174
Wind power and solar PV	2 611	1 974	8 782	8 629
Biomass, waste	6	17	22	25
<b>Total electricity generation</b>	<b>3 719</b>	<b>4 041</b>	<b>13 095</b>	<b>16 045</b>
 <b>CHP/heat</b>				
Fossil-based power	823	675	1 840	1 949
Biomass, waste	61	72	156	145
Other	503	547	1 064	1 242
<b>Total CHP/heat</b>	<b>1 387</b>	<b>1 294</b>	<b>3 060</b>	<b>3 336</b>
 <b>Electricity networks</b>				
Electricity networks	2 241	1 830	5 248	4 671
<b>Total electricity networks</b>	<b>2 241</b>	<b>1 830</b>	<b>5 248</b>	<b>4 671</b>
 Purchases of shares, shareholder contributions	30	- 59	- 361	- 267
Other	417	435	1 076	1 253
<b>Total investments from continuing operations</b>	<b>7 794</b>	<b>7 541</b>	<b>22 118</b>	<b>25 038</b>
Accrued investments (-)/release of accrued investments (+)	- 226	- 3	- 197	738
<b>Total investments with cash flow effect from continuing operations</b>	<b>7 568</b>	<b>7 538</b>	<b>21 921</b>	<b>25 776</b>
Investments with cash flow effect from discontinued operations	10	909	1 149	2 950
<b>Total investments with cash flow effect</b>	<b>7 578</b>	<b>8 447</b>	<b>23 070</b>	<b>28 726</b>

## Vattenfall's investment plan for 2017–2018

Vattenfall has decided on an investment plan for 2017–2018 of SEK 50 billion, of which SEK 33 billion, or 66%, is earmarked for investments in electricity and heat production. Vattenfall plans to invest the remainder, SEK 17 billion, primarily in electricity and heating networks. The biggest share of growth investments, SEK 19 billion, or 68%, is planned for investment in renewable energy generation, of which investments in wind power will amount to SEK 17 billion. Vattenfall will also invest in solar PV and in new areas, such as batteries and e-mobility, which will enable innovative and sustainable solutions demanded by our customers.

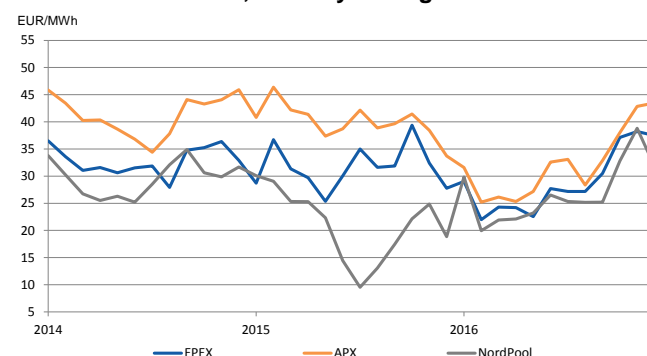
## Wholesale price trend

### Spot prices – electricity

Average Nordic spot prices were 28% higher in 2016, mainly owing to drier weather and a lower hydrological balance. During the fourth quarter of 2016 they were 57% higher than in the corresponding period in 2015. Average spot prices in Germany and the Netherlands were 8% and 19% lower, respectively, than in 2015 as a result of lower commodity prices. As a result of lower nuclear power availability in France and higher commodity prices, average spot prices in Germany and the Netherlands were 13% and 9% higher, respectively, during the fourth quarter than in the corresponding quarter in 2015.

Time period	Nord Pool Spot (Nordic countries)	EPEX (Germany)	APX (Netherlands)
EUR/MWh			
Full year 2016	26.9	29.0	32.2
Full year 2015	21.0	31.6	40.1
%	28%	-8%	-19%
Q4 2016	34.5	37.6	41.4
Q4 2015	22.0	33.3	38.0
%	57%	13%	9%
Q3 2016	25.2	28.2	31.4
%	37%	33%	32%

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

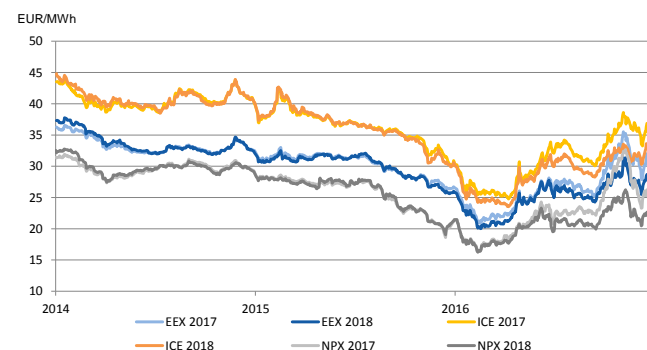


### Futures prices – electricity

Volatile commodity prices led to major fluctuations in futures prices for electricity in all markets. Electricity futures prices were 12%–20% lower than in 2015. Compared with the fourth quarter of 2015, electricity futures prices were 1%–29% higher.

Time period	Nordic countries (NPX)		Germany (EEX)		Netherlands (ICE)	
EUR/MWh	2017	2018	2017	2018	2017	2018
Full year 2016	22.6	20.7	26.6	25.1	30.9	28.9
Full year 2015	25.7	25.7	30.3	30.1	36.3	36.3
%	-12%	-19%	-12%	-16%	-15%	-20%
Q4 2016	28.1	23.5	31.8	28.4	36.1	32.4
Q4 2015	21.7	21.8	27.6	27.2	32.9	32.2
%	29%	8%	15%	4%	10%	1%

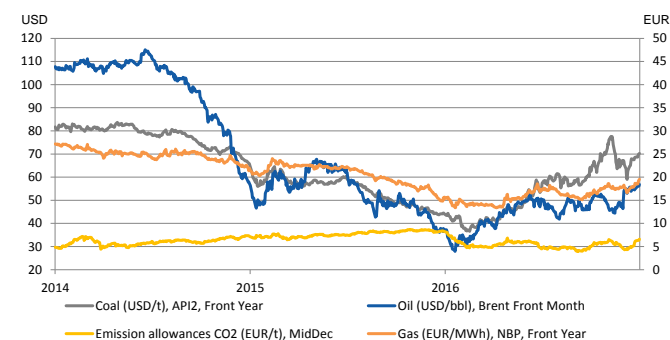
**Electricity futures prices in the Nordic countries, Germany and the Netherlands**



### Commodity prices

Oil prices (Brent crude) were an average of 16% lower than in 2015, mainly owing to larger supply and a stronger US dollar. Coal prices were an average of 1% lower than in 2015. Gas prices were 22% lower than in 2015. Prices of CO<sub>2</sub> emission allowances were an average of 30% lower than in 2015. During the fourth quarter of 2016, oil prices were 14% higher, coal prices were 46% higher, gas prices were 1% higher, and CO<sub>2</sub> emission allowances were 34% lower than in the corresponding period in 2015.

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



## Vattenfall's price hedging

(Reporting of figures and comments pertains to continuing operations)

Vattenfall continuously hedges its future electricity generation through sales in the forward and futures markets. Spot prices therefore have only a limited impact on Vattenfall's earnings in the near term.

Following the sale of the lignite operations, Vattenfall's portfolio and risk exposure have changed substantially. The dominant risk exposure is now related to price exposure for Nordic nuclear and hydro power base load generation. In addition, Vattenfall's continuing operations generate a higher share of regulated revenue from distribution, heat and subsidies from wind power, which reduces the total risk exposure. On the Continent Vattenfall continues to have some price exposure between electricity and used fuel. Such an exposure has a lower risk profile than in the Nordic countries. Based on this, Vattenfall has decided to decrease its price hedging activity and to focus on hedging its Nordic generation.

### Average indicative Nordic hedge prices as per 31 December 2016

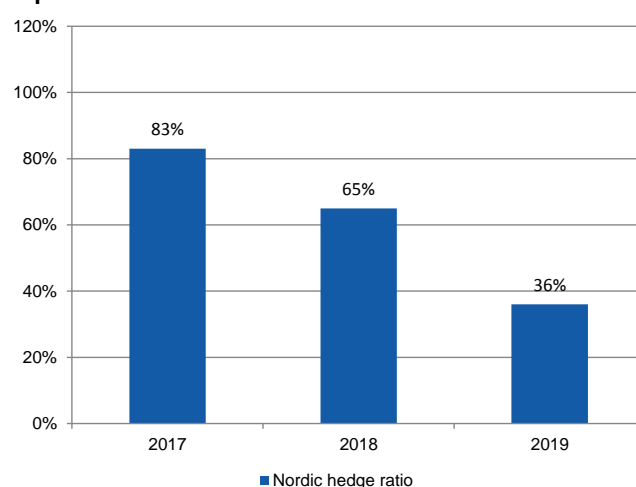
EUR/MWh	2017	2018	2019
	29	27	30

### Sensitivity analysis – Continental portfolio

Market quoted	+/-10% impact on future profit before tax, SEK million <sup>1</sup>			Observed yearly volatility <sup>2</sup>
	2017	2018	2019	
Electricity	+/-399	+/- 401	+/- 820	22% - 23%
Coal	-/+11	-/+ 241	-/+ 244	31% - 32%
Gas	-/+240	-/+ 412	-/+ 412	25% - 27%
CO <sub>2</sub>	-/+15	-/+ 79	-/+ 94	54% -55%

- 1) The denotation +/- entails that a higher price affects operating profit favourably, and -/+ vice versa.
- 2) Observed yearly volatility in 2016 for daily price movements for each commodity, based on forward contracts for the period 2017-2019. Volatility normally declines the further ahead in time the contract pertains to.

### Vattenfall's estimated Nordic hedge ratio (%) as per 31 December 2016



# Operating segments

(Reporting of figures and comments pertains to continuing operations, unless indicated otherwise)

## Customers & Solutions

Continuing operations, amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	20 066	23 596	69 230	87 523
External net sales	19 615	22 888	67 862	84 905
Underlying operating profit before depreciation, amortisation and impairment losses	670	274	2 825	2 271
Underlying operating profit	399	58	1 830	1 390
Sales of electricity, TWh	22.8	32.9	88.9	123.2
- of which, private customers	7.6	7.6	27.0	26.8
- of which, resellers	1.5	9.1	5.5	33.5
- of which, business customers	13.7	16.2	56.4	62.9
Sales of gas, TWh	18.3	15.0	53.1	50.7
Number of employees, full-time equivalents	2 930	3 168	2 930	3 168

*The Customers & Solutions Business Area is responsible for sales of electricity, gas and energy services in all of Vattenfall's markets.*

- Net sales for 2016 decreased, mainly due to a reallocation of contracts with resellers from the Customers & Solutions Business Area to the Markets Business Area, which is included in the Power Generation operating segment. Lower sold volumes in Germany and negative price effects in the Netherlands had a negative impact on net sales.
- Lower sales and administration costs had a positive effect on the underlying operating profit for 2016.
- Sales of electricity to private customers increased in 2016. Vattenfall's customer base in Customers & Solutions grew by some 144,000 contracts since the start of the year, of which the acquisition of the Danish consumer company Vindstød.dk is included (27,000). Sales of gas were slightly higher than in 2015, mainly due to a larger number of customer contracts in Germany and colder weather in the Netherlands.

## Power Generation

Continuing operations, amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	28 340	30 795	98 997	91 643
External net sales	12 311	13 383	49 276	35 783
Underlying operating profit before depreciation, amortisation and impairment losses	4 642	4 295	14 354	15 822
Underlying operating profit	3 861	3 584	11 410	12 376
Electricity generation, TWh <sup>1</sup>	21.0	22.5	81.7	82.4
- of which, hydro power	7.9	10.6	34.8	39.5 <sup>2</sup>
- of which, nuclear power	13.1	11.2	46.9	42.2
- of which, biomass, waste	—	0.7	—	0.7 <sup>2</sup>
Sales of electricity, resellers, TWh	8.5	—	31.6	—
Number of employees, full-time equivalents	7 493	7 771	7 493	7 771

1) Values for 2016 are preliminary.

2) The value has been adjusted compared with the value presented in Vattenfall's 2015 year-end report.

*Power Generation comprises the Generation and Markets Business Areas. The segment includes Vattenfall's hydro and nuclear power operations, and optimisation and trading operations.*

- Net sales for 2016 increased, mainly owing to the reallocation of contracts with resellers from the Customers & Solutions Business Area to the Markets Business Area, which is included in the Power Generation operating segment.

- The underlying operating profit for 2016 decreased, mainly owing to lower production margins resulting from average lower electricity and fuel prices achieved.
- Hydro power generation in 2016 decreased as a result of lower reservoir levels. Nordic reservoir levels were 52% (74%) of capacity at the end of the fourth quarter, which is 5 percentage points below the normal level.
- Nuclear power generation in 2016 increased compared with the preceding year, owing to higher availability. The Ringhals 2 reactor (R2) was restarted during the fourth quarter. Combined availability for Vattenfall's nuclear power plants for the full year 2016 was 75.4% (69.7%). The corresponding figure for the fourth quarter of 2016 was 83.9% (71.8%).
- For 2016 Forsmark had availability of 84.0% (76.1%) and generation of 24.0 TWh (21.1). Ringhals had availability of 68.2% (64.4%) and generation of 22.9 TWh (21.1). For the fourth quarter of 2016 Forsmark had availability of 86.1% (89.8%) and generation of 6.1 TWh (6.4). Ringhals had availability of 82.0% (76.1%) and generation of 7.0 TWh (8.0).

## Wind

Continuing operations, amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	2 183	2 155	6 702	6 769
External net sales	1 408	1 296	4 384	4 267
Underlying operating profit before depreciation, amortisation and impairment losses	1 378	1 489	4 297	4 621
Underlying operating profit	398	627	878	1 469
Electricity generation - wind power TWh	1.9	2.0	5.8	5.8
Number of employees, full-time equivalents	706	577	706	577

*The Wind Business Area is responsible for Vattenfall's wind power and solar energy operations.*

- Net sales for 2016 decreased slightly compared with 2015, mainly owing to lower average prices received and less favourable wind conditions.
- The underlying operating profit decreased, mainly owing to lower production revenue, higher depreciation associated with the commissioning of new wind farms, and higher project planning and repair costs.
- Electricity generation is in line with 2015 despite commissioning of new wind farms during 2016. This is mainly due to less favourable wind conditions, with available wind of 20% below a normal year. New capacity added in 2016 includes the German offshore wind farm Sandbank (216 MW of a total of 288 MW), the Swedish onshore wind farms Högabjär (38 MW) and Höge Våg (38 MW), and the 5 MW of solar energy adjacent to Vattenfall's Parc Cynog onshore wind farm in Wales.

## Heat

Continuing operations, amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	9 712	7 499	28 414	27 345
External net sales	4 701	3 493	15 110	14 356
Underlying operating profit before depreciation, amortisation and impairment losses	2 435	1 528	7 059	5 689
Underlying operating profit	1 532	335	3 230	1 759
Electricity generation - TWh <sup>1</sup>	9.7	8.0	31.5	29.8 <sup>2</sup>
- of which, fossil-based power	9.5	7.8	30.8	29.0 <sup>2</sup>
- of which, biomass, waste	0.2	0.2	0.7	0.8
Sales of heat, TWh	7.6	6.1	20.3	20.6
Number of employees, full-time equivalents	3 790	4 202	3 790	4 202

1) Figures for 2016 are preliminary.

2) The value has been adjusted compared with the value presented in Vattenfall's 2015 year-end report.

*The Heat Business Area comprises Vattenfall's heat operations, including all thermal operations.*

- Net sales increased in 2016, mainly owing to a higher number of customer contracts, mainly in Berlin. Vattenfall's customer base in Heat grew by approximately 40,000 contracts since the start of the year.
- The underlying operating profit improved for 2016, which is primarily explained by a higher gross margin mainly resulting from lower fuel costs.
- The decrease in the number of employees is mainly attributable to the divestment of the Nordjylland combined heat and power plant in Denmark.

## Distribution

Continuing operations, amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	5 267	5 578	19 661	19 914
External net sales	4 015	4 322	15 233	15 355
Underlying operating profit before depreciation, amortisation and impairment losses	1 850	2 402	7 669	8 189
Underlying operating profit	1 120	1 703	4 863	5 465
Number of employees, full-time equivalents	2 010	2 728	2 010	2 728

*The Distribution Business Area comprises Vattenfall's electricity distribution operations in Sweden and Germany (Berlin).*

- Net sales in 2016 excluding the divested network services operation in Hamburg increased as a result of higher prices and slightly higher transmission volumes.
- The underlying operating profit, excluding the divested network services operation in Hamburg, decreased mainly as a result of higher costs in Germany and the earlier scheduling of maintenance investments. The lost earnings contribution from the divested network services operation in Hamburg amounted to approximately SEK 0.5 billion for the full year 2016.
- Vattenfall's customer base in Distribution grew by approximately 24,000 contracts since the start of the year. The trend of growing customer base is mainly driven by urbanization.
- The decrease in the number of employees is mainly attributable to the divestment of the network services operation in Hamburg.

## Other<sup>1</sup>

Continuing operations, amounts in SEK million unless indicated otherwise	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Net sales	1 334	1 433	5 363	5 361
External net sales	169	45	326	178
Underlying operating profit before depreciation, amortisation and impairment losses	- 281	39	- 58	- 1 330
Underlying operating profit	- 401	- 95	- 512	- 1 897
Number of employees, full-time equivalents	3 006	3 319	3 006	3 319

1) Other pertains mainly to all Staff functions, including Treasury and Shared Service Centres.

The data reported above for the operating segments also include eliminations in the Group's sales and earnings.  
See pages 23-25.

# Consolidated income statement

Amounts in SEK million	Q4 2016	Q4 2015 <sup>9</sup>	Full year 2016	Full year 2015 <sup>9</sup>
<b>Continuing operations</b>				
Net sales	37 796	42 368	139 208	143 576
Cost of products sold <sup>1</sup>	- 32 629	- 33 705	- 119 217	- 129 222
<b>Gross profit</b>	<b>5 167</b>	<b>8 663</b>	<b>19 991</b>	<b>14 354</b>
Selling expenses, administrative expenses and research and development costs <sup>2</sup>	- 5 863	- 5 232	- 19 259	- 19 326
Other operating income and expenses, net	26	644	2 456	400
Participations in the results of associated companies <sup>3</sup>	- 2 171	- 434	- 1 851	- 497
<b>Operating profit (EBIT)<sup>4</sup></b>	<b>- 2 841</b>	<b>3 641</b>	<b>1 337</b>	<b>- 5 069</b>
Financial income <sup>5,8</sup>	- 11	634	1 767	2 755
Financial expenses <sup>6,7,8</sup>	- 2 006	- 1 761	- 8 149	- 7 531
<b>Profit before tax</b>	<b>- 4 858</b>	<b>2 514</b>	<b>- 5 045</b>	<b>- 9 845</b>
Income tax expense	898	2 036	2 874	4 657
<b>Profit for the period from continuing operations</b>	<b>- 3 960</b>	<b>4 550</b>	<b>- 2 171</b>	<b>- 5 188</b>
<b>Discontinued operations</b>				
Profit for the period from discontinued operations, net after tax	- 192 <sup>10</sup>	- 2 090	- 23 833	- 14 578
<b>Profit for the period</b>	<b>- 4 152</b>	<b>2 460</b>	<b>- 26 004</b>	<b>- 19 766</b>
Attributable to owner of the Parent Company	- 4 055	2 243	- 26 324	- 16 672
Attributable to non-controlling interests	- 97	217	320	- 3 094

## Supplementary information for continuing operations

Operating profit before depreciation, amortisation and impairment losses (EBITDA)	3 313	7 729	27 209	30 604
Underlying operating profit before depreciation, amortisation and impairment losses	10 880	10 222	36 144	35 229
Underlying operating profit	7 095	6 407	21 697	20 529
Financial items, net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	- 1 343	- 667	- 4 005	- 3 036

1) Of which, depreciation, amortisation and impairment losses	- 4 990	- 3 528	- 23 423	- 34 236
2) Of which, depreciation, amortisation and impairment losses	- 46	- 560	- 1 331	- 1 396
3) Of which impairment losses	- 1 118	—	- 1 118	- 41
4) Including items affecting comparability	- 9 936	- 2 766	- 20 360	- 25 598
5) Including return from the Swedish Nuclear Waste Fund	104	234	866	1 168
6) Including interest components related to pension costs	- 243	- 229	- 954	- 922
7) Including discounting effects attributable to provisions	- 778	- 694	- 3 243	- 2 908
8) Items affecting comparability recognised as financial income and expenses, net	- 176	—	- 176	- 18

9) The value for 2015 has been recalculated compared with information previously published in Vattenfall's 2015 interim reports and 2015 Annual and Sustainability Report. This is because the lignite operations have been divested and are reported as a discontinued operation in accordance with IFRS 5.

10) The value for Q4 2016 pertains in all essential respects to the recognised exchange rate effect on the value of divested operations in Q1-3 2016.

# Consolidated statement of comprehensive income

(Reporting of figures and comments pertains to Total Vattenfall)

	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Total Vattenfall, amounts in SEK million</b>				
<b>Profit for the period</b>	<b>- 4 152</b>	<b>2 460</b>	<b>- 26 004</b>	<b>- 19 766</b>
<b>Other comprehensive income</b>				
<b>Items that will be reclassified to profit or loss when specific conditions are met</b>				
Cash flow hedges - changes in fair value	- 1 695	1 629	- 17 620	11 354
Cash flow hedges - dissolved against income statement	1 317	- 936	2 737	- 5 323
Cash flow hedges - transferred to cost of hedged item	- 26	- 19	- 71	- 3
Hedging of net investments in foreign operations	113	1 434	- 923	1 709
Translation differences and exchange rate effects net, divested companies	687	—	1 164	—
Translation differences	- 921	- 2 962	1 927	- 1 938
Income tax relating to items that will be reclassified	89	- 462	4 022	- 1 722
<b>Total items that will be reclassified to profit or loss when specific conditions are met</b>	<b>- 436</b>	<b>- 1 316</b>	<b>- 8 764</b>	<b>4 077</b>
<b>Items that will not be reclassified to profit or loss</b>				
Remeasurement pertaining to defined benefit obligations	1 941	- 95	- 1 805	2 867
Income tax relating to items that will not be reclassified	- 586	48	500	- 762
<b>Total items that will not be reclassified to profit or loss</b>	<b>1 355</b>	<b>- 47</b>	<b>- 1 305</b>	<b>2 105</b>
<b>Total other comprehensive income, net after tax</b>	<b>919</b>	<b>- 1 363</b>	<b>- 10 069</b>	<b>6 182</b>
<b>Total comprehensive income for the period</b>	<b>- 3 233</b>	<b>1 097</b>	<b>- 36 073</b>	<b>- 13 584</b>
Attributable to owner of the Parent Company	- 3 005	1 007	- 36 485	- 10 398
Attributable to non-controlling interests	- 228	90	412	- 3 186

# Operating segments, Vattenfall Group

Amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>External net sales</b>				
<b>Customers &amp; Solutions</b>	19 615	22 888	67 862	84 905
<b>Power Generation</b>	12 311	13 383 <sup>3</sup>	49 276	35 783 <sup>3</sup>
<b>Wind</b>	1 408	1 296	4 384	4 267
<b>Heat</b>	4 701	3 493	15 110	14 356
<b>Distribution</b>	4 015	4 322	15 233	15 355
- of which, Distribution Germany	1 298	1 763	4 978	6 018
- of which, Distribution Sweden	2 717	2 559	10 255	9 337
<b>Other<sup>1</sup></b>	169	45	326	178
<b>Eliminations<sup>2</sup></b>	- 4 423	- 3 059	- 12 983	- 11 268
<b>Total continuing operations</b>	<b>37 796</b>	<b>42 368</b>	<b>139 208</b>	<b>143 576</b>
Discontinued operations	117 <sup>4</sup>	3 131	13 459	20 934
<b>Total</b>	<b>37 913</b>	<b>45 499</b>	<b>152 667</b>	<b>164 510</b>
<b>Internal net sales</b>				
<b>Customers &amp; Solutions</b>	451	708	1 368	2 618
<b>Power Generation</b>	16 029	17 412 <sup>3</sup>	49 721	55 860 <sup>3</sup>
<b>Wind</b>	775	859	2 318	2 502
<b>Heat</b>	5 011	4 006 <sup>3</sup>	13 304	12 989 <sup>3</sup>
<b>Distribution</b>	1 252	1 256	4 428	4 559
- of which, Distribution Germany	1 078	1 066	3 954	4 012
- of which, Distribution Sweden	174	190	474	547
<b>Other<sup>1</sup></b>	1 165	1 388	5 037	5 183
<b>Eliminations</b>	- 24 683	- 25 629 <sup>3</sup>	- 76 176	- 83 711 <sup>3</sup>
<b>Total continuing operations</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
Discontinued operations	—	—	—	—
<b>Total</b>	<b>—</b>	<b>—</b>	<b>—</b>	<b>—</b>
<b>Total net sales</b>				
<b>Customers &amp; Solutions</b>	20 066	23 596	69 230	87 523
<b>Power Generation</b>	28 340	30 795 <sup>3</sup>	98 997	91 643 <sup>3</sup>
<b>Wind</b>	2 183	2 155	6 702	6 769
<b>Heat</b>	9 712	7 499 <sup>3</sup>	28 414	27 345 <sup>3</sup>
<b>Distribution</b>	5 267	5 578	19 661	19 914
- of which, Distribution Germany	2 376	2 829	8 932	10 030
- of which, Distribution Sweden	2 891	2 749	10 729	9 884
<b>Other<sup>1</sup></b>	1 334	1 433	5 363	5 361
<b>Eliminations</b>	- 29 106	- 28 688 <sup>3</sup>	- 89 159	- 94 979 <sup>3</sup>
<b>Total continuing operations</b>	<b>37 796</b>	<b>42 368</b>	<b>139 208</b>	<b>143 576</b>
Discontinued operations	117 <sup>4</sup>	3 131	13 459	20 934
<b>Total</b>	<b>37 913</b>	<b>45 499</b>	<b>152 667</b>	<b>164 510</b>

## Operating segments, Vattenfall Group cont.

Amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b><u>Operating profit before depreciation, amortisation and impairment losses (EBITDA)</u></b>				
<b>Customers &amp; Solutions</b>	654	239	2 775	1 657
<b>Power Generation</b>	- 2 263	2 226 <sup>3</sup>	3 962	12 754 <sup>3</sup>
<b>Wind</b>	1 389	1 138	4 442	4 282
<b>Heat</b>	2 301	1 501 <sup>3</sup>	7 062	5 632 <sup>3</sup>
<b>Distribution</b>	1 834	2 393	7 644	8 143
- of which, Distribution Germany	184	881	1 337	2 649
- of which, Distribution Sweden	1 650	1 512	6 307	5 494
<b>Other<sup>1</sup></b>	- 788	37	1 326	- 1 831
<b>Eliminations</b>	186	195	- 2	- 33
<b>Total continuing operations</b>	3 313	7 729	27 209	30 604
Discontinued operations	24 <sup>4</sup>	1 106	943	2 150
<b>Total</b>	3 337	8 835	28 152	32 754
<b><u>Underlying operating profit before depreciation, amortisation and impairment losses</u></b>				
<b>Customers &amp; Solutions</b>	670	274	2 825	2 271
<b>Power Generation</b>	4 642	4 295 <sup>3</sup>	14 354	15 822 <sup>3</sup>
<b>Wind</b>	1 378	1 489	4 297	4 621
<b>Heat</b>	2 435	1 528 <sup>3</sup>	7 059	5 689 <sup>3</sup>
<b>Distribution</b>	1 850	2 402	7 669	8 189
- of which, Distribution Germany	190	881	1 355	2 683
- of which, Distribution Sweden	1 660	1 521	6 314	5 506
<b>Other<sup>1</sup></b>	- 281	39	- 58	- 1 330
<b>Eliminations</b>	186	195	- 2	- 33
<b>Total continuing operations</b>	10 880	10 222	36 144	35 229
Discontinued operations	- 135 <sup>4</sup>	1 132	2 068	4 775
<b>Total</b>	10 745	11 354	38 212	40 004

## Operating segments, Vattenfall Group cont.

Amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Operating profit (EBIT)</b>				
<b>Customers &amp; Solutions</b>	<b>361</b>	<b>22</b>	<b>1 749</b>	<b>775</b>
<b>Power Generation</b>	<b>- 4 412</b>	<b>1 512<sup>3</sup></b>	<b>- 3 648</b>	<b>- 7 699<sup>3</sup></b>
<b>Wind</b>	<b>413</b>	<b>136</b>	<b>898</b>	<b>931</b>
<b>Heat</b>	<b>416</b>	<b>183<sup>3</sup></b>	<b>- 3 366</b>	<b>- 2 555<sup>3</sup></b>
<b>Distribution</b>	<b>1 104</b>	<b>1 695</b>	<b>4 838</b>	<b>5 419</b>
- of which, Distribution Germany	- 38	674	527	1 848
- of which, Distribution Sweden	1 142	1 021	4 311	3 571
<b>Other<sup>1</sup></b>	<b>- 909</b>	<b>- 102</b>	<b>868</b>	<b>- 1 907</b>
<b>Eliminations</b>	<b>186</b>	<b>195</b>	<b>- 2</b>	<b>- 33</b>
<b>Operating profit (EBIT) continuing operations</b>	<b>- 2 841</b>	<b>3 641</b>	<b>1 337</b>	<b>- 5 069</b>
Discontinued operations	- 180 <sup>4</sup>	49	- 22 542	- 17 898
<b>Operating profit (EBIT)</b>	<b>- 3 021</b>	<b>3 690</b>	<b>- 21 205</b>	<b>- 22 967</b>
Operating profit (EBIT) continuing operations	- 2 841	3 641	1 337	- 5 069
Financial income and expenses continuing operations	- 2 017	- 1 127	- 6 382	- 4 776
<b>Profit before tax from continuing operations</b>	<b>- 4 858</b>	<b>2 514</b>	<b>- 5 045</b>	<b>- 9 845</b>
<b>Underlying operating profit</b>				
<b>Customers &amp; Solutions</b>	<b>399</b>	<b>58</b>	<b>1 830</b>	<b>1 390</b>
<b>Power Generation</b>	<b>3 861</b>	<b>3 584<sup>3</sup></b>	<b>11 410</b>	<b>12 376<sup>3</sup></b>
<b>Wind</b>	<b>398</b>	<b>627</b>	<b>878</b>	<b>1 469</b>
<b>Heat</b>	<b>1 532</b>	<b>335<sup>3</sup></b>	<b>3 230</b>	<b>1 759<sup>3</sup></b>
<b>Distribution</b>	<b>1 120</b>	<b>1 703</b>	<b>4 863</b>	<b>5 465</b>
- of which, Distribution Germany	- 33	675	544	1 881
- of which, Distribution Sweden	1 153	1 028	4 319	3 584
<b>Other<sup>1</sup></b>	<b>- 401</b>	<b>- 95</b>	<b>- 512</b>	<b>- 1 897</b>
<b>Eliminations</b>	<b>186</b>	<b>195</b>	<b>- 2</b>	<b>- 33</b>
<b>Underlying operating profit continuing operations</b>	<b>7 095</b>	<b>6 407</b>	<b>21 697</b>	<b>20 529</b>
Discontinued operations	- 152 <sup>4</sup>	42	- 4	12
<b>Underlying operating profit</b>	<b>6 943</b>	<b>6 449</b>	<b>21 693</b>	<b>20 541</b>

1) "Other" pertains mainly to all Staff functions, including Treasury and Shared Service Centres.

2) For external net sales, eliminations pertain to sales to the Nordic electricity exchange.

3) The value for 2015 has been recalculated compared with information previously published in Vattenfall's 2015 interim reports and 2015 Annual and Sustainability Report. This is because the lignite operations have been divested and are reported as a discontinued operation in accordance with IFRS 5.

4) The value for Q4 2016 pertains in all essential respects to the recognised exchange rate effect on the value of divested operations in Q1-3 2016.

# Consolidated balance sheet

Total Vattenfall, amounts in SEK million	31 Dec. 2016	31 Dec. 2015
<b>Assets</b>		
<b>Non-current assets</b>		
Intangible assets: non-current	16 792	17 564
Property, plant and equipment	217 136	244 563
Investment property	128	388
Biological assets	34	35
Participations in associated companies and joint arrangements	4 839	7 002
Other shares and participations	118	273
Share in the Swedish Nuclear Waste Fund	36 199	34 172
Derivative assets	14 036	20 220
Current tax assets, non-current	—	222
Prepaid expenses	20	103
Deferred tax assets	11 538	9 265
Other non-current receivables	3 788	9 484
<b>Total non-current assets</b>	<b>304 628</b>	<b>343 291</b>
<b>Current assets</b>		
Inventories	14 566	16 592
Biological assets	13	19
Intangible assets: current	315	1 091
Trade receivables and other receivables	26 008	26 193
Advance payments paid	1 311	3 607
Derivative assets	10 656	14 067
Prepaid expenses and accrued income	6 463	5 936
Current tax assets	1 314	3 285
Short-term investments	23 297	31 905
Cash and cash equivalents	19 995	12 351
Assets held for sale	694	3 980
<b>Total current assets</b>	<b>104 632</b>	<b>119 026</b>
<b>Total assets</b>	<b>409 260</b>	<b>462 317</b>
<b>Equity and liabilities</b>		
<b>Equity</b>		
Attributable to owner of the Parent Company	68 272	103 984
Attributable to non-controlling interests	15 528	11 972
<b>Total equity</b>	<b>83 800</b>	<b>115 956</b>
<b>Non-current liabilities</b>		
Hybrid Capital	19 164	18 546
Other interest-bearing liabilities	63 494	68 179
Pension provisions	40 644	38 919
Other interest-bearing provisions	79 341	93 042
Derivative liabilities	12 464	10 579
Deferred tax liabilities	14 776	22 970
Other noninterest-bearing liabilities	6 440	6 273
<b>Total non-current liabilities</b>	<b>236 323</b>	<b>258 508</b>
<b>Current liabilities</b>		
Trade payables and other liabilities	25 330	23 958
Advance payments received	2 164	2 293
Derivative liabilities	11 552	8 023
Accrued expenses and deferred income	15 481	19 969
Current tax liabilities	1 888	306
Other interest-bearing liabilities	14 009	23 860
Interest-bearing provisions	18 359	6 302
Liabilities associated with assets held for sale	354	3 142
<b>Total current liabilities</b>	<b>89 137</b>	<b>87 853</b>
<b>Total equity and liabilities</b>	<b>409 260</b>	<b>462 317</b>

# Consolidated balance sheet, cont.

## Supplementary information

Amounts in SEK million <sup>1</sup>	31 Dec. 2016	31 Dec. 2015
<b>Calculation of capital employed</b>		
Intangible assets: current and non-current	17 107	18 655
Property, plant and equipment	217 136	244 563
Participations in associated companies and joint arrangements	4 839	7 002
Deferred and current tax assets	12 852	12 550
Non-current noninterest-bearing receivables	2 659	8 309
Inventories	14 566	16 592
Trade receivables and other receivables	26 008	26 193
Prepaid expenses and accrued income	6 463	5 936
Unavailable liquidity	6 995	6 813
Other	484	719
<b>Total assets excl. financial assets</b>	<b>309 109</b>	<b>347 332</b>
Deferred and current tax liabilities	- 16 664	- 23 276
Other noninterest-bearing liabilities	- 6 440	- 6 273
Trade payable and other liabilities	- 25 330	- 23 958
Accrued expenses and deferred income	- 15 481	- 19 969
Other	—	- 77
<b>Total noninterest-bearing liabilities</b>	<b>- 63 915</b>	<b>- 73 553</b>
Other interest-bearing provisions not related to adjusted net debt <sup>2</sup>	- 12 505	- 9 188
<b>Capital employed<sup>3</sup></b>	<b>232 689</b>	<b>264 591</b>
<b>Capital employed, average</b>	<b>248 640</b>	<b>279 435</b>
<b>Calculation of net debt</b>		
Hybrid Capital	- 19 164	- 18 546
Bond issues, commercial paper and liabilities to credit institutions	- 55 807	- 68 898
Present value of liabilities pertaining to acquisitions of Group companies	- 51	—
Liabilities to associated companies	- 2 798	- 2 751
Liabilities to owners of non-controlling interests	- 10 109	- 13 041
Other liabilities	- 8 738	- 7 349
<b>Total interest-bearing liabilities</b>	<b>- 96 667</b>	<b>- 110 585</b>
Cash and cash equivalents	19 995	12 351
Short-term investments	23 297	31 905
Loans to owners of non-controlling interests in foreign Group companies	2 651	2 128
<b>Net debt<sup>3</sup></b>	<b>- 50 724</b>	<b>- 64 201</b>
<b>Calculation of adjusted gross debt and net debt</b>		
Total interest-bearing liabilities	- 96 667	- 110 585
50% of Hybrid Capital <sup>4</sup>	9 582	9 273
Present value of pension obligations	- 40 644	- 38 919
Provisions for mining, gas and wind operations and other environment-related provisions	- 4 367	- 19 099
Provisions for nuclear power (net) <sup>5</sup>	- 41 896	- 32 944
Margin calls received	3 961	5 307
Liabilities to owners of non-controlling interests due to consortium agreements	8 993	11 939
<b>Adjusted gross debt</b>	<b>- 161 038</b>	<b>- 175 028</b>
Reported cash and cash equivalents and short-term investments	43 292	44 256
Unavailable liquidity	- 6 995	- 6 813
<b>Adjusted cash and cash equivalents and short-term investments</b>	<b>36 297</b>	<b>37 443</b>
<b>Adjusted net debt<sup>3</sup></b>	<b>- 124 741</b>	<b>- 137 585</b>

1) The amounts as per 31 December 2016 pertain to continuing operations, and the amounts as per 31 December 2015 pertain to Total Vattenfall.

2) Includes personnel-related provisions for non-pension purposes, provisions for tax and legal disputes and certain other provisions.

3) See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

4) 50% of Hybrid Capital is treated as equity by the rating agencies, which thereby reduces adjusted net debt.

5) The calculation is based on Vattenfall's share of ownership in the respective nuclear power plants, less Vattenfall's share in the Swedish Nuclear Waste Fund and liabilities to associated companies. Vattenfall has the following ownership interests in the respective plants: Forsmark 66%, Ringhals 70.4%, Brokdorf 20%, Brunsbüttel 66.7%, Krümmel 50% and Stade 33.3%. (According to a special agreement, Vattenfall is responsible for 100% of the provisions for Ringhals.)

# Consolidated statement of cash flows

(Reporting of figures and comments pertains to Total Vattenfall)

Total Vattenfall, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Operating activities</b>				
Profit before tax	- 5 042	2 515	- 27 975	- 28 192
Reversal of depreciation, amortisation and impairment losses	6 539	5 145	49 539	55 724
Tax paid	- 144	242	1 290	- 1 340
Capital gains/losses, net	186	60	- 1 581	143
Other, incl. non-cash items	5 618	1 400	6 913	2 674
<b>Funds from operations (FFO)</b>	<b>7 157</b>	<b>9 362</b>	<b>28 186</b>	<b>29 009</b>
Changes in inventories	- 926	- 1 560	1 199	- 553
Changes in operating receivables	- 3 971	- 5 245	- 2 287	4 074
Changes in operating liabilities	4 253	8 086	3 623	5 775
Other changes	4 549	- 1 048	62	2 629
<b>Cash flow from changes in operating assets and operating liabilities</b>	<b>3 905</b>	<b>233</b>	<b>2 597</b>	<b>11 925</b>
<b>Cash flow from operating activities</b>	<b>11 062</b>	<b>9 595</b>	<b>30 783</b>	<b>40 934</b>
<b>Investing activities</b>				
Acquisitions in Group companies	- 129	—	- 129	- 5
Investments in associated companies and other shares and participations	149	59	541	272
Other investments in non-current assets	- 7 598	- 8 506	- 23 482	- 28 993
<b>Total investments</b>	<b>- 7 578</b>	<b>- 8 447</b>	<b>- 23 070</b>	<b>- 28 726</b>
Divestments	146	464	4 406	2 814
Cash and cash equivalents in acquired companies	98	—	98	—
Cash and cash equivalents in divested companies	- 116	- 28	- 199	- 563
<b>Cash flow from investing activities</b>	<b>- 7 450</b>	<b>- 8 011</b>	<b>- 18 765</b>	<b>- 26 475</b>
<b>Cash flow before financing activities</b>	<b>3 612</b>	<b>1 584</b>	<b>12 018</b>	<b>14 459</b>
<b>Financing activities</b>				
Changes in short-term investments	4 474	- 1 581	12 004	235
Changes in loans to owners of non-controlling interests in foreign Group companies	- 605	99	- 434	- 783
Loans raised <sup>1</sup>	1 482	848	8 764	5 088
Amortisation of debt pertaining to acquisitions of Group companies	—	—	—	- 19 152
Amortisation of other debt	- 2 051	- 2 357	- 21 549	- 10 223
Divestment of shares in Group companies to owners of non-controlling interests	- 30	—	2 745	—
Effect of early termination of swaps related to financing activities	- 433	—	2 244	1 690
Redemption of Hybrid Capital	—	—	—	- 9 172
Issue of Hybrid Capital	—	3 484	—	18 636
Dividends paid to owners	- 165	- 180	- 882	- 333
Contribution from owners of non-controlling interests	537	310	2 107	1 973
<b>Cash flow from financing activities</b>	<b>3 209</b>	<b>623</b>	<b>4 999</b>	<b>- 12 041</b>
<b>Cash flow for the period</b>	<b>6 821</b>	<b>2 207</b>	<b>17 017</b>	<b>2 418</b>

# Consolidated statement of cash flows, cont.

(Reporting of figures and comments pertains to Total Vattenfall)

Total Vattenfall, amounts in SEK million	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Cash and cash equivalents</b>				
Cash and cash equivalents at start of period	13 108	12 497	12 351	12 283
Cash and cash equivalents included in assets held for sale/sold	68	- 2 263	- 9 443	- 2 263
Cash flow for the period	6 821	2 207	17 017	2 418
Translation differences	- 2	- 90	70	- 87
<b>Cash and cash equivalents at end of period</b>	<b>19 995</b>	<b>12 351</b>	<b>19 995</b>	<b>12 351</b>
<b>Supplementary information</b>				
<b>Cash flow before financing activities</b>	<b>3 612</b>	<b>1 584</b>	<b>12 018</b>	<b>14 459</b>
<b>Financing activities</b>				
Divestment of shares in Group companies to owners of non-controlling interests	- 30	—	2 745	—
Effects from terminating swaps related to financing activities	- 433	—	2 244	1 690
Dividends paid to owners	- 165	- 180	- 882	- 333
Contribution from owners of non-controlling interests	537	310	2 107	1 973
<b>Cash flow after dividend</b>	<b>3 521</b>	<b>1 714</b>	<b>18 232</b>	<b>17 789</b>
<b>Analysis of change in net debt</b>				
Net debt at start of period	- 57 971	- 65 405	- 64 201	- 79 473
Cash flow after dividend	3 521	1 714	18 232	17 789
Changes as a result of valuation at fair value	647	366	- 914	274
Changes in interest-bearing liabilities for leasing	1	- 4	13	3
Interest-bearing liabilities/short-term investments acquired/divested	—	—	4	35
Changes in liabilities pertaining to acquisitions of Group companies, discounting effects	—	—	—	- 160
Cash and cash equivalents included in assets held for sale	68	- 2 263	- 9 443	- 2 263
Interest-bearing liabilities associated with assets held for sale	99	—	99	—
Release of collateralised cash by issuing bank guarantees	2 515	—	2 515	—
Translation differences on net debt	396	1 391	- 127	- 406
Reclassification	—	—	3 098	—
<b>Net debt at end of period</b>	<b>- 50 724</b>	<b>- 64 201</b>	<b>- 50 724</b>	<b>- 64 201</b>
Cash flow from operating activities	11 062	9 595	30 783	40 934
Maintenance investments	- 3 907	- 5 325	- 11 566	- 15 921
<b>Free cash flow<sup>2</sup></b>	<b>7 155</b>	<b>4 270</b>	<b>19 217</b>	<b>25 013</b>

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

2) See Definitions and calculations of key ratios for definitions of Alternative Performance Measures.

# Consolidated statement of changes in equity

(Reporting of figures and comments pertains to Total Vattenfall)

	31 Dec. 2016			31 Dec. 2015		
	Attributable to owner of the Parent Company	Attributable to non-controlling interests	Total equity	Attributable to owner of the Parent Company	Attributable to non-controlling interests	Total equity
Total Vattenfall, amounts in SEK million						
<b>Balance brought forward</b>	<b>103 984</b>	<b>11 972</b>	<b>115 956</b>	<b>115 260</b>	<b>13 202</b>	<b>128 462</b>
<b>Profit for the period</b>	<b>- 26 324</b>	<b>320</b>	<b>- 26 004</b>	<b>- 16 672</b>	<b>- 3 094</b>	<b>- 19 766</b>
Cash flow hedges - changes in fair value	- 17 691	71	- 17 620	11 335	19	11 354
Cash flow hedges - dissolved against income statement	2 746	- 9	2 737	- 5 324	1	- 5 323
Cash flow hedges - transferred to cost of hedged item	- 52	- 19	- 71	- 4	1	- 3
Hedging of net investments in foreign operations	- 923	—	- 923	1 709	—	1 709
Translation differences and exchange rate effects net, divested companies	1 164	—	1 164	—	—	—
Translation differences	1 812	115	1 927	- 1 746	- 192	- 1 938
Remeasurement pertaining to defined benefit obligations	- 1 726	- 79	- 1 805	2 742	125	2 867
Income tax relating to other comprehensive income	4 509	13	4 522	- 2 438	- 46	- 2 484
<b>Total other comprehensive income for the period</b>	<b>- 10 161</b>	<b>92</b>	<b>- 10 069</b>	<b>6 274</b>	<b>- 92</b>	<b>6 182</b>
<b>Total comprehensive income for the period</b>	<b>- 36 485</b>	<b>412</b>	<b>- 36 073</b>	<b>- 10 398</b>	<b>- 3 186</b>	<b>- 13 584</b>
Dividends paid to owners	—	- 882	- 882	—	- 333	- 333
Group contributions from(+)/to(-) owners of non-controlling interests	—	- 352	- 352	—	355	355
Changes in ownership in Group companies on divestments of shares to owners of non-controlling interests	895	2 082	2 977	—	—	—
Additional purchase price pertaining to previous share purchase	—	—	—	- 878	—	- 878
Contribution from minority interest	—	2 107	2 107	—	1 973	1 973
Other changes in ownership	—	- 28	- 28	—	- 39	- 39
Other changes	- 122	217	95	—	—	—
<b>Total transactions with equity holders</b>	<b>773</b>	<b>3 144</b>	<b>3 917</b>	<b>- 878</b>	<b>1 956</b>	<b>1 078</b>
<b>Balance carried forward</b>	<b>68 272</b>	<b>15 528</b>	<b>83 800</b>	<b>103 984</b>	<b>11 972</b>	<b>115 956</b>
- Of which, Reserve for hedges	- 1 711	43	- 1 668	9 460	7	9 467

# Key ratios, Vattenfall Group

In % unless otherwise stated. (x) means times	Q4 2016	Q4 2015	Full year 2016	Full year 2015
Operating margin, continuing operations	- 7.5	8.6	1.0	- 3.5
Operating margin, continuing operations <sup>1</sup>	18.8	15.1	15.6	14.3
Pre-tax profit margin, continuing operations	- 12.9	5.9	- 3.6	- 6.9
Pre-tax profit margin, continuing operations <sup>1</sup>	13.9	12.5	11.1	11.0
Return on equity, total Vattenfall	- 33.4 <sup>2</sup>	- 16.8 <sup>2</sup>	- 33.4	- 16.8
Return on capital employed, continuing operations	0.5 <sup>2,4</sup>	- 1.8 <sup>2</sup>	0.5 <sup>4</sup>	- 1.8
Return on capital employed, total Vattenfall	- 8.5 <sup>2,4</sup>	- 8.2 <sup>2</sup>	- 8.5 <sup>4</sup>	- 8.2
Return on capital employed, continuing operations <sup>1</sup>	8.7 <sup>2,4</sup>	7.3 <sup>2</sup>	8.7 <sup>4</sup>	7.3
Return on capital employed, total Vattenfall <sup>1</sup>	8.7 <sup>2,4</sup>	7.4 <sup>2</sup>	8.7 <sup>4</sup>	7.4
EBIT interest cover, continuing operations, (x)	0.5 <sup>2</sup>	- 0.8 <sup>2</sup>	0.5	- 0.8
EBIT interest cover, continuing operations, (x) <sup>1</sup>	4.6 <sup>2</sup>	4.8 <sup>2</sup>	4.6	4.8
FFO interest cover, continuing operations, (x)	6.5 <sup>2</sup>	6.8 <sup>2</sup>	6.5	6.8
FFO interest cover, net, continuing operations, (x)	7.7 <sup>2</sup>	9.8 <sup>2</sup>	7.7	9.8
Cash flow interest cover after maintenance investments, continuing operations, (x)	5.6 <sup>2</sup>	9.1 <sup>2</sup>	5.6	9.1
FFO/gross debt, continuing operations	27.8 <sup>2</sup>	24.2 <sup>2</sup>	27.8	24.2
FFO/gross debt, total Vattenfall	29.2 <sup>2,3</sup>	26.2 <sup>2</sup>	29.2 <sup>3</sup>	26.2
FFO/net debt, continuing operations	53.0 <sup>2</sup>	41.8 <sup>2</sup>	53.0	41.8
FFO/net debt, total Vattenfall	55.6 <sup>2,3</sup>	45.2 <sup>2</sup>	55.6 <sup>3</sup>	45.2
FFO/adjusted net debt, continuing operations	21.6 <sup>2</sup>	19.5 <sup>2</sup>	21.6	19.5
FFO/adjusted net debt, total Vattenfall	22.6 <sup>2,3</sup>	21.1 <sup>2</sup>	22.6 <sup>3</sup>	21.1
EBITDA/net financial items, continuing operations, (x)	2.5	11.6	6.8	10.1
EBITDA/net financial items, continuing operations, (x) <sup>1</sup>	8.1	15.3	9.0	11.6
Equity/total assets, total Vattenfall	20.5	25.1	20.5	25.1
Gross debt/equity, total Vattenfall	115.4	95.4	115.4	95.4
Net debt/equity, total Vattenfall	60.5	55.4	60.5	55.4
Gross debt/gross debt plus equity, total Vattenfall	53.6	48.8	53.6	48.8
Net debt/net debt plus equity, total Vattenfall	37.7	35.6	37.7	35.6
Net debt/EBITDA, continuing operations, (x)	1.9 <sup>2</sup>	2.1 <sup>2</sup>	1.9	2.1
Net debt/EBITDA, total Vattenfall, (x)	1.8 <sup>2,3</sup>	2.0 <sup>2</sup>	1.8 <sup>3</sup>	2.0
Adjusted net debt/EBITDA, continuing operations, (x)	4.6 <sup>2</sup>	4.5 <sup>2</sup>	4.6	4.5
Adjusted net debt/EBITDA, total Vattenfall, (x)	4.4 <sup>2,3</sup>	4.2 <sup>2</sup>	4.4 <sup>3</sup>	4.2

1) Based on Underlying operating profit.

2) Last 12-month values.

3) The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016. As a result, the lignite operations are excluded from balance sheet items included in the calculations of key ratios as from 30 June 2016.

4) The key ratio is based on average capital employed. The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016, which entails that the calculation of average capital employed excludes the lignite operations as from 30 June 2016.

## Quarterly information, Vattenfall Group

Amounts in SEK million	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
<b>Income statement</b>								
<b>Continuing operations</b>								
Net sales	37 796	29 746	30 047	41 619	42 368	30 939	30 951	39 318
Cost of products sold	- 32 629	- 22 990	- 34 565	- 29 032	- 33 705	- 23 651	- 44 347	- 27 518
Other operating income and expenses	- 5 837	- 4 537	- 3 877	- 2 553	- 4 588	- 4 823	- 5 620	- 3 897
Participations in the results of associated companies	- 2 171	32	123	164	- 434	- 125	- 100	163
Operating profit before depreciation, amortisation and impairment losses (EBITDA)	3 313	5 886	4 274	13 736	7 730	5 816	5 211	11 847
Operating profit (EBIT)	- 2 841	2 251	- 8 272	10 198	3 641	2 340	- 19 116	8 067
Underlying operating profit	7 095	2 602	3 701	8 299	6 407	2 681	4 056	7 386
Financial items, net	- 2 017	- 1 949	- 843	- 1 573	- 1 128	- 973	- 1 270	- 1 404
Profit before tax	- 4 858	302	- 9 115	8 625	2 514	1 366	- 20 386	6 662
<b>Profit for the period from continuing operations</b>	<b>- 3 960</b>	<b>787</b>	<b>- 5 818</b>	<b>6 820</b>	<b>4 550</b>	<b>41</b>	<b>- 14 625</b>	<b>4 847</b>
Profit for the period from discontinued operations, net after tax	- 192	- 599	- 22 826	- 218	- 2 090	1 559	- 14 187	140
<b>Profit for the period</b>	<b>- 4 152</b>	<b>188</b>	<b>- 28 644</b>	<b>6 602</b>	<b>2 460</b>	<b>1 600</b>	<b>- 28 812</b>	<b>4 987</b>
- of which, attributable to owner of the Parent Company	- 4 055	- 35	- 28 508	6 272	2 243	1 403	- 24 996	4 679
- of which, attributable to non-controlling interests	- 97	223	- 136	330	217	197	- 3 816	308
<b>Balance sheet</b>								
Non-current assets	304 628	308 457	305 918	344 481	343 291	348 656	339 871	370 318
Short-term investments	23 297	25 440	25 559	22 171	31 905	30 867	34 006	45 634
Cash and cash equivalents	19 995	13 108	5 399	15 254	12 351	12 497	20 006	11 606
Other current assets	61 340	52 603	80 075	80 282	74 770	65 338	69 666	84 827
<b>Total assets</b>	<b>409 260</b>	<b>399 608</b>	<b>416 951</b>	<b>462 188</b>	<b>462 317</b>	<b>457 358</b>	<b>463 549</b>	<b>512 385</b>
Equity	83 800	86 806	87 713	124 368	115 956	114 440	108 303	134 678
- of which, attributable to owner of the Parent Company	68 272	71 276	72 955	109 756	103 984	103 043	97 646	120 367
- of which, attributable to non-controlling interests	15 528	15 530	14 758	14 612	11 972	11 397	10 657	14 311
Hybrid Capital	19 164	19 054	18 803	18 448	18 546	15 387	15 192	19 979
Other interest-bearing liabilities	77 503	79 520	77 831	81 710	92 039	95 659	112 970	117 400
Pension provisions	40 644	42 986	42 339	38 893	38 919	42 320	41 986	44 793
Other interest-bearing provisions	97 700	85 596	84 493	99 834	99 344	99 663	97 550	92 761
Deferred tax liabilities	14 776	16 726	20 732	24 109	22 970	26 463	27 202	27 454
Other noninterest-bearing liabilities	75 673	68 920	85 040	74 826	74 543	63 426	60 346	75 320
<b>Total equity and liabilities</b>	<b>409 260</b>	<b>399 608</b>	<b>416 951</b>	<b>462 188</b>	<b>462 317</b>	<b>457 358</b>	<b>463 549</b>	<b>512 385</b>
Capital employed	232 689	232 501	234 061	269 036	264 591	267 116	269 657	298 629
Net debt	- 50 724	- 57 971	- 63 654	- 60 729	- 64 201	- 65 405	- 72 839	- 78 825
<b>Cash flow</b>								
Funds from operations (FFO)	7 157	5 501	6 446	9 082	9 362	5 698	4 154	9 795
Cash flow from changes in operating assets and operating liabilities	3 905	7 020	3 412	- 11 740	233	9 170	5 563	- 3 042
Cash flow from operating activities	11 062	12 521	9 858	- 2 658	9 595	14 868	9 717	6 753
Cash flow from investing activities	- 7 450	- 6 501	- 4 091	- 723	- 8 011	- 7 883	- 5 393	- 5 187
Cash flow before financing activities	3 612	6 020	5 767	- 3 381	1 584	6 985	4 324	1 566
Changes in short-term investments	4 474	626	- 2 910	9 814	- 1 581	3 501	11 336	- 13 022
Loans raised/Amortisation of debt, net, etc.	- 1 100	1 313	- 2 800	- 3 536	2 384	- 17 965	- 7 177	10 816
Dividends paid to owners	- 165	- 214	- 503	—	- 180	- 96	- 57	—
Cash flow from financing activities	3 209	1 725	- 6 213	6 278	623	- 14 560	4 102	- 2 206
<b>Cash flow for the period</b>	<b>6 821</b>	<b>7 745</b>	<b>- 446</b>	<b>2 897</b>	<b>2 207</b>	<b>- 7 575</b>	<b>8 426</b>	<b>- 640</b>
<b>Free cash flow</b>	<b>7 155</b>	<b>10 170</b>	<b>6 889</b>	<b>- 4 997</b>	<b>4 270</b>	<b>10 520</b>	<b>6 218</b>	<b>4 003</b>

## Quarterly information, Vattenfall Group, cont.

In % unless otherwise stated. (x) means times	Q4 2016	Q3 2016	Q2 2016	Q1 2016	Q4 2015	Q3 2015	Q2 2015	Q1 2015
<b>Key ratios</b>								
Return on equity, total Vattenfall <sup>1</sup>	- 33.4	- 23.6	- 20.6	- 15.8	- 16.8	- 14.8	- 32.6	- 10.1
Return on capital employed, continuing operations <sup>1</sup>	0.5 <sup>5</sup>	3.1 <sup>5</sup>	3.1 <sup>5</sup>	- 1.0	- 1.8	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
Return on capital employed, total Vattenfall <sup>1</sup>	- 8.5 <sup>5</sup>	- 5.8 <sup>5</sup>	- 5.5 <sup>5</sup>	- 7.5	- 8.2	- 7.1	- 14.6	- 1.9
Return on capital employed, continuing operations <sup>1, 2</sup>	8.7 <sup>5</sup>	8.4 <sup>5</sup>	8.4 <sup>5</sup>	7.6	7.3	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
Return on capital employed, total Vattenfall <sup>1, 2</sup>	8.7 <sup>5</sup>	8.5 <sup>5</sup>	8.3 <sup>5</sup>	7.4	7.4	8.1	7.5	7.6
EBIT interest cover, continuing operations (x) <sup>1</sup>	0.5	1.9	2.2	- 0.2	- 0.8	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
EBIT interest cover, continuing operations, (x) <sup>1, 2</sup>	4.6	4.7	5.2	4.7	4.8	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
FFO/gross debt, continuing operations <sup>1</sup>	27.8	30.1	29.8	27.0	24.2	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
FFO/gross debt, total Vattenfall <sup>1</sup>	29.2 <sup>3</sup>	30.8 <sup>3</sup>	31.7 <sup>3</sup>	28.3	26.2	28.9	24.5	22.7
FFO/net debt, continuing operations <sup>1</sup>	53.0	51.2	45.3	44.5	41.8	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
FFO/net debt, total Vattenfall <sup>1</sup>	55.6 <sup>3</sup>	52.4 <sup>3</sup>	48.1 <sup>3</sup>	46.6	45.2	49.1	43.2	39.5
FFO/adjusted net debt, continuing operations <sup>1</sup>	21.6	23.9	22.4	19.7	19.5	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
FFO/adjusted net debt, total Vattenfall <sup>1</sup>	22.6 <sup>3</sup>	24.5 <sup>3</sup>	23.7 <sup>3</sup>	20.6	21.1	22.5	21.1	20.7
Equity/assets ratio, total Vattenfall	20.5	21.7	21.0	26.9	25.1	25.0	23.4	26.3
Gross debt/equity, total Vattenfall	115.4	113.6	110.2	80.5	95.4	97.0	118.3	102.0
Net debt/equity, total Vattenfall	60.5	66.8	72.6	48.8	55.4	57.2	67.3	58.5
Net debt/net debt plus equity, total Vattenfall	37.7	40.0	42.1	32.8	35.6	36.4	40.2	36.9
Net debt/EBITDA, continuing operations, (x) <sup>1</sup>	1.9	1.8	2.0	1.9	2.1	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
Net debt/EBITDA, total Vattenfall, (x) <sup>1</sup>	1.8 <sup>3</sup>	1.7 <sup>3</sup>	1.8 <sup>3</sup>	1.8	2.0	1.8	2.0	2.1
Adjusted net debt/EBITDA, continuing operations, (x) <sup>1</sup>	4.6	3.9	4.1	4.2	4.5	N/A <sup>4</sup>	N/A <sup>4</sup>	N/A <sup>4</sup>
Adjusted net debt/EBITDA, total Vattenfall, (x) <sup>1</sup>	4.4 <sup>3</sup>	3.7 <sup>3</sup>	3.7 <sup>3</sup>	4.1	4.2	4.0	4.0	4.0

1) Last 12-month values.

2) Based on Underlying operating profit.

3) The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016. As a result, the lignite operations are excluded from balance sheet items included in the calculations of key ratios as from 30 June 2016.

4) This key ratio has not been calculated, as it is based on last 12-month values, which have not been recalculated for the continuing operations for 2014.

5) The key ratio is based on average capital employed. The lignite operations were classified as assets held for sale on the balance sheet as per 30 June 2016, which entails that the calculation of average capital employed excludes the lignite operations as from 30 June 2016.

## Note 1 Accounting policies, risks and uncertainties

### Accounting policies

The consolidated accounts for 2016 have been prepared, as for the 2015 year-end accounts, in accordance with International Financial Reporting Standards (IFRS) as endorsed by the EU, and the Swedish Annual Accounts Act. This interim report for the Group has been prepared in accordance with IAS 34 – “Interim Financial Reporting”, and the Swedish Annual Accounts Act. The accounting policies and calculation methods applied in this interim report are the same as those described in Note 3 to the consolidated accounts, Accounting policies in Vattenfall’s 2015 Annual and Sustainability Report. As described in the note, the amended IFRSs endorsed by the EU for application in the 2016 financial year have no significant effect on Vattenfall’s financial statements.

### Risks and uncertainties

For a description of risks, uncertainties and risk management, please refer to Vattenfall’s 2015 Annual and Sustainability Report, pages 70-78. Apart from the information provided under important events in this report and under important events in previously published interim reports during 2016, no other material changes have taken place since publication of the 2015 Annual and Sustainability Report.

### Other

Significant related-party transactions are described in Note 55 to the consolidated accounts in Vattenfall’s 2015 Annual and Sustainability Report. No material changes have taken place in relations or transactions with related parties compared with the description in the 2015 Annual and Sustainability Report.

## Note 2 Exchange rates

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

	Q4 2016	Q4 2015	Full year 2016	Full year 2015
<b>Average rate</b>				
EUR	9.6981	9.2979	9.4496	9.3414
DKK	1.3033	1.2463	1.2690	1.2523
NOK	1.0738	0.9864	1.0181	1.0403
PLN	2.2164	2.1820	2.1647	2.2297
GBP	11.1819	12.8483	11.6081	12.8325
USD	8.9666	8.5155	8.5807	8.4004
			31 Dec. 2016	31 Dec. 2015
<b>Balance sheet date rate</b>				
EUR			9.5525	9.1895
DKK			1.2849	1.2314
NOK			1.0513	0.9569
PLN			2.1660	2.1552
GBP			11.1571	12.5206
USD			9.0622	8.4408

## Note 3 Financial instruments by category and related effects on income

### Financial instruments by category: Carrying amount and fair value

	31 Dec. 2016		31 Dec. 2015	
	Carrying amount	Fair value	Carrying amount	Fair value
Total Vattenfall, amounts in SEK million <sup>1</sup>				
Financial assets at fair value through profit or loss	56 206	56 206	65 042	65 042
Loans and receivables	75 759	78 456	86 617	87 693
Available-for-sale financial assets	118	118	273	273
Financial liabilities at fair value through profit or loss	24 016	24 016	18 602	18 602
Other financial liabilities	122 779	130 474	141 436	145 986

1) For information of what is included in each respective category in the table above, please refer to Note 47 to the consolidated accounts, Financial instruments by category, offsetting of financial assets and liabilities, and financial instruments' effects on income in Vattenfall's 2015 Annual and Sustainability Report.

For assets and liabilities with a remaining maturity less than three months (e.g., cash and bank balances, trade receivables and other receivables and trade payables and other payables), fair value is considered to be equal to the carrying amount. For other shares and participations carried at cost, in the absence of fair value, cost is considered to be equal to the carrying amount.

Financial instruments that are measured at fair value on the balance sheet are described below according to the fair value hierarchy (levels), which in IFRS 13 is defined as:

**Level 1:** Quoted prices (unadjusted) in active markets for identical assets or liabilities

**Level 2:** Inputs other than quoted prices included in Level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices). In Level 2 Vattenfall reports mainly commodity derivatives, currency-forward contracts and interest rate swaps

**Level 3:** Inputs for the asset or liability that are not based on observable market data (that is, unobservable inputs)

### Financial assets and liabilities that are measured at fair value on the balance sheet at 31 December 2016

Total Vattenfall, amounts in SEK million	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Derivative assets	—	24 438	254	<b>24 692</b>
Short-term investments and cash equivalents	13 935	17 579	—	<b>31 514</b>
<b>Total assets</b>	<b>13 935</b>	<b>42 017</b>	<b>254</b>	<b>56 206</b>
<b>Liabilities</b>				
Derivative liabilities	—	23 898	118	<b>24 016</b>
<b>Total liabilities</b>	<b>—</b>	<b>23 898</b>	<b>118</b>	<b>24 016</b>

### Financial assets and liabilities that are measured at fair value on the balance sheet at 31 December 2015

Total Vattenfall, amounts in SEK million	Level 1	Level 2	Level 3	Total
<b>Assets</b>				
Derivative assets	—	33 879	408	<b>34 287</b>
Short-term investments and cash equivalents	20 606	10 149	—	<b>30 755</b>
<b>Total assets</b>	<b>20 606</b>	<b>44 028</b>	<b>408</b>	<b>65 042</b>
<b>Liabilities</b>				
Derivative liabilities	—	17 164	1 438	<b>18 602</b>
<b>Total liabilities</b>	<b>—</b>	<b>17 164</b>	<b>1 438</b>	<b>18 602</b>

## Changes in level 3 financial instruments

Financial instruments at fair value through profit or loss

	Derivative assets		Derivative liabilities	
	31 Dec. 2016	31 Dec. 2015	31 Dec. 2016	31 Dec. 2015
Total Vattenfall, amounts in SEK million				
Balance brought forward	408	650	1 438	670
Revaluations recognised in operating profit (EBIT)	- 168	- 232	- 1 361	795
Translation differences	14	- 10	41	- 27
<b>Balance carried forward</b>	<b>254</b>	<b>408</b>	<b>118</b>	<b>1 438</b>
Total revaluations for the period included in operating profit (EBIT) for assets and liabilities held on the balance sheet date	49	- 83	- 183	459

## Sensitivity analysis for Level 3 contracts

For the determination of fair value of financial instruments, Vattenfall strives to use valuation techniques that maximise the use of observable market data where it is available and rely as little as possible on entity-specific estimates.

Entity-specific estimates are based on internal valuation models that are subject to a defined process of validation, approval and monitoring. In the first step the model is designed by the business. The valuation model is then independently reviewed and approved by Vattenfall's risk organisation. If deemed necessary, adjustments are required and implemented. Afterwards, Vattenfall's risk organisation continuously monitors whether the application of the method is still appropriate. This is made by usage of several back-testing tools. In order to reduce valuation risks, the application of the model can be restricted to a limited scope.

Compared to the level 3 contracts in Vattenfall's 2015 Annual and Sustainability Report, the Biomass Sourcing Contract and the Gas supply agreement have been settled. For additional information please refer to Note 47 to the consolidated accounts, Financial instruments by category, offsetting of financial assets and liabilities, and financial instruments' effects on income, in Vattenfall's 2015 Annual and Sustainability Report. The accumulated net value of all level 3 contracts as per 31 December 2016 has been calculated at SEK 136 million (-1,030). A change of +/-5% would affect the total value by approximately SEK +/-37 million (+/-42).

## Financial instruments: Effects on income by category

Net gains (+)/losses (-) and interest income and expenses for financial instruments recognised in the income statement:

	31 Dec. 2016			31 Dec. 2015		
	Net gains/ losses <sup>1</sup>	Interest income	Interest expenses	Net gains/ losses <sup>1</sup>	Interest income	Interest expenses
Total Vattenfall, amounts in SEK million						
Derivative assets and derivative liabilities	1 758	203	- 475	3 940	116	- 76
Available-for-sale financial assets	- 143	—	—	15	—	—
Loans and trade receivables	25	1 004	—	- 241	1 546	—
Financial liabilities measured at amortised cost	- 816	—	- 3 017	1 000	—	- 3 306
<b>Total</b>	<b>824</b>	<b>1 207</b>	<b>- 3 492</b>	<b>4 714</b>	<b>1 662</b>	<b>- 3 382</b>

1) Exchange rate gains and losses are included in net gains/losses.

## Note 4 Discontinued operations

In accordance with IFRS 5 – Non-Current Assets Held for Sale and Discontinued Operations, the lignite operations, which have been divested, are reported as a discontinued operation as from the second quarter of 2016. The lignite operations are thus reported on a separate line in the income statement, and comparison figures for 2015 have been recalculated in a corresponding manner. In the segment reporting, the parts of the Power Generation and Heat segments that pertain to the lignite operations have been reclassified as “Discontinued operations”, and the Power Generation and Heat operating segments have been recalculated for earlier periods so that they only include the continuing operations. In accordance with IFRS 5, the balance sheet has not been restated to reflect earlier periods. The Statement of cash flows has not been recalculated. Cash flow from the discontinued lignite operations is presented below in this note.

### Earnings from discontinued operations

Amounts in SEK million	Q4 2016 <sup>1</sup>	Q4 2015	Full year 2016	Full year 2015
Net Sales	117	3 131	13 459	20 934
Expenses	- 121	- 3 082	- 13 957	- 38 831
Net financial items	- 3	- 47	- 387	- 449
Realised gains related to fair value hedges	—	—	37	—
Translation differences related to hedging of net investments in foreign operations	—	—	- 477	—
Capital gain	2	—	278	—
Impairment loss recognised on the remeasurement to fair value less costs to sell	- 179	—	- 21 883	—
<b>Profit before tax from discontinued operations</b>	<b>- 184</b>	<b>2</b>	<b>- 22 930</b>	<b>- 18 346</b>
Income tax expense	- 8	- 2 092	- 903	3 768
<b>Profit for the period from discontinued operations attributable to owners of the Parent Company</b>	<b>- 192</b>	<b>- 2 090</b>	<b>- 23 833</b>	<b>- 14 578</b>

Amounts in SEK million	Q4 2016 <sup>1</sup>	Q4 2015	Full year 2016	Full year 2015
Operating profit (EBIT)	- 180	49	- 22 542	- 17 898
Items affecting comparability	28	- 7	22 538	17 910
<b>Underlying operating profit</b>	<b>- 152</b>	<b>42</b>	<b>- 4</b>	<b>12</b>

1) The value for Q4 2016 pertains in all essential respects to the recognised exchange rate effect on the value of divested operations in Q1-3 2016.

### Cash flow from discontinued operations

Amounts in SEK million	Q4 2016 <sup>1</sup>	Q4 2015	Full year 2016	Full year 2015
Funds from operations (FFO)	23	- 533	1 291	2 197
Cash flow from operating activities	11	- 1 721	2 200	- 2 158
Cash flow from investing activities	- 6	- 846	- 950	- 2 871
Cash flow from financing activities	5	5 489	466	8 393

1) The value for Q4 2016 pertains in all essential respects to the recognised exchange rate effect on the value of divested operations in Q1-3 2016.

### Total earnings effect of sale of lignite operations

Amounts in SEK million	Full year 2016
Impairment loss recognised on remeasurement to fair value less costs to sell in Q2 2016	-21 505
Exchange rate effect in Q3 2016 on impairment losses recognised in Q2 2016	- 199
Capital gain Q3 2016	276
Dissolution of translation reserve and hedge of net investments in foreign operations in Q3 2016	- 477
Exchange rate effect in Q4 2016	- 177
<b>Total earnings effect in 2016</b>	<b>- 22 082</b>

# The Parent Company Vattenfall AB

## Accounting policies

The Parent Company Vattenfall AB's accounts are prepared in accordance with the Swedish Annual Accounts Act and recommendation RFR 2 – Accounting for Legal Entities, issued by the Swedish Financial Reporting Board. The accounting policies used in this report are the same as those described in Vattenfall's 2015 Annual and Sustainability Report (Note 2 to the Parent Company accounts, Accounting policies).

## Full year 2016

A condensed income statement and balance sheet for the Parent Company are presented below.

- Net sales amounted to SEK 29,752 million (30,670).
- Profit before appropriations and tax was SEK -6,510 million (6,150).
- Earnings were affected by the following:
  - Received dividends of SEK 1,729 million.
  - A small capital gain from the sale of the shareholding in Haparanda Värmeverk AB.
  - An impairment loss of SEK 12,700 million for the shareholding in Vattenfall GmbH.
  - An impairment loss of SEK 633 million for the shareholding in Vattenfall A/S – the effect of a received dividend.
- The balance sheet total was SEK 261,902 million (292,057).
- The acquisition of shares in Vindstød A/S took place during the fourth quarter.
- Investments during the period amounted to SEK 7,629 million (589) of which SEK 7,000 million is related to shareholder contribution to Vattenfall Vindkraft AB.
- Cash and cash equivalents, and short-term investments amounted to SEK 35,682 million (38,794).

## Risks and uncertainties

See Note 1 to the consolidated accounts, Accounting policies, risks and uncertainties.

## Other

Significant related-party transactions are described in Note 39 to the Parent Company accounts, Related party disclosures, in Vattenfall's 2015 Annual and Sustainability Report. No material changes have taken place in relations or transactions with related parties compared with the description in Vattenfall's 2015 Annual and Sustainability Report.

# Parent Company income statement

Amounts in SEK million	Full year 2016	Full year 2015
Net sales	29 752	30 670
Cost of products sold	- 23 999	- 24 177
<b>Gross profit</b>	<b>5 753</b>	<b>6 493</b>
Selling expenses, administrative expenses and research and development costs	- 2 398	- 2 354
Other operating income and expenses, net	275	1 009
<b>Operating profit (EBIT)</b>	<b>3 630</b>	<b>5 148</b>
Result from participations in subsidiaries	- 11 545	3 654
Result from participations in associated companies	- 2	7
Result from other shares and participations	1	—
Other financial income	5 127	991
Other financial expenses	- 3 721	- 3 650
<b>Profit before appropriations and tax</b>	<b>- 6 510</b>	<b>6 150</b>
Appropriations	1 466	1 194
<b>Profit before tax</b>	<b>- 5 044</b>	<b>7 344</b>
Income tax expense	- 1 480	- 908
<b>Profit for the period</b>	<b>- 6 524</b>	<b>6 436</b>

# Parent Company balance sheet

Amounts in SEK million	31 Dec. 2016	31 Dec. 2015
<b>Assets</b>		
<b>Non-current assets</b>		
Intangible assets: non-current	174	174
Property, plant and equipment	4 151	4 122
Shares and participations	145 586	151 865
Deferred tax assets	329	212
Other non-current receivables	58 897	83 624
<b>Total non-current assets</b>	<b>209 137</b>	<b>239 997</b>
<b>Current assets</b>		
Inventories	255	342
Intangible assets: current	275	215
Current receivables	16 553	12 172
Current tax assets	—	537
Short-term investments	18 733	28 491
Cash and cash equivalents	16 949	10 303
<b>Total current assets</b>	<b>52 765</b>	<b>52 060</b>
<b>Total assets</b>	<b>261 902</b>	<b>292 057</b>
<b>Equity, provisions and liabilities</b>		
<b>Equity</b>		
Restricted equity		
Share capital (131,700,000 shares with a share quota value of SEK 50)	6 585	6 585
Revaluation reserve	37 989	37 989
Other reserves	1 316	1 286
Non-restricted equity		
Retained earnings	50 142	43 736
Profit for the period	- 6 524	6 436
<b>Total equity</b>	<b>89 508</b>	<b>96 032</b>
<b>Untaxed reserves</b>	<b>13 294</b>	<b>14 882</b>
<b>Provisions</b>	<b>5 308</b>	<b>4 835</b>
<b>Non-current liabilities</b>		
Hybrid capital	19 101	18 603
Other interest-bearing liabilities	49 870	54 961
Other noninterest-bearing liabilities	13 099	18 302
<b>Total non-current liabilities</b>	<b>82 070</b>	<b>91 866</b>
<b>Current liabilities</b>		
Other interest-bearing liabilities	64 688	78 348
Current tax liabilities	520	—
Other noninterest-bearing liabilities	6 514	6 094
<b>Total current liabilities</b>	<b>71 722</b>	<b>84 442</b>
<b>Total equity, provisions and liabilities</b>	<b>261 902</b>	<b>292 057</b>

## Definitions and calculations of key ratios

### Alternative Performance Measures

In order to ensure a fair presentation of the Group's operations, the Vattenfall Group uses a number of Alternative Performance Measures that are not defined in IFRS or in the Swedish Annual Accounts Act. The Alternative Performance Measures that Vattenfall uses are described below, including their definitions and how they are calculated. The Alternative Performance Measures used are unchanged compared with earlier periods.

	Definition
EBIT:	Operating profit (Earnings Before Interest and Tax)
EBITDA:	Operating profit before depreciation, amortisation and impairment losses (Earnings Before Interest, Tax, Depreciation and Amortisation)
Items affecting comparability:	Capital gains and capital losses from shares and other non-current assets, impairment losses and reversed impairment losses and other material non-recurring items. Also included here are, for trading activities, unrealised changes in the fair value of energy derivatives, which according to IAS 39 cannot be recognised using hedge accounting and unrealised changes in the fair value of inventories
Underlying EBITDA:	Underlying operating profit before depreciation, amortisation and impairment losses
Underlying operating profit:	Operating profit (EBIT) excluding items affecting comparability
FFO:	Funds From Operations, see Consolidated statement of cash flow
Free cash flow:	Cash flow from operating activities less maintenance investments
Interest-bearing liabilities	See Consolidated balance sheet - Supplementary Information
Net debt:	See Consolidated balance sheet - Supplementary Information
Adjusted net debt:	See Consolidated balance sheet - Supplementary Information
Capital employed:	Total assets less financial assets, noninterest-bearing liabilities and certain other interest-bearing provisions not included in adjusted net debt. see Consolidated balance sheet - Supplementary Information

### Other definitions

	Definition
Hybrid Capital:	Perpetual subordinated securities, junior to all Vattenfall's unsubordinated debt instruments.
LTIF:	Lost Time Injury Frequency (LTIF) is expressed in terms of the number of lost time work injuries (per 1 million hours worked), i.e., work-related accidents resulting in absence longer than one day, and accidents resulting in fatality.

The key ratios are presented as percentages (%) or times (x).

Key ratios based on continuing operations (except for return on equity which is based on total Vattenfall) and last 12-month values January 2015 – December 2016:

<b>Operating margin, %</b>	= 100 x	EBIT	1 337	
		Net sales	139 208	1.0
<b>Operating margin excl. items affecting comparability, %</b>	= 100 x	Underlying EBIT	21 697	
		Net sales	139 208	15.6
<b>Pre-tax profit margin, %</b>	= 100 x	Profit before tax	-5 045	
		Net sales	139 208	-3.6
<b>Pre-tax profit margin excl. items affecting comparability, %</b>	= 100 x	Profit before tax excl. items affecting comparability	15 491	
		Net sales	139 208	11.1
<b>Return on equity, %</b>	= 100 x	Profit for the period attributable to owner of the Parent Company	-26 324	
		Average equity for the period attributable to owner of the Parent Company excl. the Reserve for cash flow hedges	78 716	-33.4
<b>Return on capital employed, %</b>	= 100 x	EBIT	1 337	
		Capital employed, average	248 640	0.5
<b>Return on capital employed excl. items affecting comparability, %</b>	= 100 x	Underlying EBIT	21 697	
		Capital employed, average	248 640	8.7
<b>EBIT interest cover, (x)</b>	=	EBIT + financial income excl. return from the Swedish Nuclear Waste Fund	2 238	
		Financial expenses excl. discounting effects attributable to provisions	4 906	0.5
<b>EBIT interest cover excl. Items affecting comparability, (x)</b>	=	Underlying EBIT + financial income excl. Return from the Swedish Nuclear Waste Fund	22 598	
		Financial expenses excl. discounting effects attributable to provisions	4 906	4.6
<b>FFO interest cover, (x)</b>	=	FFO + financial expenses excl. discounting effects attributable to provisions	31 801	
		Financial expenses excl. discounting effects attributable to provisions	4 906	6.5
<b>FFO interest cover, net, (x)</b>	=	FFO + financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	30 900	
		Financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	4 005	7.7

<b>Cash flow interest cover after maintenance investments, (x)</b>	=	Cash flow from operating activities less maintenance investments + financial expenses excl. Discounting effects attributable to provisions and interest components related to pension costs	22 163	5.6
		Financial expenses excl. discounting effects attributable to provisions and interest components related to pension costs	3 952	
<b>FFO/gross debt, %</b>	= 100 x	FFO	26 895	27.8
		Interest-bearing liabilities	96 667	
<b>FFO/net debt, %</b>	= 100 x	FFO	26 895	53.0
		Net debt	50 724	
<b>FFO/adjusted net debt, %</b>	= 100 x	FFO	26 895	21.6
		Adjusted net debt	124 741	
<b>EBITDA/net financial items, (x)</b>	=	EBITDA	27 209	6.8
		Financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	4 005	
<b>EBITDA excl. items affecting comparability/net financial items, (x)</b>	=	EBITDA excl. items affecting comparability	36 144	9.0
		Financial items net excl. discounting effects attributable to provisions and return from the Swedish Nuclear Waste Fund	4 005	

Key ratios based on the balance sheet per 31 December 2016:

<b>Equity/total assets, %</b>	= 100 x	Equity	83 800	20.5
		Balance sheet total	409 260	
<b>Gross debt/equity, %</b>	= 100 x	Interest-bearing liabilities	96 667	115.4
		Equity	83 800	
<b>Net debt/equity, %</b>	= 100 x	Net debt	50 724	60.5
		Equity	83 800	
<b>Gross debt/gross debt equity, %</b>	= 100 x	Interest-bearing liabilities	96 667	53.6
		Interest-bearing liabilities + equity	180 467	
<b>Net debt/net debt plus equity, %</b>	= 100 x	Net debt	50 724	37.7
		Net debt + equity	134 524	
<b>Net debt/EBITDA, (x)</b>	=	Net debt	50 724	1.9
		EBITDA	27 209	
<b>Adjusted net debt/EBITDA, (x)</b>	=	Adjusted net debt	124 741	4.6
		EBITDA	27 209	

# Year-end report signature, dividend and Annual General Meeting

## Dividend

On account of the negative result for the year the Board of Directors proposes, in accordance with Vattenfall's dividend policy, that no dividend be paid for 2016.

## Annual General Meeting

The Annual General Meeting will be held on 27 April 2017, in Solna. The Annual General Meeting is open to the general public. The Annual Report (in both Swedish and English versions) is expected to be published on [www.vattenfall.se](http://www.vattenfall.se) and [www.vattenfall.com](http://www.vattenfall.com), respectively, on 28 March 2017.

Solna, 7 February 2017

Vattenfall AB (publ)

The Board of Directors

This year-end report has not been reviewed by the company's auditor.

## Financial calendar

Annual and Sustainability Report 2016, 28 March 2017

Annual General Meeting, 27 April 2017

Interim report January-March, 28 April 2017

Interim report January-June, 21 July 2017

Interim report January-September, 27 October 2017

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*This information is such that Vattenfall is required to make public in accordance with the EU Market Abuse Regulation and/or the Swedish Securities Market Act. The information was submitted for publication, by the agency of the contact persons above, at 09.00 CET on 7 February 2017. This report has been prepared in both Swedish and English versions. In the event of discrepancies between the two versions, the Swedish version shall govern.*