

# ADMINISTRATION REPORT

The Board of Directors and the President of Vattenfall AB (publ), corporate identity number 556036-2138, hereby submit the annual accounts and consolidated accounts for 2004, encompassing pages 64–105.

## Group operations and structure

Vattenfall generates, distributes and sells electricity and heat and offers energy-related services and, to a certain extent, telecom services. Vattenfall's vision is to be a leading European energy company. The majority of operations are located in Sweden, Finland, Germany and Poland, and the primary segments comprise the Nordic Countries, Germany and Poland. The number of electricity customers amounts to some six million, including those through jointly-owned companies. The Group has about 33,000 employees. Vattenfall AB is wholly owned by the Swedish State. The Board of Directors has its headquarters in Stockholm.

## The year in brief

- Net sales increased by 1.3 per cent to SEK 113,366 million (111,935).
- Operating profit increased by 28.2 per cent to SEK 19,607 million (15,296).
- Net profit after tax increased by 29.1 per cent to SEK 11,776 million (9,123).
- Return on equity increased to 22.4 per cent (20.2).
- Return on net assets increased to 15.9 per cent (12.3).
- Cash flow before financing amounted to SEK 13,472 million (9,841).
- Investments totalled SEK 12,601 million (11,356), of which growth investments SEK 4,312 million (4,771) and maintenance investments SEK 8,289 million (6,585).
- Net debt fell SEK 11,479 million to SEK 55.4 billion (66.9).
- Electricity sales amounted to 186.4 TWh (184.2) – excluding deliveries to minority owners.
- Heat sales amounted to 34.5 TWh (35.6).

## Important events:

- The business units in the Nordic countries were gathered under Business Group Nordic Countries. The Group is now organised into two Business Groups; one for the Nordic countries and one for Continental Europe. Poland remains a separate business unit.
- In October, the Swedish government decided to suspend negotiations with the Swedish nuclear power operators regarding the phasing out of nuclear power in Sweden and to close Barsebäck 2. On 16 December 2004, the Swedish government decided, supported by Swedish legislation on the phasing out of nuclear power, that the right to operate Barsebäck 2 for the purpose of extracting nuclear power shall be revoked as of the end of May 2005. A general agreement from November 1999 between Vattenfall, the Swedish State and Sydkraft regulates how Vattenfall is to be compensated. While awaiting settlement of the agreement, the assets associated with Barsebäck Kraft AB will not be written down as the compensation is expected to exceed Vattenfall's share of the costs for said write down. Vattenfall owns 74 per cent of Barsebäck.
- Availability in Vattenfall's Swedish nuclear power plants reached record levels in 2004. Nuclear power generation in Sweden increased by 11.6 per cent compared to 2003.
- At the beginning of 2004, Vattenfall decided to invest a further SEK 2 billion in improving operational reliability in its Swedish networks, bringing the total investment to SEK 10 billion over a five-year period. Moreover, compensation was increased to Swedish households losing power during network disruptions.
- Investments were initiated under Vattenfall's maintenance programmes for the Swedish generation plants. The investment programmes amount to SEK 24 billion for nuclear power and SEK 6.5 billion for hydro power.
- Vattenfall acquired Örestad Vindkraftpark and plans to build a large off-shore wind power park in Öresund, off the coast of Skåne in the south of Sweden, with an investment of SEK 1.5 billion.
- In Germany, additional electricity generation capacity in the amount of 40,000 MW will be required by 2020. Vattenfall is therefore examining possible power plant investments. Among more concrete projects we find a combined heat and power plant (CHP) in Hamburg and a lignite-fired power plant in eastern Germany, together providing 1,410 MW.
- The considerable expansion of wind power in Germany has led to the need for extensive development in the German electricity networks. Vattenfall has decided to expand the capacity of its high-voltage network by 3,000 MW with an investment of approximately EUR 260 million (approximately SEK 2.3 billion).
- Three district heating plants in Berlin, with a combined capacity of 320 MW, were acquired for about SEK 440 million.

- Vattenfall continued to streamline operations and sold its holdings in A-Train AB, Russian Mosenergo, and the Chinese company Hebei Hanfeng Power Generation, and transferred the peat producing company Härjedalens Miljöbränsle AB to another owner.
- Ownership in the Polish sales and distribution company GZE was increased from 54 per cent to 75 per cent.
- In Poland, an extensive brand campaign was conducted in order to introduce the Vattenfall name to the Polish market and this received much media focus.
- In Sweden, Finland and Germany, the authorities have introduced – or plan to introduce – new models for regulating network tariffs.
- Vattenfall was the first Swedish electricity company to discontinue invoicing household customers in arrears for electricity consumed more than one year ago. Vattenfall has continued to invest in remote-readable meters in Sweden and Finland. All of Vattenfall's 1.3 million Nordic network customers will have such meters installed. In this way, advance charges can be done away with and replaced with invoicing of actual electricity consumption. By the end of 2004, 105,000 such meters had been installed.
- National allocation plans for CO<sub>2</sub> emissions have been submitted to the EU in all of Vattenfall's main markets, with all but Poland's being approved by the European Commission. In Vattenfall's case, this mainly concerns generation plants in Germany and Poland. Vattenfall has obtained the necessary emission rights in both countries for the initial trading period 2005–2007.
- A decision was made to integrate the three Nordic business units Sales Sweden, Sales Finland and MEGA into a single new unit, Sales Nordic Countries.
- A EUR 500 million 20-year bond was issued in April in order to prolong the average maturity of Vattenfall's debt portfolio. Further, the agreement governing the revolving credit facility (RCF) of EUR 600 million was renegotiated and prolonged to 8 December 2009.

## Important structural changes

The year 2004 was characterised by the continued consolidation of completed acquisitions and the streamlining of operations to the core areas of electricity and heat within the main markets of the Nordic Countries, Germany and Poland. Certain non-core assets have been divested. Growth investments amounted to SEK 4,312 million (4,771). Details of important structural transactions in 2004 are set out in the tables on page 69.

## Personnel

(Number of employees, full-time equivalents)

Amounts in SEK millions	2004	2003	Change, %
Finland	543	537	+ 1.1
Poland	3,309	4,935	-32.9
Sweden	8,192	7,994	+ 2.5
Germany	20,864	21,719	-3.9
Other countries	109	111	-1.8
<b>Total</b>	<b>33,017</b>	<b>35,296</b>	<b>-6.5</b>

Part of the substantial cutback in Poland can be explained by 761 full-time equivalents in divested operations. Otherwise, the cutbacks in personnel in Poland and Germany are the result of ongoing rationalisation initiatives. The increase in Sweden is explained by the extensive investment programmes for the maintenance of our generation plants and newly acquired operations in the Services Nordic Countries business unit.

## Research and development (R&D)

As a natural part of business development, Vattenfall runs technical research and development, R&D, with a strong emphasis on development, that is, the application of existing knowledge. The purpose is to create, retain and develop competitive advantages for the various parts of the Group. Development is also encompassed, in order to continually fulfil environmental and safety requirements and general legal requirements. Some development is also undertaken in order to create new business opportunities, primarily within the framework of existing operations, the core business.

For the Group as a whole, investment in R&D during 2004 amounted to SEK 529 million (478), of which SEK 306 million (299) was within Svensk Kärnbränslehantering AB (SKB). As a proportion of net sales, R&D expenses equal 0.5 per cent (0.4). Calculated in this way, the extent of R&D is on a par with those of Vattenfall's most important competitors.

### Management of R&D

Each business unit is responsible for the future development of its own operations, including technical research and development. The emphasis is primarily on continual improvements for increased efficiency, availability and safety, and reduced environmental impact in existing plants and processes.

As an example of tangible development, we can mention investment in increasing availability in Vattenfall's electricity networks. A number of different projects aim to reduce carbon dioxide emissions from both heat and electricity generation through improved plant efficiency and increased use of biofuel. Measures to improve efficiency are also being implemented in carbon dioxide-free generation, as well as in hydro and nuclear power. The development of methods and technologies for storing spent nuclear fuel constitutes a considerable investment, which is being carried out within the framework of SKB, Svensk Kärnbränslehantering AB.

For certain issues of a strategic nature, development is organised in joint Group programmes, for which the Group Strategies team is responsible. For example, a major investment is being made in the development of a technique for separating carbon dioxide from the combustion of coal, with later storage in the bedrock. Another programme is focused on improved availability and reduced costs in electricity networks through the use of information technology. The joint Group programmes are run in close collaboration with the business units in all of Vattenfall's core markets for a number of reasons, such as in order to optimise the distribution and introduction of the programme results into business operations.

### Environmental impact within the Group

The Group runs operations for which permits are required, in accordance with national legislation in Sweden, Finland, Germany and Poland respectively. Such operations include the generation of electricity and heat and, in Germany, also the extraction of lignite in four open-cast mines.

The Group conducts considerable network operations for the distribution and transmission of electricity in accordance with permits held in Sweden, Finland, Germany and Poland. The Group also has its own railway operations in Germany.

In Sweden, the generation of electricity is conducted in several large and small hydro power plants, eight nuclear power plant units, wind power plants, and, to a certain extent, in combustion plants. In Finland, electricity is generated in a large hydro power plant and several small hydro power and wind power plants, and also in a thermal power plant. In Germany, electricity is generated in several large combustion plants, three nuclear power plants, several medium-sized combined power and heating plants (CHPs) in Hamburg and Berlin, and in several smaller wind power and hydro power plants. Some of the hydro power plants are so-called pumped storage plants, one of which is of considerable size. In Poland, electricity is generated in two combined power and heating plant in Warsaw. In addition, the Group owns shares in the German Stade nuclear power plant, which was taken out of operation in 2003.

In Germany, heat is produced in several large and medium-sized combustion plants, primarily in Hamburg and Berlin, but also in other locations. In Poland, heat is produced in four combustion plants in Warsaw. In Sweden, heat is produced in combustion plants in several locations. In Finland and the Baltic states, heat is produced in several locations, distributed between one large plant and several smaller installations.

In Germany, there are plans to build within a few years a new lignite-fired power plant unit for electricity generation and two new natural gas and coal-fired thermal power plants in Berlin and Hamburg. There are also plans to build a pilot installation for the separation of fossil-fuel carbon dioxide in an existing power plant in Germany. The plan is to store separated carbon dioxide 1000 meters underground. The use of a power plant or thermal power plant for a pilot installation for the separation of fossil-fuel carbon dioxide and carbon dioxide storage requires a permit under German legislation. A new lignite-fired power plant unit will entail renewed extraction of lignite from open-cast mines, as these operations have been dormant. The necessary permits for renewed extraction have already been obtained.

In the autumn of 2004, all the necessary rights were acquired for the building of 48 wind turbines in Örestad wind power park in Öresund, off the coast of Skåne in the south of Sweden. Operating permits must be applied for under Swedish legislation.

Poland's entry into the EU in 2004 entailed the country having to adapt its national environmental legislation to that of the EU. This means that Vattenfall's installations in Warsaw that require permits will be subject to re-examination during the next few years, in accordance with

transitional regulations currently in force for existing installations. Preparations are underway with the purpose of ensuring that the new regulations are fulfilled in time.

The EU system for trading in emission rights for carbon dioxide starts in 2005. All of the Group's important combustion plants are encompassed by the trading system. As a result, the trading system will have a substantial impact on the Group's operations in Germany and Poland, as well as on heat operations in Sweden and Finland. Vattenfall has received emission rights for 2005 which for the most part cover the Group's needs. For heat operations in Sweden, in accordance with the Swedish allocation plan, only 80 per cent of requirements have been received, which means the remaining emission rights must be acquired in the market.

### Environmental impact in the parent company and Swedish operations

The parent company conducts operations that require permits in accordance with the Swedish Environmental Code. These operations mainly comprise combustion plants for the generation of electricity and heat and wind power plants.

The parent company has 61 combustion plants for heat and electricity generation that require permits, as well as 38 heat and cooling plants that require registration. The combustion plants for the generation of electricity that require permits are the two power plants in Stenungsund and Marviken, two gas turbine plants and one diesel power plant used for reserve power. An additional gas turbine plant, which requires a permit and is kept for reserve generation, is run under an exemption similar to a permit. A new permit for continued operation of this installation must be applied for before the end of 2005. The parent company has a total of 39 wind power turbines, which are located both separately and in groups. The wind power plants have been erected in such a way that ten plants require permits and the remainder require registration. The parent company also has hydro power plants associated with water control regulations that lie outside the legal framework of the Swedish Environmental Code. The parent company conducts fish farming in four installations that require permits.

A thermal power plant and some smaller thermal plants are subject to re-examination. The company's result and financial position are not dependent on the outcome of these reviews.

The Group's Swedish subsidiaries also conduct operations that require permits in accordance with the Swedish Environmental Code. Forsmarks Kraftgrupp AB and Ringhals AB, and also Ringhals AB's subsidiary Barsebäck Kraft AB, generate electricity in nuclear power plants. SKB operates an installation for the final storage of low and medium level radioactive waste in Forsmark and an installation for the intermediate storage of spent fuel in Oskarshamn. In several subsidiaries, electricity and heat are generated mainly in combustion plants. The Group runs network operations in Swedish subsidiaries for the distribution and transmission of electricity, in accordance with concessions. Härjedalens Miljöbränsle AB, which extracts peat in Sweden, was divested during the year.

Both of the nuclear power plants at Ringhals and Barsebäck are subject to examination for authorisation for environmentally hazardous activities, in accordance with transitional regulations in connection with the introduction of the Swedish Environmental Code.

In accordance with a decision passed by the Swedish government, Barsebäck 2 will be closed on 31 May 2005. As a result, operations at the Barsebäck plant will be wound down successively as soon as the radioactive conditions allow and the necessary permits have been obtained. Sydkraft AB is responsible for the winding down and dismantling in accordance with an agreement from 1998 between Vattenfall, Sydkraft and the Swedish State.

In the autumn of 2004, all the necessary rights were acquired for the building of 48 wind turbines in Örestad wind power park in Öresund. When operations are commissioned in the autumn of 2007, Vattenfall will have more than doubled the number of wind power plants and increased electricity generation from wind power by a factor of seven from 54 to 370 GWh. A permit must be obtained in accordance with the Swedish Environmental Code.

Projects are underway at nuclear power plants and hydro power plants with the aim of increasing the power output of existing plants. These power improvements are conducted in part within the confines of existing permits. In certain cases, new permits may be required.

The generation of electricity in hydro and nuclear power plants comprises, as do network operations, an important part of the business, unlike the other operations that require permits. The generation of electricity in hydro power plants is mainly conducted within the parent company. Other operations of importance are run mainly within subsidiaries.