Annual Report 1999



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The Vattenfall Group

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The Vattenfall Group is one of the largest energy groups in the Nordic region, with sales of about SEK 28 billion. Income from abroad accounts for about 25 per cent of this amount. Business is conducted through four business areas: Electricity Generation, Energy Market, Services and Electricity Networks.

Vattenfall offers efficient energy solutions which help to enhance customers' competitiveness, environment and quality of life.

Vattenfall Electricity Generation is responsible for the generation of electricity, largescale heat production and trade involving physical deliveries of electricity. Most of Vattenfall's electricity is generated in Sweden by hydro power plants and nuclear power plants. Vattenfall also holds shares in other power plants in the Nordic region, Poland, Germany, South-East Asia and Latin America.

Vattenfall Energy Market provides electricity, heat, one-stop energy solutions and IT solutions for customer communications and other applications. About two million customers in the Nordic region purchase energy solutions from Vattenfall or from Vattenfall's business partners. Through the partnership with HEW in Hamburg, Vattenfall will develop energy sales and energy solutions in Germany. Marketing activities are also conducted in other countries where Vattenfall has subsidiaries.

Vattenfall Services is responsible for the Group's contracting and consulting services. The business area has about 2,500 employees and total sales of about SEK 2.5 billion.

Vattenfall Electricity Networks is responsible for the electricity distribution and Vattenfall is a leading network operator for local and regional distribution within the Nordic region. The number of network customers in the Nordic region is about 1.2 million. Through its stakes in HEW in Germany, VCE in the Czech Republic and LPC in Lithuania, representing a total of about 2.9 million network customers, Vattenfall is also a significant network operator in Europe, outside the Nordic region. Futhermore, the business area is responsible for Vattenfall's interests in cables to the European continent.

The Vattenfall Group also includes Vattenfall Naturgas AB, which imports natural gas to Sweden, sells gas to distribution companies and other major customers as well as owns and operates the pipeline network. Vattenfall has a 51 per cent stake in the company. Other shareholders are Ruhrgas, Statoil, DONG and Fortum.

The Group is undergoing extensive transformation in order to meet the new market demands within the Nordic region and beyond. Process and product development as well as R&D are important in this work. Brand-building and active environmental management are also part of the process of change.

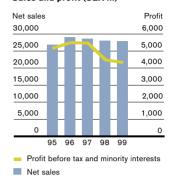
The Vattenfall Group comprises the parent company, Vattenfall AB (publ.), and approximately 130 directly or indirectly owned operational subsidiaries. At year-end, the number of employees was about 8,000, of which about 10 per cent were based outside Sweden. Through the acquisition of a 55 per cent stake in Electrocieplownie Warszawskie SA early in 2000, the number of employees in the Group increased to just over 12,000, of which about 40 per cent are outside Sweden. Through a number of partly-owned associated companies, Vattenfall's operations are significantly more extensive.

A detailed Environmental Report is available at Vattenfall's web site www.vattenfall.se/environmentalreport/99. The Annual Report is available at www.vattenfall.se/annualreport/99.

1999 in Brief

- Profit down slightly compared with 1998
- Vattenfall a more powerful brand
- Environmental management systems implemented in the majority of Vattenfall's operations
- 4 per cent increase in electricity sales volumes; billing outside Sweden on the rise
- Lowest spot market prices in the history of the NordPool Power Exchange
- Lower Nordic electricity prices due to intensified competition in all customer segments
- Major acquisitions in Germany, Poland and the Czech Republic promote growth outside the Nordic region

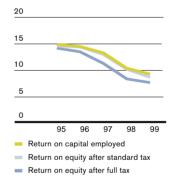
Sales and profit (SEK m)



Financial Highlights

	1999	1998
Net sales (SEK m)	27,754	27,957
Profit before tax and minority interests (SEK m)	4,297	4,448
Return on equity after standard tax (%)	8.7	10.2
Return on equity after full tax (%)	7.7	8.4
Return on capital employed (%)	9.3	10.4
Equity/assets ratio (%)	39.4	39.7
Cash flow from operating activities (internally generated funds) (SEK m)	6,224	6,758
Total investments (SEK m)	7,916	4,528
Total electricity sales (TWh)	86.9	83.8
Total heat sales (TWh)	5.3	4.6
Total natural gas sales (TWh)	9.0	9.0
Average number of employees in the Group	7,991	7,996





A fter 15 years as Chief Executive Officer of Vattenfall, I shall be retiring from the company at this year's general meeting of shareholders. The past 15 years have brought major challenges which Vattenfall has taken in its stride: Sweden's nuclear energy policy, the incorporation of Vattenfall and perhaps the greatest challenge of all – deregulation and the intensifying competition on the electricity market. Our focus in recent years has been on customer-orientation and on growth, which is supported by a strategy of improved cost-efficiency. This has led to swift and significant changes for Vattenfall and its customers.

Vattenfall aims to be the leading company in the industry and to have the most powerful brand in the Nordic region. Our branding initiative was successfully implemented and we have reaped the full benefits in 1999.

Vattenfall increasingly provides one-stop solutions to improve the customer's energy use and to guarantee an acceptable environmental profile. Many of our customers are also requesting our help and support in their operations abroad.

MARKET DEVELOPMENT

Net sales and profit were both somewhat lower than in 1998.

The high availability of hydro power and the reduced need for electricity in the Nordic region as a result of mild weather throughout most of the year led to continued low electricity market prices during 1999. The average system price on the NordPool Power Exchange was 11.8 öre* per kWh, compared with 12.3 öre in 1998.

Competitive rivalry for electricity customers in Sweden intensified with the changeover to the new system of settlement based on standard load profiles for almost all customers on November 1, 1999. This put electricity prices under added pressure and about 90,000 customers changed their electricity supplier. In Norway and Finland, customers have had this option for two years.

However, since the price in major power contracts is still fixed, the full impact of the low

prices will not be felt until the contracts at higher prices have expired. With Vattenfall's current sales volume, a lower billed price of one öre per kWh corresponds to a loss in earnings of SEK 800 million.

During 1999, Vattenfall introduced several IT-based products, including "abonnera.com", which sells electricity, telecommunications and insurance services. Vattenfall has also developed an IT infrastructure for intelligent homes which is sold through Sensel AB.

For several years now, Vattenfall has pursued a dual strategy of creating added value for customers and of generating growth on markets outside Sweden. This strategy was continued in 1999. The share of sales outside Sweden increased from 19 per cent in 1998 to 25 per cent in 1999. At the end of 1999, 10 per cent of Vattenfall's personnel were based outside Sweden.

ENVIRONMENTAL WORK – A MARKET ISSUE In January 2000, Vattenfall adopted a new environmental policy which links environmental work more closely to business operations. Sound environmental work and the implementation of environmental management systems provide the necessary platform for enhanced profitability. In 1999, our work on environmental systems generated new knowledge and skills that can also be applied to improve our customers' operations.

ACQUISITIONS BOOST GROWTH

1999 was a year of major developments in terms of strategic acquisitions and partnerships. In Finland, Vattenfall acquired the two electricity companies, Revon Sähkö and Heinola Energia, with a combined customer base of 67,000. Early in 2000, Keski-Suomen Valo was acquired, with 75,000 customers. In Norway, a 49 per cent stake in Oslo Energi, which has 385,000 customers, and a 40 per cent stake in Fredrikstad Energi, with 35,000 customers, were acquired. Sales partnerships were also initiated with Göteborg Energi through the newly formed 50 per cent owned company, Plusenergi AB.

In November, Vattenfall acquired a 25.1 per

cent stake in Hamburgische Electricitäts-Werke (HEW) and signed a co-operation agreement with the City of Hamburg which owns a further 25.1 per cent of the shares, thereby giving Vattenfall a controlling influence on the board of the company. The acquisition and co-operation agreement provides Vattenfall with a platform from which it will develop business on the German market. The HEW group has about 900,000 electricity customers, 680,000 natural gas customers and 9,000 district-heating customers. In the Czech Republic, additional shares were acquired in the electricity distribution company, Vychodoceska Energetika, with 676,000 customers. Vattenfall's stake in the company is now 42 per cent. In January 2000, a 55 per cent stake was acquired in Electrocieplownie Warszawskie which generates electricity and heat in Warsaw.

Through these acquisitions, Vattenfall has expanded its business base. Within a year, operations abroad will be as large as in Sweden.

Prior to the closure of Barsebäck I, an agreement concerning Barsebäck Kraft AB, which owns the Barsebäck nuclear power plant, was reached between the state, Vattenfall and Sydkraft. The agreement fulfills the commercial terms that Vattenfall has demanded with respect to the level and form of compensation. The agreement still has to be ratified by the Swedish parliament with respect to financing.

Together, Barsebäck Kraft AB and Ringhals AB will form a corporate group. Vattenfall will have a 74.2 per cent stake in the parent company of the group while Sydkraft will own 25.8 per cent. The state will pay Vattenfall SEK 2,639 million in compensation, to be disbursed over a period of four years. In addition, the agreement regulates the relationship between Vattenfall and Sydkraft as well as compensation from the state for the added cost of operating the remaining unit at the nuclear power plant, Barsebäck 2.

NEW ORGANIZATION

BASED ON VALUE CHAIN

With the growing competition on the electricity and related markets, it has become clear that the different activities in the value chain – electricity generation, distribution and market – are each governed by their own business logic, at the same time as they support each other. As of July I, 1999, the Group was restructured into a matrix organization, where each business area is responsible for its own separate value chain activity - electricity generation, distribution, energy market operations and services – in all of the countries where it does business.

RESEARCH AND DEVELOPMENT

R&D is essential for Vattenfall to attain its growth objective. Investments are made in research and development projects on the basis of their future business potential. Through the Sustainable Energy Solutions project, Vattenfall is focusing on R&D with an emphasis on environmental values, including new technology for electricity and heat generation and for improving energy efficiency in customer facilities.

INTERNAL EFFICIENCY IMPROVEMENT

The impact of the rationalization initiative, which is being implemented through the Internal Efficiency Improvement programme, represents a saving of SEK 500 million in 1999. Altogether, around SEK 1,300 million will be saved before the end of 2000. A critical success factor for improved profitability is the identification of further opportunities to increase cost and capital efficiency.

YEAR 2000

Vattenfall made thorough preparations to secure Year 2000 systems compliance. A total of SEK 300 million had been spent on the project and all of Vattenfall's customers in Sweden and abroad were supplied with uninterrupted electricity and heating during the millenium transition.

THE FUTURE

Vattenfall is now at a crossroads. The Group must now determine how it can successfully consolidate its role in the European energy supply system in the face of the rapid restructuring which is occurring as electricity and gas markets become deregulated. Vattenfall must establish more powerful alliances than ever before. However, this requires a stronger capital base than the present balance sheet allows.

Мудия

Carl-Erik Nyquist President and Chief Executive Officer Stockholm March 7, 2000.



Carl-Erik Nyquist

Vision

Vattenfall's vision is to be

- A leading European
 energy company
- A global energy partner

V attenfall aims to be one of Europe's leading energy companies in terms of customerperceived energy benefits, reliability and environmental performance.

As a global energy partner, Vattenfall intends to follow its customers anywhere in the world in order to meet customers' energy needs wherever they do business. Vattenfall also aims to enter into successful partnerships with other energy companies through investment in attractive markets with high growth potential in terms of energy use.

Mission

Vattenfall's mission is to enhance customers' competitiveness, environment and quality of life through a unique combination of efficient energy solutions and world-class service.

Brand

Vattenfall stands for:

- Innovation
- Openness
- Security
- Knowledge
- Caring

V attenfall's mission expresses the conviction that customers demand intelligent solutions to their energy needs and that Vattenfall has the capacity and expertise to satisfy this demand.

I n addition to developing customized products and services at competitive prices, Vattenfall's competitive strength is also based on the development of powerful, attractive brands that inspire confidence.

Besides the parent company brand of Vattenfall, the Group's brand portfolio contains a mix of international, national and local brands, in order to optimize the Group's position in specific market segments.

Although the attributes of each brand in the portfolio are adapted to a specific market situation, the brands are all firmly rooted in the mission and vision of the Vattenfall Group.

Vattenfall's New Environmental Policy

V attenfall's values are reflected in the new environmental policy in the following way: "Vattenfall's actions on environmental issues will create the necessary conditions for ensuring a positive business development and for reinforcing Vattenfall's competitive strength. By implementing continuous improvements and by adopting a comprehensive approach, we aim to set an example on the markets where we operate.

Innovation We strive to achieve sustainable development through innovative system solutions and the efficient use of resources.

Openness We create trust by maintaining an open dialogue concerning our environmental work and the environmental impact of our products.

Security We comply with the relevant legislation, regulations, stipulations and our own environmental requirements. We take preventive action to reduce our environmental impact and we assess, in advance, the impact of new activities. We also demand that our suppliers, contractors and business partners comply with the requirements.

Knowledge We are competent and committed to environmental issues and this helps us to make sound business decisions.

Caring We protect nature and focus on human health and safety. In accordance with our core values, our actions are characterized by respect for the cultures, customs and values of the countries where we operate".

Financial Objectives

V attenfall's overall financial objective is to combine competitive earnings with a healthy balance between capital strength and dividends.

The Group aims, in the long term, to generate a return on equity after standard tax of around 15 per cent over each business cycle and to achieve an equity/assets ratio of 30–40 per cent.

The Board of Directors intends that Vattenfall should pay stable dividends equivalent to a third of profit and around 5 per cent of equity.

The profitability target was set, taking into account the difference between the book and market value of Vattenfall's fixed assets. In spite of favourable economic conditions, profitability in 1999 was considerably below the 15 per cent target. With the diminishing margins in the highly competitive and stagnating electricity market, efficiency (cost efficiency, capital efficiency, market efficiency and performance efficiency) and size have become increasingly important to attaining an acceptable level of profitability. Substantial investment is required for organic growth through internal product development and for growth through acquisitions as well as for measures to improve efficiency. This means increasing the level of costs in the short term in order to meet our shareholder's requirements on return in the long term.

The equity/assets ratio target was met in 1999.

With the Board of Director's proposed dividend for 1999, the target of a dividend of 5 per cent of equity has not been met, while the target of a third of profit has been exceeded.

Other Overall Objectives for the Group

I n addition to the financial objectives, the Group has formulated objectives for customers, employees, processes, the environment and development.

Customers Market efficiency at the group level is measured through knowledge of the brand and Vattenfall's market share. The brand-building campaigns have been successful. Knowledge of and confidence in Vattenfall have increased.

Employees The group objectives for employees focused on the development of competence and skills and on management performance appraisal. The number of employees undertaking new jobs and roles as a result of the Skills Swap programme has far exceeded the target. Management appraisal was conducted through management reviews and indexbased performance measurement.

Processes Vattenfall is currently reengineering the business processes of the Group. Four processes have been identified for the Group as a whole. These are Human Resources, Procurement, Business Administration and Plant. A pilot project was launched in 1999 and the aim is to integrate these processes throughout the Group by 2001.

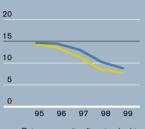
In 1999, a number of measures were implemented to improve the product development process within the Group as a whole.

Environment Work on implementing environmental management systems within the Group was successful. The aim for 2000 is for certifiable environmental management systems to be implemented in all activities that are important for the customer.

Development For several years, Vattenfall has worked on developing its business in line with Swedish quality criteria. Process development integrated with IT solutions is expected to yield positive results over the next few years.

Substantial resources are channelled into new product development. The product development objectives were met in 1999.

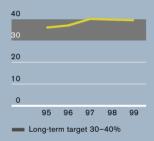
Return on equity, 1995-1999 (%)



Return on equity after standard tax

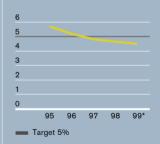
Since 1995, the return has been below the target.

Equity/assets ratio, 1995-1999 (%)



Since 1995, the equity/assets ratio has been within or above the target interval.

Dividend, 1995–1999 in relation to equity (%)



The dividend exceeded the 5 per cent target in 1995–1996. The proposed distribution for 1999 is below the target. The target of a dividend corresponding to onethird of profit was exceeded in 1995–1998. The proposed dividend for 1999 meets the target.

* Proposed dividend

Return on equity after full tax
 Target 15% average over

a business cycle



Business Environment

On the open market that has emerged after deregulation, electricity is bought like a commodity and sold at a diminishing profit.

The EC directives on the deregulation of the gas and electricity markets, together with customer demands and the upsurge of new market entrants are driving change, putting pressure on earning capacity in all parts of the value chain. Traditionally, electricity generation, electricity distribution and electricity sales were considered to be a chain of closely integrated activities that were provided through a coherent business structure. Now there is a clear tendency towards the fragmentation of the traditional value chain into separate activities, each governed by its own business logic. Players are specializing - either in one part of the value chain or allowing the different activities to develop more or less as separate business entities.

The development on the European continent is generally lagging behind the development in the Nordic region by a few years, although the trend is the same. This is particularly the case on the German market where the price of electricity in 1999 fell by 10–30 per cent, depending on the customer category.

MARKET DYNAMICS

It is no longer mainly the regulatory authorities and politicians' demands on market solutions that are driving market dynamics. Following the establishment of new rules for electricity trading, it is now the actions of the free market players that are promoting change. Three main tendencies have emerged:

- Consolidation towards fewer and larger constellations of players
- An increasingly differentiated range of products and services

• Intensifying price competition for undifferentiated electricity sales.

Market players have various options to choose from. One alternative would be to adopt a strictly low-price strategy and to concentrate on selling bulk power. In view of the abundant supply of electricity today, pursuing this strategy would severely limit trading margins. To compensate for this, large volumes would have to be generated, supported by cost-effective systems. Another alternative would be to develop products and services that create value for customers. This option requires considerable resources and sustainable implementation. Based on a thorough knowledge of customer needs, solutions must be developed that provide customer benefits. This option is all about building a closer customersupplier relationship than is possible by simply selling electricity as a commodity.

Alliances and acquisitions are strategies adopted by established players aiming to consolidate their market position in the face of intensifying competition. At the same time, a significant number of new players have entered the scene. These new entrants are mainly targeting the end-customer segment and are purchasing their electricity supplies via the electricity exchange. Similarly, a multifaceted configuration of new players is entering the emerging market for energy services.

As a result, the electricity market no longer belongs to an exclusive domain. It is now open to – and influenced by – new players from different industries and sectors.

NATURAL GAS MARKET IN EUROPE Natural gas is becoming increasingly important to the energy supply in Europe. The European Union estimates that natural gas's share of the fuel supply on the European continent will inElectricity is just like carrots. Carrots have lots of vitamins and are good for you - just like electricity is good for you.

Ellen, 9 years old, Sweden.



Denis, 9 years old, Germany.

crease from the current level of 20–25 per cent to 30 per cent in 2005. One reason for substituting power from conventional coal and oil-fired plants with natural gas is that gas involves the lowest cost for carbon dioxide emission reduction.

The Internal Gas Market Directive is to enter into force in the EU member states no later than by August 10, 2000. The directive, which is based on the same principles as the Internal Electricity Market Directive, concerns access to the grid as well as the successive opening up of the market, taking into account the conditions that specifically apply to the natural gas market. Each member state is to ensure that the first stage of the opening up of the market represents no less than 20 per cent of the total annual gas consumption of its own national gas market. After five years, the minimum requirement is 28 per cent and after 10 years, 33 per cent is the lowest level permitted. Furthermore, each member state must specify which customers are to have access to the grid (termed "eligible customers" by the directive). A minimum requirement is that electricity generators, irrespective of their size, and other final customers with a consumption of more than 25 million cubic meters (Mm³), or about 270 GWh, of natural gas per year must have access to the grid. Distributors are to be entitled to access the volume of natural gas that they themselves sell to eligible customers. After five years, the volume threshold will be reduced to 15 Mm³ and, after ten years, to 5 Mm³.

The directive allows for a temporary derogation, in other words, other competing companies can be denied access to the distribution pipeline network once the pipeline system has been, or is proposed to be built in a new geographical area. This could be an important factor for the establishment of new pipeline networks in Sweden.

The directive does not stipulate any requirements with respect to separate companies specializing in sales or network operations. However, integrated natural gas companies are required to keep separate accounts for transmission, distribution and storage activities (unbundling of accounts).

In autumn 1999, a Swedish governmentappointed commission of inquiry proposed that the market should be opened up in stages with complete opening up as of January 1, 2006. A parliamentary resolution on the matter is expected during spring 2000.

CLIMATE-RELATED ISSUES

In recent years, the risks of greenhouse gas emissions have come into greater focus in the environmental debate. This is a global issue. A concerted international effort must be made to improve environmental performance. Since a significant share of international electricity generation capacity is based on various fossil fuels, restrictions are likely to be introduced. Incumbent electricity generators will be affected to varying degrees, depending on how these restrictions are formulated. One probable effect is that coal-based production will be converted into or replaced by natural gas production.

To keep the costs for both countries and companies to an acceptable limit, Vattenfall believes that it is important to introduce an international system of emissions trading. Without this type of trade, or limits on the system, there is a risk that the cost of complying with the Kyoto Protocol will be very high and unevenly distributed, not only among countries, but also among industrial sectors and companies.

Processes and Organization of Work

Vattenfall is currently reengineering the different processes in the Group to optimize the entire chain – from the production of goods and services to the delivery to the end customer.

The Group has a diverse portfolio of businesses and, therefore, environmental responsibility is decentralized. The business areas and companies within the Group are responsible for implementing and maintaining environmental management systems that are adapted to their own activities in accordance with ISO standards or EMAS requirements. (For more information on environmental management see www.environmarket.com).

The environment is taken into consideration in connection with new company acquisitions. In the case of major acquisitions, a thorough environmental analysis of the activity is conducted in advance. An environmental audit is most often carried out within the six months following an acquisition in order to identify any necessary environmental investments.

The Group is developing its internal work procedures by focusing on business processes. So far, five processes have been established for the Group as a whole: product development, human resource management, business administration, procurement and plant. A single, integrated information support system is being simultaneously introduced for the last four processes. The processes are to be introduced throughout the Group as of 2000 and will provide the necessary conditions for maintaining a high rate of development in the Group. Structural changes in the form of company acquisitions and new business startups or the closure or disposal of existing businesses can be conducted at the same time as the reporting system can be quickly updated and developments followed up and kept on track.

The Internet and web technology are increasingly important for communication and business When electricity has turned into electricity it goes to houses and to factories and to lots of other buildings so that we can turn on lights and things.

Anton, 9 years old, Sweden.

process rationalization. In 1999, significant areas with e-business potential were identified within Vattenfall's sales process and the Group is now focusing keenly on developing e-business. The e-smart group project was launched in 1999 to promote the application of internet and web technology to business processes shared by the whole Group.

Human Resources

The broadening of Vattenfall's business – from a supplier of wholesale electricity to a provider of a broad spectrum of services means that the Group must develop new competences.

Results-oriented managers with good leadership skills are critical for the success of the Group. Therefore, the sourcing and development of managers is a vital issue for Vattenfall and part of the work of integrating acquired companies into the Group. During the year, Vattenfall conducted in-house management training through Vattenfall Management Institute (VMI) and through co-operation with external management training institutes.

Competence development work is based on stimulating employees to self-development, so that they undertake new tasks and unlock their inherent potential for responsibility and learning. Professional, business and social competence, such as knowledge of different cultures and the willingness to embrace change, are all important.

Vattenfall's core values are constantly communicated in the management development, competence development and recruitment processes. For our employees, these core values are summarized by the following keywords: Performance, Commitment, and Boldness. In addition, the following apply to managers: Clarity, Trust, Participation, Businesslike Approach and Added Value.

In 1999, Vattenfall completed its two-year "Skills Swap" human resource development programme which involved just over 1,100 employees. Of these, about 600 obtained new jobs within and outside the Group. Competence development will continue to be given priority in the future. For a couple of years, different units within the Group have been working on analyzing current and future needs in order to plan training and development at an early stage. A method to facilitate this will be successively introduced at all units within the Group.

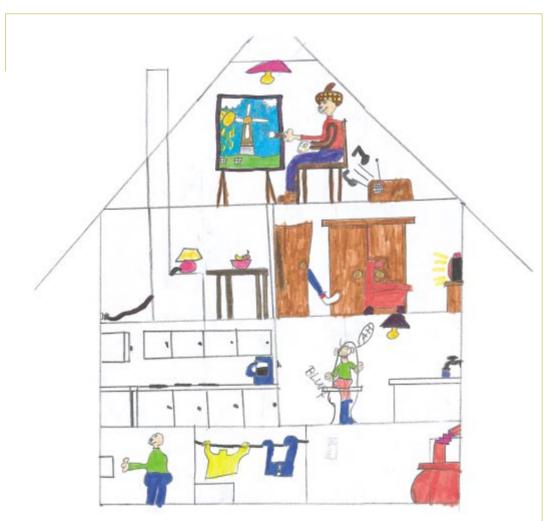
As a result of the new market conditions, it is also essential to attract new employees to the Group. For some time now, Vattenfall has conducted trainee programmes targeting different categories of university graduates. Vattenfall has also been working actively to attract more women to the energy industry and to increase the number of female employees. A number of ratios has been used during the years to track progress and the result for 1999 is that 23 per cent of the Group's employees are women. Women in managerial positions account for 16 per cent and women working in engineering and technical fields account for 9 per cent. In all of these cases, the figures are higher than ever before. Furthermore, women are increasingly represented as project managers in a number of different projects. Further improvements in equal opportunities for women will be achieved by an added focus on clearly defined and qualitative processes for management development and recruitment. This is underpinned by Vattenfall's continued focus on developing and marketing the company as an interesting and attractive workplace.

Competence development at Vattenfall is not only a question of acquiring new knowledge and skills. A holistic perspective is increasingly important for all employees. This means recognizing and understanding the relationship between physical and mental well-being and on-the-job performance. Vattenfall has named 2000 the year of "The Whole Person". In 1999, the extensive "Active Team" keep-fit project was launched in which just over 3,000 of the Group's employees now participate in a range of activities – from workouts to stress management as well as diet and nutrition.

Due to the risk of redundancy, a special

Earth, lightning, the sun. Electricity is important for the whole world.

Florentine, 7 years old, Germany.



Kevin, 9 years old, Germany.

competence development programme was launched in 1999, in collaboration with Vattenfall's Union representatives. The purpose of the programme is to provide those employees whose current positions are considered to be redundant with the opportunity – on a full-time basis – to find new alternatives within or outside the Group. During the year, about 200 employees embarked upon the programme.

Research and Development

Investment in development is essential to the future of Vattenfall.

In 1999, Vattenfall spent SEK 479 million on R&D and SEK 132 million on product development, representing a total of SEK 611 million. Altogether, this corresponds to 2.2 per cent of sales (2.3). The focus on product development and the development work within the Swedish Nuclear Fuel and Waste Management Co. increased, while other R&D decreased compared with 1998.

Priority was given to the following areas:

• Industrial energy systems and solutions within the FärdigEnergi (Ready Energy) product label

- Products based on power contracts
- Environmental products and services
- Sustainable energy solutions
- Efficiency improvement and development of Vattenfall's own electricity generation and network operations
- Safety relating to the deep disposal of spent nuclear fuel.

A few examples of Vattenfall's development work – from product development for the endcustomer segment to in-house electricity generation and network operations – are provided below.

PRODUCT DEVELOPMENT

New product and service development continued to be prioritized. Work has intensified in recent years. The focus is on creating value through partnerships and acquisitions. Vattenfall is meeting customer demand for one-stop solutions through market networks/alliances. One example of successful co-operation within a new area is the launching of Vattenfall Telefoni (telecom) together with MCI Worldcom and KF (the Swedish Co-operative Union).

New products and services are being developed with priority being given to Intelligent Services for the control and monitoring of functions in the home.

New electricity products are also being constantly developed with new pricing models based on customer needs. During the year, about 20 types of contracts were formulated.

Within the area of energy efficiency, the Energy Management product enables solutions to be developed on the basis of the analysis of customer energy use, which meet the customer's specific needs. Continuous data transfer from the customer's facilities ensures that prompt action is taken to correct any deviations.

Within the industrial segment, Vattenfall provides tailored solutions for the customer's facility, investing in measures and assuming responsibility for operation and maintenance at a fixed price. Knowledge and expertise from the environmental area are important in this type of business.

On November 1, the Innovation Center was launched. The purpose of the center is to rapidly

and interactively test products for retail customers. Operations are conducted by a company that is independent from Vattenfall, with a limited permanent staff reinforced by a network of specialists. The aim is to reduce the time spent on product development projects to a quarter. The focus is on making the most of new opportunities within IT.

Several Newly Developed

Services from Vattenfall

Two examples of newly developed energy services are Electricity Quality, which entails enhancing delivery reliability by eliminating disturbances caused by lightning, and Electricity Efficiency, which involves identifying and improving the efficiency of energy systems. The latter service has been applied within a joint project with Lafarge Braas Svenska Tak for technically advanced measures to improve the efficiency of dryers at the Lafarge roof tile factory in Vittinge, Sweden. The need for electricity has been reduced by half and the number of rejects during tile production has decreased as a result of reduced cracking.

A new product in the Färdig-product range was developed during the year. FärdigKlimat is a combination of FärdigVärme (heating) and FärdigKyla (cooling) which includes ventilation and where Vattenfall has an extensive responsibility for performance.

SUSTAINABLE ENERGY SOLUTIONS Vattenfall's R&D within future energy solutions is conducted through the Sustainable Energy Solutions project, which covers the production, distribution and use of energy and enables efficient and sustainable energy solutions to be developed, together with the customer. Applications include wind power, solar energy systems, mini CHP plants, biofuels and other combustible waste as well as industrial process efficiency.

Experiments are also in progress with smallscale CHP plants based on fuel cells and microturbines.

Greater Use of Industrial Biofuels A relatively large share of electricity is sold to major industrial customers. Vattenfall also owns

I think electricity comes from waterfalls.

Cecilia, 8 years old, Sweden.



Carl, 7 years old, Sweden.

and operates energy facilities used by industrial customers. For this reason, it is important to develop products and services which directly target this customer segment. One example is the increased use of industrial biofuels, in the form of sludge or black liquor within the forestry industry and more efficient processes, such as drying or industrial energy production.

Electrochemical Laboratory Opened In 1999, Vattenfall opened a laboratory for the development of electrochemical processes. Work will focus primarily on the development of new electrochemical applications, mainly for industrial and municipal customers. Examples include removing metals from water and developing techniques that are more energy efficient, more environmentally acceptable and less expensive than the traditional chemical methods.

Distributed Power

Together with technical advancements, new electricity market conditions have promoted new solutions for electricity generation in very small facilities, mini CHP plants or distributed electricity generation. Since 1997, Vattenfall has had



Malgorzata, 12 years old, Poland.

Sweden's first micro-turbine in operation at a demonstration facility at the Papyrus plant in Mölndal. Operational experience is satisfactory and the market potential for the technology is now being explored, not least in countries with an extensive gas pipeline network, such as Germany.

Vattenfall's 200 kWe fuel cell in Varberg has had a high availability and has broken the European record for uninterrupted operation, namely 6,900 hours. The exhaust gas condenser, which was developed by Vattenfall has also improved efficiency.

Wind Power

Vattenfall is Sweden's largest wind power producer. In 1999, the country's first Arctic wind power plant was started up in Suorva in Lapland. After one year in operation, it has been found to be Sweden's most efficient wind power plant. A new plant with a 1,000 MW output will be constructed on the island of Gotland during 2000 as a further step in the development of new wind power technologies to achieve a plant that uses less materials but which is cost-effective and can be used offshore.

Solar Power and Solar Heating

Vattenfall is concentrating on the development and demonstration of solar power systems and is participating in a national development programme managed by Elforsk (the Swedish electrical utilities' R&D company). Joint work is also in progress with the Ångström Solar Center in Uppsala which is developing thin-film solar cells – a technique which can considerably reduce costs.

Vattenfall has delivered a complete solar energy facility to the newly opened farm at the

Nordic Ark animal sanctuary in Bohus County, Sweden. Solar cells, solar collectors and heat pumps supply the farm with most of its electricity and heating.

Within the area of solar heating, Vattenfall has been conducting R&D since the end of the 1970's, to develop cost-effective solar heating solutions that are adapted to the Nordic climate. In 1999, construction work began on one of northern Sweden's largest solar heating plants, located in Ånge. New technology combining solar energy and biofuels for delivery of the FärdigVärme (Ready Heat) product is being tested in a district-heating network. The Swedish National Energy Administration is jointly financing the facility.

EFFICIENCY IMPROVEMENT AND DEVELOP-MENT OF VATTENFALL'S OWN ELECTRICITY GENERATION AND NETWORK OPERATIONS During 2000, Vattenfall will start up the first commercial high voltage Powerformer generator in Porsi, Lapland. Since Powerformer generates electricity at the same voltage as the grid, no transformer is necessary. The advantages of the design are higher efficiency, less maintenance, lower costs and reduced oil handling.

In November, Vattenfall – together with Gotlands Energiverk, ABB and the Swedish National Energy Administration – inaugurated the world's first High Voltage Direct Current light cable on the island of Gotland. Developed by ABB, the technology eliminates the problem of voltage variations and improves the quality of the electricity, thereby allowing for the further expansion of wind power on Gotland.

Both projects are examples of successful joint development work with ABB.

FURTHER ASSESSMENT

OF DEEP REPOSITORY SAFETY During 1999, the Swedish Nuclear Fuel and Waste Management Co. (SKB) submitted a comprehensive assessment report on the long-term safety of a deep repository for spent nuclear fuel. The results of the assessment show that the prospects for constructing a safe deep repository in Sweden are good. The Swedish concept involves encapsulating spent nuclear fuel elements in copper canisters and depositing them deep in the Swedish bedrock.

More Aggressive and Flexible Brand Strategy

The intensifying competition on the European energy market and Vattenfall's growth strategy require a more aggressive and flexible brand strategy for the Group.

In 1999, an international strategy was developed to build the Vattenfall parent company brand on all markets where the Group operates or is planning to operate. The strategy aims at creating and reinforcing the image of Vattenfall as an international energy company, characterized by the following values: innovation, openness, security, knowledge and caring.

Brand-building activities on the Swedish household market have ensured that knowledge of, and confidence in the Vattenfall brand are now comparable with the most powerful brands in Sweden.

One contributing factor is the implementation of a sponsorship programme focusing on four areas: culture, sports, people and the environment. The sponsorship portfolio consists of the Swedish National Ski Team in alpine and cross-country skiing, the Royal Swedish Opera, the Gothenburg Opera, the "Livslust" Foundation for orphaned children in Latvia, and the Nordic Ark. This is a long-term programme and the idea is to reinforce the brand through exposure as well as through customer and employee relations.

The acquisition of and partnerships with energy companies with well-established brands, such as Oslo Energi and HEW in Hamburg, as well as new subsidiaries and associates with newly developed or packaged offerings carrying their own brand names, such as "Plusenergi" (with Göteborg Energi), "abonnera.com" and "Sensel", are important for Vattenfall's adaptation to the new competitive environment.

We need lamps to see better and to look at TV.

David, 7 years old, Sweden.

The intention is to build a powerful Vattenfall brand and to develop a competitive portfolio of complementary brands targeting specific market and customer segments.

ETHICAL POLICY

Vattenfall's ethical policy reflects the company's former status as a state organization. The basic ethical values have now been expanded to include respect for cultures, customs and values in the countries where Vattenfall operates.

Vattenfall's Business Structure

At mid-year 1999, Vattenfall introduced a new matrix organization, in which the business areas are the profit centers. Business is conducted through geographical market areas.

The organization is based on the value chain since Generation, Networks and Market are each ruled by their own business logic. As of January I, 2000, there are four business areas: Electricity Generation, Energy Market, Services and Electricity Networks.

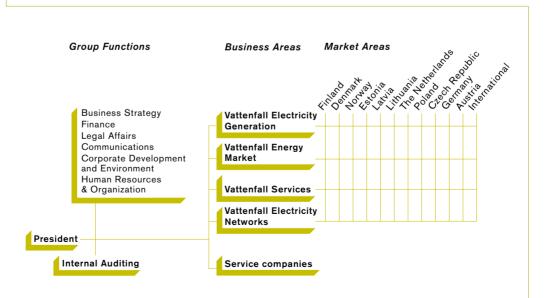
The geographical market areas comprise Finland, Denmark, Norway, Estonia, Latvia, Lithuania, the Netherlands, Poland, the Czech Republic, Germany and Austria – the countries in Europe, besides Sweden, where Vattenfall operates. The International market area, which operates in Thailand, Laos, the USA, Bolivia and Brazil etc., is responsible for the rest of the Group's foreign operations.

Through the new organization, each business area can develop according to the conditions in its own specific business environment.

Vattenfall Electricity Generation is to secure a reliable electricity supply, on a free market, through its own generation operations and through transactions on public markets which give the required return on Vattenfall's investment in production resources and knowledge capital. In "Business Activities 1999", Electricity Generation's operations are described under the product area of "Electricity".

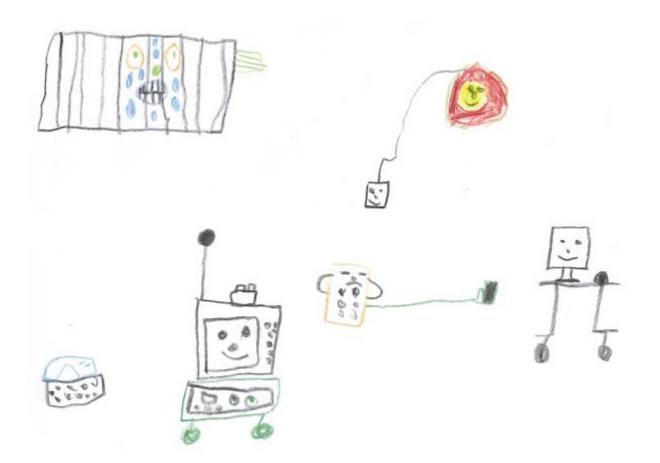
Vattenfall Energy Market is responsible for all customer and product management. At present, electricity, district-heating, energy solutions, customer communications systems and other IT solutions are sold. The business area is also responsible for the development of the Group's products and services. The business area also includes financial electricity trading. In "Business Activities 1999", Energy Market's operations are described under the product areas of "Electricity", "District-heating" and "Energy Services".

Vattenfall Services comprises, as of January 1, 2000, the engineering consultancy and contracting operations of the Group as well as other units providing technical and engineering ser-



We can play games on our computer.

Adam, 7 years old, Sweden.



Linus, 7 years old, Sweden.

vices. Business is expected to develop rapidly and efficiently through the focus on services. In "Business Activities 1999", this business area's operations are described under the "Energy Services" product area.

Vattenfall Electricity Networks is responsible for transmission over electricity networks as well as for all of the integrated electricity distribution companies (networks and electricity sales). The business area also includes cable links with other countries. This business area's operations are described under the "Network Services" product area.

The following service companies are outside the business area structure: Vattenfall Fastigheter, Vattenfall Treasury, Vattenfall Insurance, Vattenfall Data, Vattenfall Support and Vattenfall Development. Within their specializations, these companies develop and sell services shared by the Group, primarily to the Group and even, to a certain extent, to external customers. External sales are described within the "Energy Services" product area. The partly-owned company (51 per cent), Vattenfall Naturgas, which is described under the "Natural Gas" product area is also excluded from the business area structure.

The Market Areas are responsible for implementing, within each country and together with the business area responsible, the activities in the business plan and for initiating acquisitions and alliances. Furthermore, the market areas are responsible for maintaining relations with local and central authorities. Their performance is measured in relation to the business objectives established for each market area as well as in terms of the total business area earnings in the particular market area.

Comparisons with Other European Power Companies

This section compares Vattenfall with a number of major power companies in Sweden and abroad, based on their 1998 annual accounts. The ratio analysis is based on Vattenfall's definitions, see page 62.

Vattenfall reports a return on assets and return on equity which are higher than the average, whereas Vattenfall's interest cover is somewhat below average. The debt cover corresponds to the average, while the equity/assets ratio is much higher than the average in the comparison.

It must be emphasized that full comparison is not possible. Certain companies (especially those in Germany) apply accounting policies/assumptions which are different from those used in Sweden. In some cases this has a significant impact on the ratios. The main difference is the way funds are allocated for the future expenses of the management of nuclear waste. In Germany, the companies each make internal provisions and these are reported as non-interest-bearing liabilities. This considerably reduces the capital employed in the German companies which enhances the ratios calculated on this basis. For instance, in the case of RWE Energie, there is a large difference between return on capital employed (34 per cent) and on total assets (5 per cent), see the diagrams on the opposite page.

The Swedish power companies pay fees corresponding to the future expenses of the management of nuclear waste to the Nuclear Waste Fund.

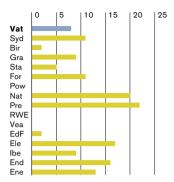
The following companies are included in the comparison for 1998 (1997)

Company and E country	lectricity sales (TWh)	Principal resources (%)*	CO ₂ emissions grams per SEK in sales	Market share (% of volume)	Total (SEK bi	
Vattenfall (Vat) Sweden	84 (79)) Nuclear power 47 Hydro power 39	9	Nordic 23 (22)	28	(28)
Sydkraft (Syd) Sweden	33 (32)) Nuclear power 42 Hydro power 38	52	Nordic 9 (9)	15	(15)
Birka Energi (Bir)** <i>Sweden</i>	26 (26) Nuclear power 38 Hydro power 38	116	Nordic 8 (–)	13	(13)
Graningeverken (Gra) <i>Sweden</i>	5 (5) Hydro power 62 Bought in 25	11	Nordic 1 (2)	3	(3)
Statkraft (Sta) <i>Norway</i>	35 (32)) Hydro power 93 Bought in 7	0	Nordic 9 (9)	6	(7)
Fortum (For)** <i>Finland</i>	45 (48)) Nuclear power 31 Hydro power 26	347	Nordic 12 (14)	20	(20)
PowerGen (Pow) Great Britain	56 (56) Fossil fuels 100	1,280	18 (20)	31	(36)
National Power (Nat) Great Britain	63 (60)) Fossil fuels 100	1,123	21 (21)	40	(41)
PreussenElektra (Pre) Germany	106 (105) Fossil fuels 43 Nuclear power 30	457	23 (24)	74	(71)
RWE Energie (RWE) Germany	136 (132)) Fossil fuels 64 Nuclear power 32	1,270	30 (30)	69	(71)
VEAG (Vea) Germany	47 (47)) Fossil fuels 93 Bought in 4	2,573	10 (11)	22	(23)
Electricité de France (E France	dF) 460 (439)) Nuclear power 80 Hydro power 13	83	94 (97)	267	(242)
Electrabel (Ele) Belgium	80 (68) Nuclear power 57 Fossil fuels 35	405	88 (90)	54	(51)
Iberdrola (Ibe) <i>Spain</i>	62 (57)) Nuclear power 41 Hydro power 29	125	40 (40)	39	(43)
Endesa (End) <i>Spain</i>	74 (69)) Fossil fuels 56 Nuclear power 31	n/a	44 (43)	63	(70)
Enel (Ene) <i>Italy</i>	226 (219)) Fossil fuels 79 Hydro power 19	554	86 (87)	196	(186)

* Resources refers to energy used by the entire company, including for heat sales.

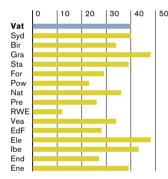
**50 per cent of Birka Energi is included in the figures for the Fortum Group.

Return on equity after full tax (%), 1998



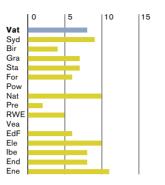
Vattenfall's return on equity is just over 8 per cent, which is somewhat better than the average. Profitability varies considerably between the companies from negative values to just over 20 per cent. The negative values for PowerGen and RWE are due to extraordinary expenses and tax payments, respectively.

Equity/assets ratio (%), 1998



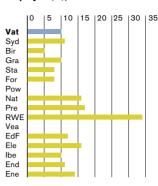
Vattenfall's equity/assets ratio is above average (34 per cent). Certain companies have strong balance sheets. German companies have low ratios because the reserves for the future management of nuclear waste are booked as liabilities and primarily shown as liquid assets on the balance sheet.

Return on assets (%), 1998



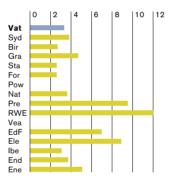
Vattenfall's return on assets is above average at 6 per cent. After Sydkraft, Vattenfall shows the highest figures for the Nordic companies.

Return on capital employed (%), 1998



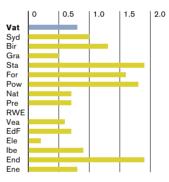
Vattenfall's return on capital employed is below the average of about 13 per cent. PreussenElektra and RWE Energie have substantial reserves reported as non-interest-bearing liabilities, which have resulted in a significantly higher return on capital employed than return on assets.

Interest cover (times), 1998



Interest cover shows considerable variations in the comparison. The average is 5. Vattenfall's interest cover of just over 3 times is comparatively low. Some of the companies report much higher figures due to very a low interest expense.

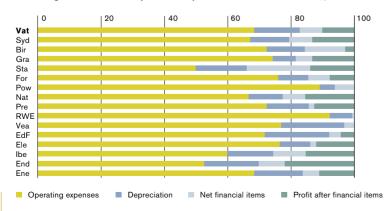
Debt cover (times), 1998



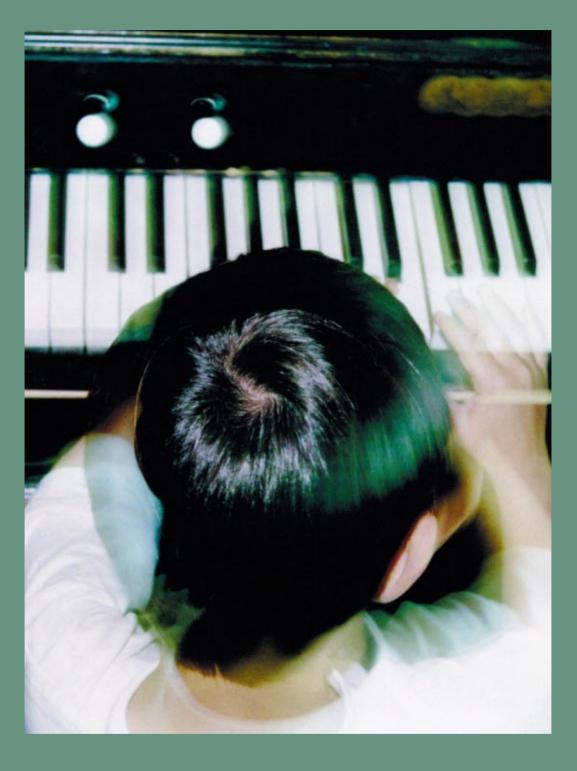
Vattenfall's debt cover is 0.8 times which corresponds to the average. There is a considerable spread between the companies. Some companies report very low figures due to a relatively low proportion of interestbearing liabilities in relation to equity.

The diagram gives an overview of how total income was used by each company in 1998. Vattenfall's operating expenses are relatively low, while for example, British and German companies, with a larger share of fossil-fuelled plants and a resulting large proportion of fuel costs, have high operating expenses. RWE and VEAG report zero profit due to large tax payments and low operating profit, respectively.

Percentage distribution of expenses and profit in relation to income (%), 1998



business activities 1999



Electricity Product Area

In 1999, net sales within the Electricity product area amounted to SEK 18,499 million (18,773) and operating profit to SEK 4,198 million (4,129). A total of 86.9 TWh (83.8) was sold.

ELECTRICITY GENERATION

Vattenfall's generation facilities, primarily hydro power and nuclear power, have a very high availability, high quality and good environmental performance. Vattenfall is the largest power generator in the Nordic region, accounting for just over 20 per cent of generation capacity. In 1999, work focused on the active management and development of fixed assets and on the improvement of plant operation and maintenance. Considerable work was also conducted to introduce modern, integrated IT systems into business operations.

During 1999, electricity generation within the Vattenfall Group amounted to 86.6 TWh (83.8). Of this figure, hydro power accounted for 36.7 TWh (34.9) and nuclear power, 49.0 TWh (48.3). Small-scale electricity generation amounted to 1.26 TWh, of which wind power accounted for 0.04 TWh, small-scale hydro power for 0.38 TWh and CHP generation for 0.84 TWh – partly directly in connection with customers' operations.

Through the acquisition of Revon Sähkö, Vattenfall gained access to additional hydro power and nuclear power generation as well as to a quarter of the wind power generated in Finland. The total electricity generation in Finland is about 0.8 TWh per year.

Early in 2000, Vattenfall acquired 55 per cent of the shares in Electrocieplownie Warszawskie SA from the Polish state, and there is a possibility of purchasing additional shares. The company accounts for about 98 per cent of Warsaw's district-heating supply and about 68 per cent of electricity used in the city. The company's six power and heat plants generate 4 TWh of electricity and 13 TWh of heat in total per year. Vattenfall's oil-fired reserve capacity plants in Stenungsund and Marviken, which represent a total of 1,020 MW, have been shut down and mothballed. Therefore, in 1999, Vattenfall disposed of most of its oil stockpile. During the year, 400 MW, in gas turbine capacity was sold to Svenska Kraftnät, which owns and operates the national electricity grid. The remaining gas turbines in the Group, representing a total of 380 MW, are subsequently being shut down or sold, since it is no longer economical to maintain reserve capacity plants.

With respect to investments on distant markets, Vattenfall's wholly-owned subsidiary, Nordic Power Invest AB (NPI) is a shareholder in electricity generation facilities in Bolivia, Thailand and Laos. During 1999, NPI decided, together with other shareholders, to conduct the Bulo Bulo project in Bolivia, involving an 87 MW gas turbine. The intention is to commission the facility, in which NPI has a 30 per cent stake, during 2000.

Hydro Power

Vattenfall owns about 160 hydro power plants, of which about 70 have a capacity greater than 10 MW. During the year, efficiency improvement measures were implemented, thereby reducing costs.

The Boden, Älvkarleby and Bergeforsen hydro power plants were registered under EMAS and ISO-certified. A number of improvements were also implemented as part of the environmental management system in order to reduce oil emissions to water.

In 1999, Vattenfall decided to create a Vattenfall VärnOmråde (Vattenfall nature conservation area) along the Lule River. The area, which features a number of endangered plant species, will be protected against different types of future exploitation.

In NPI's project in Bolivia, the 30 MW Huaji hydro power plant was taken into operation



Lukasz, 8 years old, Poland.

during the year. The development of hydro power in the Zongo Valley, representing a total generation capacity of 225 MW, has thereby been completed. Vattenfall's ownership stake through NPI is 49 per cent.

Nuclear Power

In 1999, operational experience at Vattenfall's nuclear power plants was highly satisfactory. Unit capability at Ringhals nuclear power plant was 86.9 per cent and 93.1 at Forsmark, which far exceeds the average level for nuclear power plants in the world. Forsmark 1's unit capability factor was 96.8 per cent, which is a new record for nuclear power in Sweden.

The nuclear power plant reinvestment programme continued as planned during the year. At Forsmark, a five-year reinvestment programme of SEK 2 billion is to be completed in 2000. An organizational review was also conducted to further improve efficiency. Investment in completely new instrumentation and control systems is underway at Ringhals 2.

The Swedish Nuclear Fuel and Waste Management Co. (SKB) manages spent nuclear fuel and other radioactive waste in Sweden. The company is, thereby, the final stage in the nuclear fuel cycle. SKB is owned by the Swedish nuclear power companies and Vattenfall's stake is 58 per cent.

During 1999, SKB continued its work on finding a suitable site for a deep repository for high-level nuclear waste and spent nuclear fuel. Feasibility studies were initiated in Hultsfred and Älvkarleby, which means that a total of six municipalities are now involved in this stage of the siting process.

Agreement concerning Barsebäck On November 30, an agreement was reached between Vattenfall, the Swedish state and Sydkraft whereby Sydkraft will also become a shareholder of Ringhals AB, which is currently wholly-owned by Vattenfall. A new corporate group will be formed through a merger between Ringhals AB and Barsebäck Kraft AB. The new parent company will be called Ringhals AB, and Barsebäck Kraft AB will become a wholly-owned subsidiary of the parent company. Vattenfall will own 74.2 per cent and Sydkraft, 25.8 per cent of the shares. The owners will be allocated generation capacity in proportion to their share of ownership. The new corporate structure will not take effect until the agreement is ratified by the Swedish parliament.

MARKET

Vattenfall's domestic market consists of the Nordic countries. In Sweden, Vattenfall's market share is about 40 per cent. Major customers now purchase power through contracts where the price is increasingly linked to the power exchange price. Competitive rivalry for small customers increased once the new system of settlement based on standard load profiles was introduced on November 1, 1999. Vattenfall anticipated the increase in market competition by advertising, already in spring, an attractive price offer to customers signing one-year or multi-year contracts. The customer satisfaction index (NKI) increased from 67 to 68, with retail customers and major customers accounting for the largest increase.

Together with Göteborg Energi, Vattenfall formed a joint company, Plusenergi, to sell electricity and energy services in the western part of Sweden. Vattenfall's stake in the company is 50 per cent. Gestrikekraft AB became a whollyowned subsidiary through Vattenfall's acquisition of the remaining 60 per cent.

Vattenfall's market share in Finland increased to about 10 per cent, partly through its acquisition of Revon Sähkö and Heinola Energia. Just over 45,000 retail customers in Finland switched their electricity supplier and one-third went over to Vattenfall. At the end of 1999, Vattenfall was the best-known energy company in Finland. In Norway, Vattenfall acquired a 49 per cent stake in Oslo Energi AS in order to consolidate its market base. In Denmark, Vattenfall signed power contracts with a number of major customers and acquired all of the shares in the formerly 50 per cent-owned Ström a/s. This enables Vattenfall to increase its market activities, although the fact that the Danish market is not yet deregulated is a limiting factor.

During 1998 and 1999, Vattenfall made major inroads in the Czech Republic and Germany through its acquisitions. In the Netherlands, Vattenfall signed power contracts with a number of major industrial customers. Vattenfall also conducts trading activities in this market. In March, Vattenfall was the first foreign company to be granted a licence to sell electricity throughout Poland.

Electricity is still Vattenfall's dominant product. Developments in the past few years have revolutionized electricity trading. The market is now more clearly divided into two separate segments – the end-customer market and the wholesale market. The wholesale market consists of trade between professional participants.

The increasing product differentiation has an impact on the type of contracts Vattenfall signs with customers. The trend is towards a successive transition from standard, traditional power contracts to completely new offerings. This trend is most significant among major customers, such as industries and energy companies.

Vattenfall currently offers about 25 types of contracts which are adapted to the specific needs of different customers.

Environmental aspects are gaining in importance. Vattenfall's power content-labelled products – VattenEl (hydro) and VindEl (wind) – now also carry environmental labels. As of 1999, Vattenfall is also providing 14 TWh of hydroelectricity from the Lule River with a third-party certified Environmental Product Declaration (EPD), as a result of earlier work on Life Cycle Assessment (LCA).

Vattenfall also offers a portfolio management service, whereby it provides assistance to major customers in managing their power contract portfolios. This can include the customer's entire power demand and can include portfolio risk management. Portfolio management is also provided outside the Nordic region.

The wholesale market is the basis of Vattenfall's value-adding activities for electricity sold to end-customers. The wholesale market can be divided into a spot market where transactions are made for the physical delivery of electricity and a If we didn't have any energy, our computers wouldn't work.

Martin, 7 years old, Sweden.

Electricity is good because it can run machines.

Pontus, 8 years old, Sweden.

financial market for hedging the price of electricity. The driving force for the financial electricity market is risk management or active risk-taking. The participants on the financial market are traditional energy providers such as power generators and distribution companies as well as new entrants to the power market such as portfolio managers, major industries and banks.

Through its active participation on the wholesale market, Vattenfall can give the Group's endcustomers access to power contracts which are, for example, linked to the power exchange price. This opens up completely new possibilities for small customers to access products that were previously reserved for wholesale market participants.

In connection with the wholesale market, products and services are offered which target professional market participants. These products may include new types of financial contracts, analyses and newsletters, price forecasts and portfolio management services. During 1999, Vattenfall launched a new type of electricity forward contract which is denominated in SEK and settled in the Swedish price area. Such a product is currently not available in NordPool's product range.

Electricity in Different Products In terms of volume, Sweden is the largest market for the Electricity product area. Sales to small and medium-sized customers in Finland and Norway are also substantial. Electricity products are also sold to major customers in Denmark and outside the Nordic region. In Germany, selling has also been conducted via the VASA Energy subsidiary.

The profit margin for electricity sales via power contracts decreased further during the year. This trend applies to the market as a whole and is expected to continue. With increasing electricity market deregulation in Europe, the same development can be seen in a growing number of countries.

Business where customers actively choose the energy resources used to generate the electricity they purchase as well as the environmental profile is continuing to increase. In 1999, the increase was over 60 per cent. Sales amounted to just over SEK 100 million. An even greater increase in sales is expected over the next few years. Vattenfall is also stimulating demand through a dialogue with customers concerning how their competitiveness can be enhanced by the use of these products.

Throughout Europe, there is a growing interest in electricity trading. However, European markets have not evolved as far as in the Nordic region, with a clear separation of the different stages in the value chain. In 1999, Vattenfall delivered electricity to companies in Germany and the Netherlands. Initially, sales of forward contracts on the wholesale markets in these countries involve physical power deliveries. Once the market has evolved and clear reference markets have been developed for the sale of physical power, financial trading in electricity will also become more sophisticated. In May 1999, Vattenfall became a shareholder of the Amsterdam Power Exchange (APX) which is a spot market for physical trading.

District-heating Product Area

In 1999, net sales in the District-heating product area amounted to SEK 1,028 million (887) and operating profit to SEK 121 million (135). During the year, Vattenfall's district-heating sales amounted to 3.0 TWh (2.6), of which Germany accounted for 0.9 TWh (0.4).

District-heating business is conducted independently and together with partners in the form of joint ownership in municipal district-heating operations. Vattenfall is active in the districtheating markets in Sweden and, to a certain extent, in Germany, Finland, Norway, Poland, Estonia and Latvia.

District-heating operations are still largely regulated. Vattenfall's district-heating business focuses on improvements within environmental performance, operational efficiency and rationalization. There are considerable differences between different facilities depending on their geographical location, the need for renovation and environmental impact. Further expansion is planned within this product area.

Energy Services Product Area

In 1999, net sales in the Energy Services product area amounted to SEK 2,633 million (2,058) and operating profit to SEK -52 million (153). Energy Services comprises Energy Solutions, Energy and Consulting Services as well as Contracting Services. The latter accounted for just over 60 per cent of net sales and made a positive contribution



Malin, 9 years old, Sweden.

to results, while both Energy Solutions and Energy and Consulting Services reported negative results. The development of "Intelligent homes" is reported outside this product area. The main reason for the negative results is that most of the products are new and are at an early stage in the product life cycle. Deliveries of Färdig-Värme (Ready Heat) account for a significant share of Energy Solutions, comprising a total of 2.3 TWh (2.0) in delivered heat.

ONE-STOP ENERGY SOLUTIONS

The development of new products is directly linked to Vattenfall's mission and strategy, namely to create value for the customer. Vattenfall offers energy services to all customer categories.

Vattenfall offers major industrial customers a variety of solutions, ranging from fulfilling their energy needs to full partnership, covering all energy-related operations. This can also be combined with more or less sophisticated environmental solutions. A number of partnership agreements were signed during the year.

In July, a long-term energy partnership agreement was signed with Myllykoski Paper Oy in Anjalankoski, southern Finland. Vattenfall will assume responsibility for the paper mill's energy supply and a new biofuel-fired CHP plant is being constructed next to the plant which will improve environmental performance. About 0.9 TWh of process heat and 0.4 TWh of electricity will be supplied.

A close energy partnership was also initiated with SCA Packaging Munksund AB concerning the supply of electricity and steam to the factory for 18 years. Vattenfall is investing in a new 96 MW bark-fired boiler and a 25 MW back-pressure turbine. The Swedish Energy Administration has approved an investment grant.

Another example is Cementa's factory in Slite where Vattenfall will supply 50 GWh of electricity a year, for a period of 15 years, based on the recovery of flue gas heat from the cement manufacturing process which will be used for power generation.

Vattenfall signed an agreement with Utansjö Bruk AB for energy generation efficiency improvement.

In addition to energy supply, industrial and business customers are offered products relating to energy optimization, energy monitoring, onestop energy solutions, indoor climate and cooling as well as products with power content labels and other environment-related products.

The agreement with AssiDomän Nordträ is one example of an application of the Färdig-Värme product. The agreement involves a new investment in a solid fuel-fired furnace with elec-



Justyna, 8 years old, Poland.

trostatic precipitators. The investment will reduce the use of electricity, eliminate the use of oil and reduce hazardous emissions.

Vattenfall provides retail customers with a one-stop energy supply service, regardless of the type of energy, as well as products with power content labels. Other products for the retail customer segment include security contracts, spot price-linked contracts, telecommunications services and products for electrical safety, energy use and energy efficiency.

INTELLIGENT HOMES AND E-BUSINESS

In 1999, Vattenfall launched extensive business operations within intelligent homes. This market is expected to grow substantially in the future, with a similar potential to mobile telecommunications. During 1999, Vattenfall formed a separate company, Sensel, to market the infrastructure for intelligent homes. In simplified terms, an intelligent home requires a communications platform which communicates with a receiver station – a "smart box" – in the home. The box communicates with the fridge, VCR, alarm system, sauna and iron via nodes installed directly inside the appliance or in a plug on the wall. At the same time, Vattenfall developed products for the endcustomer segment, together with partners from other sectors. During 2000, products such as remote-controlled heat regulation, security alarm systems and ground fault interrupters will be launched.

Another new business that was launched in 1999 was the new Internet company, "abonnera.com". The company is a new sales channel for energy and other service products, primarily targeting private individuals and small businesses. Electricity and telecommunications were the first two products to be offered and sold in this way. In December, abonnera.com signed a contract with the DIAL insurance company (a subsidiary of Skandia), to sell property and personal insurance. This is the first time that electricity, telecommunications and insurance have been sold on the Internet by a single company.

OTHER ENERGY-RELATED PRODUCTS

In terms of volume, energy-related products within Energy Services are still a small part of Vattenfall's business. The range of products is largely limited to the Swedish market, although some sales are made abroad, primarily to major customers.

The expansion of the product portfolio has tangibly contributed to an increase in customer satisfaction and growth in the customer base. Examples in 1999 include a high level of loyalty among major industrial and business customers, a substantial improvement in retail customer satisfaction and the fact that 35,000 retail customers purchased telecommunications services from Vattenfall within the first seven weeks after these services were launched.

PARTNERSHIP AGREEMENTS

As a part of the focus on closer customer relations, Vattenfall has established a partnership concept for energy companies. This involves in-depth co-operation concerning the endcustomers at the same time as the energy companies can improve their risk control and enhance the return on their brand value.

At the end of 1999, Vattenfall had partnership agreements with 11 major energy companies in Sweden, representing a customer base of 272,000 customers in total. Vattenfall also offers a small-scale, economical concept for small energy companies, based on targeting the endcustomer segment together with the customer. Vattenfall has 11 partnership agreements of this type with a customer base of 45,000.

Vattenfall has initiated a partnership with the OK/Q8 chain of petrol service stations, to launch an energy package for petrol and electricity. The package is in line with Vattenfall's aim to be a supplier of complete energy solutions.

Together with KF (the Swedish Cooperative Union), Vattenfall has developed a unique partnership agreement to provide Vattenfall's telecommunications services to MedMera loyalty cardholders. Vattenfall is developing and providing new products and services, together with Electrolux, MCI Worldcom (telecommunications and Internet), TAC (services), MTC (household market) and Energros (waste incineration).

CONTRACTING AND

CONSULTING SERVICES In 1999, network contracting services sold through *VESAB* (*Vattenfall ElnätService AB*) maintained a satisfactory market position in terms of both sales and profit. The volume of business conducted with customers outside Vattenfall exceeded expectations.

Contracting and consulting services within electricity generation are conducted through four units in *Vattenfall Generation Services (the VGS* group).

VGS Hydro Sweden (which has now changed its name to Vattenfall Kraft & Industri Service) provides operation and maintenance contracting services within the hydro power sector. During the year, business with customers outside the Group increased. One example of this type of contracting is a three-year agreement with Telia concerning maintenance and repair response services and inspection of 30 network stations in the Arjeplog area. VGS Hydro Sweden also formed a joint company with Skellefteå Kraft for the operation and maintenance of hydro power facilities in the Skellefte River.

VGS Hydro International focuses on contracting and consulting outside Vattenfall's domestic market.

VGS Nuclear concentrates on consulting, primarily in North America, where there is a large potential market. Vattenfall's experience within nuclear power plant management is valued by customers. During 1999, new management agreements with respect to a large number of nuclear power plants were signed with Energy Northwest, Wisconsin Electric and other companies.

VGS Thermal offers operation and maintenance contracting for thermal plant operations. During the year, market activities largely focused on the domestic Nordic market, Poland and the Czech Republic.

During 1999, contracts were signed with a number of customers, primarily in the Nordic countries. Examples of contracts outside the Electricity comes from the wind, water and sun. The wind turns propellers to make electricity. Solar panels catch the sun and make electricity. Water turns the water wheel and makes electricity.

Anton, 9 years old, Sweden.



Karolin, 6 years old, Sweden.

Nordic region include Kostrzyn Paper Mill in Poland and Ubungo in Tanzania.

SwedPower is an engineering consultancy company which mainly targets the energy and infrastructure sectors. The company was formed in 1999 through a merger of the three consultancy companies, Vattenfall Energisystem AB, Vattenfall Hydropower AB and Vattenfall Transmission AB. Engineering consultants were also transferred from the Energy Market business area.

The SwedPower group also includes *Swed-Power International AB* which co-ordinates and develops international consultancy business operations on distant markets and in Europe. Altogether, the two companies have about 500 employees.

Vattenfall Energimätning AB provides solutions for energy measurement, communications and measurement data processing.

Network Services Product Area

In 1999, network sales in the Network Services product area amounted to SEK 7,097 million (6,993) and operating profit to SEK 1,657 million (1,629).

MARKET

In 1999, Vattenfall reduced the regional network

tariff in Sweden by an average of 2 per cent. Due to rationalization measures, there was only a marginal decrease in profitability. The local network tariffs were redistributed among as well as within the tariff areas and customer groups of the different network companies. The aim is to further reduce the range between the highest and lowest tariff levels.

Following a review of 19 of Vattenfall's 29 network tariff areas in Sweden, the Swedish Energy Administration decided that Vattenfall should return to the 1998 tariff level in 14 of these areas. The decision does not take into account the base price level and other circumstances affecting costs, including customer density on the network. Vattenfall has lodged an appeal against the decision with the County Administrative Court.

In Finland, the subsidiary, Hämeen Sähkö, reduced its tariffs as of April 1, in spite of higher costs for high-voltage networks.

On November I, a system of settlement based on standard load profiles was introduced in Sweden, with the result that almost all customers can now switch to a new electricity supplier at no added cost. The reform required extensive advance preparations to handle the anticipated increase in customer mobility. Added resources will be required by the network companies in order to continue to operate under the new conditions. At the same time, the cost of replacing electricity meters is decreasing.

During 1999, substantial resources were invested in a programme to secure Year 2000 compliance of all operational systems.

Disturbances due to cold weather, lightning and storms were relatively extensive during 1999. Several severe storms in western and central Sweden at the end of November interrupted the power supply to about 110,000 of Vattenfall's network customers and in a few cases, the power cuts lasted for more than a week. In early December, extensive disturbances occurred in the electricity supply to eastern and western parts of Sweden, with the result that, at most, more than 50,000 customers were without electricity. Altogether, the costs of the disturbances amounted to SEK 80-90 million and a maximum of 800 to 900 workers were involved in the repair work. Vattenfall's service guarantee for operational interruptions amounted to SEK 27 million (9) in 1999.

In December, the Baltic Cable – the direct current link between Sweden and Germany – was damaged, interrupting cable operations. Vattenfall owns one third of the cable. The cable is expected to be back in operation in April 2000.

A new operational support system, DRISS, was purchased. The system will be taken into service at the end of 2001, reducing the number of operational stations from 26 to four. DRISS will considerably improve the efficiency and quality of operational monitoring and will provide improved information to customers, such as in the event of power failures. An extensive personnel training programme on the use of the system was initiated in 1999.

In December 1999, Vattenfall, together with Svenska Kraftnät, Sydkraft and Birka Energi, launched a project to introduce a fiber optic broadband network for the companies' transmission lines in southern Sweden. The first stage comprises 1,700 km of fiber optic cables.

ENVIRONMENTAL CERTIFICATION AND ENVIRONMENTAL MANAGEMENT In 1999, Hämeen Sähkö was the first electricity network company in Finland, and the second in Europe, to become environmentally certified in accordance with ISO 14001. The environmental management system was introduced at about 40 per cent of its network operations by year-end. Vattenfall's objective is for all network companies to be certified in accordance with ISO 14001 by 2003.

The phasing out of hazardous substances continued. Systematic recovery of metals in transmission line wires and cables continued during the year.

During 1999, work continued on a specification of how to apply the precautionary principle for electromagnetic fields (EMF) to Vattenfall's activities.

ACQUISITIONS AND MARKET SHARE In 1999, the number of network customers increased by 128,500 in Sweden and Finland, through the acquisition of Säffle Elverk, Ingarö Elektriska Distributionsförening, Årjängs Elektriska Nät AB, Botkyrka Salem AB, Fagerstas elnät, Heinola Energia Oy and Revon Sähkö Oy. Vattenfall's network operations in Lycksele and Robertsfors with 7,000 customers were sold to Skellefteå Kraft. At year-end 1999, the number of network customers amounted to 1,110,000, of which 245,000 were in Finland. Furthermore, an agreement was signed to acquire 35 per cent of Fredrikstad Energinett AS with 35,000 customers. In addition to this, Vattenfall acquired 40 per cent of the parent company, Fredrikstad Energiverk AS.

At the end of January 2000, agreements had been signed with all of the municipal shareholders to acquire Keski-Suomen Valo Oy with 75,000 customers. With this acquisition, Vattenfall will access 320,000 network customers in Finland or about 12 per cent of Finland's network customers. The acquisition creates a rational geographical structure for Vattenfall's Finnish network operations.

EXPANSION IN THE REST OF EUROPE Vattenfall's operations on the European market are now resulting in tangible business. In the Czech Republic, Vattenfall increased its stake in the distribution company Vychodoceska Energetika (VCE) to about 42 per cent (8.1). VCE distributes electricity in eastern Bohemia and has 676,000 customers.

In Lithuania, Vattenfall increased its stake

Solar panels catch the sun's rays and make electricity. The electricity goes up into the pole and comes to my house.

Anna, 9 years old, Sweden.



Anna, 8 years old, Poland.

in the vertically-integrated Lithuanian Power Company (LPC) to about 9.7 per cent. Vattenfall is actively participating in preparations for the restructuring of the entire power supply system in Lithuania. The aim is to further increase Vattenfall's involvement in distribution outside Sweden.

In November 1999, an environmental licence was granted to operate the 600 MW direct current cable between Sweden and Poland – SwePol Link. The cable will be taken into service in spring 2000. Karlshamn Municipality has appealed against the licensing decision. Vattenfall owns 48 per cent of SwePol Link AB.

Natural Gas Product Area

In 1999, net sales in the Natural Gas product area amounted to SEK 863 million (928) and operating profit to SEK 69 million (54). Sales are conducted in Sweden through Vattenfall Naturgas AB.

VATTENFALL NATURGAS

Vattenfall Naturgas AB (VNG) is the only company importing natural gas to Sweden. This is done via the pipeline network, owned and operated by VNG, and stretching from Dragør in Denmark under Öresund to Klagshamn in Skåne in the south of Sweden and along the west coast of Sweden up to Gothenburg. External natural gas sales represented 823 million m³ during 1999, or in terms of energy units, 9.0 TWh (9.0). Of the natural gas sold, industry accounts for about 40 per cent, power and heat generation facilities for about 40 per cent and housing and other buildings, 20 per cent. VNG's environmental management system was certified in accordance with ISO 14001 in June 1999.

Preem's oil refinery in Gothenburg was converted from oil to natural gas for heating. During 2000, the gas network will be extended to Lerum and Partille. Consequently, 28 municipalities in Sweden will use natural gas.

Vattenfall AB owns 51 per cent of the shares in VNG. The other shareholders are the German company Ruhrgas, Danish DONG, Norwegian Statoil and Finnish Fortum.

annual accounts 1999



The Board of Directors and President of Vattenfall AB (publ.) (556036-2138) hereby submit the annual accounts and consolidated accounts for 1999 (pages 31–63).

Group

ESSENTIAL STRUCTURAL CHANGES In Sweden, all of the shares were acquired in the electricity sales company, Säffle Kommun Förvaltnings AB and its subsidiaries, Säffle Elverk AB and Säffle Energi AB. The acquisition represents a customer base of about 7,600. Vattenfall also acquired 99.8 per cent of the shares in Energibolaget i Botkyrka och Salem AB, thereby gaining access to about 39,000 network customers. Distribution networks in the Västerbotten region, with 7,000 customers, were sold.

In addition, the remaining 60 per cent of the shares in Gestrikekraft AB were acquired, making the company a wholly-owned subsidiary of Vattenfall. The company sells electricity to 80,000 customers.

Together with Göteborg Energi AB, Vattenfall acquired an electricity sales company, Plusenergi AB, which has a customer base of 425,000. Vattenfall's stake in the company is 50 per cent.

During 1999, the subsidiary, Abonnera i Sverige AB, was formed to sell electricity, telecommunications services and insurance via the Internet to household customers and small businesses. Sensel AB was also formed to sell intelligent home infrastructure and applications.

In Finland, Heinola Energia Oy, with about 25,000 customers and Revon Sähkö Oy, with about 42,000 customers, were acquired.

In January 2000, all of the municipal shareholders accepted Vattenfall's bid for the Finnish company, Keski-Suomen Valo, with 75,000 customers. In January 2000, the acquisition was approved by the Finnish Competition Authority.

In Norway, Vattenfall acquired 49 per cent of Oslo Energi AS. Vattenfall's sales to the corporate market in Norway were transferred to Oslo Energi. The company has about 385,000 customers.

In September, a further 32.5 per cent was acquired in Fredrikstad Energiverk AS, bringing Vattenfall's stake at year-end to 40 per cent. At the same time, Vattenfall also acquired 35 per cent in its subsidiary, Fredrikstad Energinett AS.

In the Netherlands, Vattenfall acquired 10 per cent of the shares in the Amsterdam Power Exchange (APX).

In the Czech Republic, a further 34 per cent was acquired in the electricity distribution company, Vychodoceska Energetika, bringing Vattenfall's stake to 42 per cent at year-end. The company has about 676,000 customers.

In Germany, the subsidiary VASA Energy acquired 12.55 per cent of Rostock Stadtwerke during the second quarter.

In November, Vattenfall signed an agreement with the City of Hamburg concerning the acquisition of 25.1 per cent of the shares in HEW (Hamburgische Electricitäts-Werke AG). Ownership will be formally transferred in 2000. The City of Hamburg and Vattenfall will form a jointly-owned company in which each will have a 50 per cent stake. In addition, the City of Hamburg has an option to sell its remaining 25.1 per cent to Vattenfall. HEW sells electricity to about 900,000 customers, natural gas to 680,000 customers and district-heating to 9,000 customers.

In Poland, 34 per cent of the shares were acquired in the Ustka district-heating company.

In January 2000, an agreement was signed with the Polish state for the acquisition of 55 per cent of the Polish energy company, Electrocieplownie Warszawskie SA. The company accounts for about 98 per cent of the district-heating production and about 68 per cent of the electricity used in Warsaw.

On November 10, the Environmental Court gave the go-ahead for the completion of the SwePol Link direct-current cable between Sweden and Poland. An appeal has been lodged against the ruling. Vattenfall has a 48 per cent stake in SwePol Link AB. The total investment in the project is estimated at about SEK 2,800 million, of which SEK 2,200 million has already been invested. Vattenfall has the financial responsibility for the first ten years of operation.

In Lithuania, Vattenfall acquired an additional 4.7 per cent in the Lithuanian Power Co. (LPC), bringing its stake to 9.7 per cent at yearend.

During the year, a pension fund was formed for the Group – the Vattenfall Pension Fund. During the first quarter, Vattenfall AB transferred SEK 2,840 million to the fund. Pension liabilities in Vattenfall AB and Ringhals AB have been secured by assets in the fund as of year-end 1999.

AGREEMENT CONCERNING BARSEBÄCK In November, Vattenfall reached an agreement with the Swedish state and Sydkraft concerning

* In addition to the information on this page, the Administration Report comprises the comments on performance and financial position provided in connection with the Income Statement and Balance Sheet as well as the Cash Flow Statement (pages 37, 39 and 41). Barsebäck nuclear power plant. The agreement with the state still has to be ratified by the Swedish parliament. During 2000, Barsebäck Kraft AB and Ringhals AB will form a corporate group. Vattenfall will have a 74.2 per cent stakes, and Sydkraft a 25.8 per cent stake in the parent company of the group. The agreement has been signed on a commercial basis, whereby the state will pay Vattenfall SEK 2,639 million for Sydkraft's participation in Ringhals. In addition, Sydkraft will pay SEK 113 million a year over and above Ringhals's production costs.

PERSONNEL

The average number of employees amounted to 7,991 (7,996). Salaries and remuneration amounted to SEK 2,762 million (2,644). For further information on the average number of employees, salary costs as well as remuneration to the senior management, see Note 33.

RESEARCH AND DEVELOPMENT (R&D) Vattenfall's R&D activities are integrated into its business operations. This means that each business area and service company is responsible for conducting its own R&D, with an emphasis on the potential commercial benefits of the work. R&D for the Group is co-ordinated by Corporate Development & Environment.

In 1999 the total R&D cost amounted to SEK 479 million (527), of which the Swedish Nuclear Fuel and Waste Management Co. accounted for SEK 266 million (194). R&D costs comprised 1.7 per cent (1.9) of net sales.

ENVIRONMENT

Within two of its business areas, Electricity Generation and Energy Market, the Group conducts activities defined as environmentally hazardous under the Swedish Environmental Code and which must therefore be licensed. These activities account for about 57 per cent or 49.9 TWh of Vattenfall's electricity generation. In addition to nuclear power, where the main environmental impact is associated with radioactive waste, these activities comprise electricity and heat generation in combustion facilities. The main environmental impact of these facilities is associated with emissions to the air and noise pollution, as well as wind power which also causes noise pollution. The Group's hydro power production, which accounts for about 43 per cent of the total electricity generation, is not classified as a hazardous activity in accordance with the

definition of the Code but is classified as water use requiring a licence.

YEAR 2000

Since 1997, some SEK 300 million has been spent on auditing the IT systems of the Group to ensure Year 2000 compliance. Vattenfall supplied uninterrupted electricity and heating to all of its customers in Sweden and abroad.

SURPLUS FUNDS FROM

THE SPP PENSION INSURANCE COMPANY SPP has notified Vattenfall that about SEK 417 million in surplus funds have been allocated to the Vattenfall Group. SEK 198 million will go to Vattenfall AB. Due to uncertainty relating to terms and the date when the allocated funds can be used, the allocated funds have not been included in the income statements or balance sheets for 1999.

Parent Company

Net sales for the parent company amounted to SEK 18,450 million (19,230). Net profit for the year was SEK 3,929 million (2,414). Investments totalled SEK 7,963 million (4,785). Liquid assets came to SEK 48 million (223). Funds in the group account managed by Vattenfall Treasury AB amounted to SEK 14,824 million (9,749).

On April 1, Ringhals's business operations were transferred from the parent company to a new subsidiary, Ringhals AB.

Vattenfall AB is wholly owned by the Swedish state.

BOARD OF DIRECTORS

AND RULES OF PROCEDURE Vattenfall AB's Board of Directors consists of eight members and two alternates, elected by the general meeting of shareholders, as well as three employee representatives, with a corresponding number of alternates appointed by the trade union members. The President is a member of the Board of Directors. Other company employees participate in board meetings as rapporteurs. The Secretary is a Vattenfall AB employee.

During the 1999 financial year, the Board held 11 meetings, including 6 scheduled meetings, one of which was the meeting following the election. The work of the Board follows an annual plan devoted to fulfilling the Board's need for information and which is otherwise influenced by the rules of procedure adopted by the Board. The Board meets with the company's auditors every year. The Vattenfall Group is exposed to risk due to market price fluctuations which can have an impact on the income statement and balance sheet. For Vattenfall, this primarily applies to electricity and fuel prices as well as interest and foreign exchange rates. Vattenfall works actively with financial risk management in order to control and limit risk exposure.

Financial risk management is conducted in accordance with the rules and risk limits established by Vattenfall's Board of Directors and management concerning risk exposures as well as criteria set for counterparties, liquidity and availability of funds. Internal security, controls and issues regarding operational risks are given very high priority.

ELECTRICITY PRICE RISK

Vattenfall's financial performance is affected to a considerable extent by electricity exchange prices. Vattenfall manages the electricity price risk through a clear division of responsibility with respect to profit centers and risk-taking within specified limits. This division of responsibility is based on the division of business responsibility within the Group. Other risks that arise, such as price area, currency and interest rate risks, are hedged through internal transactions with Vattenfall's Energy Trading Center, which manages Vattenfall's market-related risk on a day-to-day basis.

The daily fixing of electricity prices is conducted on the basis of the marginal production costs of the participants on the exchange, which, in the Nordic power system, is largely controlled by the availability of hydro power. Prices are highly volatile (see diagrams on page 35). Vattenfall actively uses different forms of electricity derivatives, both to hedge price risk and to increase returns through active risk-taking within specified limits.

On the Nordic electricity market, Vattenfall trades on the NordPool Power Exchange, via brokers as well as bilaterally with different participants. Outside the Nordic region, trading is mainly conducted directly between participants, although the volume of trading via brokers is increasing. Vattenfall is also active on the Amsterdam Power Exchange.

FINANCING RISK

The Group's operations are capital-intensive with major liquidity fluctuations during the year,

which places demands on the availability of funds in the short and long term. The target for short-term liquidity is always to have no less than 10 per cent of the Group's sales in the form of liquid assets or committed credit lines. Longterm availability of funds is measured in terms of the average remaining maturity of the portfolio, which was 4.8 years (5.1) at December 31.

INTEREST RATE RISK

Interest rate risks relating to long-term borrowings are managed using a portfolio method, whereby the average fixed interest rate term is not allowed to fluctuate more than 12 months on either side of a certain norm. Other interest rate risks are managed within the overall risk limit for interest rates and exchange rates.

CURRENCY RISK

The exposure of the Group to currency risk is related to the effects of exchange rate movements on future cash flows (transaction exposure) and on the value of the net assets of foreign subsidiaries (translation exposure).

Payments are mainly made in SEK. Transaction exposure mainly arises in connection with electricity trading and fuel purchases, largely due to the fact that trading on the Nordic electricity derivatives market is primarily conducted in NOK. Fuel is preferably purchased in USD and Euro. Transaction exposure also arises in connection with borrowing in foreign currencies.

As a rule, no currency risks are taken with respect to long-term borrowing. Virtually all currency risks in other forms of transaction exposure are hedged through matching and different types of derivatives. Any remaining exposure is then managed together with the interest rate exposure within the overall risk limit established for the Group.

To reduce the translation exposure, major net investments used to be hedged through loans in foreign currencies and forward exchange contracts. In the consolidated accounts, any exchange rate differences relating to these loans were set off against translation differences in equity. A decision has been made to terminate equity hedging, and outstanding transactions are therefore phased out upon maturity.

COUNTERPARTY RISK

Counterparty risks associated with investments, derivative contracts etc. are managed within the limits set on the basis of external credit assessments. Only a number of major Nordic banks and credit institutions as well as parties with very high credit ratings are accepted as counterparties. Furthermore, before entering into long-term swap agreements, an International Swaps and Derivatives Association, Inc. (ISDA) agreement must be signed with the counterparty. Counterparty risks in derivatives are constantly quantified through mark-to-market valuations as well as a standard mark-up for future value changes in accordance with the method stipulated by Finansinspektionen (the Swedish Financial Supervisory Authority) for institutions which are required to calculate capital ratios.

The management of counterparty risk in electricity trading is governed by counterparty rules where the basis of assessment is based on external credit assessment. NordPool represents a considerable counterparty risk for Vattenfall which, in addition to trading in its own marketplace, also provides a clearing service for bilaterally traded standard power contracts. Under Norwegian law, NordPool is not formally a financial trading exchange and the level of equity is low. NordPool's creditworthiness is therefore based on the clearing margin requirements.

Vattenfall is working to improve the electricity market's management of credit risks through organizations such as ISDA, EFET (European Federation of Energy Traders) and NAET (the Nordic Association for Electricity Traders). Vattenfall has also developed its own framework agreement for financial electricity trading which is closely modelled on standards from other international financial markets.

VATTENFALL'S ENERGY TRADING CENTER The operational electricity trading on the external market is conducted centrally by Vattenfall's Energy Trading Center within Vattenfall AB. The center is a fully functional internal marketplace and its task is to support other operational units so that they can access the market on the best possible terms. To avoid cost aggregation within Vattenfall's value chain, in this respect, the center trades internally on a zero-margin basis. Instead its performance is measured in terms of process efficiency. Vattenfall is one of four market makers on NordPool and is a driving force behind the development of a financial trading exchange in STOSEK (price area Stockholm. SEK).

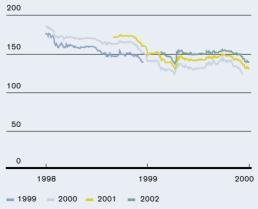
VATTENFALL TREASURY

Vattenfall's financial risk management operations are conducted by the wholly-owned subsidiary, Vattenfall Treasury AB (publ.), which is responsible for the Group's funding and investment operations and for the management of the associated financial risks. Vattenfall Treasury AB is a service company and serves as the Group's internal bank with just over 80 account-holders among the companies and units within Vattenfall. The centralized treasury function allows the units within the Group to each focus on their core business.



System price, SEK/MWh

Annual price, NOK



Consolidated Income Statement

		G	Group	
SEK million	Note	1999	1998	
Net sales	1, 2	27,754	27,957	
Cost of products sold	4, 5	-19,402	-18,963	
Gross profit		8,352	8,994	
Selling expenses		-1,702	-1,315	
Administrative expenses		-1,523	-1,614	
Research and development costs		-479	-527	
Other operating income		1,034	604	
Other operating expenses		-309	-166	
Participations in the results of associated companies	6	142	91	
Operating profit	7	5,515	6,067	
Result from other long-term securities held	9	34	-1	
Other interest income and similar profit/loss items	10	508	289	
Interest expense and similar profit/loss items	11	-1,760	-1,907	
Profit before tax and minority interests		4,297	4,448	
Tax	13	-1,400	-1,816	
Minority interests in the profit for the year	14	-359	32	
Net profit for the year		2,538	2,664	

Product Areas

	Net sales		Operatir	ig profit/loss
SEK million	1999	1998	1999	1998
Electricity	18,499	18,773	4,198	4,129
District-heating	1,028	887	121	135
Energy services	2,633	2,058	-52	153
Network services	7,097	6,993	1,657	1,629
Natural gas	863	928	69	54
Other and eliminations	-2,366	-1,682	-478	-33
Total	27,754	27,957	5,515	6,067

Comments

NET SALES AND PERFORMANCE Net sales amounted to SEK 27,754 million (27,957). The decrease can mainly be explained by reduced income from electricity sales due to lower market prices. Net sales outside Sweden increased to 25 per cent (19).

Operating profit was SEK 5,515 million (6,067). Operating profit expressed as a percentage of net sales (operating margin) was 19.9 per cent (21.7). The decline in operating profit was primarily due to reduced margins as a result of falling electricity market prices. The price drop was partially compensated for by cost savings of about SEK 500 million.

Financial income and expenses – net, which is the net amount of other interest income and interest expense, amounted to SEK –1,252 million (–1,618). The interest cover was 3.4 times (3.3). The long-term objective is an interest cover of at least 3 times.

Profit before tax and minority interests amounted to SEK 4,297 million (4,448). Expressed as a percentage of net sales, profit (pre-tax profit margin) was 15.5 per cent (15.9).

Taxes amounted to SEK -1,400 million (-1,816), of which SEK 1,291 million (1,316) is attributable to tax on profit for the year and previous years.

Net profit for the year amounted to SEK 2,538 million (2,664), resulting in a return on equity after full tax of 7.7 per cent (8.4).

PRODUCT AREAS Electricity

Net sales amounted to SEK 18,499 million (18,773). Income from electricity sales decreased in spite of an increase in sales volume. The decrease in income can be explained by lower market prices. Direct sales to customers, primarily energy companies, declined by 5.4 TWh, while sales on electricity exchanges increased by 8.5 TWh. The decrease in volume to customers is mainly due to the transfer of sales volumes to Oslo Energi in Norway and Plusenergi in Gothenburg. Sales amounted to 86.9 TWh (83.8), with customers accounting for 67.5 TWh (72.9) and electricity exchanges for 19.4 TWh (10.9).

In addition, 8.5 TWh (9.0) was delivered to minority shareholders in power plants etc.

Electricity purchases amounted to 98.7 TWh (96.0), of which in-house generation comprised 86.6 TWh (83.7) and purchases 12.1 TWh (12.3). In total, 36.7 TWh (34.9) of hydro power, 49.0 TWh (48.3) of nuclear power and 0.9 TWh (0.5) of thermal power were generated. Of the electricity purchases, 3.3 TWh (3.2) was utilized internally, mainly to cover network losses.

Operating profit amounted to SEK 4,198 million (4,129).

District-heating

Net sales amounted to SEK 1,028 million (887). The volume sold amounted to 3.0 TWh (2.6) through the expansion of existing district-heating systems. Operating profit amounted to SEK 121 million (135).

Energy Services

Services comprise Energy Solutions and Energy and Consulting Services as well as Contracting Services. Contracting accounted for just over 60 per cent of net sales and also made a positive contribution to operating profit while both Energy Solutions and Energy and Consulting Services reported negative results.

Net sales amounted to SEK 2,633 million (2,058). Sales of FärdigVärme (Ready Heat) amounted to 2.3 TWh, which is an increase of 0.3 TWh. Operating profit was SEK –52 million (153). The lower operating profit is explained by the considerable expansion and work within the area which led to a more rapid increase in costs than in income.

An investment of just over SEK 300 million in intelligent homes is included in "Other and eliminations".

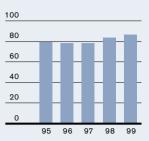
Network Services

Net sales amounted to SEK 7,097 million (6,993). Transmission volumes amounted to 127 TWh (124). Operating profit amounted to SEK 1,657 million (1,629).

Natural Gas

Net sales amounted to SEK 863 million (928), corresponding to 9.3 TWh (9.3) in volume sold. Of the volume sold, 0.3 TWh (0.3) was sold within the Group. Operating profit amounted to SEK 69 million (54).

Electricity sales (TWh)



Net sales (SEK m)



Quarterly figures

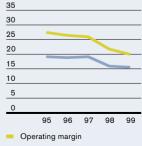
Profit before tax and minority interests (SEK m)



Rolling 12-month figures

Quarterly figures

Operating and pre-tax profit margin (%)



Pre-tax profit margin

Consolidated Balance Sheet

		Group		
SEK million	Note	Dec. 31, 1999	Dec. 31, 1998	
ASSETS				
FIXED ASSETS				
Intangible assets	45			
Concessions, patents, licences, trademarks and similar rights	15	494	388	
Renting and similar rights	15	755	794	
Goodwill Total intersible acceste	15	304	575	
Total intangible assets		1,553	1,757	
Tangible assets	10	40.000	10.001	
Land and buildings	16 16	18,323	18,821 36,521	
Plant and machinery Equipment, tools, fixtures and fittings	16	36,123 891	877	
Construction in progress	16	1,632	1,347	
Advance payments for tangible assets	17	285	215	
Total tangible assets		57,254	57,781	
Financial assets				
Participations in associated companies	18, 19	5,223	2,917	
Receivables from associated companies	17	1,687	1,337	
Other securities held as fixed assets	18, 19	1,549	1,181	
Other long-term receivables	17	1,272	1,463	
Total financial assets		9,731	6,898	
Total fixed assets		68,538	66,436	
		,		
CURRENT ASSETS Inventories etc.	20	4,901	5,440	
Current receivables	21	8,364	7,041	
Investments		3,738	2,465	
Cash and bank balances		1,122	1,974	
Total liquid assets		4,860	4,439	
Total current assets		18,125	16,920	
Total assets		86,663	83,356	
EQUITY, PROVISIONS AND LIABILITIES				
Equity	23			
Restricted equity	20			
Share capital		6,585	6,585	
Revaluation reserve		295	313	
Equity method reserve		616	573	
Other restricted reserves		16,333	19,965	
Non-restricted equity				
Non-restricted reserves		6,980	2,225	
Net profit for the year		2,538	2,664	
Total equity		33,347	32,325	
Minority interests in equity		2,472	2,213	
Interest-bearing provisions	24	1,210	3,891	
Non-interest-bearing provisions	25	11,192	10,811	
Total provisions		12,402	14,702	
Long-term interest-bearing liabilities	26	19,714	17,488	
Long-term non-interest-bearing liabilities	27	1,222	1,485	
Total long-term liabilities		20,936	18,973	
Current interest-bearing liabilities	28	11,351	6,497	
Current non-interest-bearing liabilities	29	6,155	8,646	
Total current liabilities		17,506	15,143	
Total equity, provisions and liabilities		86,663	83,356	
Pledged assets	30	150	3,431	
Contingent liabilities	31	7,046	6,437	
Commitments under consortium agreements	32			
US Leases	See Note 31			

Comments

FINANCIAL POSITION

Assets

Tangible assets decreased by SEK 527 million to SEK 57,254 million. The decrease is due to the disposal of fixed assets in Germany with a residual value of SEK 1,884 million. The investments amount to SEK 2,462 million (2,554).

Participations in associated companies amounted to SEK 5,223 million, which is an increase of SEK 2,306 million. The increase is mainly attributable to investments in Vychodoceska Energetika, Oslo Energi, Fredrikstad Energinett and Fredrikstad Energiverk.

Current receivables increased by SEK 1,323 million and amount to SEK 8,364 million.

Liquid assets amounted to SEK 4,860 million (4,439), which corresponds to 17.5 per cent (15.9) of sales. Liquid assets comprise SEK 1,960 million (2,007) in investments concerning interestarbitrage transactions with refinancing risk. During the year, the average volume of liquid assets was about SEK 6,700 million (4,600). Of this amount, about SEK 3,800 million (2,400) comprised investments concerning interestarbitrage transactions.

Equity, Provisions and Liabilities Equity amounted to SEK 33,347 million, which is an increase of SEK 1,022 million. The equity/ assets ratio was 39.4 per cent (39.7). Since 1991, the equity/assets ratio has increased by 13 percentage points. Vattenfall's target is to maintain an equity/assets ratio of 30–40 per cent.

Interest-bearing provisions decreased by SEK 2,681 million to SEK 1,210 million as a result of a payment of SEK 2,840 million into a pension fund formed by Vattenfall AB.

Non-interest-bearing provisions increased by SEK 381 million, due to higher deferred tax liabilities, primarily as a result of reported deferred tax liabilities on surpluses arising from company acquisitions.

Interest-bearing liabilities increased by SEK 7,080 million to SEK 31,065 million. The increase is primarily due to the financing of the above-mentioned payment into the pension fund and to investments made.

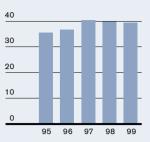
Vattenfall has three Commercial Paper programmes and two Medium Term Note programmes which, together, allow for more flexible financing options. The short-term Commercial Paper programme is backed up by a Revolving Credit Facility of USD 600 million, which falls due in 2003. In addition, there is a USD 200 million back-up in the form of 364-day credit facilities.

The maturity profile of Vattenfall's loans is shown in the diagram below. About 80 per cent of the total loan portfolio consists of loans raised abroad.

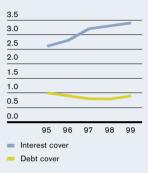
For short-term borrowing, Vattenfall has been awarded a P–1 credit rating from Moody's and A–1 from Standard & Poor's. This is the highest possible rating from Moody's while Standard & Poor's has decreased its rating by one step, compared with the previous year. The rating for international long-term borrowings has been reduced compared with the previous year, namely A1 from Moody's and A+ from Standard & Poor's.

Current non-interest-bearing liabilities decreased by SEK 2,491 million to SEK 6,155 million. The decline is mainly due to the fact that advance payments received for the sale of fixed assets in Germany have been realized.

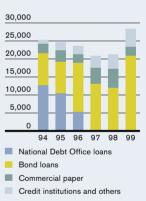
Equity/assets ratio (%)



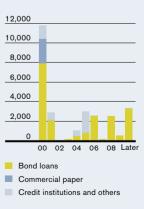
Interest cover and debt cover (times)



Total borrowings (SEK m)*



Maturity profile (SEK m)*



* Excluding loans from minority owners.

Consolidated Cash Flow Statement

		Group
SEK million	1999	1998
CASH FLOW FROM OPERATING ACTIVITIES		
Net profit for the year	2,538	2,664
Adjustment for the effects of non-cash items*	3,686	4,094
Cash flow from operating activities before changes in		
operating assets and liabilities (internally generated funds)	6,224	6,758
Cash flow from changes in operating assets and liabilities		
Decrease in inventories	539	92
Increase in receivables	-1,125	-213
Decrease in payables	-2,400	-152
Cash flow from operating activities	3,238	6,485
CASH FLOW FROM INVESTING ACTIVITIES		
Acquisitions of group companies**	-2,916	-1,286
Investment in participations in associated companies and other long-term securities	-2,519	-677
Investment in tangible fixed assets	-2,462	-2,554
Investment in intangible fixed assets	-19	-11
Sale of tangible and intangible fixed assets	2,473	386
Sale of shares and participations	77	17
Liquid assets in acquired/sold companies, net	255	387
Cash flow from investing activities	-5,111	-3,738
CASH FLOW FROM FINANCING ACTIVITIES		
Proceeds from borrowings	10,575	11,833
Repayment of debt	-6,493	-12,576
Contributions from minority interests	14	
Dividends paid	-1,676	-1,620
Cash flow from financing activities	2,420	-2,363
Cash flow for the year	547	384
LIQUID ASSETS		
Liquid assets at the beginning of the year	4,439	3,961
Translation differences	-126	94
Cash flow for the year	547	384
Liquid assets at the end of the year***	4,860	4,439

*- *** See specification on page 41.

Comments

OPERATING ACTIVITIES

Cash flows from operating activities before changes in operating assets and liabilities decreased by SEK 534 million to SEK 6,244 million. Cash flow from operating activities amounted to SEK 3,238 million (6,485). The decline is mainly due to a decrease in operating liabilities as a result of a decrease in advance payments.

The degree of self-financing was 0.8 times (1.5).

INVESTING ACTIVITIES

The Group's investments amounted to SEK 7,916 million (4,528), of which growth-related investments, i.e. company acquisitions and expansion investments in fixed assets amounted to SEK 6,004 million (2,362). Company acquisitions amounted to SEK 5,435 million (1,963). Acquisitions of group companies accounted for SEK 2,916 million (1,286), associated companies SEK 2,137 million (469) and other long-term securities, SEK 382 million (208).

SEK 2,462 million (2,554) was invested in tangible fixed assets.

SEK 742 million (899) was invested in electricity generation facilities and SEK 851 million

CASH FLOW STATEMENT SPECIFICATION

* Adjustment for non-cash items

	1999	1998
Depreciation according to plan	4,351	3,793
Participation in the results of		
associated companies	-89	-42
Unrealized foreign exchange gains	-74	-201
Unrealized foreign exchange losses	65	40
Capital gains	-409	-125
Capital losses	116	78
Write-down of shares	10	-
Change in interest receivable	-175	-88
Change in interest payable	70	107
Change in provisions	-281	2
Change in income tax liability	-257	562
Minority interest in profit for the year	359	-32
	3,686	4,094

Interest paid amounted to SEK 1,617 million (1,758) and interest received to SEK 279 million (193). Taxes paid amounted to SEK 1,657 million (1,254).

(825) in electricity networks. Within the heating segment – district-heating, FärdigVärme (Ready Heat) and power and heat – investments amounted to SEK 520 million (366). The remaining investments mainly concerned equipment, tools, fixtures and fittings. Expansion investments in fixed assets amounted to SEK 569 million (400). District-heating, FärdigVärme and power and heat accounted for most of these investments.

Sales of tangible fixed assets are mainly attributable to assets in Germany.

SEK 19 million (11) was invested in intangible assets.

FINANCING ACTIVITIES

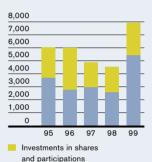
Long-term interest-bearing liabilities increased by SEK 2,226 million. Borrowing for the year through the Euro Medium Term Programme (EMTN) amounted to about SEK 9,600 million, of which SEK 6,300 million was in the form of one-year loans. The average maturity profile of the loan portfolio is 4.8 years.

The net debt – i.e. interest-bearing liabilities and provisions minus liquid assets – increased by SEK 3,978 million to SEK 27,415 million. The increase is mainly due to investments.

Depreciation according to function

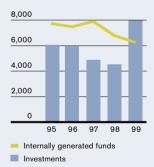
	1999	1998	
Cost of			
products sold	4,217	3,683	
Selling expenses	52	44	
Administrative expenses	79	62	
Research and development			
costs	3	4	
Total			
depreciation	4,351	3,793	

Investments (SEK m)



Investments in tangible and intangible fixed assets

Self-financing (SEK m)



** Acquisition of group companies

Assets in group companies acquired mainly comprise fixed assets. See notes 15, 16 and 18.

*** Liquid assets at the end of the year

	Dec. 31, 1999 De	ec. 31,1998
Investments	3,738	2,465
Cash and bank balances	1,122	1,974
Liquid assets at the end of the year	4,860	4,439

"Investments" refers to investments with maturities of less than one year. Investments with maturities of less than three months amounted to SEK 2,453 million (1,356).

Parent Company Income Statement

Parent company Note 1999 1998 SEK million 1, 2, 3 18.450 19.230 Net sales Cost of products sold 4, 5 -14,752 -15,331 **Gross** profit 3,698 3,899 Selling expenses -707 -691 Administrative expenses -630 -783 Research and development costs -158 -272 Other operating income 388 329 Other operating expenses -152 -98 7 2,384 **Operating profit** 2,439 Result from participations in group companies 8 74 301 Result from participations in associated companies 6 19 -1 9 Result from other long-term securities held 775 814 10 Other interest income and similar profit/loss items 633 435 Interest expense and similar profit/loss items 11 -1,186 -1,761 Group contributions corresponding to dividends 1,251 1,279 Profit before appropriations and tax 4,005 3,451 Appropriations 12 1,252 -210 Profit before tax 5,257 3,241 Tax 13 -1,328 -827 Net profit for the year 3,929 2,414

Parent Company Cash Flow Statement

Parent Company Cash Flow Statement	Parent	Parent company	
SEK million	1999	1998	
CASH FLOW FROM OPERATING ACTIVITIES			
Net profit for the year	3,929	2,414	
Adjustment for the effects of non-cash items	-1,801	-1,008	
Cash flow from operating activities before changes in operating assets and liabilities(internally generated funds)	2,128	1,406	
Cash flow from changes in operating assets and liabilities	-4,691	2,298	
Cash flow from operating activities	-2,563	3,704	
CASH FLOW FROM INVESTING ACTIVITIES			
Investment in group companies, associated companies			
and other long-term securities	-7,537	-3,824	
Investment in tangible and intangible fixed assets	-426	-961	
Sale of tangible fixed assets	5,117	224	
Sale of shares and participations	1,143	1,965	
Cash flow from investing activities	-1,703	-2,596	
CASH FLOW FROM FINANCING ACTIVITIES			
Proceeds from borrowings	5,591	489	
Dividends paid	-1,500	-1,500	
Cash flow from financing activities	4,091	-1,011	
Cash flow for the year	-175	97	
LIQUID ASSETS			
Liquid assets at the beginning of the year	223	126	
Cash flow for the year	-175	97	
Liquid assets at the end of the year	48	223	

Interest paid amounted to SEK 1,036 million (1,545) and interest received to SEK 1,089 million (1,224). Tax paid amounted to SEK 1,052 million (480).

Parent Company Balance Sheet

SEK million	Note	Dec 21 1000	Dec 21 100
	note	Dec. 31, 1999	Dec. 31, 199
ASSETS			
FIXED ASSETS			
Intangible assets			
Concessions, patents, licences, trademarks and similar rights	15	6	20
Renting and similar rights	15	678	706
Total intangible assets		684	720
Tangible assets			
Land and buildings	16	12,496	13,18
Plant and machinery	16	6,109	10,25
Equipment, tools, fixtures and fittings	16	87	20
Construction in progress	16	411	68
Advance payments for tangible assets	17	57	5
Total tangible assets		19,160	24,37
Financial assets			
Participations in group companies	18, 19	12,987	7,48
Receivables from group companies	17	38	12
Participations in associated companies	18, 19	1,527	66
Receivables from associated companies	17	909	63
Other securities held as fixed assets	18, 19	594	66
Other long-term receivables	17	135	123
Total financial assets		16,190	9,68
Total fixed assets		36,034	34,793
CURRENT ASSETS			
Inventories etc.	20	103	2,01
Current receivables	21	20,821	15,35
Investments		-	49
Cash and bank balances		48	174
Total liquid assets	22	48	223
Total current assets		20,972	17,59
Total assets		57,006	52,388
EQUITY, PROVISIONS AND LIABILITIES			
Equity	23		
Restricted equity			
Share capital (131,700,000 shares at a par value of SEK 50 each)		6,585	6,58
Statutory reserve		1,316	1,31
Non-restricted equity			
Profit brought forward		3,067	3,173
Net profit for the year		3,929	2,414
Total equity		14,897	13,488
Untaxed reserves	12	10,065	11,31
Interest-bearing provisions	24 25	112 146	3,04 62
Non-interest-bearing provisions Total provisions	25	258	3,668
· · · · · · · · · · · · · · · · · · ·	26		7,33
Long-term interest-bearing liabilities Long-term non-interest-bearing liabilities	20	16,060 4,794	5,22
Total long-term liabilities		20,854	12,56
Current interest-bearing liabilities	28	1,425	3,20
Current non-interest-bearing liabilities	29	9,507	8,14
Total current liabilities		10,932	11,35
Total equity, provisions and liabilities		57,006	52,388
Pledged assets	30	_	_
Contingent liabilities	31	59,567	46,045
Commitments under consortium agreements	32		

notes to the accounts

Accounting Policies and Valuation Principles CONSOLIDATED ACCOUNTS

The consolidated accounts concern the parent company and companies in which Vattenfall held more than 50 per cent of the voting power or in any other way had a controlling influence at the year-end.

The consolidated accounts have been prepared in accordance with the Swedish Financial Accounting Standards Council Recommendation, RR 1:96.

The consolidated accounts have been prepared using the purchase accounting method. This means that the group equity only includes that portion of the subsidiary's equity earned after the acquisition date. The surplus values arising after market valuation in connection with the acquisition of the company's assets and liabilities are attributed to the appropriate item. Deferred tax is taken into account in these surplus values except for water rights which are not amortized. Remaining differences in relation to the acquisition prices are reported as goodwill.

Companies acquired during the year are included in the consolidated income statement as of the time of acquisition. Divested companies are included in the consolidated income statement up to the time of disposal.

Intercompany profits on sales between group companies are eliminated in their entirety, taking into account deferred tax.

Associated companies are accounted for in accordance with the equity method. Dividends from associated companies are not included in the profit for the Group. Instead, the Group's share of an associated company's pre-tax profit, net of any amortization of surplus values, is reported under "Participations in the results of associated companies". The Group's portion of an associated company's reported tax expense and deferred tax liability in untaxed reserves is included in the tax expense for the Group.

For practical reasons, the results of associated companies are included in Vattenfall's accounts after a slight delay, normally one calendar quarter.

The book value of the Group's shareholding in an associated company is adjusted to take account of the Group's share of the company's profit after tax, less any amortization of surplus values and dividends received.

FOREIGN CURRENCIES

When preparing the consolidated accounts, all items in the income statements of a foreign subsidiary are translated into Swedish kronor at the average exchange rate for the year, while all balance sheet items, apart from the net profit/loss for the year, are translated at the exchange rates prevailing at year-end (closing rate). The changes in group equity arising from variations in the closing rate, compared with the rates for the previous year, directly affect equity and are reported as an equity item, among restricted and non-restricted reserves. The difference arising in the consolidated balance sheet through the translation of a foreign subsidiary's net profit/loss into Swedish kronor on the basis of the average exchange rate affects non-restricted reserves for the Group.

Receivables and liabilities denominated in foreign currencies are valued at the closing rate, in the accounts of the individual group companies as well as in the consolidated accounts. When hedging, the spot exchange rate on the date that the currency was hedged is used in the valuation of the underlying receivable or liability.

As of October 1999, net assets in foreign currencies are no longer hedged through loans and other financial instruments. In the consolidated accounts, exchange rate differences on these loans have previously been set off against translation differences in equity.

Exchange rate differences are divided into operational and financial differences. Operational differences are included in operating profit.

The most important exchange rates used in the consolidated accounts are provided below.

Key Exchange Rates Applied in the Consolidated Accounts

		Average rates		Closing	rates
Country	Currency	1999	1998	Dec. 31, 1999	Dec. 31,1998
Denmark	DKK	1.1884	1.1873	1.1505	1.2685
Finland	FIM	1.4863	1.4892	1.4403	1.5885
Norway	NOK	1.0603	1.0565	1.0605	1.0730
Germany	DEM	4.5183	4.5223	4.3784	4.8295
USA	USD	8.2871	7.9567	8.5250	8.0650

APPROPRIATIONS, DEFERRED TAX LIABILITY AND UNTAXED RESERVES

Tax legislation in Sweden and in certain other countries allows companies to defer tax payments through appropriations to untaxed reserves. In the consolidated balance sheet, untaxed reserves are divided into deferred tax liability and equity. The deferred tax liability is reported as provisions and the equity portion is included in restricted equity. The tax liability in the untaxed reserves is calculated on the basis of the anticipated tax rate for the following year in each country (in the case of Sweden, 28 per cent).

The consolidated income statement does not include any appropriations. The tax expense for the Group is calculated as the sum of the reported tax expenses in the individual group companies, adjusted for the effects of transfers to/from untaxed reserves. This adjustment is equivalent to the year's change in the tax liability in the untaxed reserves, which is included in the deferred tax liability in the consolidated balance sheet.

The individual companies (including Vattenfall AB) disclose untaxed reserves on the balance sheet as a separate item. In the income statement, transfers to/from untaxed reserves are reported under "Appropriations". The reported tax expense comprises the tax payable on profit after appropriations.

Group contributions are reported in accordance with the Swedish Financial Accounting Standards Council's statement.

NET SALES

Net sales does not include value-added tax and indirect taxes (primarily energy tax). Charges paid by customers for connection to the electricity network, are taken up as revenue at the time of connection.

RESEARCH AND DEVELOPMENT

R&D costs are taken up as an expense as they are incurred.

DEPRECIATION AND AMORTIZATION

Depreciation according to plan is calculated on a straight-line basis over the estimated useful life of an asset. Depreciation according to plan is distributed according to function in the income statement. Furthermore, accelerated depreciation is reported by the parent company under appropriations in the income statement and under untaxed reserves in the balance sheet.

Depreciation Rates (Years)

	Plant and equipment	Buildings	Land im- provements
Plants in operation			
Properties	30	25-50	25
Hydro power plants	40	50	25
Thermal power plants *	25	25	25
Gas pipelines	20	—	—
Power lines and transformer stations **	30	30	30
Equipment etc.	3–10	_	_

* 15 years for reinvestment in nuclear power plants.

** 25-35 years for local distribution networks.

Intangible fixed assets are amortized over an appropriate period but no longer than the length of any underlying agreement. Goodwill acquired before 1997 is amortized over no more than 10 years, while goodwill acquired in 1997 and after is amortized over no more than 5 years with certain exceptions.

FIXED ASSETS

Intangible and tangible fixed assets are valued at cost (acquisition value) plus revaluation less accumulated

depreciation according to plan. Revaluations are reported taking into account deferred tax. The cost of large plants, built for the Group's own purposes, includes interest accrued during the construction period. Interest is capitalized, in the case of plants with a cost in excess of SEK 100 million.

INVENTORIES ETC.

Inventories are valued at the lower of cost or net realizable value in accordance with the first-in/first-out principle. The consumption of nuclear fuel is calculated as a depletion of the energy content of the fuel rods and is based on the cost of each batch of fuel loaded into the core. The value of the energy stored in the form of water in reservoirs is not reported as an asset.

WORK IN PROGRESS

AND REVENUE RECOGNITION

Contracts are carried out on a cost plus and fixed price basis. The former are recognized as revenue as invoices are issued, while the percentage of completion method is applied to the latter.

Work in progress is valued as the direct costs incurred plus a reasonable proportion of indirect costs. Bad debts are written off in their entirety irrespective of the degree of completion of the contract in question.

RECEIVABLES

Receivables are carried at the amount likely to be received.

CURRENT ASSET INVESTMENTS

Current asset investments include bonds, commercial paper and other interest-bearing financial instruments. Current asset investments are valued at the lower of cost and market at balance sheet date. Unrealized losses are set off against unrealized gains. Where losses exceed gains, the net amount is reported in the income statement; where gains exceed losses, the surplus is not included in income.

PENSIONS

When Vattenfall became incorporated, the Group took over the relevant pension liabilities accrued by the state. In the case of the municipal electricity companies acquired by Vattenfall, the Group has taken over the relevant pension liabilities accrued by the municipality. Pension liabilities accrued by active personnel are now organized within the pension plans and insurance schemes which are standard in the markets in which Vattenfall operates. This applies to employees at the Swedish companies and to some employees at foreign subsidiaries. The provision reported in the balance sheet has been calculated using customary actuarial methods.

The entire pension liability is secured by assets in the Vattenfall Pension Fund, which was formed in 1999 and which is currently owned by Vattenfall AB and Ringhals AB.

LEASING

The Group's accounting for material contracts is mainly based on the Swedish Financial Accounting Standards Council's recommendation RR6 "Accounting for Leases". This means that, at the inception of the lease, a finance lease is recognized as an asset and reported as a tangible fixed asset purchase as well as reported among other current liabilities and other long-term liabilities.

note 1

Net sales

	Group		Parent compa	
	1999	1998	1999	1998
Sales including indirect taxes	29,478	29,678	19,651 2	0,510
Indirect taxes	-1,724	-1,721	-1,201 -	1,280
Net sales	27,754	27,957	18,450 1	9,230

note 2

Net sales by product area

	G	iroup	Parent compar		
	1999	1998	1999	1998	
Electricity	18,499	18,773	14,522	15,274	
District-heating	1,028	887	319	323	
Energy services	2,633	2,058	972	683	
Network services	7,097	6,993	2,462	2,883	
Natural gas	863	928	_	—	
Other and eliminations	-2,366	-1,682	175	67	
Total	27,754	27,957	18,450	19,230	

Sales in Sweden accounted for 75 per cent (81) of net sales and the other Nordic countries accounted for 21 per cent (17).

note 3

Intra-group transactions

Transactions with group companies accounted for 10 per cent (8) of the parent company's total income from sales and 69 per cent (43) of its total purchase costs.

note 4

Cost of products sold

Direct costs include SEK 1,892 million (1,811) in production taxes and duties for the Group and SEK 185 million (1,104) for the parent company as well as SEK 401 million (1,133) in property taxes for the Group and SEK 243 million (924) for the parent company.

note 5

Cost of nuclear waste management

	Gr	oup	Parent company		
	1999	1998	1999	1998	
Fees to					
Nuclear Waste Fund					
– own high-level					
waste *	683	624	_	249	
- SVAFO **	73	72	_	37	
Provisions for					
the future expenses					
of managing low and					
intermediate-level waste	52	50	_	27	
Total	808	746	_	313	

* According to the Act (1995:1544) on the Financing of Future Expenses of Spent Nuclear Fuel etc., the holder of a licence to own or operate a nuclear reactor must pay, as long as the reactor is in operation, an annual fee to finance the management of spent nuclear fuel and other radioactive waste. The fee is paid into the Nuclear Waste Fund and is based on the energy delivered by the reactor. The Fund reimburses these fees in the form of government grants as the nuclear power company incurs costs for (a) the treatment and final disposal of spent fuel and radioactive waste from its reactors, after the fuel and waste have been removed from the reactors, (b) the decommissioning and dismantling of the unit (c) the research and development necessary in order to fulfill the obligations in (a) and (b).

During 1999, SEK 351 million (397) was disbursed from the Fund in respect of costs for which the Vattenfall Group is liable. At December 31, the market value of the Vattenfall Group's share of the Fund was SEK 14,243 million (14,135).

** According to the Act (1988:1597, latest amendment, 1995:1545) on the Financing of the Management of Certain Radioactive Waste etc., the holder of a licence to own and operate a nuclear reactor must pay a fee as a contribution to the activities which have been conducted at Studsvik AB, relating to the development of the Swedish nuclear power programme. This fee is also based on the energy delivered from the reactor and is paid into and administered by the Nuclear Waste Fund.

Participations in the results of associated companies

	Gr	oup	Parent company		
	1999	1998	1999	1998	
Share of profits	142	91	_	_	
Dividends	—	—	19	9	
Capital gains/losses on sales proceeds	_	_	_	-10	
Total	142	91	19	-1	

note 7

Depreciation classified according to function

	G	roup	Parent company		
	1999	1998	1999	1998	
Cost of products sold	4,217	3,683	641	1,274	
Selling expenses	52	44	13	22	
Administrative expenses	79	62	30	6	
Research and development costs	3	4	_	_	
Total	4,351	3,793	684	1,302	

note 8

Result from participations in group companies

	Parent c	ompany
	1999	1998
Dividends	159	348
Shareholder's contribution	—	-34
Write-downs	-82	-13
Capital gains/losses on sales proceeds	-3	—
Total	74	301

note 9

Result from other long-term securities held

	G	roup	Parent	Parent company		
	1999	1998	1999	1998		
Dividends	16	9	6	6		
Interest income *	—	_	747	808		
Capital gains/losses on sales proceeds	18	-10	22	_		
Total	34	-1	775	814		

 Interest income from subsidiaries amounted to SEK 613 million (746).

note 10

Other interest income and similar profit/loss items

	G	roup	Parent company		
	1999	1998	1999	1998	
Interest income	454	282	342*	416*	
Exchange gains	54	7	291	19	
Total	508	289	633	435	

* Includes SEK 342 million (416) in interest income from subsidiaries.

note **11**

Interest expense and similar profit/loss items

	G	roup	Parent company		
	1999	1998	1999	1998	
Interest expense *	1,687	1,865	1,036**	1,545**	
Exchange losses	73	42	150	216	
Total	1,760	1,907	1,186	1,761	

* In accordance with a recommendation from the Swedish Institute of Authorised Public Accountants (FAR), the interest element in pension provisions has not been charged to operating profit but has, instead, been reported as an interest expense, less compensation from the Vattenfall Pension Fund.

** Interest expense to subsidiaries amounts to SEK 1,008 million (1,386).

note **12**

Appropriations and untaxed reserves

	Т		
Parent company 1999	Jan. 1	from (-)	Dec. 31
Accelerated depreciation	8,926	-2,093	6,833
1996 tax allocation reserve	363	—	363
1997 tax allocation reserve	931	—	931
1998 tax allocation reserve	715	_	715
1999 tax allocation reserve	382	—	382
2000 tax allocation reserve	_	841	841
Total	11,317	-1,252	10,065

Untaxed reserves added through mergers have been divided into a deferred tax liability portion and an equity portion.

The following changes occurred in untaxed reserves in 1998: SEK 172 million in accelerated depreciation was dissolved, SEK 382 million was transferred to the 1999 tax allocation reserve.

Taxes

	Gr	oup	Parent	company
	1999	1998	1999	1998
Direct tax on profit for 1999 and previous years	1,330	1,316	1,340	839
Share of tax at associated companies	32	39	_	_
Deferred tax	38	461	-12	-12
Total	1,400	1,816	1,328	827

The year's tax expense of SEK 1,400 million (1,816) comprised 33 per cent (41) of profit before tax and minority interests.

The parent company's unrecorded deferred tax expense relating to appropriations amounted to SEK -351 million (59).

note 15

Intangible fixed assets

note **14**

Minority interests in profit for the year

	Gre	oup
	1999	1998
Minority interest in profit before tax	350	-41
Minority interest in tax	9	9
Total	359	-32

	Concessions Renting			Goodwill				
	and sin 1999	nilar rights 1998	and sim 1999	ilar rights 1998	Good\ 1999	vill 1998	Total 1999	1998
	1000	1000	1000	1000	1000	1000	1000	1000
GROUP								
Acquisition values								
Acquisition values brought forward	702	539	952	929	913	563	2,567	
Companies acquired	215	147	13	7	185	446	413	600
Investments	12	1	6	10	1	—	19	11
Sales/disposals	-2	—	-9	—	-40	-132	-51	-132
Reclassifications	_	—	_	—	-72	_	-72	—
Translation differences	-18	15	-10	6	-40	36	-68	57
Accumulated acquisition values carried forward	909	702	952	952	947	913	2,808	2,567
Accumulated depreciation according to plan								
Depreciation brought forward	-314	-233	-158	-114	-338	-376	-810	-723
Acquired companies	_	-1	-5	-1	-4	-17	-9	-19
Depreciation for the year	-108	-76	-42	-41	-333*	-75	-483	-192
Sales/disposals	2	_	4	_	21	132	27	132
Translation differences	5	-4	4	-2	11	-2	20	-8
Accumulated acquisition values carried forward	-415	-314	-197	-158	-643	-338	-1,255	-810
Residual value according to plan carried forward	494	388	755	794	304	575	1,553	1,757
PARENT COMPANY								
Acquisition values								
Acquisition values brought forward	204	198	808	806	_	_	1,012	1,004
Investments	_	6	9	2	_	_	9	8
Sales/disposals	-6	_	_	_	_	_	-6	_
Accumulated acquisition values carried forward	198	204	817	808	—	—	1,015	1,012
Accumulated depreciation according to plan								
Depreciation brought forward	-184	-177	-102	-70	_	_	-286	-247
Depreciation for the year	-8	-7	-37	-32	_	_	-45	-39
Accumulated depreciation carried forward	-192	-184	-139	-102	_	_	-331	-286
Residual value according to plan carried forward	6	20	678	706	_	_	684	726
Accumulated accelerated depreciation	_	_	-674	_	_	_	-674	_
Book value	6	20	4	706	_	_	10	726

* Including an SEK 210 million write-down.

Tangible fixed assets

-	Land and bui	Idings	Plant and ma	chinery	Equip tools, and fit	fixtures	Construction in progress		Total		
	1999	1998	1999	1998	1999	1998	1999	1998	1999	1998	
GROUP											
Acquisition values											
Acquisition values brought forward **	27,878	27,332	70,270	65,394	3,246	2,906	1,347	1,231	102,741	96,863	
Companies acquired	145	222	3,742	3,336	107	44	23	16	4,017	3,618	
Investments ***	65	30	379	367	254	323	1,764	1,834	2,462	2,554	
Transfer from construction in progress	114	222	1,331	1,494	44	18	-1,489	-1,734	_	_	
Sales/disposals	-311	-113	-3,160	-920	-170	-175	-7	_	-3,648	-1,208	
Reclassifications	-12	152	-39	164	87	104	-2	_	34	420	
Companies sold	-12	_	1	_	-9		_	_	-20	_	
Translation differences	-40	33	-579	435	-38	26	-4	_	-661	494	
Accumulated acquisition values carried forward	27,827*	27,878*	71,945	70,270	3,521	3,246	1,632	1,347	104,925	102,741	
Accumulated depreciation according to plan											
Depreciation brought forward	-9,129	-8,438	-34,629	-31,734	-2,369	-2,116	_	_	-46,127	-42,288	
Companies acquired	-37	-24	-538	-581	-49	-29	_	_	-624	-634	
Depreciation for the year	-529	-529	-2,942	-2,703	-346	-318	_	_	-3,817	-3,550	
Sales/disposals	103	30	1,232	690	132	162	_	_	1,467	882	
Reclassifications	_	-161	65	-178	-29	-49	_	_	36	-388	
Companies sold	12	_	_	_	5	_	_	_	17		
Translation differences	11	-7	144	-123	26	-19	_	_	181	-149	
Accumulated depreciation carried forward	-9,569	-9,129	-36,668	-34,629	-2,630	-2,369	_	_	-48,867	-46,127	
Revaluations											
Revaluations brought forward	72	59	880	930	_	_	_	_	952	989	
Revaluations for the year	_	_	17	_	_	_	_	_	17	_	
Write-downs for the year											
of previous revaluations	—	-1	-51	-50	_		_	—	-51	-51	
Other changes	_	8	_	_	_	_	_	_	_	8	
Translation differences	-7	6	_	_	_	_	_	_	-7	6	
Accumulated revaluations											
carried forward, net	65	72	846	880	_	_	_	_	911	952	
Residual value according carried forward	18,323	18,821	36,123	36,521	891	877	1,632	1,347	56,969	57,566	

* Includes non-depreciable cost of land and water rights amounting to SEK 8,865 million (8,864).
 ** Government grants received at Jan. 1: SEK 2,840 million (2,697).
 *** Government grants received during the year: SEK 132 million (135).

cont'd.

	Land		Plant		Equipn tools	1ent, fixtures	Constr	uction		
	and buildings					d fittings in pr				
	1999	1998	1999	1998	1999	1998	1999	1998	1999	1998
PARENT COMPANY										
Acquisition values										
Acquisition values brought forward **	18,717	18,664	21,998	22,108	725	682	687	618	42,127	42,072
Investments	1	_	6	36	24	74	386	843	417	953
Transfer from construction										
in progress	46	135	250	633	_	6	-296	-774	—	
Sales/disposals	-1,820	-73	-11,174	-798	-458	-27	-366	—	-13,818	-898
Reclassifications	-8	-9	6	19	2	-10	_	—	—	—
Accumulated acquisition										
values carried forward	16,936*	18,717*	11,086	21,998	293	725	411	687	28,726	42,127
Accumulated depreciation										
according to plan										
Depreciation brought forward	-5,536	-5,238	-11,748	-11,487	-523	-476	_	_	-17,807	-17,201
Depreciation for the year	-247	-328	-358	-866	-34	-69	—	_	-639	-1,263
Sales/disposals	1,343	27	7,129	613	351	17	_	_	8,823	657
Reclassifications	—	3	—	-8	—	5	_		—	_
Accumulated depreciation										
carried forward	-4,440	-5,536	-4,977	-11,748	-206	-523	_	_	-9,623	-17,807
Residual value according										
to plan carried forward	12,496	13,181	6,109	10,250	87	202	411	687	19,103	24,320
Accumulated accelerated										
depreciation	_	-16	-6,077	-8,738	-82	-172	_	_	-6,159	-8,926
Book value	12,496	13,165	32	1,512	5	30	411	687	12,944	15,394

* Includes non-depreciable cost of land and water rights amounting to SEK 6,841 million (6,839).
 ** Government grants received, at Jan. 1: SEK 2 million (2).

Tax assessment values

	G	roup	Parent company		
	1999	1998	1999	1998	
Buildings	42,890	47,380	15,326	31,330	
Land	36,661	37,549	30,245	31,579	
Total	79,551	84,929	45,571	62,909	

Transmission lines and transformer stations are not subject to tax assessment values.

Advances and long-term receivables

	Advance pay to suppliers, fixed assets	tangible	Receivables from group companies		Receivables from associated companies		Other long-term receivables	
	1999	1998	1999	1998	1999	1998	1999	1998
GROUP								
Balance brought forward	215	104	_	_	1,337	1,022	1,463	1,571
Acquired companies	_	_	_	_	_	1	6	2
New advances/receivables	202	139	_	_	1,008	538	31	2
Payments received	-60	_	_	_	-657	-262	-20	-4
Exchange rate differences	_	_	_	_	_	32	_	_
Reclassifications	-72	-28	_	—	-1	6	-208	-108
Balance carried forward	285	215	_		1,687	1,337	1,272	1,463
PARENT COMPANY								
Balance brought forward	59	43	123	300	630	336	123	121
New advances/receivables	57	36	_	149	374	258	30	1
Payments received	-59	_	_	-133	-95	_	-18	-4
Exchange rate differences	_	_	_	_	_	33	_	_
Reclassifications	_	-20	-85	-193	_	3	_	5
Balance carried forward	57	59	38	123	909	630	135	123

note **18**

Participations in group companies, associated companies and other securities held as fixed assets

	Partici	pations in	Participa	tions in	Other fi	xed	
	group	companies	associate	ed companies	asset se	asset securities	
	1999	1998	1999	1998	1999	1998	
GROUP							
Balance brought forward	-	—	2,917	2,716	1,181	805	
Companies acquired	-	—	55	9	370	136	
Investments	—	—	2,083	469	382	208	
New issues and shareholders' contribution	—	—	54	—	—	_	
Disposals	—	—	_	-12	-40	-5	
Reclassifications	—	—	112	-303	-285	23	
Change in value, associated companies	—	—	57	3	—	_	
Write-downs	—	—	-7	—	-3	_	
Translation differences	-	—	-48	35	-56	14	
Balance carried forward	_	_	5,223	2,917	1,549	1,181	
PARENT COMPANY							
Balance brought forward	7,481	5,861	669	585	662	531	
Investments	1,351	945	770	116	125	106	
New issues	2,216	_	46	_	_	_	
Shareholder's contribution made *	3,029	2,657	_	_	_	_	
Disposals*	-1,101	-1,944	-20	-7	-5	_	
Mergers of shareholdings	_	-25	_	_	_	_	
Reclassifications	126	_	62	-25	-188	25	
Write-downs	-115	-13	_	_	_	_	
Balance carried forward	12,987	7,481	1,527	669	594	662	

* Shareholder's contribution made and disposals mainly refer to restructuring within the Group.

Shares and participations

The following is a list of the main shares and participations held directly or indirectly by the parent company.

Book

GROUP COMPANIES

	• · · ·				Book
	Corporate i.d. no.	Reg. office	% holding	Number	value
Abonnera i Sverige AB	556572-9869	Stockholm	100	50,000	5
AB Ryssa Elverk	556012-2458	Mora	63	421,397	317
Bastusels Kraft AB	556117-7279	Malå	72	4,932	151
Energibolaget Botkyrka-Salem Försäljn. AB	556014-7406	Botkyrka	100	2,400	90
Forsaströms Kraft AB	556010-0819	Åtvidaberg	100	400,000	294
Forsmarks Kraftgrupp AB	556174-8525	Östhammar	74.5	223,500	223
Försäkrings AB Vattenfall Insurance	516401-8391	Stockholm	100	200,000	200
Gestrikekraft AB	556476-9858	Gävle	100	100,000	202
Gotlands Energiverk AB	556008-2157	Visby	75	112,500	13
Kraftbyggarna Entreprenad AB	556333-2468	Luleå	100	38,000	46
Kraftbyggarna Invest AB	556497-6917	Stockholm	100	1,000	121
Ljusfors Kraft AB	556042-3351	Norrköping	99	1,089	13
Nordic Power Invest AB	556377-2861	Stockholm	100	218,000	758
Ringhals AB	556558-7036	Varberg	100	1,000	457
Svensk Kärnbränslehantering AB *	556175-2014	Stockholm	36	360	0
Sensel AB	556573-5965	Stockholm	100	300,000	30
Ström a/s	250526	Gentofte	100	40,000	10
SwedPower AB	556383-5619	Stockholm	100	12,500	15
SwedPower International AB	556192-6212	Stockholm	85	3,400	19
Säffle Kommun Förvaltnings AB	556037-3960	Säffle	100	600	195
Vattenfall Bråviken AB	556507-8572	Nyköping	100	200	70
Vattenfall Bränsle AB	556440-2609	Stockholm	100	100	96
Vattenfall Data AB	556439-0614	Stockholm	100	100	10
Vattenfall Deutschland GmbH	(HRB) 62659	Hamburg	100	2	1,847
Vattenfall ElnätService AB	556417-0859	Trollhättan	100	16,000	18
Vattenfall Energimätning AB	556329-0757	Motala	100	500	15
Vattenfall Engineering AB	556383-5643	Stockholm	100	160,000	199
Vattenfall Estonia OÜ	10142764	Tallinn	100	100	0
Vattenfall Fastigheter AB	556438-5952	Sundsvall	100	100	120
VGS Hydro International AB	556417-0750	Stockholm	100	8,000	10
VGS Thermal AB	556013-1574	Stockholm	100	150,000	16
Vattenfall Naturgas AB	556181-1034	Stockholm	51	161,210	10
Vattenfall Norge AS	(NO) 978-641423	Oslo	100	80,000	1,975
Vattenfall Norrnät AB	556437-8502	Luleå	100	100	283
Vattenfall Poland Sp. zo.o.	A-7069	Warszawa	100	40	24
Vattenfall Oy	1071366-1	Helsingfors	100	10,000	1,202
Vattenfall Regionnät AB	556417-0800	Stockholm	100	8,000	11
Vattenfall Reinsurance S.A.	(B) 49528	Luxemburg	100	12,999	13
Vattenfall Support AB	556438-6026	Stockholm	100	100	1
Vattenfall Sveanät AB	556438-0268	Uppsala	100	100	1,942
Vattenfall Treasury AB (publ.)	556439-0606	Stockholm	100	500	6
Vattenfall Utveckling AB	556390-5891	Älvkarleby	100	14,000	17
Vattenfall Västnät AB	556022-0369	Trollhättan	100	600	437
Vattenfall Östnät AB	556215-7494	Söderköping	100	1,000	1,179
Västerbergslagens Energi AB	556565-6872	Ludvika	51	7,590	8
Västerbergslagens Kraft AB	556194-9784	Ludvika	58	89,726	19
Västerbergslagens Värme AB	556565-6856	Ludvika	51	5,566	6
Östra Roslags Elverk AB	556036-2526	Norrtälje	91	8,690	237
Other companies	190000 2020		0.	0,000	57
Total parent company					12,987

* The Group owns a further 22 per cent via Forsmarks Kraftgrupp AB

Book value

Major shareholdings held by group companies

	Reg. office	% holding		Reg. office	% holding
Energibolaget Botkyrka-Salem AB	Tumba	100	Revon Sähkö Oy	Oulainen	100
Heinola Energia Oy	Heinola	100	VASA Energy GmbH & Co KG	Hamburg	75
Hämeen Sähkö Oy	Tavastehus	100	VASA Neubrandenburg KG	Hamburg	75
Murgrönan & Yxan AB	Botkyrka	100	VASA Schwerin KG	Hamburg	75
Lapuan Sähkö Oy	Lappo	100	Vattenfall AS	Oslo	100
NPI Holding AB	Stockholm	100	Vattenfall Indalsälven AB	Bispgården	74

ASSOCIATED COMPANIES

	Corporate i.d. no.	Reg. office	% holding	Number	Group	Parent company
Direct holdings						
i/s Avedøreværket 2	(LEV) 221005	Gentofte	40	participations	14	14
Bullerforsens Kraft AB	556036-4514	Falun	37	111,000	169	161
Baltic Cable AB	556420-6026	Malmö	33	10,000	160	1
Bodens Energi AB	556200-9117	Boden	40	20	53	0
Gulsele AB	556001-1800	Skellefteå	35	84,000	331	332
Luleå Energi AB	556139-8255	Luleå	30	54,000	148	3
AB Pite Energi	556330-9227	Piteå	50	70,000	167	7
Plusenergi AB	556572-4696	Göteborg	50	46,100	162	170
Preem Gas AB	556037-2970	Stockholm	30	750	7	7
Tierps Fjärrvärme AB	556249-4723	Tierp	40	1,000	6	1
Vychodoceska Energetika a.s.	60108720	Hradec Kralov	e 42	1,058,656	816	813
SwePol Link AB	556530-9829	Stockholm	48	288,000	2	3
Älvkarleby Fjärrvärme AB	556246-1425	Älvkarleby	49	980	7	1
Other		-			13	14
Indirect holdings						
A-Train AB	556500-3745	Stockholm	20	1,000,000	71	_
California Polar Power Brokers, LLC	-	San Francisco	26*	530,250	8	_
Fredrikstad Energinett AS	(NO) 980234088	Fredrikstad	35	178,446	340	_
Fredrikstad Energiverk AS	(NO) 971644494	Fredrikstad	40	6,166	567	_
Hafslund ASA	(NO) 912230252	Sarpsborg	12**	13,658,200	711	_
Nordic Hydropower AB	556023-6043	Stockholm	50	500	12	_
Oslo Energi AS	(NO) 874412004	Oslo	49	294,000	436	_
Ostrowski Zaklad Cieplowniczy	250017863	Kalisz	23	188,511	9	_
Pamilo Oy	95.710	Uima Harju	49	265,580	327	_
Päijät Hämeen Voima Oy	1000864-7	Nastola	29	18,999	30	_
Tosli Investments BV	33.262.554	Amsterdam	50	9,000	568	_
Stadtwerke Eilenburg GmbH	(HRB) 12673	Leipzig	37	1	22	_
Suomen Voimateknikka Oy	0959028-9	Harjavalta	33	1,800	12	_
Åtvidabergs Fjärrvärme AB	556543-1607	Åtvidaberg	50	10,000	10	_
Other		3			45	_
Total					5,223	1,527

OTHER SECURITIES HELD AS FIXED ASSETS

OTHER SECURITIES HELD AS FIXED ASSETS				Вс	ook value
	Countries	% holding	Number	Group	Parent company
Direct holdings					
Amsterdam Power Exchange (APX)	Netherlands	10	680,000	12	12
Jämtkraft AB	Sweden	20***	13,000	23	23
Leksand-Rättvik Energi AB	Sweden	4	8,596	21	21
Lithuanian Power Company	Lithuania	10	17,910,507	183	183
NESA A/S	Denmark	12	155,003	351	351
Other				4	4
Indirect holdings					
Dala Kraft AB	Sweden	12	22,678	55	—
Etelä-Pohjanmaan Voima Oy	Finland	11	504	120	—
Rostock AG	Germany	13	1	239	—
Stadtwerke Rheinsberg KG	Germany	1	1	24	—
Spjutmo Kraft AB	Sweden	19	3,000	75	—
Teollisudden Voima Oy	Finland	2	14,768,466	264	_
The Cogeneration Co Ltd (COCO)	Thailand	7	59,576,522	144	_
Other				34	_
Total				1,549	594

* 3 per cent of voting power ** 20 per cent of voting power *** 16 per cent of voting power

Inventories etc.

	Gi	oup	Parent	company	
	1999	1998	1999	1998	
Raw materials and consumables					
Nuclear fuel	4,190	4,554	_	1,602	
Oil	111	266	95	246	
Coal etc.	12	7	5	3	
Materials and spare parts	588	613	3	165	
Total	4,901	5,440	103	2,016	

note **21**

Current receivables

	G	roup	Parent	company	
	1999	1998	1999	1998	
Accounts receivable – trade	4,285	4,622	2,501	2,873	
Receivables from group companies	_	_	15,449	10,605	
Receivables from associated companies	2,450	1,294	2,350	1,272	
Other receivables	683	503	180	397	
Prepaid expenses and accrued income	946	622	341	209	
Total	8,364	7,041	20,821	15,356	

Specification of prepaid expenses and accrued income:

	Gro	oup	Parent of	t company	
	1999	1998	1999	1998	
Prepaid insurance premiums	57	51	17	21	
Prepaid expenses, other	359	262	178	105	
Prepaid expenses and accrued income, electricity	223	113	79	33	
Accrued income, other	307	196	67	50	
Total	946	622	341	209	

note **22**

Liquid assets

The parent company's liquid asset investments, cash and bank deposits are handled by the subsidiary, Vattenfall Treasury AB. Deposits in the group account amounted to SEK 14,824 million (9,749) and are reported under current assets as current receivables from group companies.

note **23**

Equity		Revalu-	Equity	Other	Non-
	Share capital	ation reserve	method reserve	restricted reserves	restricted equity
GROUP					
Jan. 1	6,585	313	573	19,965	4,889
Dividend	_	_	_	_	-1,500
Transferred to restricted reserves	_	_	_	275	-275
Change in revaluation reserve	_	-18	_	_	18
Transfers betwe restricted and non-restricted	en		07	0.700	0.745
reserves	_	_	37	-3,782	3,745
Translation differences	_	_	6	-125	103
Net profit for the year	_	_	_	_	2,538
Dec. 31	6,585	295	616	16,333	9,518

Accumulated translation differences in equity amounted to SEK 12 million.

Total untaxed reserves in companies within the Group amounted to SEK 32,189 million, of which accelerated depreciation accounted for SEK 27,061 million. The equity portion is included in restricted reserves, see Accounting Policies, page 44.

SEK 136 million of the non-restricted equity at year-end is expected to be transferred to restricted reserves as proposed by the boards of subsidiaries.

	Share capital	Statutory reserve	Non- restricted equity	Total
PARENT COMPANY				
Jan. 1	6,585	1,316	5,587	13,488
Dividend	_	_	-1,500	-1,500
Group contributions corresponding to dividends	_	_	-1,417	-1,417
Tax effects due to group contributions	_	_	397	397
Net profit for the year	_	_	3,929	3,929
Dec. 31	6,585	1,316	6,996	14,897

Vattenfall AB's share capital comprises 131,700,000 shares, each with a par value of SEK 50.

Interest-bearing provisions

Interest-bearing provisions comprise pension provisions and similar commitments which Vattenfall AB and group companies are liable to pay

to pay.	Gi	roup	Parent	company
	1999	1998	1999	1998
Pensions secured by fund				
Pension commitments with state guarantee	2,135	_	2,041	_
FPG/PRI pensions	705	_	522	_
Less: Capital in pension fund	-2,798	_	-2,563	_
	42	—	0	
Pension liabilities, in accordance with Swedish Pension Liabilities Act and other pension commitm				
Pension commitments with state guarantee	_	2,307	_	2,307
FPG/PRI pensions	758	1,255	_	610
Other pension commitments	410	329	112	124
	1,168	3,891	112	3,041
Total	1,210	3,891	112	3,041

In the first quarter of 1999, Vattenfall AB formed a pension fund and paid SEK 2,840 million into the fund. Of the paid-in amount, SEK 235 million concerns employees who have transferred to Ringhals AB. The remaining amount concerns Vattenfall AB. SEK 100 million in compensation has been paid by the fund to Vattenfall AB. Vattenfall AB's entire pension liability and parts of Ringhals AB's pension liability are secured by assets in the fund, which amounted to SEK 2,798 million at year-end 1999. The parent company's portion represented almost 92 per cent. The return on interest-bearing assets in the fund was 2.15 per cent for 1999.

note 25

Non-interest-bearing provisions

	Group		Parent company	
	1999	1998	1999	1998
Provisions for deferred tax liabilities	10,940	10,114	12	24
Other provisions	252	697	134	603
Total	11,192	10,811	146	627

Other provisions mainly comprise restructuring provisions for the Skills Swap programme. During the year, a large portion of these provisions was utilized. A provision of SEK 51 million for low and intermediate-level nuclear waste management which has also been used to fund the Final Repository for Radioactive Operational Waste is also included.

note **26**

Long-term interest-bearing liabilities

	Group		Parent company	
	1999	1998	1999	1998
Bond loans	12,865	11,056	—	_
Liabilities to other credit institutions	4,053	3,596	_	_
Liabilities to minority owners	2,762	2,802	—	—
Liabilities to group companie	es —	—	16,057	7,331
Other liabilities	34	34	3	5
Total	19,714	17,488	16,060	7,336

Of the above liabilities in respect of the Group, the following amounts fall due after more than five years: Bond loans SEK 10,013 million (7,462), Liabilities to other credit institutions SEK 2,232 million (2,766), Liabilities to minority owners SEK 2,242 million (2,264), Other long-term borrowings SEK 6 million (16). In respect of the parent company, SEK 669 million (202) in

liabilities to group companies falls due after more than five years. Liabilities to group companies mainly concern long-term borrow-

ings from Vattenfall Treasury AB.

Virtually all borrowings in foreign currencies are hedged.

note **27**

Long-term non-interest-bearing liabilities

	Group		Parent compar	
	1999	1998	1999	1998
Liabilities to				
group companies	_	—	4,168	4,420
Other liabilities	1,222	1,485	626	804
Total	1,222	1,485	4,794	5,224

Of the above liabilities for the Group, the following amount falls due after five years: Other liabilities SEK 264 million (264). For the parent company, the following amount falls due after five years: Other liabilities SEK 155 million (171).

Liabilities to group companies mainly comprise long-term liabilities to Forsmarks Kraftgrupp AB and others relating to power charges. In the case of Forsmarks Kraftgrupp AB, the credit is an interest-free loan.

note **28**

Current interest-bearing liabilities

	Group		Parent	company
	1999	1998	1999	1998
Bond loans	7,876	910	_	_
Commercial paper	2,502	5,276	_	_
Liabilities to credit institutions	861	193	_	_
Liabilities to minority owners	3	2	_	_
Liabilities to associated companies	26	26	_	_
Liabilities to				
group companies	—	—	1,423	3,203
Other liabilities	83	90	2	3
Total	11,351	6,497	1,425	3,206

Current non-interest bearing liabilities

	Group		Parent compan	
	1999	1998	1999	1998
Advance payments from customers	15	2,267	1	
			-	500
Accounts payable – trade	1,986	1,850	446	502
Liabilities to group companies	_	_	7,702	5,875
Liabilities to associated				
companies	85	50	70	50
Tax liabilities	87	197	24	_
Other liabilities	1,648	2,161	659	970
Accrued expenses				
and deferred income	2,334	2,121	605	752
Total	6,155	8,646	9,507	8,149

Specification of accrued expenses and deferred income:

	Group		Parent company	
	1999	1998	1999	1998
Accrued personnel costs	685	593	123	185
Accrued nuclear-related				
fees and taxes	265	281	—	87
Accrued interest expense	332	329	—	2
Other accrued expenses	629	638	204	385
Deferred income and accrued expenses,				
electricity	331	100	267	76
Other deferred income	92	180	11	17
Total	2,334	2,121	605	752

note 30

Pledged assets

	1000	1000
GROUP		
For own liabilities and provisions		
Liabilities to credit institutions:		
Floating charges	53	476
Property mortgages	92	2,950
Other	5	5
Total	150	3,431

1000

1008

The parent company has no pledged assets.

note 31

Contingent liabilities

	1555	1990
GROUP		
Guarantees	6,058	5,624
Other contingent liabilities	988	813
Total	7,046	6,437

	1999	1998
PARENT COMPANY		
Guarantees		
of which:		
for Vattenfall Treasury's lending		
to subsidiaries and associates	25,184	19,162
for subsidiaries and associates	26,686	19,564
subordinated guarantees	1,466	1,495
Nuclear Waste Fund	4,914	4,491
Contract guarantees	962	1,085
Other	355	248
Total	59,567	46,045
Other contingent liabilities		
Compensatory and free power supplied:		
Wholesale power supplied		
 Number of commitments 	16	16
 Capacity in MW 	222	222
 Energy supplied in TWh/year 	0.9	0.9

SEK 58,542 million (43,034) of the parent company's contingent liabilities relate to its subsidiaries. The parent company has guaranteed Vattenfall Treasury AB's commitments.

On some rivers, hydro power plants share regulation facilities. The owners of the plants are each liable for their share of the regulation costs.

Under Swedish law, Vattenfall has a strictly unlimited liability for third party losses as a result of dam accidents. Together with other hydro power producers in Sweden and Norway, Vattenfall has taken out a liability insurance cover which will pay out a maximum of NOK 5 billion for this kind of loss.

As a natural part of the Group's business, in addition to those specified above, additional guarantees are put up for the fulfillment of contractual commitments.

During 1999, Vattenfall conducted lease transactions, with investors in the USA as counterparties, with respect to three power facilities in Germany. The term of each lease is about 40 years and the lease contracts can be terminated after about half of the term has elapsed, without any economic consequences for Vattenfall. The present value of the lease payments that Vattenfall, through a defeasance structure, has undertaken to make was about SEK 2 billion at the time of the transaction, of which about 20 per cent is the maximum amount that Vattenfall, in the event of a force majeure, is liable to pay in compensation to the counterparty if Vattenfall chooses to, or cannot, fulfill the obligations of the lease contracts. The present value of the lease payments has been deposited in a bank with an AAA credit rating. On account of the structure of the contract, Vattenfall's credit risk is assessed to be negligible. The net amount of advance payments received and deposits made during 1999 has been reported in the balance sheet.

note **32**

Commitments under consortium agreements

Power plants are often built on a joint venture basis. Under the consortium agreements, each owner is entitled to electricity in proportion to its share of ownership and each owner is liable – irrespective of output – for an equivalent proportion of the joint venture company's costs.

Vattenfall's investments in heating and other companies often entail a liability for costs in proportion to its share of ownership.

Vattenfall bears the full responsibility for Swe-Pol Link during the first ten years.

Average number of employees and personnel costs

	1999			1998		
Average number of employees	Men	Women	Total	Men	Women	Total
GROUP						
Sweden	5,727	1,602	7,329	5,925	1,643	7,568
Finland	313	135	448	222	106	328
Poland	13	4	17	8	2	10
Norway	9	6	15	15	6	21
Germany	49	34	83	14	8	22
Other countries	75	24	99	34	13	47
Total	6,186	1,805	7,991	6,218	1,778	7,996
PARENT COMPANY						
Sweden	1,341	503	1,844	2,205	677	2,882
Other countries	14	1	15	12	_	12
Total	1,355	504	1,859	2,217	677	2,894
		G	roup		Parent c	ompany
Personnel costs		1999	1998		1999	1998
Salaries and other remuneration		2,762	2,644		730	991
Social security expenses		1,698	1,628		447	806
(of which pension costs)		(777)*	(752)*		(189)**	(458)**
Total		4,460	4,272		1,177	1,797

* SEK 6 million (7) of the Group's pension costs relate to presidents, executive vice presidents and former executive vice presidents.

The Group's outstanding pension commitments in respect of these officers total SEK 44 million (41).

** The parent company's pension costs include SEK 1 million (2) for presidents, executive vice presidents and former executive vice presidents. The company's outstanding pension commitments in respect of these officers total SEK 22 million (21).

None of the board members receive any pension benefits in connection with board duties.

Salaries and other remuneration	1999 Board members and presidents *	Other employees	Total	1998 Board members and presidents *	Other employees	Total
GROUP						
Sweden	37	2,526	2,563	39	2,490	2,529
Finland	7	112	119	4	83	87
Norway	1	6	7	1	9	10
Other countries	4	69	73	3	15	18
Total	49**	2,713	2,762	47**	2,597	2,644
PARENT COMPANY						
Sweden	6	720	726	7	980	987
Other countries	_	4	4	_	4	4
Total	6***	724	730	7***	984	991

* Board members and presidents also include alternates, executive vice presidents as well as former board members, alternates, presidents and executive vice presidents.

** Includes bonuses of SEK 2 million (2.7).

*** Includes bonuses of SEK 0.6 million (1).

Remuneration to the senior management of Vattenfall AB

In 1999, a fixed fee of SEK 36k was paid to Lars Rekke and SEK 134k to Jörgen Andersson for chairmanship of the Board of Directors.

In 1999, the Chief Executive Officer, who is also the President of Vattenfall AB, received a salary and other emoluments, including the value of a company car, amounting to SEK 2,944k, including a bonus for 1998 of SEK 294k. The Chief Executive Officer's future pension comprises pension benefits under the applicable ITP plan plus additional benefits. The Chief Executive Officer, born in 1936, will be taking early retirement in April 2000. The early retirement pension is equivalent to 75 per cent of his final salary. For other senior officers of Vattenfall – deputy Chief Executive Officer, business area and senior group management executives – the future pension is based on the existing pension plans or equivalent terms. Several of the above-mentioned officers have the right, at their own request, and a duty, at the company's request, to take early retirement on reaching the age of 60. Should their employment be terminated by the company, they are entitled to their salary during the contractual period of notice (6–12 months) plus severance pay of 18–24 months' salary.

Leasing

LEASING EXPENSES

Equipment leased through finance leases (where the group company is the lessee) and which is reported as a tangible fixed asset comprises:

	1999	1998
Acquisition value		
Equipment	8	33
Accumulated depreciation according to plan		
Equipment	-4	-13
Residual value according to plan	4	20

Future payment commitments within the Group at December 31, 1999 for lease contracts and rental contracts are distributed as follows:

	Group		Parent company
	Finance	Operating	Operating
	lease	lease	lease
2000	4	118	20
2001	—	77	11
2002	—	50	7
2003	—	27	3
2004	—	16	2
2005 and beyond	_	17	2
Total	4	305	45

The year's leasing expenses in respect of group assets amounted to SEK 111 million. For the parent company, the corresponding figure was SEK 18 million.

LEASING INCOME

Certain group companies lease equipment to customers.

At December 31, 1999, the acquisition value of assets reported under Operating leases amounted to SEK 678 million. Accumulated depreciation amounted to SEK 155 million and the net investment to SEK 523 million.

Future lease payments for leased equipment (where the group company is the lessor) are distributed as follows:

	Gro	oup
	Finance	Operating
	lease	lease
2000	12	104
2001	12	87
2002	11	82
2003	11	74
2004	10	67
2005 and beyond	44	145
Less: financial income	-29	-128
Total	71	431

note 35

Reimbursement of auditors (SEK '000)

	Group	Parent company
	1999	1999
Audit *		
Ernst & Young	4,496	2,200
Swedish National Audit Office	175	175
Other	5,004	—
	9,675	2,375
Other fees **		
Ernst & Young	15,171	12,428
Other	4,822	—
	19,993	12,428
Total	29,668	14,803

* Concerns the audit which is legally required under the Swedish Companies Act.

** Other fees concern reimbursement for temporary, special engagements such as project audits and various issues relating to company acquisitions.

Proposed Distribution of Profits

According to the consolidated balance sheet, the Group's non-restricted equity amounts to SEK 9,518,753k (4,888,539). Of this amount, SEK 135,908k is expected to be transferred to restricted reserves. Thus, the total profits at the disposal of the General Meeting of Shareholders are SEK 6,995,755,592. The Board of Directors and President propose that profits be distributed as follows:

_	dividend to shareholder	SEK	1,500,000,000
_	to be carried forward	SEK	5,495,755,592
		SEK	6,995,755,592

This is equivalent to a dividend of SEK 11.39 per share.

Stockholm, March 7, 2000

Jörgen Andersson (Chairman)

Helge Eklund

Göran Johansson

Johnny Bernhardsson (employee representative) Lilian Fossum Bo Marking

Lars Carlberg (employee representative)

Carl-Erik Nyquist (President)

Lars Hjorth

Christina Striby

Ronny Ekwall (employee representative)

Audit Report (translated)

To the General Meeting of the Shareholders of Vattenfall AB

Corporate identity number 556036-2138

We have audited the annual accounts on pages 31–63, the consolidated accounts, the accounting records and the administration of the Board of Directors and the President of Vattenfall AB for the financial year 1999. These accounts and the administration of the company are the responsibility of the Board of Directors and the President. Our responsibility is to express an opinion on the annual accounts, the consolidated accounts and the administration based on our audit.

We conducted our audit in accordance with generally accepted auditing standards in Sweden. Those standards require that we plan and perform the audit to obtain reasonable assurance that the annual accounts and the consolidated accounts are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the accounts. An audit also includes assessing the accounting principles used and their application by the Board of Directors and the President, as well as evaluating the overall presentation of information in the annual accounts and the consolidated accounts. As a basis for our opinion concerning discharge from liability, we examined significant decisions, actions taken and circumstances of the company in order to be able to determine the liability, if any, to the company of any board member or the President. We also examined whether any board member or the President has, in any other way, acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association. We believe that our audit provides a reasonable basis for our opinion set out below.

The annual accounts and the consolidated accounts have been prepared in accordance with the Annual Accounts Act and, thereby, give a true and fair view of the company's and the Group's financial position and results of operations in accordance with generally accepted accounting principles in Sweden.

We recommend to the General Meeting of Shareholders that the income statements and balance sheets of the parent company and the Group be adopted, that the profit of the parent company be dealt with in accordance with the proposal in the administration report and that the members of the Board of Directors and the President be discharged from liability for the financial year.

Stockholm, March 8, 2000

Ernst & Young AB Lars Träff Authorized Public Accountant Filip Cassel Authorized Public Accountant Swedish National Audit Office

Consolidated Accounts excluding Minority Interests in Electricity Generation Companies

BASIS OF ACCOUNTING

Joint work in Vattenfall's electricity generation subsidiaries is regulated by consortium agreements, where each partner's rights to a particular plant's output and liability to meet the plant's costs and financing are proportional to the partner's participating interest.

The following review shows the financial impact of these consortium agreements on the accounts of the Vattenfall Group. The consolidated accounts have been restated in accordance with the proportional consolidation method, i.e. only the Group's portion of subsidiaries' income statements and balance sheets is included.

The reason for applying the proportional method is that Vattenfall's interests in these companies are strictly limited to its participating interests. This method gives a true and fair view of the Group, compared with accounting in accordance with traditional consolidation methods.

PROFIT

The restated operating profit is SEK 5,435 million, which is SEK 80 million lower than that based on traditional consolidation methods. Profit before tax and minority interests was SEK 4,359 million, which is SEK 62 million higher than that based on traditional consolidation methods.

BALANCE SHEET

The balance sheet total was SEK 81,066 million, which is SEK 5,597 million lower than that based on traditional consolidation methods. This has increased the equity/assets ratio by 2.8 percentage points because the restated balance sheet includes only those portions of the generation companies' assets and liabilities that are actually owned by the Group.

Income Statement SEK million	1999	1998
Net sales	26,022	26,221
Cost of products sold	-17,905	-17,502
Gross profit	8,117	8,719
Selling expenses, research and development costs		
and administrative expenses	-3,553	-3,335
Other operating income and other operating expenses, net	729	411
Participations in the results of associated companies	142	91
Operating profit	5,435	5,886
Financial income	504	241
Financial expenses	-1,580	-1,656
Profit before tax and minority interests	4,359	4,471
Tax	-1,420	-1,754
Minority interests in the profit for the year	-401	-53
Net profit for the year	2,538	2,664

Balance Sheet SEK million	Dec. 31, 1999	Dec. 31, 1998
Assets		
Fixed assets	63,894	61,540
Current assets, excl. liquid assets	12,545	11,337
Liquid assets	4,627	4,067
Total assets	81,066	76,944
Equity, provisions and liabilities		
Equity		
Restricted equity	23,828	27,437
Non-restricted equity	9,519	4,888
Total equity	33,347	32,325
Minority interests in equity	1,006	643
Provisions and liabilities		
Interest-bearing provisions and liabilities	29,228	24,619
Non-interest-bearing provisions and liabilities	17,485	19,357
Total equity, provisions and liabilities	81,066	76,944

Key Ratios	1999	1998
Return on capital employed, %	9.8	10.9
Return on equity after full tax, %	7.7	8.4
Return on assets, %	7.5	8.2
Pre-tax profit margin, %	16.8	17.1
Equity/assets ratio, %	42.2	43.1
Interest cover, times	3.8	3.7
Asset turn, times	0.32	0.34

Definitions and Calculation of Key Ratios:

Figures for the Group in 1999 (SEK million)

RETURN ON CAPITAL EMPLOYED

Operating profit including financial income in relation to average total assets less non-interestbearing liabilities and provisions.

Operating profit	
plus financial income	6,057
Average capital employed	65,254
Return on capital employed, per cent	9.3

RETURN ON EQUITY AFTER FULL TAX

Net profit for the year in relation to the av	erage
of equity at the start and at the end of the	year.
Net profit for the year	2.538

for prontion the year	_,
Average equity	32,836
Return on equity after full tax, per cent	7.7

RETURN ON EQUITY AFTER STANDARD TAX

Profit before tax and minority interests less minority interests and tax at standard rate (28 per cent) in relation to the average of equity at the start and the end of the year.

Profit before tax and minority interests less minority interests	
and tax at standard rate (28 per cent)	2,841
Average equity	32,836
Return on equity after standard tax. per cent	9.7
allei Slanualu lat. Dei Celli	0.7

RETURN ON ASSETS

after standard tax, per cent

Operating profit including financial income in relation to the average of total assets at the start and end of the year

Operating profit	
including financial income	6,057
Average total assets	85,010
Return on assets, per cent	7.1

OPERATING MARGIN

Operating profit in relation to net sales.

Operating profit	5,515
Net sales	27,754
Operating margin, per cent	19.9

PRE-TAX PROFIT MARGIN

Profit before tax and minority interests in relation to net sales. Profit before tax

and minority interests	4,297
Net sales	27,754
Pre-tax profit margin, per cent	15.5

EQUITY/ASSETS RATIO

Equity in relation to total assets at the end of the year less interest-arbitrage transactions

Equity	33,347
Total assets less	
interest-arbitrage transactions	84,703
Equity/assets ratio, per cent	39.4

DEBT COVER

Interest-bearing liabilities and provisions plus minority interests in equity less liquid assets in relation to equity at the end of the year.

Interest-bearing liabilities	
plus minority interests	
in equity less liquid assets	29,887
Equity	33,347
Debt cover, times	0.9

INTEREST COVER

Operating profit including financial income in relation to financial expenses

Operating profit	
including financial income	6,057
Financial expenses	1,760
Interest cover, times	3.4

DEGREE OF SELF-FINANCING

Internally generated funds in relation to total investments for the year.

Internally generated funds	6,224
Total investments	7,916
Degree of self-financing, times	0.8

ASSET TURN

Net sales in relation to the balance she	eet total at
the end of the year.	
Net sales	27,754
Total assets	86,663
Asset turn, times	0.32

Six-year Review

SEK million	1999	1998	1997	1996	1995	1994
	1999	1990	1997	1990	1995	1994
INCOME STATEMENT						
Net sales	27,754	27,957	28,458	29,030	26,796	24,575
Items affecting comparability	_	_	163	_	-250	_
Operating profit	5,515	6,067	7,376	7,672	7,354	7,600
Financial income	542	288	561	746	930	556
Financial expenses	-1,760	-1,907	-2,498	-2,957	-3,158	-3,050
Profit before tax						
and minority interests	4,297	4,448	5,439	5,461	5,126	5,106
Net profit for the year	2,538	2,664	3,399	3,725	3,576	3,718
BALANCE SHEET						
Liquid assets	4,860	4,439	3,961	4,321	3,099	3,052
Equity	33,347	32,325	31,158	28,875	26,305	24,084
Minority interests in equity	2,472	2,213	2,304	1,990	1,097	1,094
Interest-bearing provisions	·			,		,
and liabilities	32,275	27,876	26,311	28,825	29,253	29,728
Non-interest-bearing provisions						
and liabilities	18,569	20,942	19,099	18,923	17,425	15,631
Total assets	86,663	83,356	78,872	78,613	74,080	70,537
KEY FINANCIAL RATIOS						
(in per cent unless otherwise specified)						
Return on capital employed	9.3	10.4	13.3	14.5	14.9	14.8
Return on equity after full tax	7.7	8.4	11.3	13.5	14.2	16.3
Return on equity after standard tax	8.7	10.2	13.0	14.1	14.5	16.1
Return on assets	7.1	7.8	10.1	11.0	11.5	11.7
Operating margin	19.9	21.7	25.9	26.4	27.4	30.9
Pre-tax profit margin	15.5	15.9	19.1	18.8	19.1	20.8
Equity/assets ratio	39.4	39.7	40.3	36.7	35.5	34.1
Debt cover, times	0.9	0.8	0.8	0.9	1.0	1.2
Interest cover, times	3.4	3.3	3.2	2.8	2.6	2.7
Degree of self-financing, times	0.8	1.5	1.6	1.2	1.3	2.8
Asset turn, times	0.32	0.34	0.36	0.37	0.36	0.35
OTHER INFORMATION						
Dividends, SEK m	1,500 *	1,500	1,500	1,500	1,500	1,343
Total investments, SEK m	7,916	4,528	4,877	5,984	6,043	2,992
Internally generated funds, SEK m	6,224	4,320 6,758	7,869	7,455	7,711	8,238
Electricity sales, TWh	86.9	83.8	7,009	7,400	79.3	74.0
Average number of employees	7,991	7,996	7,847	8,263	8,460	9,071
A strage number of employees	1,551	7,330	7,047	0,200	0,400	5,071

* Proposed dividend. The figures for 1994–1995 have not been restated in line with the change in accounting policy (equity method).

Board of Directors

Jörgen Andersson

Chairman of the Board since 1999. Born 1946. Former Minister. Chairman of KAAB's AB, Ängelholm, Chairman of Marcon-gruppen AB, Member of the Riksbank's (Swedish central bank) Council.

Carl-Erik Nyquist

President and Chief Executive Officer. Born 1936. Director-General of Vattenfall 1985–91. President and Chief Executive Officer since 1992. Board member of the public utility from 1985 to 1991 and of Vattenfall AB since 1992. Chairman of the Swedish Power Association, Swedelec and Baltrel, Board member of the Federation of Swedish Industries.

Helge Eklund

Born 1944. Director. Board member since 1997. Board member of the Swedish Forest Industries Association and the Employers' Federation of Swedish Forest Industries.

Lilian Fossum

Born 1962. Deputy CEO of Spendrup AB. Board member since 1999.

Lars Hiorth

Born 1943. Deputy CEO of KF. Board member since 1997. Chairman of Merita-Nordbanken, Stockholm region.

Göran Johansson

Born 1945. Municipal Councillor. Board member of the public utility, 1982-91 and board member of Vattenfall AB since 1995 (alternate 1992-94). Chairman of the Municipal Executive Board in Gothenburg. Board member of SKF AB and Liseberg AB

Bo Marking

Born 1937. Former President. Board member since 1996. Vice Chairman of Lithuanian Development Bank. Board member of Nordiska Investeringsbanken, N&T Argonaut AB and SBAB.

Christina Striby

Born 1944. Senior Legal Advisor at Posten AB. Board member since 1997. Board member of Postfastigheter AB.

Johnny Bernhardsson

Born 1952. Employee representative, SIF trade union. Board member since 1995.

Lars Carlberg Born 1943. Employee representative, CF

trade union. Board member since 1998.

Ronny Ekwall

Born 1953. Employee representative SEKO trade union. Board member since 1999. Alternate in 1998.

Alternates

Hans Christer Olson Born 1944. Assistant Under-Secretary, Ministry of Industry. Board member of LKAB and the Swedish Testing and Research Institute, SP AB.

Kent Ögren

Born 1955. Municipal Councillor in Jokkmokk. Chairman of Jokkmokks Värmeverk AB.

Lars Carlsson

Born 1951. Employee representative, SIF trade union.

Per-Ove Lööv Born 1961. Employee representative, SEKO trade union.

Stig Lindberg Born 1946. Employee representative, Ledarna trade union.



Lilian Fossum, Lars Hjorth



Göran Johansson, Bo Marking



Auditors

Ernst & Young AB Lars Träff, authorized public accountant

Swedish National Audit Office

Alternate

Staffan Nyström, authorized public accountant, Swedish National Audit Office.



Jörgen Andersson, Carl-Erik Nyquist



Helge Eklund, Kent Ögren



Hans Christer Olson, Christina Striby

Ronny Ekwall, Johnny Bernhardsson, Lars Carlberg

Filip Cassel, authorized public accountant



Bertil Tiusanen



Jan C Johansson



Alf Lindfors



Mats Fagerlund



Carl-Erik Nyquist



Inger Holmström-Lindgren



Berndt-Olof Helzén



Bertil Agrenius



Gunnar Vallin





Lennart Billfalk







Lars Segerstolpe

Group Management

Senior Executives

Carl-Erik Nyquist

Born 1936. President and Chief Executive Officer up to April 13, 2000.

Bertil Tiusanen Born 1949, Deputy Chief Executive Officer and Chief Financial Officer. Acting Presi-dent and Chief Executive Officer as of April 13.2000.

Gunnar Axheim Born 1951. Executive Vice President, Director of Vattenfall Services.

Berndt-Olof Helzén Born 1943, Executive Vice President, Director of Vattenfall Electricity Networks.

Jan C Johansson Born 1954. Executive Vice President, Director of Vattenfall Energy Market.

Alf Lindfors Born 1946, Executive Vice President, Director of Vattenfall Electricity Generation.

Other Senior Officers

Bertil Agrenius Born 1944. Senior Vice President, Business Strategy. Died in February 2000.

Lennart Billfalk Born 1946. Senior Vice President, Corporate Development & Environment.

Mats Fagerlund Born 1950. Senior Vice President, General Counsel.

Stig Göthe Born 1941. Senior Vice President, IT Strategy and European Union Affairs.

Lisbeth Holm Born 1953. Senior Vice President, Human Resources & Organization.

Inger Holmström-Lindgren Born 1948. Senior Vice President, Communications.

Gunnar Vallin Born 1943. Senior Vice President, Director of International Market Area.

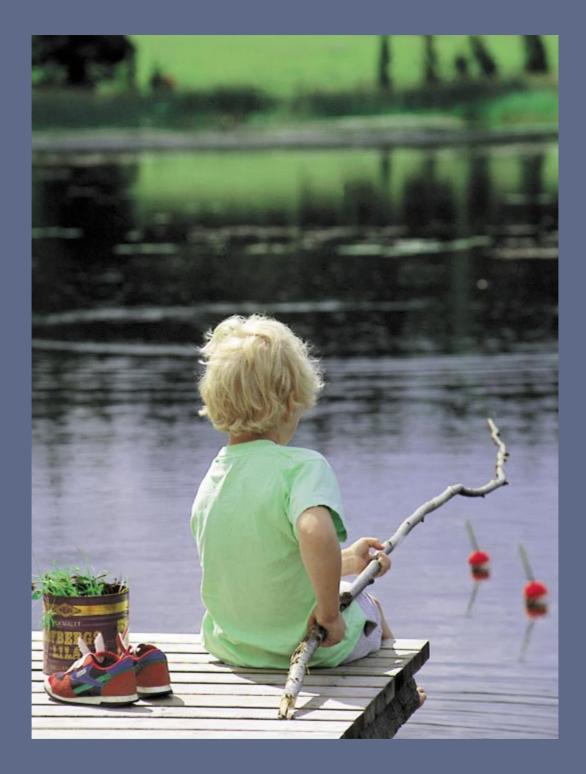
Lars Segerstolpe Born 1941. Senior Vice President, Internal

Auditing.





environment



Highlights from the Environmental Report 1999

IMPORTANT ENVIRONMENTAL EVENTS DURING 1999

ISO 14001 certifications or EMAS registrations were obtained by the following companies/units: Energy Market Business Area (ISO) Bergeforsen Hydro Power Plant (EMAS/ISO) Boden Hydro Power Plant (EMAS/ISO) Älvkarleby Hydro Power Plant (EMAS/ISO) Ringhals Nuclear Power Plant (EMAS 1999, ISO 1998) Hämeen Sähkö Oy (ISO)
Vattenfall Naturgas AB (ISO) SwedPower AB, Civil and Geotechnical Engineering (ISO)

- Vattenfall issues a new environmental policy
- 14 TWh of electricity from the Lule River was third-party certified as the world's first environmental product declaration (EPD)
- The biotope method developed by Vattenfall was successfully applied to describe land changes linked to impacts on biological diversity, as part of the EPD work
- 100 per cent of Vattenfall's products carry environmental declarations

ENVIRONMENTAL WORK – INTEGRATED WITH BUSINESS OPERATIONS AND WITH THE ANNUAL REPORT

Environmental management systems have now been introduced into most of Vattenfall's business activities. This means that environmental issues are successively integrated into business management which, in turn, provides a good basis for ensuring that environmental work contributes to the development of Vattenfall's business value. The annual environmental report has also been prepared using this approach. Environmental information concerning Vattenfall's business activities and products is provided under "Business Activities 1999".

A summary of Vattenfall's Environmental Accounts is provided on the next few pages, with information concerning the use of resources and the environmental impact of activities in Sweden and, to some extent, in Finland. Comparisons are also made with previous years. This is followed by a section on "Economic Aspects of the Environment".

ENVIRONMENTAL REPORT 1999 ON THE INTERNET

A broader and more detailed environmental report for 1999 is available at Vattenfall's website. The web-based report includes environmental accounts with detailed information on environmental impact, the use of resources and trends. Furthermore, information is presented on Vattenfall's internal environmental work, with examples from business operations, and information on the environmental aspects of business.

Environmental Accounts 1999 for Activities in Sweden

Use of Resources		Environmental Impact, Ow	n Generation	Pro Sol	ducts Id
Enriched uranium	98 tonnes	Radiation dose to neighbou	uring population		
		Radiation dose, Forsmark	0.00003 mSV		
		Radiation dose, Ringhals	0.008 mSV		
		High-level waste	126 tonnes		
		Low and intermediate-level waste	763 tonnes		
Land use		Impact on biodiversity Impact on landscape			
Fossil fuels*	5.6 TWh	CO,	252,000 tonnes		ectricity, e note 86.1 TW
Biofuels	2.1 TWh	S	99 tonnes	He	at*** 4.4 TW
		NO _x	754 tonnes	Na ga	tural s 4.5 TW
Lubrication and		Oil emissions			
insulation oils etc.	133 tonnes	to water	1.8 tonnes		
		Waste (non-radioactive), note	16,140 tonnes		
Electricity**	12 TWh				
Heat**	0.2 TWh				

 Includes 1.1 TWh in fuel to Vattenfall's own facilities, Vattenfall Naturgas's purchases for reselling (Vattenfall's share is 51 per cent) as well as vehicle fuel used by operations, not including business trips (comprises petrol, diesel and a small amount of natural gas and corresponds to about 3,500 m³ of petrol).

** Purchased for reselling and own use.

*** Applies to heat sold in Sweden and Finland, of which 1 TWh is generated by electric boilers. In Germany, a further 0.9 TWh of heat from fossil-fired plants was sold.

note

	1999 Per cent	1999 TWh	1998 TWh
Sold,			
unspecified electricity		84.1	80.3
Hydro	43.2	36.3	35.7
Nuclear	53.5	45.0	42.8
Fossil fuels	2.7	2.3	1.8
Biofuels	0.5	0.46	0
Wind	0.0	0.03	0.04
Sold, electricity			
with content labels		2.0	3.0
Nuclear		0	1.8
VattenEl (hydro)*		1.9	1.2
VindEl (wind)		0.02	0.01
BiobränsleEl (biofuels)		0.07	0.07
Total electricity	sold	86.1	83.3

1999	
16,140	
1,600	
12,230	
2,130	
180	

Operation of electricity and heat generation facilities was, on the whole, normal, without any major events. The incidents and deviations which occurred are reported in the Environmental Report on the Internet.

 Comprises the following products: VattenEl, Lokal VattenEl, VattenEl which carry the Good Environmental Choice eco-label and VattenEl EPD (Environmental Product Declaration).

Electricity sold comprises electricity generated by Vattenfall plus purchased electricity minus electricity consumption within the Group.

A detailed environmental report for 1999 is presented on the Internet. www.vattenfall.se/environmentalreport/99

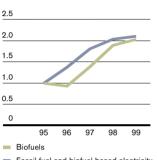
THE FOLLOWING TREND DIAGRAMS HAVE BEEN NORMALIZED

(THE 1995 LEVEL HAS BEEN SET AT 1).

The trends for the use of fossil fuels and biofuels as well as related emissions are affected by the amount of water in the reservoirs, winter temperatures, the number and types of facilities acquired or sold, the level of compulsory taxes and fees as well as by the environmental work which aims at improving efficiencies and reducing emissions. Temperatures and the availability of hydro power have a significant effect. For example, 1996 was a year with low precipitation and a cold winter and this is reflected in the diagrams. Fuel-based electricity and heat generation have increased, primarily due to the acquisition of FärdigVärme facilities. Acquisitions often comprise fossil fuel-based facilities which Vattenfall continuously optimizes and successively converts to biofuels.

Use of Fossil Fuels

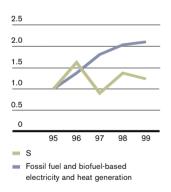
Use of Biofuels



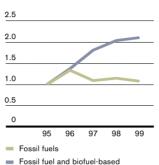
Fossil fuel and biofuel-based electricity and heat generation

The use of biofuels in thermal plants has increased as new facilities have been acquired. About 50 per cent of heat generation is based on biofuels. Vattenfall is thereby one of the major users of biofuels within the Swedish energy sector.

Sulphur Emissions

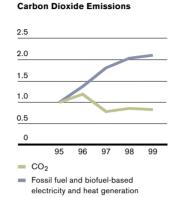


Many facilities are successively switching over from heavy oil to light oil with a lower sulphur content. One example is the heat plant at Saab in Trollhättan which, during summer 1999, switched over from Eo4 (0.3 per cent S) to WRD oil (0.1 per cent S), thereby reducing sulphur emissions by 4 tonnes. Since WRD oil will be used throughout the year in 2000, a further saving of 7 tonnes of sulphur emissions will be achieved.

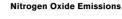


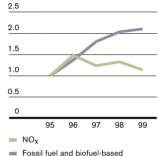
 Fossil fuel and biofuel-based electricity and heat generation

Oil-fired condensing power plants have been mothballed and the remaining reserve capacity is in the form of a few gas turbines. Fossil fuels are mainly used in heat plants. The use of fossil fuels has not increased with new acquisitions.



Emissions of CO_2 from fossil-fired plants are moderately constant and follow the use of fossil fuels.





Fossil fuel and biofuel-based electricity and heat generation

Vattenfall's knowledge of reducing nitrogen oxide emissions from boilers has been launched as Vattenfall Low NO_x Engineering and has been applied at about 10 boilers in the Nordic region. Normally, a 30–50 per cent reduction is achieved.

At the CHP plant in Nyköping, annual emissions were reduced by 20 tonnes. At the Uppsala CHP plant (not included in the diagram), a reduction of almost 100 tonnes was achieved. During 1999, the concept was applied to Stora Enso's bark-fired boiler at Gruvön factory (not included in the diagram above). In this case, the reduction is estimated at about 130 tonnes of nitrogen oxides/year. An important base for this work is the development laboratory at Älvkarleby, where a new department called "Fort NOx" was recently inaugurated for boiler optimization.

Use of Uranium **Radioactive Waste** 2.0 2.0 1.5 1.5 1.0 1.0 0.5 0.5 0 0 95 96 97 98 aa 95 96 97 98 99 Uranium Low and intermediate level waste Nuclear power generated Spent nuclear fuel Nuclear power generated

For economic and environmental reasons, nuclear fuel usage is optimized so that the smallest possible quantity of uranium is consumed. The fuel stays in the reactor core for about 5 years. Depending on plant operation, a varying quantity of fuel is replaced each summer. The diagram shows how much fresh fuel has been loaded into the reactor each year. The decrease reported in 1998 and 1999 does not represent a permanent change to a lower uranium consumption. In the next few years, the decrease will be counterbalanced by a greater supply of fuel to the reactor core. The curve for low and intermediate-level waste does not exactly reproduce the actual level of waste generated per year. In the case of Ringhals, low-level waste is collected and temporarily stored on site. This waste is only reported as waste once actual disposal takes place. Consequently, a peak was reached in 1998 when five years of accumulated waste was disposed of.

A detailed environmental report for 1999 is presented on the Internet. www.vattenfall.se/environmentalreport/99

ECONOMIC ASPECTS

OF THE ENVIRONMENT

The contribution of environmental work to business profitability is determined by the cost of and revenue from the activities carried out. However, many environmental measures are currently treated as an integrated part of the business. Consequently, it would be unnatural and difficult to present a separate financial report on all of these measures. A further difficulty is that benefits are not specifically quantified in terms of SEK with respect to environmental performance improvement measures.

Previously, Vattenfall only reported environmental expenditure. However, there is a risk that this will be misinterpreted to mean that environmental issues only entail costs. Reporting expenditure without estimating the benefit of measures implemented could, thereby, be counterproductive to the objective of integrating environmental awareness with business management.

Therefore, Vattenfall's environmental expenditure is classified into two categories in the table below. Market-driven environmental expenditure corresponds to investments made and costs incurred for business reasons, such as the introduc-

Environmental expenditure, SEK million	1999	1998				
Market-driven environmental expenditure						
Environmental management Comprises the introduction and main tenance of environmental management systems, environmental audits and environmental reporting						
Projects and R&D including product development Comprises the Sustainable Energy Solutions project and other projects	about 65					
Compulsory environmental expenditure						
CO ₂ taxes	78	88				
Sulphur taxes	2.3	2.4				
NO _x fees	0.4	0.2				
Fish-related expenditure**	29.7	29.8				
Nuclear waste fees***	808	746				

* The prime reason for introducing environmental management systems is to increase the efficiency of Vattenfall's own processes. This figure refers to the savings and revenues contributed by the environmental management systems within the Group during 1999 as a result of measures during 1999.

** Concerns the replenishment of fish stocks conducted on a voluntary basis or as a result of a court ruling, the control of replenishment obligations and fish-related fees.

** See also Note 5 (page 46) in "Notes to the Accounts". Nuclear power taxes must be added, see Note 4 (production taxes). tion of environmental management systems, environmental R&D and specific environmental projects such as Life Cycle Assessment (LCA). Environmental expenditure required by regulatory authorities (compulsory environmental expenditure) is defined as investments and expenditure in order to fulfill regulatory requirements and relates to licences, environmental taxes and fish stock replenishment.

The market-driven environmental expenditure should be balanced against the contribution of the measures to business value. The benefits consist of: more efficient processes which entails energy and resource savings, minimizing future expenditure contingencies through environmental considerations in connection with acquisitions, the generation of direct revenue through increased sales and market share or the development of environmental expertise and brand value. Market-driven environmental expenditure is estimated to correspond to no less than an equivalent level of revenues and savings. Compulsory environmental expenditure can be reduced through more efficient processes and through preparations prior to future legislative amendments in the countries where Vattenfall operates.

Business Benefits Resulting from Environmental Expenditure 1999

Improvement of Process Efficiency

Vattenfall's own facilities*

An estimate of total savings/revenues cannot be made yet. During 1999, cost reductions within the Energy Market business area, through lower fuel costs and environmental taxes, were identified.

Customers' facilities

During 1999, a number of measures were implemented at customers' facilities which led both to improved environmental performance and reduced costs for environmental taxes and fuel. The savings are estimated at about SEK 30 million.

Business

During 1999, the demand for power with an environmental profile increased by over 60 per cent. Sales of these products corresponded to just over SEK 100 million. During the year, a number of business transactions were identified where Vattenfall's environmental profile was important.

Brand Value/Expertise

Vattenfall's combined environmental work has helped to strengthen the Vattenfall brand. A number of group projects have enhanced expertise in this area. Vattenfall has maintained its leading position within LCA for electricity and heat generation and for environmental product declarations (EPD) within energy.

A detailed environmental report for 1999 is presented on the Internet. www.vattenfall.se/environmentalreport/99

The wind blows through the wind power plant and makes electricity.

Andreas, 7 years old, Sweden.



Hauke, 9 years old, Germany.

Accounting Principles Environmental Accounts

SCOPE

The aim is for the Environmental Report to include all of the operations in the Group, that is, operations where Vattenfall is fully able to affect the environmental work. This aim was not fulfilled in 1999. The year's Environmental Report includes companies in Sweden and in Finland where Vattenfall has been a majority shareholder throughout the year. Only Vattenfall's stake in the business has been included in the accounts. Therefore, the accounts apply to:

- Vattenfall's stake in nuclear power plants in 1999, namely, 100 per cent of Ringhals and 74.5 per cent of Forsmark
- All hydro power plants
- All power-generating combustion facilities
- All wind power plants
- Swedish and Finnish electricity distribution companies (1.1 million customers)
- Heat generation facilities in the parent company and subsidiaries as well as facilities for FärdigVärme where Vattenfall owns and operates a local heating facility which supplies heat to customers
- Vattenfall's stake in Vattenfall Naturgas AB, namely 51 per cent of the company.

Changes in the scope of the activities of the Group (acquisitions and disposals) have not been taken into account in year by year comparisons.

Data only refer to the environmental impact of Vattenfall's own generation and do not include in-transit emissions or data from suppliers. Therefore, the input/output analyses are not fully based on the LCA approach.

CALCULATION PRINCIPLES

Emissions from small district-heating facilities (<10 MW) are calculated on the basis of standard values or inspection values. The emissions from larger combustion facilities are mainly measured values. Ash quantities are estimated.

CO₂ emissions refer only to the net amount entering the atmosphere from the combustion of fossil fuels. CO₂ emissions from the combustion of biofuels are not included since these emissions are considered part of the ecocycle. The values for 1995-1998 have been roughly re-stated in accordance with the 1999 accounting principles (according to the previous accounting principles, 100 per cent of an activity was included, even if Vattenfall's ownership stake was less. However, companies with a stake of less than 50 per cent were excluded then, as now).

ENERGY UNITS **Power** A measure of the rate of work. Expressed in watts (W) I kW (kilowatt) = 1,000 W I MW (megawatt) = 1,000 kW I GW (gigawatt) = 1,000,000 kW

Electrical energy

A measure of power over time. I kWh (kilowatt-hour) = I kW for one hour I MWh (megawatt-hour) = 1,000 kWh I GWh (gigawatt-hour) = 1,000,000 kWh

I TWh (terawatt-hour) = I,000,000,000 kWh

Voltage A measure of electrical potential. I kV (kilovolt) = 1,000 volts (V).

ENERGY UNITS IN PRACTICE **1 kWh** is enough to run a car's heater for an hour or a 60 watt bulb for almost 17 hours.

1 MWh is enough to heat a house for a couple of weeks and can be generated in 20 minutes by Vattenfall's largest wind farm in windy weather.

1 GWh is enough to meet the energy needs of an average town with a population of 90,000 for 8 hours and can be generated in one hour by the Harsprånget hydro plant or in 20 minutes by Forsmark nuclear power plant.

1 TWh is enough to run two large newsprint paper machines for a year or to power all of Sweden's railways, subways and trams for 5 months and can be generated by the Ringhals nuclear power plant in 12 days.

GLOSSARY

APX Amsterdam Power Exchange.

CHP plant Combined heat and power plant. Plant which supplies both electricity and district-heating. Often known as a backpressure plant if linked directly to an industrial process.

Consortium power Output from a power plant to which several parties have rights.

Derivative Financial instrument where the value or change in value is related to an underlying instrument. Derivatives (options, forward contracts and swaps) are often used for risk management (hedging).

Distributed electricity generation

(distributed power) Small-scale, decentralized electricity generation, for example smallscale power and heat generation in individual buildings.

District-heating Large-scale central heating system – based on hot water or steam and including many different buildings in a particular area.

EFET European Federation of Energy Traders. An organization for electricity and gas traders in Europe which works towards achieving an open and competitive energy market.

EMAS Eco Management and Audit Scheme. European Commission regulations for environmental management and auditing.

EMF Electromagnetic fields, generated by power lines, generators and other electrical equipment.

EPD Environmental Product Declaration. A system based on Type III declarations in ISO TR 14025 and which aims at providing objective, credible and comparable information on the environmental impact of products and services, see www.environmarket.com/epd.

FärdigEI Special one-stop management service where Vattenfall assumes full responsibility for a customer's electricity facilities, including maintenance, and works with the customer on environmental factors and energy efficiency.

"Färdig-products" Name used for a group of Vattenfall products and services, such as FärdigEl. Other Vattenfall product labels include FlexibelEl as well as electricity where the source is specified (power content labels), such as VindEl (wind power) and VattenEl (hydro power).

Hazardous Waste Waste defined as hazardous under Swedish law (the Environmental Code).

ISDA agreement A bilateral framework agreement in accordance with guidelines issued by the International Swap and Derivatives Association, Inc. The agreement regulates the parties' legal obligations in derivative transactions.

ISO 14001 International standard for environmental management systems.

LCA Life Cycle Assessment, a way of measuring (life cycle inventory) and evaluating (life cycle analysis) the environmental impact of a product or process from cradle (extraction of raw materials) to grave (disposal or recycling). **Local network** Electricity distribution network with a voltage of 0.4 – 20 kV.

manSv, **mansievert** The collective dose which is the average radiation dose, multiplied by the number of individuals in a particular population.

mSv, millisievert Unit used to measure the radiation dose to humans.

NAET Nordic Association for Electricity Traders. An association for traders active on the Nordic electricity derivatives market and representing companies from Sweden, Norway, Finland, Denmark, Germany, USA and England.

NordPool The Nordic Power Exchange.

 NO_x Nitrogen oxides are formed during combustion and these contribute to acidification, eutrophication and the formation of tropospheric ozone. Can be hazardous to health.

PCBs Polychlorinated biphenyls are found in the insulating fluid which was previously used in capacitors. PCBs are an environmental toxin.

Precautionary principle applied to EMF In connection with the new construction or restoration of facilities, solutions are used which result in lower electromagnetic fields at a reasonable cost.

Regional network Electricity distribution network with a voltage of 40–130 kV.

S, **Sulphur** Emissions of sulphur (e.g. sulphur dioxide) are converted into sulphuric acid in the atmosphere and contribute to acidification.

SKB Svensk Kärnbränslehantering AB (Swedish Nuclear Fuel and Waste Management Co.). Responsible for the management of radioactive waste.

Spot market Short-term trading in electricity on an exchange with immediate rather than future delivery.

Thermal power Electricity generated by a gas turbine or steam process.

Transmission income The prices paid by suppliers, customers and network owners for the transmission of electricity over a network.

Unit capability The unit capability factor is the ratio of the available electricity generation over a given time period to the reference energy generation over the same time period, expressed as a percentage. Vattenfall AB (publ.) SE-162 87 STOCKHOLM Tel +46 8 739 50 00 Fax +46 8 37 01 70 Visitors Jämtlandsg 99, Vällingby

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Photos: Lars Åke Bäckdahl, Per Klaesson (Bildhuset), Kicki Lundgren (Mira bildbyrå), Q image, Rein Välme.

Drawings and quotations: A number of children (aged 6–12) in Sweden, Germany and Poland were asked to draw or write about where energy comes from, how energy is used and how the Internet is used.

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