ANNUAL REPORT 1997

VATTENFALL

CONTENTS

THE VATTENFALL GROUP

Vattenfall is one of the largest energy groups in its most important market, the Nordic countries, accounting for over 20% of electricity sales in the region.

Vattenfall offers efficient energy solutions which help enhance customers' competitiveness, environment and quality of life. The group's role is threefold: supplier of energy solutions, power generator and network operator.

Vattenfall sells electricity direct to over 900,000 customers – from large industrial companies and power companies through to small businesses and households. The group also trades actively on Nord Pool Nordic Power Exchange and EL-EX Electricity Exchange, and sells natural gas, heating and other energy products and services.

Vattenfall is one of Europe's largest power generators. Most electricity is produced at hydro and nuclear plants, with back-up from various other energy sources.

Vattenfall is the leading operator of regional and local electricity distribution networks in the Nordic countries, with 950,000 network customers.

Vattenfall also has operations in Germany, the Baltic States, Poland, the Czech Republic, Southeast Asia and South America – markets set to play an increasingly important role in the group's growth.

Vattenfall invests heavily in research and has set up an ambitious programme to develop sustainable energy solutions.

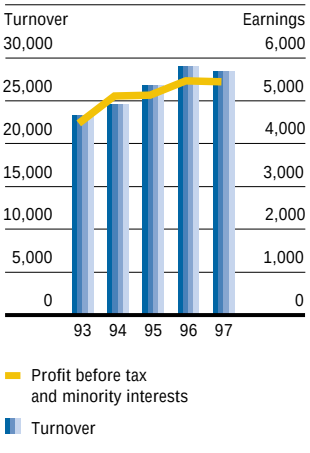
Vattenfall comprises the parent company Vattenfall AB (publ) and around 90 operating subsidiaries owned directly or indirectly.

1997 IN BRIEF

- **Continued strong earnings**
- **Successes in Finland and Norway**
- **Establishing the brand**
- **Ever tougher competition**
- **Intensified product development**
- **Continued restructuring of energy sector**

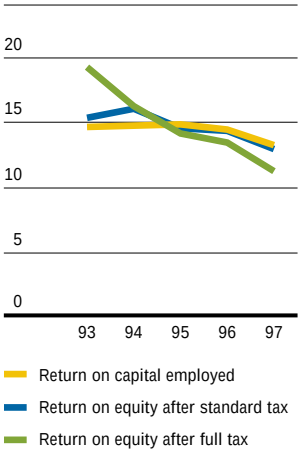
FINANCIAL HIGHLIGHTS	1997	1996	% change
Turnover (SEK m)	**28,458**	29,030	–2
Profit before tax and minority interests (SEK m)	**5,439**	5,461	—
Return on equity after standard tax (%)	**13.0**	14.1	
Return on equity after full tax (%)	**11.3**	13.5	
Return on capital employed (%)	**13.3**	14.5	
Equity/assets ratio (%)	**40**	37	
Cash flow (internally generated funds) (SEK m)	**7,869**	7,455	+6
Total investments (SEK m)	**4,877**	5,984	–18
Electricity sold (TWh)	**78.7**	78.4	—
Electricity generated (TWh)	**79.1**	76.9	+3
Hydro (TWh)	**36.0**	28.0	+29
Nuclear (TWh)	**43.0**	48.8	–12
Other thermal (TWh)	**0.1**	0.1	—
Average workforce (FTEs)	**7,847**	8,263	–5

Turnover and earnings (SEK m)



NB Figures for 1993–95 not restated in line with new basis of accounting (equity method for associated companies)

Return on capital (%)



COMMENTS BY THE CHIEF EXECUTIVE OFFICER

Carl-Erik Nyquist,
Chief Executive Officer

The Vattenfall group recorded turnover of SEK 28,458 million in 1997, which is slightly down on 1996. Exports continued to account for 13% of turnover. The group's profit before tax and minority interests was virtually unchanged at SEK 5,439 million (5,461).

Although we were able to sustain healthy earnings in 1997, increasingly stiff competition will necessitate further efficiency measures and reorganisation in the group. One key step has already been taken in the form of the decision to restructure our sales organisation with effect from 1 January 1998 and so maximise product development and marketing synergies. Another is the decision to cut costs by SEK 1 billion over the next three years through a range of efficiency improvements. In addition, the accounts for 1997 include provisions of around SEK 1 billion to cover internal restructuring initiatives over the next few years, such as our Skills Swap programme.

Markets

1997 was the second year of a fully deregulated electricity market in Sweden, Finland and Norway, and featured growing competition, a good supply of electricity and so lower prices on the Nordic Power Exchange. Several new players entered the market, including some of the large oil companies. Vattenfall is among the largest players in the Nordic energy market, with a 20% share of the Nordic electricity market.

One product in growing demand is heat, both district heating and our one-stop heating concept Färdig Värme. Other energy services are also gaining in importance, such as energy efficiency, plant maintenance and the development of new energy technologies. Vattenfall is well equipped to provide these services, especially given their increasing environmental profile.

Electricity meter technology is advancing rapidly and allowing even small customers to change supplier. Vattenfall is currently developing a combined network monitoring and customer communication system based on hour-by-hour metering. Once the ongoing trials are complete, the system will be extended to cover all our distribution networks.

A strong brand

The Vattenfall brand name will prove a vital asset in the future, promoting customer loyalty and confidence. In the first instance it is the quality of service provided which will determine our reputation, but recent advertising campaigns have proved instrumental in raising brand recognition and building up a positive image of the group.

Energy taxation

One remaining problem facing the deregulated Nordic electricity market is the unfair competition resulting from differences in the way energy is taxed in different countries: Sweden and Norway levy taxes on production, while Denmark and Finland levy taxes on consumption. Sweden is currently reviewing its energy taxation system.

Sweden to phase out nuclear power and promote sustainable energy

June 1997 brought a key energy policy initiative in Sweden – the parliament's decision to begin phasing out the country's nuclear power capacity with the closure of the Barsebäck nuclear power plant owned by Sydkraft AB. One reactor is to be closed by 1 July 1998, and the other by 1 July 2001

provided that suitable compensation is in place in the form of new generation facilities and reduced electricity consumption. Unlike previously, no final deadline has been set for the closure of all Sweden's nuclear power stations. The necessary act of parliament was passed in December 1997 and the deadline for the closure of Barsebäck 1 was confirmed by the government in February 1998.

Sweden's nuclear power facilities will remain technically, environmentally and financially viable for a considerable time to come. For as long as the closure programme is limited to one plant, the shortfall in supply can be offset in the short term by buying in power from elsewhere in the Nordic countries, though electricity prices will rise somewhat. However, there is a risk that the output of Sweden's nuclear plants will end up being replaced primarily by power from coal-fired plants.

The Swedish parliament's decision also aims to promote the reduction of electricity consumption and the development of new, sustainable sources of energy. However, it should be noted that half of Sweden's electricity generation is based on hydro power and so already renewable. Vattenfall invests around SEK 100 million annually in research and development in the sustainable energy field.

The development of renewable sources of energy is a matter of global priority. Research into areas like solar power is increasingly coming under the auspices of international networks, in which Vattenfall intends to continue playing an active role.

Electricity supply

In 1997 Vattenfall supplied 79.1 TWh of electricity generated internally (primarily hydro and nuclear power) and 10.7 TWh bought in from outside. Plenty of hydro power was available during the year, and the shortfall brought on by extensive overhaul-related outages at two of Vattenfall's seven nuclear reactors could be offset by an increase in internal hydro power output combined with cheap power bought in from outside.

Vattenfall's goal is to have electricity generation facilities throughout the Nordic countries. In Finland the group's installed capacity was expanded by 140 MW to just over 190 MW during the year through a mixture of acquisitions and agreements. In Denmark the group is continuing to work with i/s Sjællandske Kraftværker on the construction of the Avedøre 2 CHP plant outside Copenhagen. In Norway Vattenfall has built up a 20% stake in Hafslund ASA.

The group also has interests in generation facilities in Germany (through VASA Energy),Thailand, Laos and Bolivia.

Restructuring of network operations

The restructuring of electricity network companies into larger units is continuing throughout the Nordic region. Vattenfall has over 7% of the Nordic market and is actively hunting for further potential acquisitions. The group's strategy is to focus on building up and integrating groups of adjoining networks with a view to maximising their operational efficiency. In Sweden Vattenfall has separated the role of owner/operator from construction/maintenance functions by spinning the latter off into the subsidiary Vattenfall ElnätService AB.

The service guarantee launched in January 1997 was given a very warm welcome. Storms in parts of the country led to a total of SEK 14 million being paid out to customers in compensation for interruptions to supply.

Opportunities in Europe

The wave of deregulation is continuing to sweep across Europe's electricity markets. Vattenfall intends to start selling energy outside the Nordic countries just as soon as opportunities arise, and already has subsidiaries in the Baltic States, Poland and Germany. The privatisation process in Europe continues. The group will play an active role in the ongoing restructuring process. One example is the acquisition of a minority holding in a Czech distributor.

Good cable links to the continent important

The cables linking the Nordic countries with the rest of Europe are a key factor for Vattenfall's operations in the Baltic region.

»Vattenfall is to focus on offering customers one-stop energy solutions«

Carl-Erik Nyquist meets Bolivian Minister for Economic Development Ivo Kuljis Fuchtner (right) at the opening of Cobee's Zongo valley hydro plant.

»Vattenfall's natural role is to be an energy supplier with the expertise to integrate different sources and types of energy into efficient energy solutions«

The exchange of power across these cables makes for more efficient generation in each country, so bringing down the overall cost of electricity and reducing harmful emissions into the environment.

These same ideas were behind a special project in which Vattenfall has been involved. The Baltic Ring study looked at ways of connecting up all the different electricity networks around the Baltic Sea to maximise the efficiency of the region's electricity supply system. Now complete, the study confirmed the importance of the planned SwePol Link direct-current cable between Sweden and Poland.

Integration of the energy market

Vattenfall has prepared for the deregulation of the natural gas market by broadening the ownership of Vattenfall Naturgas AB to include Denmark's Dong, Finland's Neste, Norway's Statoil and Germany's Ruhrgas. It would be a real boon for Swedish trade and industry if one of the gas pipelines planned from the gas fields in Russia and Norway were to pass through Swedish territory, and Vattenfall Naturgas is actively promoting this option.

Customer-centred development

The transformation of the European and world energy markets is clearly benefiting consumers. From being the sole domain of national monopolies, electricity and natural gas are becoming true international trading commodities. Suppliers will compete not only on price but also on the strength of new and improved products and services.

The energy sector is restructuring, with the emergence of larger and more closely integrated energy companies operating in more than one country. The companies themselves are also restructuring and growing ever more efficient. Experience from the early deregulation of the electricity markets in Finland, Norway and Sweden will give the Nordic energy companies a clear competitive edge in other markets.

Vattenfall aims to play a leading role in this process and be a global partner for its customers. This will require an efficient organisation, environmentally friendly and cost-effective generation facilities, and an active product development ethic. Vattenfall aims to lead the field in all these areas.

Carl-Erik Nyquist
President and Chief Executive Officer
Stockholm, 3 March 1998

VISION, MISSION AND TARGETS

The board of directors and president of Vattenfall AB (reg no 556036-2138) hereby submit their annual report and group accounts for 1997.

Vision

Vattenfall's vision is to be

- *a leading European energy company*
- *a global energy partner*

Those players that prepare today for the fiercely competitive electricity and energy market of tomorrow will be in the best position to safeguard their future earnings and asset growth. Large, powerful and efficient new groupings are emerging in the energy sector through acquisitions, mergers and alliances. Vattenfall intends to participate actively in this restructuring process and so rank among the leading European energy companies in the future.

As a global energy partner Vattenfall will work alongside other energy companies to develop new energy solutions and further its expertise on a global scale. Vattenfall wishes to extend the scope of its partnerships with large industrial customers to cover other markets in which they operate.

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.

The emergence of a competitive and international energy market is opening up new opportunities for Vattenfall. The early and complete deregulation of the Swedish electricity market has given Vattenfall valuable experience of a competitive, customer-centred world that will give it a clear edge over other European power companies.

Strategic focus

Nordic domestic market:

- Building up leading position in electricity sales
- Investing further in product development
- Expanding heating operations

Rest of Europe:

- Strengthening position as supplier of energy solutions to industrial customers
- Acquiring electricity networks and sales concessions
- Expanding heating operations
- Working with other players to ensure local footing etc

Growth markets outside Europe:

- Participating in electricity supply projects in Southeast Asia, South America and elsewhere

Financial targets

Vattenfall's overall financial goal is to combine competitive earnings with a healthy balance between capital strength and dividends.

Given the difference between the book and market value of its fixed assets, the group aims in the longer term to generate a return on equity after standard tax of around 15% over each economic cycle.

Vattenfall believes that an equity/assets ratio of 35–40% will give it the financial strength it needs.

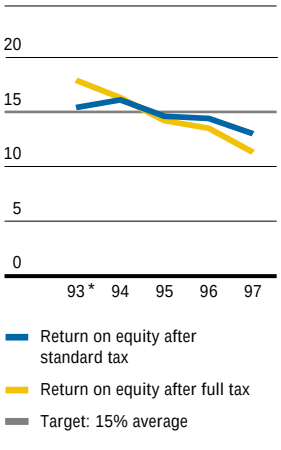
The board intends to pay stable dividends equivalent to a third of earnings and around 5% of equity.

General goals

- High levels of customer satisfaction
- High standards of relevant expertise, management and job satisfaction
- Environmental leadership
- A strong brand name
- Long-term R&D to find sustainable new energy solutions

Vattenfall's financial targets and general goals are broken down at management level into specific targets and scorecards for the various business areas and subsidiaries.

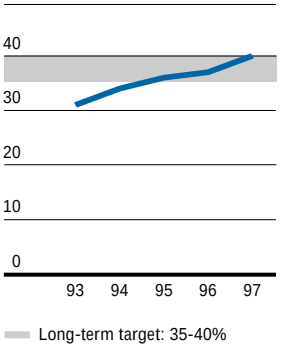
Return on equity (%), 1993–97



**1993 figure restated net of one-off effect of reduction in corporation tax to 28%.*

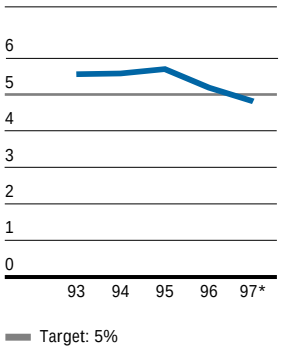
The target has not been met since 1995.

Equity/assets ratio (%), 1993–97



The ratio has been within the target interval since 1995.

Dividends relative to equity (%), 1993–97



**1997 figure based on directors' proposal*

Dividends exceeded 5% of equity in 1993–96 but the board's proposal for 1997 is slightly below the target. Dividends have consistently exceeded a third of earnings.

From Hanseatic League to Baltic Ring

The Baltic region has a long history as an integrated trading zone. Back in mediaeval times, about 70 towns around the Baltic Sea teamed up to form the Hanseatic League, which introduced a harmonised regulatory framework to promote trade in a wide range of commodities – and so laid the foundations for a long era of strong economic growth throughout the region.

Back then, the actual trading was in the hands of a network of merchants and marketplaces scattered throughout the region, while the transport system – the infrastructure – comprised a fleet of more than a thousand large sailing vessels.

Nation state takes over

The emergence and growing ascendancy of the nation state eventually undermined the Hanseatic League's potential. National expansionism gained the upper hand and began to steer events. For a while the Baltic was almost completely enveloped by a burgeoning Swedish empire, and then it was Russia's turn to dominate the region before the countries we know today gradually won the freedom to act independently. Despite these upheavals, trade in the region continued with undiminished vitality.

The Second World War transformed things once again and the strictly isolationist policies of the Soviet Union spelt a temporary end to the Baltic Sea's natural role as an international communications link and trading route. But now, with the collapse of the Iron Curtain, the Baltic is back with a vengeance.

Life's necessities

Back in Hanseatic times, Baltic trade was dominated by the most valuable commodities of the age, like iron, copper, skins, timber, grain, fish and salt – life's necessities. We may trade in a much wider variety of goods today, but one thing remains the same: free trade is making for efficient use of resources and laying the foundations for strong economic growth.

These days, access to energy is the backbone of industrial and economic development. As the 20th century has progressed, electricity has steadily increased its share of energy consumption at the expense of other forms of energy.

So energy is now on a par with the great commodities of the Hanseatic era – electricity too has become one of life's necessities. A secure and stable supply of electricity is a must in modern society, and there are two ways of achieving this: building a substantial reserve of standby generation capacity or linking countries and regions together.

Electricity around the Baltic

Sweden's first international underwater electricity cable was laid back in 1915, linking Helsingborg in Southwest Sweden with Helsingør in Denmark. As time has passed, more and more links have been added between Sweden and its Nordic neighbours, and today there are transmission links with Germany too. The development of a pan-Nordic electricity supply system has proved a great success, helping to limit expenditure on standby generation facilities and pushing up the security of supply to extremely high levels.

This international transmission capacity has brought a very important environmental and financial bonus in that it promotes highly efficient use of hydro power. The consumption of fossil fuels falls when hydro

power is readily available, with high reservoir levels in Sweden and Norway naturally leading to cuts in production at Danish and German coal-fired power stations.

Network capacity vital for wind power

Plenty of network capacity will also be vital if wind power is to play a more important role in the Baltic region's electricity supply. Wind power has advanced rapidly over the last decade: total wind power production in northern Germany and Denmark is now up at 2–3 TWh a year and major expansion plans are afoot for the next few years.

The Achilles heel of wind power is variation in wind strength and, as a result, production. However, good transmission capacity between regions and countries will allow the full potential of wind power to be tapped with the help of easily regulated energy sources such as hydro power. The alternative of building up a reserve of conventional power plants with the same capacity as today's wind power facilities would be an extremely expensive business.

Baltic Ring

The environmental benefits of an advanced and extensive electricity transmission system are the driving force behind the Baltic Ring project. Part-financed by the EU through its Trans European Network infrastructure programme, the project has been looking at how the supply of electricity in the Baltic region can be made more efficient in the future. Vattenfall has been actively involved in the project alongside other power companies in the region. A similar gas network is also being studied.

Environmental benefits

A direct-current link between Poland and Sweden will form part of the Baltic Ring solution. Annual exports of 2 TWh of electricity from Norway and Sweden to Poland would reap considerable environmental rewards: it is estimated this would cut sulphur emissions in Poland by 10,500 tonnes a year, which is equivalent to no less than 21% of all Sweden's sulphur emissions. Exports on this scale would also cut Polish emissions of carbon dioxide by 2.1 million tonnes a year, equivalent to 3.5% of total Swedish emissions.

In dry years the link would provide an important source of standby power for Sweden and Norway to make up for lower hydro production. So the environmental gains would vary over time in line with the availability of hydro power.

Harmonised taxation

A fundamental prerequisite for an efficient energy system like this is that power generation has to be taxed in the same way and at the same rates in each country. This means that taxes need to be levied on consumption rather than generation. Otherwise a situation can arise where, for instance, high levels of taxation on Norwegian hydro power during certain parts of the year make Norwegian hydro power less competitive than power from Danish coal-fired plants. In this scenario, a Swedish power company trading on the Nordic Power Exchange could end up buying in non-renewable power from Denmark even though there is spare capacity in the Norwegian hydro power system – with obvious environmental consequences. And of course a poorly aligned energy taxation policy in Sweden would have a similar unwanted impact on the environment.

The keys to the success of the Hanseatic League were good transport links, efficient marketplaces and a uniform regulatory framework. These are also the keys to unlocking the full potential of the Baltic electricity market. For the most part the transport links and marketplaces are already in place today. All that is needed to complete the picture is a properly harmonised regulatory framework.

The energy market

The world's electricity supply industry is being transformed by new market structures, new technology and ever tougher environmental standards. Northern Europe and the Nordic countries in particular are now leading the way thanks to the complete deregulation of the electricity markets in Finland, Norway and Sweden.

Nord Pool Nordic Power Exchange has both a spot market (electricity for immediate delivery) and a futures market (electricity for future delivery). The exchange has around 200 members.

A CHANGING WORLD

Deregulation

January 1997 heralded the entry into force of the directive opening up the EU's electricity markets to competition. Poland, the Czech Republic and Hungary have plans to follow suit. But deregulation is not a purely European phenomenon – similar moves are afoot in South America, Southeast Asia, Oceania and elsewhere. In fact initiatives for various forms of deregulation or equivalent reforms have been seen in over 100 countries. Last year also saw the final decision on the complete deregulation of the Californian electricity market, with deregulation in the rest of the US set to follow in its wake. A global wave of deregulation is clearly sweeping across both the more mature markets and the rapidly expanding emerging markets.

The natural gas market is also being opened up. The US market was deregulated in the 1980s and Europe is now heading in the same direction. In December 1997 the EU decided to deregulate its natural gas markets and gradually expose them to full competition.

Restructuring and growing competition

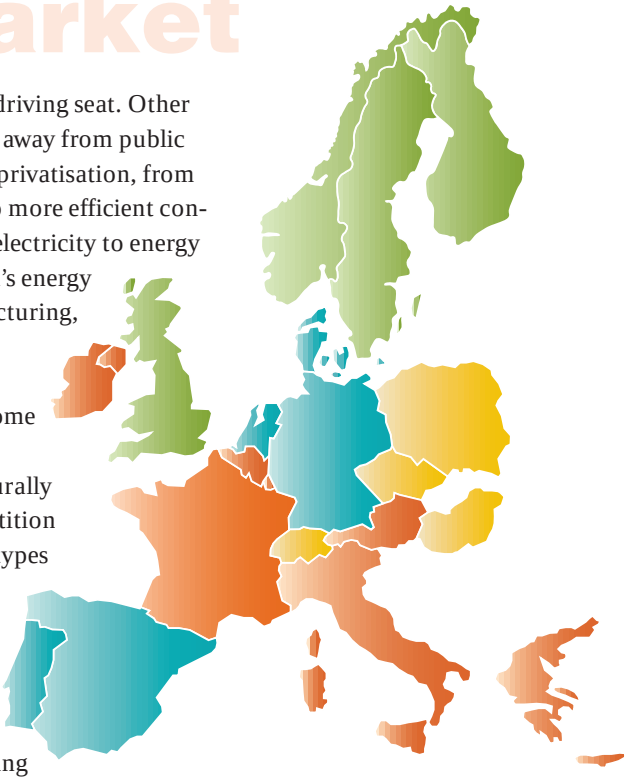
Thus two key energy markets are being opened up to competition. Given the increasing integration of the two, it will gradually become less and less relevant to talk about gas and electricity companies as separate entities. It is becoming more and more a question of energy companies, which sell oil, natural gas, electricity and heating. A good example of this integration process is the way that the traditional oil & gas companies have now started to trade electricity on the Nordic Power Exchange with a view to offering customers a more comprehensive range of energy services.

The deregulation of the energy markets involves a transition from a monopoly with central planning to an open market where customers are in the driving seat. Other trends include moves away from public sector dominance to privatisation, from stepping up supply to more efficient consumption, and from electricity to energy services. So the world's energy companies are restructuring, forming mergers and alliances with other companies both at home and abroad.

Deregulation naturally brings greater competition between companies, types of energy, markets and countries. But it is also helping to bring countries and regions together in the form of new trading links. The Nordic electricity market is an excellent example, with ever growing use of the cables linking the Nordic countries and those linking them with the rest of Europe. And as the European natural gas network develops, deregulation will allow natural gas too to be bought and sold like any other commodity. Indeed electricity and natural gas are now being traded like any other raw material in larger and larger markets.

Regulatory framework incomplete

However, an efficient market is dependent on a level playing field. At present there is still much to be done to bring about a fully harmonised regulatory framework, and so governments need to work closely together. In the Nordic countries the most urgently required measures are the harmonisation of energy and environmental taxes and the abolition of restrictions on usage of electricity networks – the physical marketplace. Elsewhere in Europe electricity transmission tariffs need to be aligned to promote trade.



Electricity reforms in Europe

- Fully deregulated
- EU countries with reforms under way
- EU countries with reforms planned
- Non-EU countries with reforms planned or under consideration

Tougher environmental standards

Deregulation and privatisation are not the only contributing factors in the transformation of the world energy sector. Environmental standards are getting tougher by the minute, driven by growing concern for the environment and human health among customers and consumers.

Technological advances

Natural gas is playing an ever more important role in Europe. Though a non-renewable fossil fuel, it is relatively environmentally friendly and has great potential for being made even more so. Natural gas technology is advancing rapidly, with both extraction and conversion to electricity becoming more efficient. So natural gas has the potential to bridge the gap to the renewable energy sources of tomorrow. Advances in gas turbines are also making the mass-production of smaller and smaller power plants environmentally and financially viable, further promoting the use of small-scale solutions to back up their large-scale counterparts.

Transformation

Deregulation, new environmental standards and technological advances together are bringing about sweeping changes in energy markets, systems and companies alike – and the changes may run even deeper than most people imagine today. The major restructuring seen in recent years is just the beginning of the complete transformation and integration of the world energy sector.

Sustainable development in a competitive energy market

In the longer term there is considerable potential for developing a sustainable energy system based on renewable resources and making the necessary back-up from fossil fuels acceptable from an environmental point of view. However, in a deregulated energy market, moves in this direction must be on the market's terms. Today the main role of governments is to set out the basic regulatory framework and ensure a level playing field. Another role is to support the development of new energy sources, from initial research through to market launch. Nevertheless, in the long term all energy solutions will have to be able to survive on their own merits and prove commercially viable without government subsidies.

The deregulation of the energy market itself may promote the development of a more sustainable energy system. One reason for the dramatic rise in the efficiency of electricity generation from fossil fuels over the last decade is the pressure which competition has brought to bear on suppliers of generation equipment. This means that the consumption of fossil fuels will continue to grow more efficient and make less of an environmental impact.

Kyoto Protocol

December finally brought an international agreement on reducing emissions of greenhouse gases. Average emissions in the period 2008–12 are to be 5% lower than in 1990 in the industrialised world as a whole and 8% lower in the EU.

Until the Kyoto Protocol is ratified and a variety of issues have been clarified, it is difficult to assess what impact it will have. If the protocol is enforced, it will place a considerable burden on energy policy and power generation in the Nordic countries. This is particularly the case for Sweden, which has relatively low emissions of carbon dioxide from the outset and is planning to phase out nuclear power. The protocol may also have implications for Norway's plans to introduce a series of gas-fired power stations.

Demonstrators calling for rapid reductions in greenhouse gas emissions at the Kyoto climate change conference.

The Nordic electricity market

Competition in the Nordic electricity market intensified in 1997. In Sweden a ceiling was introduced for the price of electricity meters that will make it easier for small customers to change electricity supplier and so try to take full advantage of deregulation. Another contributing factor in the tougher competition seen during the year was the much greater supply of hydro power in Norway and Sweden than in 1996. Electricity prices in the two countries are coming down and showing signs of falling into line with each other, though the lower prices have been offset by a sharp rise in electricity taxes in Sweden.

A whole host of new faces entered the market during the year, not only electricity traders and brokers but also large companies from the oil sector and elsewhere that have begun trading in electricity.

COMPANY COMPARISONS

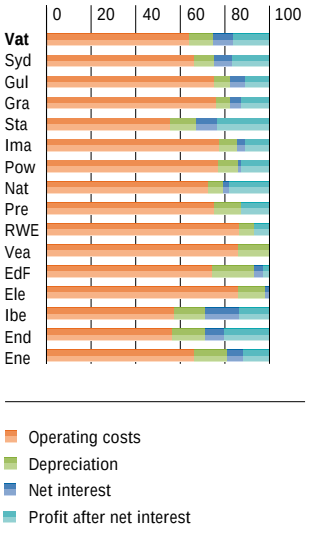
Comparisons with other European power companies

This section compares Vattenfall with a variety of large power companies in Sweden and abroad on the basis of their 1996 results. The ratios have been calculated using Vattenfall's definitions, cf page 62.

It is important to note that some companies, especially those in Germany, employ accounting conventions and assumptions that differ from those used in Sweden. In some cases this has a significant impact on the ratios presented here and so the figures are not directly comparable. The main difference is in the way funds are allocated for the future handling of nuclear waste. The German companies make internal provisions which are reported as non-interest-bearing liabilities. This reduces the relative level of capital employed and so artificially enhances the ratios calculated on this basis. For instance, for RWE Energie there is a major difference between return on capital employed (57%) and return on assets (8%), cf the graphs opposite. In Sweden the equivalent costs for the future handling of nuclear waste are paid to the Swedish Nuclear Waste Fund.

As can be seen from the graphs, Vattenfall's return on equity and return on assets are above average, while its interest cover is below average and its debt cover and equity/assets ratio are about average.

Percentage distribution of costs and earnings relative to income (%), 1996



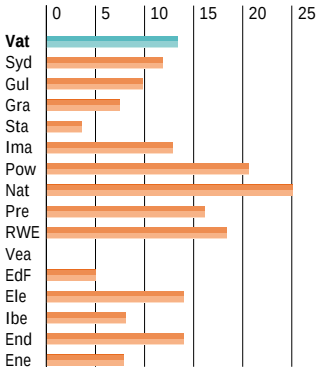
This graph shows what happened to each company's total income in 1996. Vattenfall has a relatively low proportion of operating costs, while generators using predominantly fossil fuels (eg the UK companies) have higher fuel costs and so report much higher operating costs.

The following companies are included in the comparison (1996 figures):

Company and country	Electricity sales (TWh)	Principal sources (%)	Market share (% by volume)	Turnover (SEK bn)
Vattenfall (Vat) *Sweden*	**78**	Nuclear **49** Hydro **28**	*Nordic* **21**	**29**
Sydkraft (Syd) *Sweden*	31	Nuclear 38 Hydro 15	*Nordic* 8	14
Gullspång (Gul)* *Sweden*	15	Nuclear 34 Hydro 26	*Nordic* 4	6
Graningeverken (Gra) *Sweden*	3	Hydro 53 Bought in 34	*Nordic* 1	2
Statkraft (Sta) *Norway*	40	Hydro 81 Bought in 19	*Nordic* 11	7
Imatran Voima (Ima)* *Finland*	43	Fossil fuels 38 Nuclear 27	*Nordic* 12	18
PowerGen (Pow) *UK*	62	Fossil fuels 100	22	31
National Power (Nat) *UK*	70	Fossil fuels 100	24	38
PreussenElektra (Pre) *Germany*	105	Fossil fuels 38 Nuclear 23	24	76
RWE Energie (RWE) *Germany*	130	Fossil fuels 73 Nuclear 24	29	77
VEAG (Vea) *Former East Germany*	50	Fossil fuels 85 Bought in 12	11	27
Electricité de France (EdF) *France*	443	Nuclear 82 Hydro 13	97	250
Electrabel (Ele) *Belgium*	66	Nuclear 57 Fossil fuels 35	84	49
Iberdrola (Ibe) *Spain*	55	Nuclear 44 Hydro 41	39	50
Endesa (End) *Spain*	66	Fossil fuels 54 Nuclear 31	43	77
Enel (Ene) *Italy*	230	Fossil fuels 63 Bought in 23	87	180

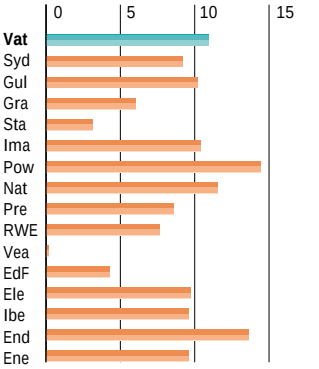
**Gullspång's results are also included in those for Imatran Voima*

Return on equity after full tax (%), 1996



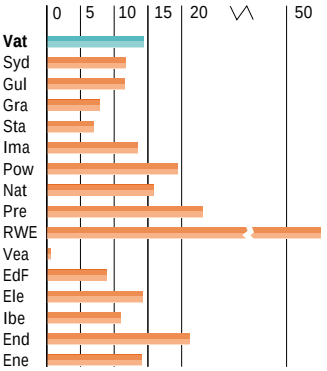
Vattenfall's return on equity of just over 13% is the highest for the Nordic companies and above the average of 12%.

Return on assets (%), 1996



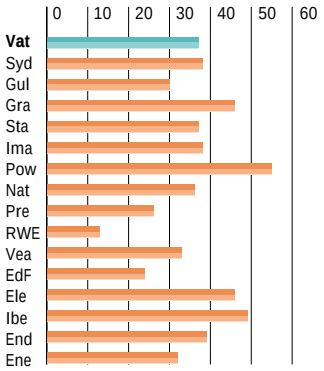
Vattenfall's return on assets is above the average of 9%. The companies reporting higher values are those with a large proportion of relatively old fossil fuel plants and so comparatively low total assets.

Return on capital employed (%), 1996



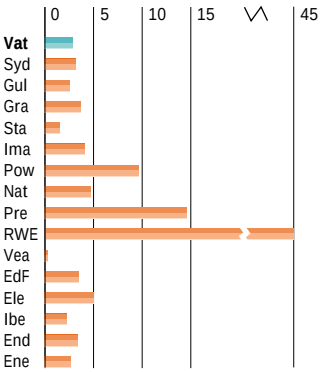
Vattenfall's return on capital employed is slightly below the average of 16%. German companies PreussenElektra and RWE Energie have a much higher return on capital employed than on assets due to the substantial reserves built up for future handling of nuclear waste, which are reported as non-interest-bearing liabilities.

Equity/assets ratio (%), 1996



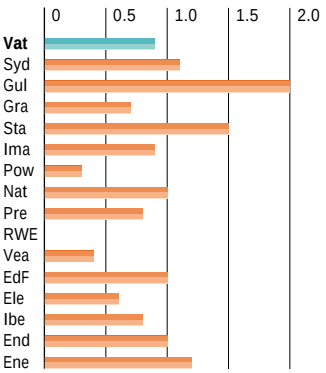
Vattenfall's equity/assets ratio is just above the average of 36%. Some companies, like PowerGen and Iberdrola, have extremely strong balance sheets. German companies PreussenElektra and RWE Energie have low ratios because the reserves for future handling of nuclear waste are reported as liabilities in the bottom half of the balance sheet and mainly as liquid assets in the top half.

Interest cover (times), 1996



Vattenfall's interest cover of three is low compared to the average of seven. There are considerable variations, with some companies reporting much higher figures due to extremely low interest charges.

Debt cover (times), 1996



Vattenfall's debt cover is average at 0.9. Again there are considerable variations, with some companies reporting much lower figures due to relatively low interest-bearing liabilities relative to equity.

Business review

Towards the end of 1997 it was decided to restructure the Vattenfall group with effect from 1 January 1998. Electricity Sales, Energy and Engineering have been merged into a single new business area called Vattenfall Energy Market with a common sales organisation so as to present a united front in dealings with Nordic customers and promote proactive product development. Meanwhile a new business area called Vattenfall Europe has been set up to intensify the group's activities elsewhere in Europe.

The following review reports on the business areas as they were in 1997. An introduction to the new organisation structure can be found on page 30.

Story-time before lights-out... Lighting accounts for a fifth of household electricity consumption for purposes other than heating.

business area

ELECTRICITY SALES & GENERATION

Vattenfall's electricity customers are offered efficient energy solutions intended to enhance their competitiveness, environment and quality of life by:

- *saving them time, money and resources*
- *improving their environmental profile in terms of both natural and working environment*
- *making their life easier*

In 1997 Electricity Sales & Generation recorded turnover of SEK 20,496 million (21,145) and an operating profit of SEK 4,306 million (5,682). Sales of electricity accounted for 69% (69) of the Vattenfall group's total turnover.

Electricity sales volumes rose to 78.7 TWh (78.4). Sales fell to 64.0 TWh (65.2) in Sweden but climbed to 2.6 TWh (1.4) in Norway and 0.6 TWh (0.1) in Denmark and held steady at 6.7 TWh in Finland. Exports to outside the Nordic region rose to 0.4 TWh (0.1). Sales on the Nord Pool Nordic Power Exchange and EL-EX Electricity Exchange fell to 4.4 TWh (4.9). The Vattenfall group accounted for around 22% (21) of all electricity sales in the Nordic countries.

Prices in the electricity spot market were much lower than in 1996.

Competition in the Nordic electricity market increased in 1997. In Finland it was the first year of full competition, in Norway transaction costs were reduced, and in Sweden a price ceiling of SEK 2,500 for sales of hour-by-hour meters to small businesses and households was introduced on 1 July.

Sales of value-added products and one-stop energy solutions tailored to customer needs rose during the year.

Industrial and other business customers

Large industrial customers accounted for 31% of electricity sales by volume. Vattenfall's sector specialists work closely with several industrial customers to develop more efficient ways of operating their power plants. Group-wide agreements covering customers' electricity needs throughout the Nordic countries and beyond are becoming more and more common.

Vattenfall's 50,000 other business customers accounted for 11% of electricity sales. This market covers everything from small service companies to nationwide groups and local authorities, with customers from more or less throughout the service, property and manufacturing sectors. Vattenfall expanded its share of this market slightly despite stiff competition.

Long-term relationships and services that take account of customers' total energy needs and competitiveness are key elements in Vattenfall's marketing approach. Larger customers are being offered a special new product with a built-in energy saving element, while smaller customers are being offered a range of energy packages that include security agreements and telephone hotlines for advice on environmental and energy-related matters. Other products marketed in 1997 included special environmental solutions and wind power packages.

Energy companies

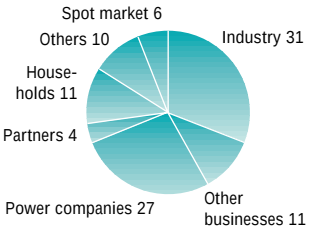
27% of electricity sales went to independent energy companies and 4% to market partners. 1997 marked the real breakthrough of the mutually beneficial market partner concept, which allows energy companies to draw on Vattenfall's products and services in their own marketing work and sales contracts. In 1997 partnership agreements were entered into with Eskilstuna Energi & Miljö, Gestrikekraft, Västervik Energi and Pite Energi in Sweden, and with Follo Energi in Norway.

Household customers

Household customers accounted for 11% of total electricity sales. Vattenfall has approxi-

SEK m	1997	1996
Turnover	20,496	21,145
– of which intra-group	821	993
Operating profit	4,306	5,682
Investments	2,140	1,151
Total assets	57,079	58,202
Year-end workforce	3,819	3,664

Electricity sales by customer type (%)



Industrial and other business customers accounted for 42% of sales, power companies and market partners for 31% and household customers for 11%.

The Indigo 3000 two-seater roadster is produced by Jösse Car, which buys its electricity from Vattenfall.

Vattenfall customer Maria Saarinen can keep tabs on her electricity consumption hour-by-hour via Vattenfall's website. Here she is comparing a logbook print-out with her electricity meter's readings.

mately 17% of the household electricity market in Sweden and 9% in Finland, which equates to over 700,000 customers in Sweden and 155,000 in Finland. Increased competition led to the loss of some home-owners with electric heating, but this was partly offset by targeted marketing campaigns.

Power trading

Sales on the Nordic Power Exchange and EL-EX Electricity Exchange accounted for 6% of sales by volume.

Electricity supply

Vattenfall must always strike the right balance between the electricity it sells and the electricity it generates or buys in, all depending on generation costs, spot market prices and estimated reservoir inflow. Due to long outages at some of the group's nuclear power stations in 1997, Vattenfall generated large amounts of hydro power during the autumn to leave reservoir levels relatively low at the year-end. The diagram below illustrates the relationship between the volumes sold, generated and bought in.

Electricity generation

Vattenfall's electricity generation operations feature high standards of safety and environmental performance.

In Sweden Vattenfall has 9,100 MW of hydro capacity and over 6,600 MW of nuclear capacity, backed up by fossil-fuelled power stations with a capacity of 2,100 MW (including 700 MW of standby gas turbines). In 1997 the group generated a total of 79.1 TWh (76.9), including 36.0 TWh hydro power (28.0) and 43.0 TWh nuclear power (48.8).

Some of Vattenfall's hydro capacity on the river Indalsälven was transferred in 1996 as part of the ongoing partnership with Denmark's i/s Sjællandske Kraftværker. The deferred income from this sale was reclassified in 1997. Meanwhile, the group's capacity in Finland climbed to over 190 MW thanks to a deal with Imatran Voima Oy whereby Vattenfall received 140 MW capacity in return for its shares in Gullspång Kraft AB.

POWER BALANCE, 1997

INPUTS (TWh)	
Renewable sources	
Hydro power	36.0
Wind power	0.02
Nuclear power	43.0
Fossil fuel power	0.1
Total generated internally	**79.1**
Power bought in	10.7
Less own consumption	–3.1
Total	**86.7**

OUTPUTS (TWh)	
Sweden	64.0
Norway	2.6
Finland	6.7
Denmark	0.6
Other exports	0.4
Pool trading	4.4
Total sales	**78.7**
Minority interests in power plants	7.0
Compensatory hydro supplies etc	1.0
Total	**86.7**

Renewable energy sources and nuclear power are the main sources of the electricity generated. Power is bought in through bilateral agreements and pool trading (on power exchanges). Sales are still dominated by the Swedish market but are growing in Finland and Norway.

GKN Nordiska Kardan AB develops and manufactures drive shafts for heavy goods vehicles, employing 170 people.

GKN has a long-term agreement with Vattenfall that involves working together extremely closely on energy matters: eg energy efficiency at the company, electricity training for small groups of staff, and a life-cycle inventory by Vattenfall's environmental consultants.

Along with its monthly bills GKN receives special statistics which facilitate the analysis of its electricity consumption.

Vattenfall's generation units work to the development criteria set out for the Swedish Quality Award and operate process-oriented management systems which integrate quality and environmental management based on ISO standards.

Hydro power

Hydro power offers uniquely efficient electricity generation. Vattenfall's high installed capacity and large reservoirs make for efficient regulation of output in line with fluctuations in demand. In 1997 the group's hydro plants generated 36 TWh (28). Vattenfall reviewed its hydro organisation during the year with a view to separating its ownership role from operation and maintenance, and the process is expected to be completed in 1998.

Nuclear power

Vattenfall is the sole owner of the Ringhals plant and has a 74.5% stake in the company that owns the Forsmark plant (though the electricity balance on page 16 includes the whole of Forsmark's output). The diagram on page 18 shows the unit capability factor for the two plants in 1997 compared to the five-year averages for 1987–91 and 1992–96. As can be seen, the unit capability factor was lower than in previous years.

Ringhals

In 1997 Ringhals generated 21.4 TWh (25.3), equivalent to almost 15% of total Swedish electricity production.

1997 saw the start of a major five-year reinvestment programme at Ringhals which aims to bring further improvements in the plant's productivity, reliability and safety without any increase in generation costs. Almost SEK 700 million was invested during the year.

At Ringhals 1 the reactor and safety systems underwent a thorough inspection and overhaul to maintain high levels of production. The work was the first of its kind and proved in part more difficult than anticipated, prolonging the shut-down period from the planned three months to over seven. At Ringhals 4 a pioneering programme of tests on the condition of the reactor cooling pumps was carried out successfully. Ringhals 2 had an excellent year, while there were some problems with vibrations in a steam conduit at Ringhals 3 during the first half of the year which have now been resolved.

Capacity of Vattenfall's power plants (MW)

Hydro*)	9,100
Nuclear	6,640
Other thermal**)	2,100
	17,840

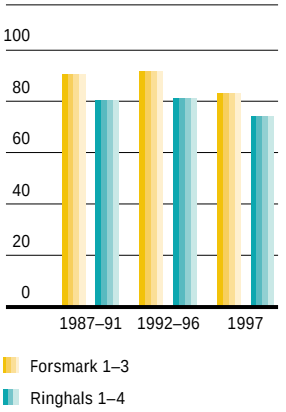
**) The high capacity of Vattenfall's hydro facilities makes it easy to regulate levels of hydro production, thus increasing the value of Vattenfall's generation resources as a whole.*
***) The standby plants at Stenungsund and Marviken are being mothballed in 1998.*

Output of Vattenfall's power plants (TWh)

	1997	1996
Hydro	**36.0**	28.0
Nuclear	**43.0**	48.8
Other thermal	**0.1**	0.1
	79.1	76.9

Above average reservoir inflow in 1997 led to a much higher hydro output than in 1996. Nuclear output was lower than normal due to extensive overhauls at Ringhals 1 and Forsmark 1.

Load factor at Forsmark and Ringhals (%), 1987–1997



The unit capability factor at Forsmark and Ringhals was lower in 1997 than in previous years due to extensive overhaul-related outages at Forsmark 1 and Ringhals 1. Unit capability factor is the ratio of the available energy generation over a given time period to the reference energy generation over the same time period, expressed as a percentage.

Forsmark

In 1997 Forsmark generated 21.6 TWh (23.5), again equivalent to almost 15% of total Swedish electricity production.

The reinvestment initiative at Forsmark running through to the year 2000 reached its halfway point on the completion of the year's overhaul programme.

An almost inaccessible crack discovered during a regular inspection of pipe connections to the reactor tank at Forsmark 1 required a brand new repair method. Along with repairs to the upper part of the reactor containment, this delayed the restart after the overhaul by over two months. Despite this, Forsmark achieved a unit capability factor of 83% in 1997.

Fossil-fuelled plants

On 31 March 1997 the Danish government gave the go-ahead for the primarily gas-fired CHP plant Avedøre 2 outside Copenhagen. A joint venture with Danish company i/s Sjællandske Kraftværker, the plant will have a capacity of 560 MW of electricity and is expected to be taken into operation in the year 2001. Vattenfall has a 40% interest in the plant.

In Finland an environmental permit was granted for a new 900 MW combined-cycle gas turbine station in Imatra while in Sweden Svenska Kraftnät has commissioned gas turbine standby capacity from Vattenfall.

The deregulation of the electricity market has led to a new attitude to standby capacity, as it is now cheaper to buy in top-up power on the spot market than to keep a spare power plant on standby. As a result, Vattenfall took the decision to commence the long-term mothballing of its two oil-fired plants in Stenungsund and Marviken in 1998.

The subsidiary Vattenfall Generation Services AB was set up on 1 January 1997 to operate Vattenfall's thermal power stations in Sweden and two power plants in Tanzania. The new company is also involved in Vattenfall's power plant projects in Finland and won an order during the year for the operation of a plant in Poland. The group aims to increase its international commitments.

Fuel supplies

The fuels needed by the group for large-scale electricity generation – uranium and oil – are bought in at competitive prices in the international market by subsidiary Vattenfall Bränsle AB. The company recorded turnover of SEK 1,408 million (1,371) in 1997.

Uranium is purchased both through long/short-term contracts and in the spot market. Prices in the international market rose during the year, but the group has long-term contracts that will ensure reduced fuel costs for its nuclear plants over the next few years. Vattenfall requires all suppliers of uranium and other nuclear fuel services to meet relevant international environmental standards. Quality control procedures involve examination of accounting records, communication with the authorities and special site visits. 1997 saw contracts with four suppliers negotiated for the supply of nuclear fuels for the group's seven reactors in 1999–2002 (in one case 2000–2003).

Nuclear waste

Svensk Kärnbränslehantering AB (SKB) handles and stores radioactive waste from Sweden's nuclear power stations. The system comprises transportation, intermediate storage and final storage. An extensive R&D programme looking at the final fate of spent nuclear fuels has come up with a deep storage method where waste is stored in copper capsules 500 metres below ground level.

In 1997 SKB's operating costs came to SEK 1,000 million. The company employs just over 110 people but uses the services of around 600 people in all. SKB's operations are funded primarily by the Swedish Nuclear Waste Fund built up from fees paid by Sweden's nuclear power companies. The market value of the fund at the year-end was SEK 23.1 billion, over half of which is attributable to Vattenfall.

ENERGY business area

Energy offers secure, competitive and environmentally friendly energy solutions in three areas: heating, natural gas and small-scale electricity generation.

Since the start of 1998 Energy has been part of the new Vattenfall Energy Market business area.

In 1997 Energy recorded turnover of SEK 2,245 million (1,990) and an operating profit of SEK 629 million (205). The 1997 figures include capital gains of SEK 382 million on the sale of 49% of Vattenfall Naturgas AB.

Heating is proving one of Vattenfall's fastest growing areas of activity. The group operates almost 200 heating plants in Sweden with over 500 boilers. In 1997 the group supplied a total of 3.7 TWh (3.2), of which 45% was converted from biofuels.

District heating

1.9 TWh (1.6) of district heating was supplied in 1997. New biofuel-fired district heating boilers were taken into operation in Motala, Tibro and Kalix as part of the group's commitment to increasing the proportion of biofuels used to generate heating. The group sold its holding in Hallsberg Kraft och Värme AB to the company's other shareholder, Örebro Energi AB, and purchased the Bjuv gas-fired district heating plant and associated distribution network at the end of the year.

Färdig Värme

Färdig Värme is a one-stop energy management concept where Vattenfall assumes responsibility for reliable and efficient production at a customer's own heating plants. Despite a sharp rise in competition, Vattenfall signed a variety of new contracts in 1997 and sales totalled 1.8 TWh (1.6). One new customer is the NOBIA group, which has signed a contract for the production of 0.05 TWh per year at its plants. This contract marks a real breakthrough for the concept in southern Sweden.

Pulp and paper industry

1997 saw Vattenfall step up its marketing drive targeting the pulp and paper industry. The service offered by Vattenfall entails assuming responsibility for the operation of a customer's power plants, which are often highly complex with large outputs and subject to extremely high reliability and efficiency criteria. This allows the customer to focus on its core activities.

Natural gas

Vattenfall Naturgas AB imports and sells natural gas from its own trunk pipeline on Sweden's western coast to distributors, power companies and heat producers. 9.0 TWh (9.2) of natural gas was supplied in 1997.

Vattenfall has high hopes of expanding the Swedish natural gas market. The viability of a pan-Nordic natural gas network is currently being studied by an EU-backed team, which is expected to publish its report in the summer. 1997 saw the completion of the sale of 49% of Vattenfall Naturgas to Ruhrgas AG, Statoil, Neste Oy and Dong A/S.

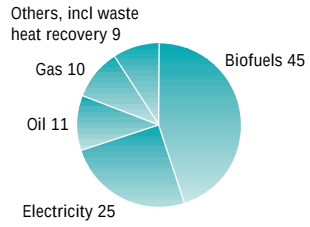
Small-scale electricity generation

The group's 87 small-scale hydro plants in Sweden and Finland have a total installed capacity of 97 MW and generated 0.3 TWh in 1997 (0.2).

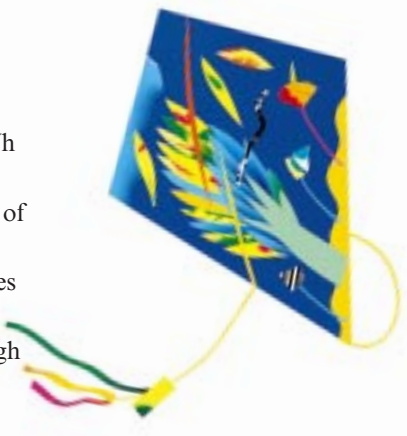
Vattenfall is Sweden's largest producer of wind power, generating 0.02 TWh in 1997 (0.01). The group now has 37 wind turbines (27) with a total installed capacity of 19.1 MW (13.9) and has more planned. Through agreements with independent producers, Vattenfall is now able to market a total of around 0.1 TWh of wind power a year. Further wind power expansion is being planned.

SEK m	1997	1996
Turnover	2,245	1,990
– of which intra-group	122	109
Operating profit	629	205
Investments	570	601
Total assets	4,304	3,446
Year-end workforce	252	245

Fuel mix (%)



The heat supplied by Vattenfall is derived from a variety of fuels, with biofuels dominant at 45%. The proportion of biofuels rose in 1997 at the expense of oil and gas.



A new wind power marketing campaign targeting corporate customers was launched late in 1997. Some 30 companies signed up for a total of 3.4 GWh.

business area

ELECTRICITY NETWORKS

SEK m	1997	1996
Turnover	6,927	6,857
– of which intra-group	758	709
Operating profit	1,405	1,964
Investments	1,588	1,789
Total assets	28,181	27,224
Year-end workforce	2,432	2,526

Electricity Networks' vision is to be the leading network operator in Northern Europe, offering value-for-money network services.

Electricity Networks recorded turnover of SEK 6,927 million (6,857) and an operating profit of SEK 1,405 million (1,964).

Vattenfall is the largest network operator in the Nordic countries. The group owns half of Sweden's regional networks and a seventh of Sweden's local networks, with 775,000 customers. Vattenfall also has two subsidiaries in Finland with 175,000 network customers. In 1997 network operations in Sweden were regulated by the Network Authority at NUTEK.

The GotCom project gives all customers on Gotland special meters and two-way communications. Project manager Tord Ingvarsson (left) presents the special equipment used.

Service guarantee

1997 saw the launch of a service guarantee for all Vattenfall's network customers in Sweden which resulted in a total of SEK 14 million being paid to 75, 000 customers in compensation for interruptions to supply. Local networks suffered extensive interruptions at the start of the year, particularly in western Sweden, and there was an unusually high incidence of storm-related interruptions in the summer.

Metering and IT-communications

Advances in metering technology are bringing further efficiency gains in Vattenfall's network operations. September saw a new move to improve service with the introduction of an IT-based monitoring system that allows two-way communication with customers and full hour-by-hour metering of electricity consumption. Vattenfall launched a full-scale trial of the system covering 36,000 customers on the island of Gotland, with hourly metering and easy-to-read bills that reflect actual consumption.

Restructuring and acquisitions

1997 brought a major restructuring programme to increase efficiency. Nine local network companies were merged into four: Vattenfall Västgötanät AB (80,000 customers), Vattenfall VätterNät AB (44,000), Vattenfall Norrnät AB (127,000) and Vattenfall Mälarnät AB (103,000).

In September a new contracting company called Vattenfall ElnätService AB (VESAB) was set up to separate the roles of network owner and operator. The restructuring will be completed in April 1998 when the company will have over 800 staff recruited from the network companies and have operations throughout Sweden.

In May Vattenfall acquired Forsaströms Kraft AB with 36,000 network customers in southern Sweden, and in December an agreement was reached on the acquisition of Flens Energi AB with 11,000 customers.

Network LCA

In 1997 Vattenfall carried out Sweden's very first life-cycle assessment of electricity network operations in conjunction with Svenska Kraftnät and Göteborg Energi. The results provide sound foundations for continued environmental improvements.

Lower network prices

Recent times have brought adjustments in network price levels and pricing structures. Vattenfall's distribution networks are mainly in sparsely populated areas of Sweden, leading to higher costs and thus higher prices than in more densely populated areas. In recent years Vattenfall has also acquired some urban networks and been able to maintain low prices or even cut them further. Rapid restructuring of Sweden's network companies is vital if transmission costs are to be kept down, and Vattenfall intends to participate actively in this process.

Cable to Poland

Vattenfall's work with Svenska Kraftnät and the Polish Power Grid Company on a 600 MW direct-current cable between Sweden and Poland continued. In July the Swedish government awarded a concession for the cable, and in September PPGC purchased a 1% stake in the company SwePol Link AB from Vattenfall, leaving Vattenfall with a 48% holding and Svenska Kraftnät with the majority holding of 51%. The cable is expected to come into operation in 1999. Appeals against the refusal of local permits have yet to be heard by the Swedish government.

business area

ENGINEERING – VATTENFALL CONSULTANTS

Vattenfall Consultants' vision is to be a leading consultancy and preferred partner with the expertise to develop the energy solutions of tomorrow, and its mission is to provide consulting services that promote environmentally friendly energy solutions.

In 1997 Vattenfall Consultants recorded turnover of SEK 443 million (768) and an operating profit of SEK 4 million (51). It is Sweden's largest energy consultancy, with around 450 employees at the year-end.

Vattenfall Consultants comprises a close-knit group of three companies: Vattenfall Energisystem AB, Vattenfall Hydropower AB and Vattenfall Transmission AB. Together they have expertise covering the entire Swedish power system, from generation through to distribution with all the associated systems and infrastructure, as well as in-depth construction and environmental know-how. The group provides consulting, project management and other services in fields like energy efficiency, the environment and IT.

Vattenfall Consultants' principal client is the rest of the Vattenfall group, and it plays a key role in supporting Vattenfall's sales of electricity. Since the start of 1998 Vattenfall Consultants has been part of the new Vattenfall Energy Market business area.

Highlights of 1997

Changes in the world around us have led to a new need for systematic risk management. During the year Vattenfall Energisystem carried out studies and analyses and developed methods and models for risk management in the field of nuclear safety. The models are also applicable in other areas and this led to a rise in demand for these services during the year. Vattenfall Energisystem also helped plan a biofuel-fired CHP plant in Eskilstuna for Vattenfall and Eskilstuna Energi & Miljö.

Vattenfall Transmission won a contract from Landsvirkjun in Iceland, which involved using the ROBHOT® method to inspect and assess the condition of conductor joints while lines are in operation.

Vattenfall Hydropower worked on designing new environmentally friendly power stations and was involved in the modernisation of hydro power plants both in Sweden and abroad.

All three consulting companies were involved in the introduction of environmental management systems in the Vattenfall group.

Hidden resources

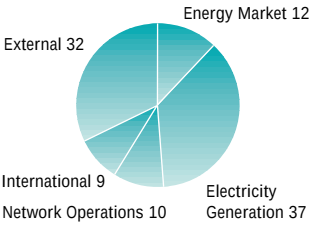
Traditional financial reporting fails to take account of the considerable hidden resources to be found at Vattenfall Consultants – its know-how and relationships with clients. The ability to come up with bright ideas and translate them into new business opportunities is vital for the group's future competitiveness. Confidence in Vattenfall Consultants is built up by tailoring their expertise to clients' needs and so helping to unleash clients' own potential.

Strategic guidelines have been drawn up in eight key areas with a view to developing these hidden resources and so maximising client confidence. Alongside the group's vision and mission, these guidelines constitute the foundations for the future development of Vattenfall Consultants.

Thanks to greater know-how, a broader portfolio and greater efficiency, value added per consultant rose to SEK 550,000 from SEK 530,000 in 1996 and SEK 400,000 in 1995. Vattenfall Consultants continued its involvement in university engineering courses during the year and intends to step up its involvement in challenging assignments which promote the development of its human resources.

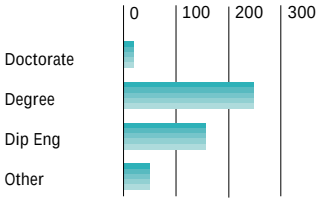
SEK m	1997	1996
Turnover	443	768
– of which intra-group	249	389
Operating profit	4	51
Investments	7	8
Total assets	274	310
Year-end workforce	443	450

Client structure (%)



Most of Vattenfall Consultants' work is commissioned by other parts of the Vattenfall group, often in conjunction with their customers.

Staff qualifications



Having such a highly qualified workforce makes it easier for Vattenfall Consultants to develop specialist know-how in particular fields.

business area
INTERNATIONAL

SEK m	1997	1996
Turnover	132	188
– of which intra-group	7	6
Operating profit	–176	–102
Investments	694	322
Total assets	1,744	754
Year-end workforce	87	100

International was responsible for all Vattenfall's operations in northern Europe and some growth markets on other continents.

Responsibility for electricity sales outside the Nordic countries was transferred to International in 1997.

International recorded turnover of SEK 132 million (188) in 1997 and an operating loss of SEK 176 million (102) due to continued heavy investment and intensive market development work.

At the start of 1998 International was split into two separate business areas: Vattenfall Europe and Vattenfall International.

In 1997 Vattenfall sold 0.4 TWh (0.1) of electricity outside the Nordic countries, all to German power companies. One of Vattenfall's goals is to follow its Nordic customers into Europe and offer them the same products and services as back home. Operations outside the Nordic countries are set to play a key role in Vattenfall's future growth. In 1997 investments totalled SEK 694 million (322).

Europe

Vattenfall's focus is in Northern Europe with lokal representation in Germany, Poland, Estonia, Latvia, Lithuania and the Czech Republic.

In 1997 Vattenfall acquired a 7.75% stake in the Czech electricity distributor Vychodoceska Energetika a.s, with sales of 6 TWh and 600,000 customers.

Independent German power generator VASA Energy GmbH & Co KG, in which Vattenfall has a 50% holding, stepped up its activity during the year. Besides generating heat and power, the company is involved in energy sales and project development, including financing, cooperation with and investment in local energy companies.

Nordic Power Invest

Vattenfall's wholly owned subsidiary Nordic Power Invest AB (NPI) handles Vattenfall's operations in growth markets outside Europe, focusing on Southeast Asia and South America.

Despite the economic crisis currently engulfing Southeast Asia, Vattenfall considers the region to have substantial development potential in the longer term. NPI has an 11% holding in Thai company COCO, which generates around 450 MW of electricity and 600 tonnes of steam per hour for a large industrial area. COCO has been floated on the Bangkok Stock Exchange but the financial crisis in Thailand has seriously affected the company's chances of securing the financing needed for its ongoing expansion programme.

In 1997 NPI assumed operational responsibility for the Theun Hinboun hydro project in Laos (210 MW), in which Vattenfall has a 10% interest. Vattenfall is responsible for the operation and maintenance of the plant for the next five years. The plant is now in production trials.

Through 50/50 joint venture Tosli Investments BV, NPI and US power company NRG have a combined 96% interest in the power company Cobee, which owns 160 MW of hydro generation capacity in Bolivia. Around half of the 65 MW expansion programme in the Zongo valley was completed during the year. Cobee managed to negotiate favourable financing terms from a consortium comprising the South American development bank CAF and commercial bank ING. NPI is also developing a hydro project in the Miguillas valley on behalf of Cobee which is expected to have a capacity of 160 MW.

SwedPower AB

Vattenfall has a 58% holding in consulting company SwedPower, which focuses on markets outside Europe. Africa is its largest market, accounting for 65% of sales, but the company has operations in Asia and South America too. Around 100 consultants from Vattenfall were used in 1997.

SERVICE COMPANIES

Tougher competition and new trading patterns are impacting on every player in the electricity market. Speed and flexibility are of the essence: the traditionally stable structure of the electricity market is now exposed to considerable pressure for change.

Since converting from public utility to limited liability company, Vattenfall has constantly fine-tuned its structure. A key element in this process was to create a network of companies that provide the rest of the group with a wide variety of cost-effective, high-quality services.

Competition

Some of the service companies operate in a competitive environment to ensure the best and most efficient service for the group. Specialisation and development also increase the value of the services offered to clients, including property management, technical IT support, insurance, asset management, communications, human resources and other administrative services.

By keeping these group-wide services in seperate companies the rest of the Vattenfall group can act on the market with an appropriate organisation. This ensures high levels of efficiency and promotes speed and flexibility whenever there is a need to adjust the group's structure.

The success of this concept is evident from the change process undertaken in the autumn of 1997, when Energy, Engineering and Electricity Sales were merged into the new Vattenfall Energy Market business area. This reorganisation could be undertaken quickly and smoothly, with the service companies continuing to provide their service without any disruption. The service companies employed a total of 734 FTEs (full-time equivalents) at the year-end.

The companies

Vattenfall Utveckling AB, handles the group's research and development activities, which are described in detail on pages 26–28.

Vattenfall Treasury AB (publ) is described in the section on financial risk management on page 36. The other service companies offer the following services:

Vattenfall Fastigheter AB is the group's property management specialist, managing all buildings and properties in the Nordic countries other than production facilities and electricity substations. The company's property portfolio has a book value of SEK 984 million.

Vattenfall Support AB provides communications, human resources and office services for the Vattenfall group's activities throughout Sweden. These services are provided principally for the group but also for some external clients. The company recorded turnover of SEK 198 million in 1997.

Anneli Brolin and Martin Lund at Vattenfall Data AB help customers with day-to-day computer problems.

Vattenfall Data AB provides IT support and solutions. The company's services range from business analyses and system development through implementation and training to operation and maintenance. The company recorded turnover of SEK 334 million in 1997.

Vattenfall Insurance and *Vattenfall Reinsurance SA* in Luxembourg (captive company) are insurance specialists which provide cost-effective management of the group's insurable risks and serve as effective tools in insurance procurement and risk management.

Looking ahead

Vattenfall's work on the environment and R&D has also been affected by the increasing competition in the electricity market. Adopting a market-oriented, customer-centred approach and developing the right skills are becoming a matter of survival.

In 1997 Pappersgruppen introduced a High-Speed Generation (HSG) unit to provide electricity and heating for its warehouse facilities in Mölndal.

looking ahead

ENVIRONMENT

The environment as business opportunity

The deregulation of the energy market has made the environment a competitive tool. Environmental know-how is becoming ever more important for the development of new products and services, given that environmental benefits are also customer benefits. Vattenfall aims to be the environmental leader in its sector.

Extensive expertise

The Vattenfall group is home to broad range of environmental expertise and considerable experience of energy efficiency. Vattenfall provides a wide variety of environmental and energy-related services for its customers, with comprehensive one-stop energy management solutions like Färdig Värme (heat) and Färdig El (electricity) accounting for a growing share of turnover. A number of new services with a clear environmental profile were also introduced in 1997.

New products with an environmental profile

To take account of customer needs from an early stage, great importance is given to product development. In response to customers' environmental concern, Vattenfall introduced the option of choosing electricity from specific sources and electricity with an environmental declaration as an alternative to the standard mix in 1996. This option was marketed more actively in 1997.

Sound Environmental Choice

In 1997 the Swedish Society for Nature Conservation granted Vattenfall the right to use its Sound Environmental Choice label for 1.7 TWh of hydro power and 0.014 TWh of wind power generated each year. In February 1998 this was extended to cover a further 0.065 TWh of wind power annually.

Environmental management systems

Vattenfall aims to have environmental management systems in place throughout the group by December 1998. This initiative will include a special environmental training programme for all staff.

1997 saw the preparation of guidelines on green purchasing, which involves demanding certain standards of environmental performance from suppliers. The guidelines are expected to be adopted early in 1998.

Vattenfall leads the way in LCA

Vattenfall is the sector leader in life-cycle assessment. The life-cycle inventory for electricity generation compiled in 1996 was followed up with a similar exercise for electricity distribution in 1997 in conjunction with Svenska Kraftnät and Göteborg Energi. The environmental impact of electricity can now be described right through from generation to the customer. Vattenfall can supply an environmental declaration for the electricity it supplies, and this forms the basis for eco-labelling its products. A life-cycle inventory for the group's heating operations is also under way.

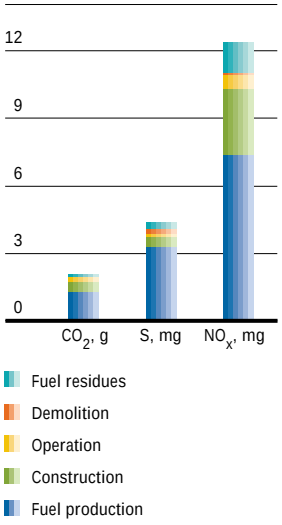
1997 brought an initiative to develop the work on inventories to encompass life-cycle analysis and environmental impact analysis. This process involves comparing the environmental impact of different forms of production in terms of not only emissions and the consumption of natural resources but also of financial considerations.

Environmental reporting

An intensive programme is under way to develop the group's environmental reporting systems and integrate them into its financial reporting. A key element in this work is to develop suitable environmental controls, indicators and reporting systems.

Vattenfall has already produced some environmental indicators to gauge its performance in 1998 relative to the targets set. These indicators will measure progress in the introduction of the group's environmental management systems and assess just how much of the group's business impacts directly on the environment. The indicators will be phased in during 1998.

Life-cycle inventory – Vattenfall's emissions to air from electricity generation (per kWh)



From a life-cycle perspective, most emissions to air come from fuel preparation and plant operation. Overall, this inventory shows that Vattenfall's generation system produces low levels of emissions.

A full description of Vattenfall's environmental work is published in a separate Environmental Performance Report. To order a copy, please phone +46 8 739 65 92.

looking ahead

RESEARCH AND DEVELOPMENT

R&D in a competitive market

The electricity sector has always been particularly capital-intensive with a forward-looking and production-oriented approach, but deregulation has transformed the market so that a market-oriented and customer-centred approach is now vital for survival. This impacts on Vattenfall's R&D activities, which are now being focused on the development of products and services which promote competitiveness. Vattenfall invested a total of SEK 460 million in R&D in 1997, equivalent to 1.6% of turnover.

Sharper focus on product development

There is growing demand for solutions that benefit the environment and increase customers' efficiency. In 1997 Vattenfall concentrated its resources on meeting this demand and bringing new products to market more rapidly. Product development is now very much a commercially oriented and group-wide process, with the ideas for new products emerging primarily from a dialogue with customers.

In 1997 over 500 new product ideas were received and more than ten new products saw the light of day. The target for 1998 is 40 new products.

User lab opens

A special user laboratory has been opened in Sweden as part of Vattenfall's sharper focus on product development. The laboratory is looking at new technology which will specifically benefit customers and users. Examples include electrically heated windows, solar powered cooling systems and micro processor monitored energy systems.

HSG

High-Speed Generation (HSG) is a new type of CHP generation based on a gas-turbine-driven high-speed turbo-generator. The technology is an example of the small-scale electricity and heat generation units for residential developments and elsewhere which are about to make a major breakthrough. HSG was developed by Vattenfall alongside Volvo and ABB, and has been demonstrated in Volvo's environmental concept cars. Advantages include a low initial outlay, an extremely compact unit, low maintenance needs and environmental friendliness.

In September a gas-powered demonstration unit producing 38 kW of electricity and 70 kW of heat was unveiled at paper company Pappersgruppen in Mölndal, Sweden. The demonstration project will run for five years.

Increasing efficiency, decreasing emissions

Since 1996 Vattenfall has been involved in an EU-funded project to develop and build an advanced coal-powder-fired power plant with a conversion efficiency as high as 55%. Part of Vattenfall's role is to transfer the results to biofuel-fired plants. Meanwhile, another project is looking into an evaporative gas turbine process that is also expected to achieve a conversion efficiency of 55% as well as low capital outlays.

Vattenfall's biofuel-fired power plant in Nässjö was fitted with a highly advanced flue gas condenser unit in 1997 to increase its heat output, and systems for increasing its conversion efficiency are being looked into. Vattenfall also has a long-term programme studying large-scale conversion of biofuels into electricity, but it looks like bioelectricity will be much more expensive to produce than standard electricity despite considerable technological improvements and cost reductions.

One example of a technological advance which pays off directly is the Vattenfall Low NO_X Engineering method, which has been used successfully to reduce nitrogen oxide emissions from large incineration units in the Nordic countries.

Elvira

The Elvira Environmental Foundation was set up by Vattenfall in 1996 to meet customers' calls for more rapid progress towards a sustainable energy system and a better environment in the Baltic region. Both private individuals and companies are invited to make donations to the foundation, with Vattenfall matching their contributions.

The foundation has gradually become

more widely known, with increases in both donations and applications for grants. In 1997 Elvira funded four projects, including what is considered to be one of the most interesting solar cell projects in the world. It involves the development of thin-film technology for solar cell modules to make them far more efficient than existing models.

Networks

Several R&D projects are focusing on new applications of IT. One is the development of mobile workstations, so that staff out at a plant, meter or customer have the same access to technical and commercial data as they would back at the office. Work on geographical information systems is also under way.

R&D projects with an environmental profile include studies of cables, concrete pylons and recycling.

Two projects are investigating practical methods for reducing the magnetic fields generated by power lines. One involves a four-cable set-up while the other is based on screening off the magnetic fields using a cable loop erected parallel with the power lines. Both methods are primarily suited to use along short sections of line.

Another example of development work at Electricity Networks is the TEMPLIFE computer program for more economical operation of transformers.

Electricity Networks also has long-term development programmes looking at materials and components, and conducts theoretical research in fields like power system technology.

Monitoring developments in EMF research

Vattenfall is supporting research into electromagnetic fields, with a special EMF steering group charged with monitoring developments and drawing up guidelines and policies.

Although the US National Research Council and others have noted that no causal link has ever been demonstrated between electromagnetic fields and health problems in 20 years of research, Vattenfall's policy is to play safe by trying to limit these fields as far as possible.

Defusing the year 2000 time-bomb

Vattenfall has been working on safeguarding its computer systems from the year 2000 time-bomb since 1996. After a preliminary study in early 1997, the group-wide Vattenfall Millennium Project was set up to manage and monitor the identification, analysis and modification/replacement of all components which could affect Vattenfall's operations at the turn of the century. Over 2,000 systems have been identified as potential risk factors and are now being worked on.

The bulk of the systems affected are at Electricity Generation and Electricity Networks, where the various system owners are working with suppliers to modify or replace components. Vattenfall is working closely with ABB, Alfa Laval Automation (SattControl) and Siemens on the problem, with around 50 people involved in helping the system owners. All critical systems are expected to be millennium-proof by late 1998 or early 1999. The total cost of the programme is difficult to estimate, but the extra work needed in 1998–99 is expected to run into a few hundred million Swedish kronor.

Several generators and distributors in Sweden have teamed up in a special initiative to deal with the year 2000 time-bomb. Their goal is to safeguard Sweden's electricity supply into the new millennium. The companies are also working with other sectors and with the authorities, and are represented in the Swedish IT Commission's Year 2000 Group where around 20 major companies are represented.

Swedish television channel TV4 will be donating SEK 100,000 to the Elvira Environmental Foundation in each of the next three years. TV4 aims to become one of the world's most environmentally friendly TV companies by the year 2000.

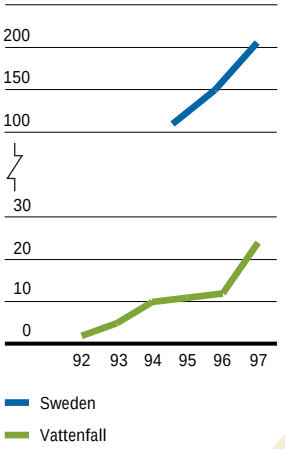
looking ahead

SUSTAINABLE ENERGY SOLUTIONS

In 1997 Vattenfall decided to instigate a long-term programme to develop the new electricity and heat generation technologies needed for a sustainable energy system. The Sustainable Energy Solutions programme will build on the knowledge already built up by Vattenfall through previous R&D work in areas like biofuels, wind power, solar power and energy efficiency.

The emphasis of the programme will be on developing and demonstrating systems and integrated energy solutions which might be commercially viable within five to ten years, such as wind power and the conversion of biofuels into electricity and heat. The programme includes participation in long-term research into solar cells and fuel cells.

Wind power output in Sweden (GWh)



Wind power output is increasing rapidly in Sweden. Vattenfall is the country's largest wind power producer.

Ash recycling

Since 1990 Vattenfall's Bioenergy Project has been investigating the potential role of biofuels in the group. The ash recycling project has now been completed and has provided a good deal of information on how the application of ash residues as fertilisers in the forestry industry can make the use of biofuels more environmentally friendly. The method is now undergoing trials at Vattenfall's CHP plant in Nässjö.

New fuel cell tested

Fuel cell technology is an interesting option for local small-scale production of electricity and heat. In the autumn of 1997 a new fuel cell unit was opened in Varberg. The unit has an installed capacity of 200 kW electricity and 200 kW heat and is being run in conjunction with Varberg Energi. The electricity and heat produced is being supplied to a local spa hotel complex. The main aim of the project is to provide more information on and experience of the technology and its development.

Investment in solar cell technology

SOLEL 97–99 is a national R&D programme looking at solar cell systems. Vattenfall is helping to finance the programme and carrying out some of the projects involved. The other main financiers are the Swedish Energy Agency (formerly NUTEK), the Swedish Council for Building Research, the Development Fund of the Swedish Construction Industry and several of the power companies behind electricity research company Elforsk. The goal is to come up with economical solar cells suitable for use within Sweden's existing electricity supply system, and to identify development projects that can increase the potential for solar cells in the system in future.

Demonstration of solar heating

Since 1996 Vattenfall has been working with the Swedish Energy Agency on a solar heating research, development and demonstration programme. The idea is to develop and test new components for solar heating systems and set up two or three major demonstration units each year. In Falun a demonstration unit is already in operation using the MaReCo solar panel, which has been specially designed for a Nordic climate. The system is expected to halve the cost of energy production using standard panels and reflectors. The Falun unit is linked to the local district heating system.

Elsewhere trials are under way using various forms of solar panels that can be fully integrated into building materials.

Wind power strides on

NORDIC 1000 is a 1 MW wind turbine prototype taken over from its manufacturer during the year. There are plans to install five large units in Malmö harbour.

In recent years Vattenfall has considerably expanded its wind power capacity. In the years ahead priority will be given to gaining more experience from the market.

looking ahead

HUMAN RESOURCES

Training and development

Vattenfall gives very high priority to training and development. Management development programmes are run in several parts of the group, and Vattenfall's trainee programme is a good example of the importance attached to training at other levels. With the onset of open competition, Vattenfall also needs to recruit new staff from outside to various key positions.

Recent years have seen the group's workforce shrink gradually, and this trend continued in 1997 with the average workforce reduced by 416 to 7,847 FTEs. Women account for 7% of technical posts and 14% of managerial positions. Further information on employee numbers and payroll costs can be found in note 34 on page 57.

Skills Swap programme

The deregulation of the electricity market and the associated rapid and extensive structural changes are having a major impact on Vattenfall's human resources.

Against this background the group started up an extensive Skills Swap programme last autumn. Its aim is to contribute proactively to the group's future human resources needs by providing training and development for the group's existing workforce. Vattenfall also takes other measures. The group needs to introduce major changes for around a thousand employees. The programme is set to run for two years and will account for much of the SEK 1 billion restructuring provision made in 1997.

The Skills Swap programme is at the heart of the group's human resources strategy. Given the group's stated aim of participating actively in the ongoing restructuring of the Northern European energy market, the rate of change at Vattenfall will be extremely rapid in the coming years. It is therefore essential to take practical steps to unleash the workforce's maximum development potential.

Corporate development

Corporate development at Vattenfall is centred on the concept of Quality at Vattenfall. The development strategy has its roots in the group's commercial goals and strategies, and is measured against the criteria set for the Swedish Quality Award.

The Head Start project involved preparing a procedure-based description of the entire Vattenfall group. The results of these analyses can now be used to further the group's development through more efficient procedures and so a sharper focus on customers' needs – whether stated or not.

A competition called Quality at Vattenfall was set up in 1996 to stimulate development and utilise the tools created through the work on the Swedish Quality Award. The winner in 1997 was Vattenfall VätterNät.

A new organisation, new distributors and new markets are just some of the challenges which face information flows and management systems and which need to be overcome if the group is to maintain its current rate of development. Vattenfall needs to have a support system that promotes flexibility and support in a phase of rapid restructuring. An in-depth analysis of possible solutions led to the decision to phase in SAP R/3 as Vattenfall's standard IT system. A group-wide project to introduce the system started in the autumn of 1997.

Vattenfall's human resources and corporate development strategies are now giving greater emphasis to sales and marketing work. Lena Nordkvist and Peter Ljung are project managers handling marketing campaigns aimed at household customers.

BRAND-BUILDING AT VATTENFALL

The Vattenfall brand name will be a vital asset for the group in the future.

In 1995 the group management took the decision to build up a strong brand name by the year 2000. The idea is that every customer – large or small – should instinctively think of Vattenfall when it comes to energy and energy solutions. Vattenfall's entire communications strategy is centred around this goal.

The background to this move is familiar by now: the deregulation of the electricity market and resulting growth in competition for customers. In an open market a strong brand name is one of the most important guarantees of competitiveness, profitability, employment and survival.

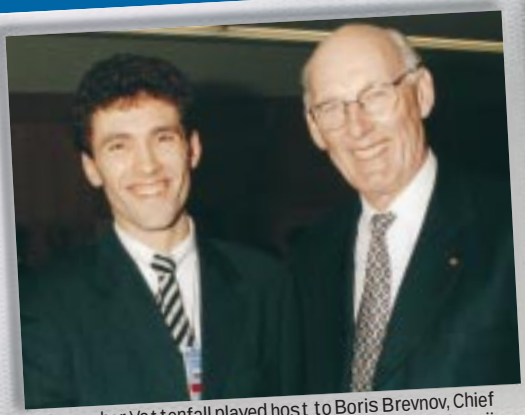
There are two key ingredients in brand-building: recognition and confidence. Simply for a company to be a household name is very important – which is why Vattenfall sponsors the Swedish national ski teams, and why Vattenfall invests in high-profile advertising campaigns on radio and TV, on hoardings and in the press.

The first step is to link the Vattenfall name inextricably with the benefits of electricity in day-to-day life. Gradually this picture of the company will be expanded to present Vattenfall as a reliable, responsible and service-oriented supplier of energy solutions.

Our surveys have shown that we are more than half-way there in terms of both recognition and confidence among household customers.

the year in pictures

The theme of the Vattenfall Symposium in February 1997 was "A world without frontiers". One of the speakers was UN human rights investigator Elisabeth Rehn, who spoke on "Europe today – a very different story".



In December Vattenfall played host to Boris Brevnov, Chief Executive of Russian electricity company RAO ESS Rossii. Seen here with Vattenfall Chief Executive Officer Carl-Erik Nyquist.

Vattenfall's energy attraction ELdorado on Gothenburg was opened in May 1997. There are eight rooms packed with activities for children of all ages, including a world-class and prize-winning 3D laser show. ELdorado had almost 200,000 visitors in its first year.

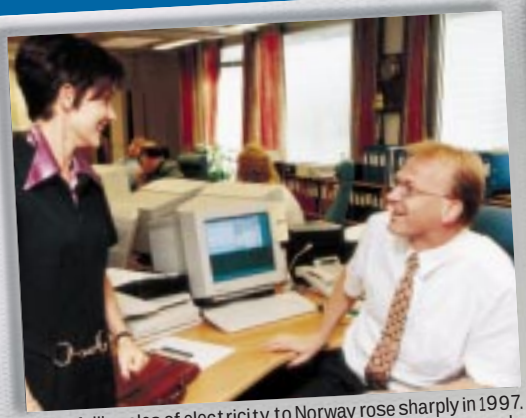
Lars Wirén, Head of Market Communications, presents an example of the autumn's hoarding and bus advertising campaign.

An advanced natural gas fuel cell was installed at the spa hotel in Varberg in September. Its practical size shows just how far small-scale technology could change the face of electricity supply in the future.

Hugo Klötzig and Rainer Beneke discuss the partnership between German energy company Stadtkraftwerke Schwerin and VASA Energy.

Håkan Nylund, Head of Public Relations at Vattenfall Oy in Finland, strengthens Vattenfall's profile at a trade fair in Helsinki.

Göran Öhlund instructs future operators of the Theun Hinboun project in Laos. Vattenfall has ownership interests in the project and Nordic Power Invest has been given operational responsibility.



Vattenfall's sales of electricity to Norway rose sharply in 1997. Here we see Market Communications Officer Åse Larsson and Customer Manager Arne Karlsen at Vattenfall AS in Oslo.

Hans Löwegren and Calle Ersson work on a new 10 kV power line on the island of Ornö off Stockholm.

Director of Vattenfall Communications Inger Holmström-Lindgren took part in a conference for female managers at Näsudden on Gotland, home to Vattenfall's wind power development programme.

The new Web Response service gives customers 24-hour access to Vattenfall. Jonna Olsson helped design the service.

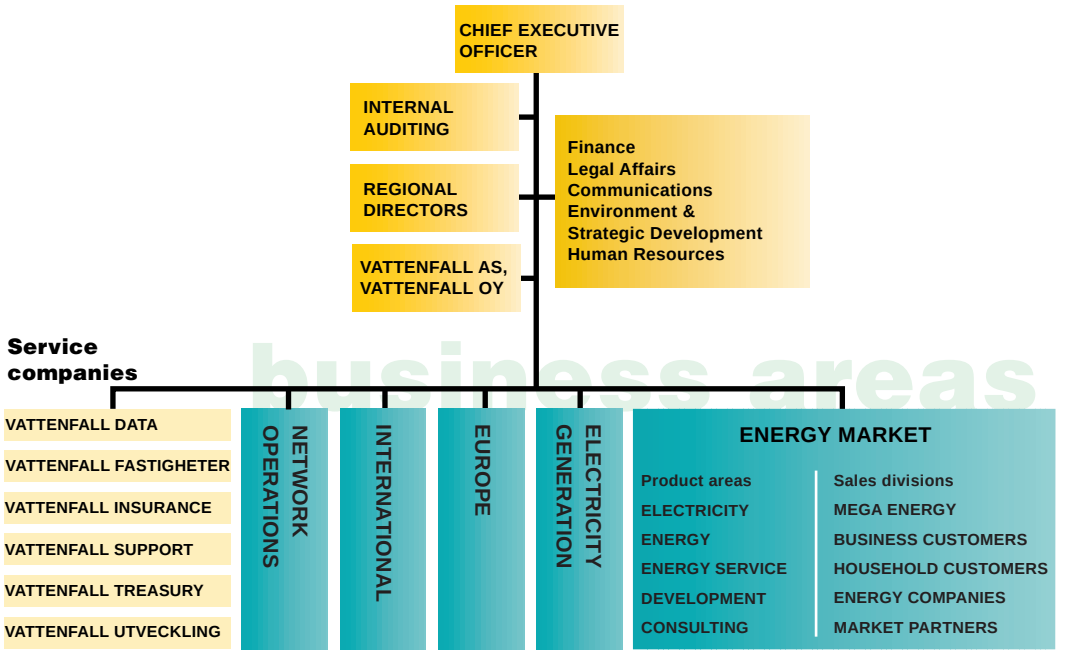
Hannu Kostianen, Chief Executive of Hämeen Sähkö Oy in Finland, often takes customers to ice hockey games in Hämeenlinna.

To ensure that the group has the skills needed in the future, Vattenfall has set up a trainee programme for 18 young business and engineering graduates.

Vattenfall sponsors cultural events as part of the work to build up image as a quality-conscious and customer-centred supplier. Sponsorship of the Swedish Radio Symphony Orchestra won an award in 1997.

New technology for repairing reactor vessel pipe connections was used with great success at the overhaul of the Forsmark nuclear plant.

In 1997 Vattenfall became the main sponsor of the Swedish alpine ski team. Pernilla Wiberg won both the World Cup overall and the slalom title.



New group structure for 1998

Vattenfall has decided to take a variety of steps to maximise its competitiveness and safeguard its strategic development. One such step was the introduction of a new group structure on 1 January 1998 to create a single Nordic sales organisation, promote more proactive product development and intensify the group's activities in the rest of Europe. Vattenfall now has five core business areas:

Vattenfall Energy Market is responsible for sales and development in the Nordic market and has been created through the merger of the Electricity Sales, Energy and Engineering business areas. The idea is to make Vattenfall more competitive by presenting a unified front in dealings with customers and by sharpening the focus on proactive product development. The business area comprises five product areas (Electricity, Energy, Energy Service, Development and Consulting) with a common sales organisation, itself split into five divisions (Mega Energy, Business Customers, Household Customers, Energy Companies and Market Partners). The Energy product area covers the group's heating and natural gas operations.

Vattenfall Electricity Generation is responsible for electricity generation and purchasing in the Nordic countries, including development in this field. The business area includes electricity supply operations, large power stations, plant operation contractor Vattenfall Generation Services AB, fuel company Vattenfall Bränsle AB and nuclear waste company Svensk Kärnbränslehantering AB.

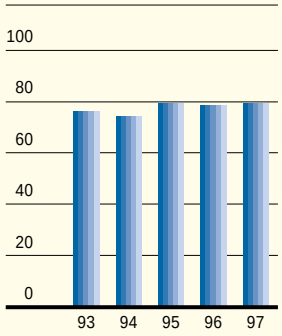
Vattenfall Europe is responsible for all the group's operations in the rest of Europe, including sales. The business area includes subsidiaries in Germany, Poland, Estonia, Latvia and Lithuania.

Vattenfall International is responsible for investments and operations in the rest of the world. The business area includes subsidiaries Nordic Power Invest AB and SwedPower AB and coordinates other subsidiaries' sales outside Europe.

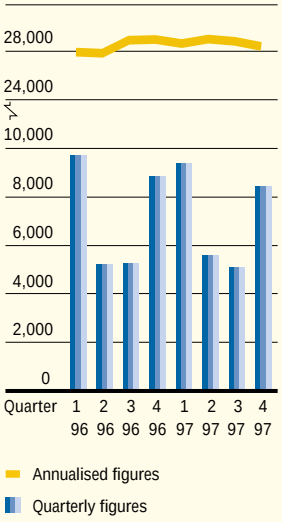
Vattenfall Network Operations is responsible for network customers and the development of network operations in the Nordic countries. The business area includes regional network company Vattenfall Regionnät AB, the local network companies in Sweden and Finland, network maintenance contractor Vattenfall ElnätService AB and metering company Vattenfall Energimätning AB.

Financial review

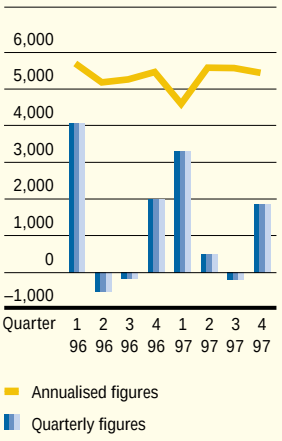
Electricity sales (TWh)



Turnover (SEK m)



Profit/loss before tax and minority interests (SEK m)



GROUP

The 1997 financial year was the second year of full competition in the Swedish electricity market. Deregulation has increased the level of competition, which is now having an impact on household customers too. The supply of electricity was higher than in 1996, bringing lower spot market prices. Vattenfall had a 22% (21) share of the Nordic electricity market by volume. Turnover dropped 2% to SEK 28,458 million, while electricity sales volumes rose 0.3 TWh to 78.7 TWh. The group generated satisfactory earnings despite the tougher competition, returning a profit before tax and minority interests of SEK 5,439 million (5,461).

Turnover and earnings

The slight drop in turnover to SEK 28,458 million (29,030) is attributable primarily to reduced income from electricity sales due to lower prices and reduced income from contracting activities. Income from heat and natural gas operations increased. As in 1996, Sweden accounted for 87% of turnover and the other Nordic countries for 12%.

The group generated an operating profit of SEK 7,376 million (7,672). The operating margin was 25.9% (26.4). The fall in operating profit is due mainly to lower margins. Note that the 1997 figure includes net exceptional items of SEK 163 million (cf note 6).

Net interest payable (excluding "income from other fixed asset securities") came to SEK 2,098 million (2,245). The early repayment of National Debt Office loans totalling SEK 3,471 million at the end of the year led to an additional charge of SEK 238 million. Excluding this charge, the net interest payable figure would have been SEK 385 million lower. The overall reduction in interest payable is due primarily to reduced borrowing and lower interest rates. Interest cover at the year-end was 3.2 times (2.8). The group's long-term target is to maintain interest cover of at least three.

Profit before tax and minority interests came to SEK 5,439 million (5,461), resulting in a pre-tax profit margin of 19.1% (18.8).

The group's tax charge was SEK 2,011 million (1,686), of which SEK 1,498 million (1,053) is attributable to the group's profits in 1997 and previous years.

The net profit for the year was SEK 3,399 million (3,725), resulting in a return on equity after full tax of 11.3% (13.5).

Financial position

The tangible fixed assets increased by SEK 267 million to SEK 55,668 million, including a SEK 929 million revaluation of natural gas network.

Liquid assets totalled SEK 3,961 million (4,321) at the year-end, equivalent to 13.9% (14.9) of turnover. This figure includes SEK 1,591 million (723) in current asset investments related to fully matched interest arbitrage transactions and arbitrage with refinancing risk. Averaged over the year, the group had liquid assets of around SEK 6,200 million (8,500), including SEK 1,300 million (3,300) relating to interest and refinancing risk arbitrage transactions.

Shareholders' equity rose SEK 2,283 million to SEK 31,158 million, due in part to an increase in the revaluation reserve after the appreciation of the natural gas network. The equity/assets ratio was 40% (37) at the year-end, which is 13 percentage points higher than in 1991. Vattenfall's target is to maintain an equity/assets ratio of 35–40%.

Minority interests in equity rose SEK 314 million to SEK 2,304 million, again due mainly to the revaluation of the natural gas network.

Interest-bearing provisions and liabilities, current and long-term loans and provisions for pensions and similar liabilities fell SEK 2,514 million to SEK 26,311 million. Net debt (defined as interest-bearing liabilities net of pension provisions less liquid assets) fell to SEK 18,751 million (20,982).

Interest-bearing liabilities fell SEK 2,591 million to SEK 22,712 million. The group repaid National Debt Office loans totalling SEK 5,206 million during the year.

Vattenfall has three commercial paper programmes and two Medium-Term Note programmes to give it more flexible financing options. The Commercial Paper programmes are backed up by a seven-year revolving credit facility of USD 600 million.

The maturity structure of Vattenfall's loan portfolio is illustrated on page 36. Foreign loans account for 63% of the total portfolio.

Vattenfall retained its high creditratings. The group has the highest possible short-term creditratings of P-1 from Moody's and A-1+/K-1 from Standard & Poor's. For international long-term borrowing Vattenfall has been awarded an Aa3 rating by Moody's and an AA rating by Standard & Poor's.

As a result of three-party agreement on energy policy in Sweden in February 1997, Standard & Poor's placed Vattenfall on CreditWatch, with negative implications meaning that its ratings might then have been confirmed or reduced. However, in June all the ratings were confirmed and Vattenfall was removed from the CreditWatch list.

Non-interest-bearing provisions rose SEK 1,932 million due to higher deferred tax liabilities (a result of increases in untaxed reserves) and to a SEK 914 million net rise in other provisions (primarily the provision for the Skills Swap programme).

Current interest-bearing liabilities rose SEK 5,045 million on account of short-term borrowing to refinance the repayment of National Debt Office loans.

Current non-interest-bearing liabilities fell SEK 2,147 million, primarily due to the reclassification as an income of deferred income in connection with the partnership with i/s Sjællandske Kraftværker.

Financing and investment

Internally generated funds amounted to SEK 7,869 million (7,455), resulting in degree of self-financing of 1.6 times (1.2). There was a net increase of SEK 2,659 million in working capital excluding liquid assets, against a net decrease of SEK 4,107 million in 1996.

The group's investments totalled SEK 4,877 million (5,984). These included SEK 902 million (611) in acquisitions of subsidiaries, SEK 470 million (332) in associated companies and SEK 549 million (2,272) in other fixed asset securities. SEK 2,953 million (2,688) was invested in tangible fixed assets, including SEK 1,328 million (953) in electricity generation facilities, SEK 888 million (956) in electricity networks, SEK 335 million (273) in heating systems and the remainder mainly in equipment, tools, fixtures and fittings. SEK 3 million (81) was invested in intangible fixed assets.

The reduction in long-term interest-bearing liabilities is primarily attributable to the early repayment of National Debt Office loans and the transfer of amounts due for repayment in 1998 to current liabilities. New long-term borrowing taken out during the year came to just over SEK 900 million. The average maturity of Vattenfall's overall loan portfolio fell from 4.9 to 3.8 years on account of the low level of new borrowing and the short-term financing for the prepayment of the National Debt Office loans.

Acquisitions and disposals

In January Vattenfall and the German company Kommunalfinanz set up the 50/50 joint venture VASA Energy GmbH & Co KG. Based in Hamburg, the company owns and operates small CHP plants in Germany.

January also saw the acquisition of a further 8.1% of the voting capital in Norwegian company Hafslund ASA, giving Vattenfall 20% of voting capital and 11.8% of total share capital.

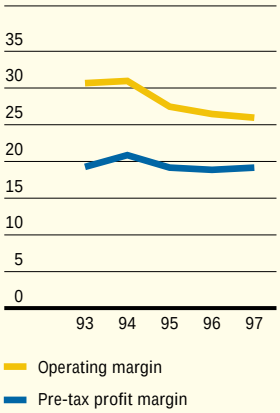
In May Vattenfall acquired 100% of the shares of Swedish power company Forsaströms Kraftaktiebolag, which sells electricity to 36,000 customers in southern Sweden through its own distribution network. The company also has a heating operation and owns some hydro and thermal power facilities.

May also brought the completion of the sale of 49% of the shares in Vattenfall Naturgas AB to four foreign gas companies.

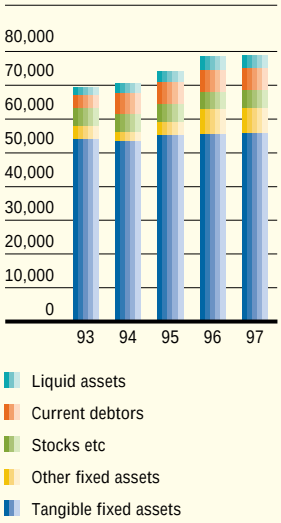
In June Vattenfall sold its holding in Gullspång Kraft AB (through Gullspång Intressenter AB) to Finland's Imatran Voima Oy. As part of the deal Vattenfall acquired 49% of Finnish hydro company Pamilo Oy in January 1998 and has been granted rights to generation capacity at EPV.

In October Vattenfall purchased 56% of Kraftledningar i Bergslagen 130 kV AB (KBAB), which operates a 130 kV regional network in central Sweden and supplies electricity to a number of large industrial customers. Vattenfall has acquired the remaining shares in the company since the year-end.

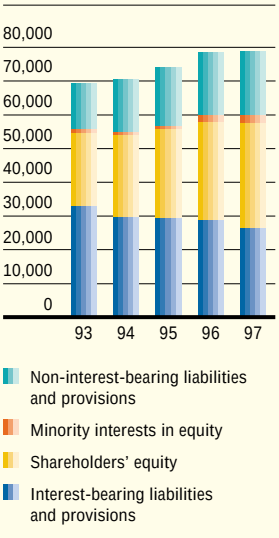
Profit margins (%)



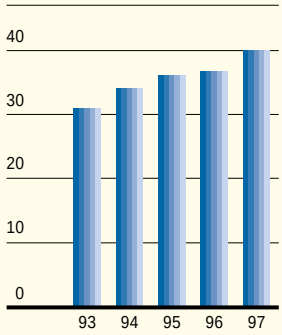
Assets (SEK m)



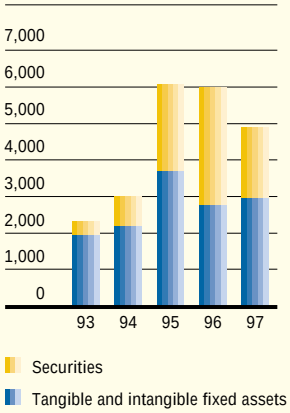
Liabilities, provisions and equity (SEK m)



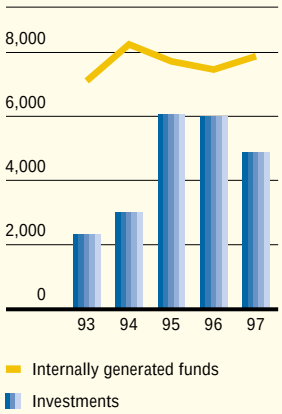
Equity/assets ratio (%)



Investments (SEK m)



Self-financing (SEK m)



The fourth quarter also saw the acquisition of a 7.75% stake in Czech company Vychodoceska Energetika a.s, which distributes around 6 TWh of electricity a year to 600,000 customers.

Vattenfall's partnership with i/s Sjællandske Kraftværker (SK) on the Avedøre 2 CHP plant in Denmark was reviewed during the year on the basis of the construction licence granted on 31 March. The partnership with SK gives Vattenfall the right to transmit electricity over the Kontek direct-current cable between Denmark and Germany, and to sell some of its electricity production to SK. As a result of the decision to continue the partnership, the deferred income of SEK 1,930 million reported in 1996, which arose from the sale of a minority interest in Kraftgården AB, was reclassified in December 1997.

December also brought an agreement on the acquisition of 99.7% of the shares in Flens Energinät AB, along with its subsidiary Flens Energi AB. The transaction will be completed during 1998.

Post balance sheet events

Vattenfall introduced a new group structure in January 1998 to make the group more competitive and cement the strategic direction set out by the board in 1997.

January also saw an agreement reached with Nacka Municipality on the acquisition of all the shares in electricity trading company Nacka Energimarknads AB.

A decision has been taken to embark on a project to identify measures that can reduce Vattenfall's costs by a total of SEK 1 billion over the next three years.

Offer documents have been sent to shareholders in connection with the proposed takeover of Falbygdens Energi AB and AB Ryssa Elverk.

Human resources

The average size of the workforce fell by 416 to 7,847 FTEs. The reduction is attributable primarily to the effects of the disposal of Engineering's contracting activities, natural wastage and streamlining measures at Electricity Networks. Total salaries and other remuneration came to SEK 2,531 million (2,391). Further information on employee numbers, payroll costs and the remuneration of senior executives can be found in note 34.

Research and development

Vattenfall's R&D activities are integrated into its general commercial operations. This means that each business area and service company is responsible for conducting its own R&D, with a sharp focus on the potential commercial value of the work. Coordination at group level is in the hands of Group Environmental Affairs and Development.

Total investments in R&D came to SEK 460 million (486), of which nuclear waste company Svensk Kärnbränslehantering AB accounted for SEK 139 million (121). R&D expenditure was equivalent to 1.6% (1.7) of turnover.

Decision to phase out nuclear power in Sweden

In June 1997 the Swedish parliament decided to begin phasing out Sweden's nuclear power capacity with the closure of Sydkraft's Barsebäck nuclear plant. One reactor is to be closed before 1 July 1998, and the other before 1 July 2001 provided that suitable compensation is in place in the form of new generation facilities and reduced electricity consumption. The necessary act of parliament was passed in December 1997 and the deadline for the closure of Barsebäck 1 was confirmed by the government in February 1998.

OPERATIONS

Electricity (Sales & Generation)

Electricity recorded turnover of SEK 20,496 million (21,145). Total sales of electricity to customers and the Nordic Power Exchange came to 81.8 TWh (80.9), including 3.1 TWh (2.5) sold internally and 4.4 TWh (4.9) sold on the Nordic Power Exchange (Nord Pool). A further 8.0 TWh (7.3) was supplied to parties with minority interests in power stations and the like.

The total 89.8 TWh (88.2) of electricity supplied breaks down into 79.1 TWh (76.9) generated internally and 10.7 TWh (11.3) bought in. 36.0 TWh (28.0) of hydro power and 43.0 TWh (48.8) of nuclear power were generated.

Reservoir inflow was above the norm, making for much higher availability than in the dry year of 1996. However, reservoir levels were low at the year-end because more hydro power was generated than usual to compensate for long overhaul-related outages at the group's nuclear plants.

Electricity made an operating profit of SEK 4,306 million (5,682). The reduction is attributable primarily to a change in depreciation rates for nuclear plant overhaul investments, lower margins and increased nuclear plant overhaul costs.

Total investments came to SEK 2,140 million (1,151), including SEK 727 million in assets transferred internally and then disposed of.

Energy

Energy recorded turnover of SEK 2,245 million (1,990), including SEK 1,097 million (967) in heat sales and SEK 958 million (832) in natural gas sales. In terms of volumes this translates into 3.7 TWh (3.2) of heat and 9.0 TWh (9.2) of natural gas. Energy made an operating profit of SEK 629 million (205), including net capital gains of SEK 382 million (51).

Total investments came to SEK 570 million (601), including SEK 133 million in shares transferred internally.

Electricity Networks

Electricity Networks recorded turnover of SEK 6,927 million (6,857), including SEK 6,286 million (6,334) in transmission income. Total transmission volumes came to 114 TWh. Electricity Networks made an operating profit of SEK 1,405 million (1,964). The drop is due mainly to restructuring provisions but also to low price rises and mild weather.

Total investments came to SEK 1,588 million (1,789).

Engineering

Engineering recorded turnover of SEK 443 million (768). The sharp fall is attributable primarily to the disposal of its contracting operations in the fourth quarter of 1996. Engineering made an operating profit of SEK 4 million (51). The 1996 figure includes net capital gains of SEK 59 million.

Total investments came to SEK 7 million (8).

International

International recorded turnover of SEK 132 million (188) and an operating loss of SEK 176 million (102). The loss reflects substantial development expenditure in connection with new investment projects.

Total investments came to SEK 694 million (322). These included investments in CHP generation at associated undertaking VASA Energy GmbH & Co KG and in electricity generation at Cobee, in which associated undertaking Tosli Investments BV has a 96% stake. Vattenfall also acquired a 7.75% holding in Czech distributor Vychodoceska Energetika a.s.

PARENT COMPANY

The parent company recorded turnover of SEK 20,312 million (21,325) and a net profit of SEK 3,730 million (2,700). Total investments came to SEK 3,282 million (4,381), while liquid assets closed the year at SEK 126 million (68). Deposits in the group-wide account managed by Vattenfall Treasury AB totalled SEK 10,996 million (8,783) at the year-end.

Proposed distribution of profits

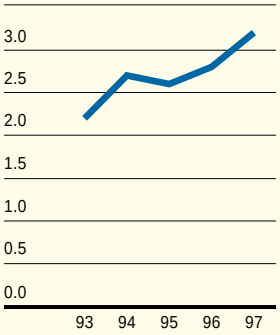
The group has distributable shareholders' equity of SEK 4,171,857,000 (3,589,098,000). Of this, SEK 4,919,000 is expected to be transferred to non-distributable reserves. Thus the Annual General Meeting has earnings of SEK 5,573,022,496 at its disposal. The board and the President propose that these be distributed as follows:

Dividend to shareholder	SEK 1,500,000,000
To be carried forward	SEK 4,073,022,496
	SEK 5,573,022,496

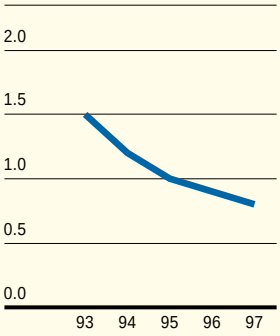
This is equivalent to a dividend of SEK 11.39 per share, which is the same as in 1996.

100% of the shares in Vattenfall AB are owned by the Swedish state.

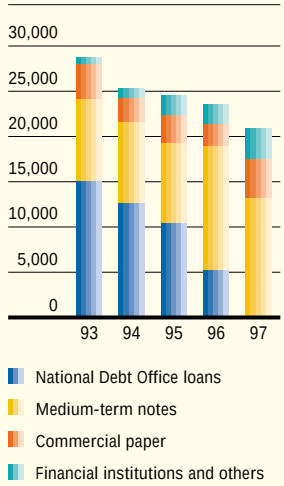
Interest cover (times)



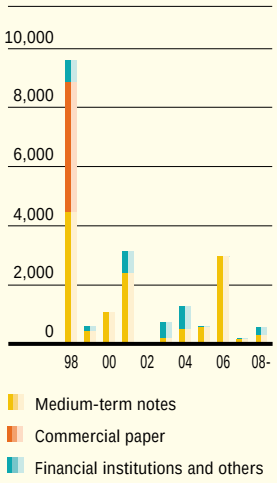
Debt cover (times)



Total borrowings* (SEK m)



Maturity structure* (SEK m)



** Excluding loans from minorities.*

FINANCIAL RISK MANAGEMENT

Vattenfall's financial management operations are handled by the wholly owned subsidiary Vattenfall Treasury AB, which is responsible for the group's investments and borrowings and for the management of the associated risks. Vattenfall Treasury serves as the group's internal bank, with almost 80 account-holders among the companies and units in the Vattenfall group. This centralisation of the group's financial management operations allows the other units to focus on their core activities.

Vattenfall Treasury works within the guidelines and limits set out by the board and group management as to interest and exchange rate exposure, counterparty risk, liquidity and availability of funds. Internal security and controls are given extremely high priority.

Financing risk

The group's operations are capital-intensive with major fluctuations in liquid assets over the year, and therefore the availability of funds – short-term as well as long-term – must be carefully planned. The target for short-term liquidity is for at least 10% of the group's turnover to be available in the form of liquid assets or committed credit lines. This target was exceeded by a good margin throughout 1997. Long-term liquidity is measured as the average maturity of the group's loan portfolio. The average maturity at the end of 1997 was 3.8 years (4.9). The group's loan portfolio was reduced in 1997 due to low levels of new borrowing and the use of short-term financing for the early repayment of National Debt Office loans totalling SEK 3,471 million at the end of the year. The loan portfolio's maturity structure is illustrated opposite.

Interest rate risk

Interest rate risk exposure relating to long-term borrowing is managed using a portfolio method whereby the average fixed-interest term of the loan portfolio is allowed to fluctuate by not more than 12 months either side of the target. This target is based on the time it takes to adjust sales prices. Other interest rate risk exposure is managed within the overall risk limit set for the group.

Exchange rate risk

The group's exchange rate risk exposure relates to the effects of exchange rate fluctuations on both future cash flows – transaction exposure – and the value of the net assets of foreign subsidiaries – translation exposure. Transaction exposure arises in connection with electricity sales, imports of fuels and other goods, and borrowing in foreign currencies. In general, no exchange rate exposure is permitted in the long-term loan portfolio. Other forms of transaction exposure are hedged mainly through matching and various forms of derivative. Any remaining exchange rate exposure is managed along with interest rate exposure within the overall risk limit set for the group. Translation exposure relates mainly to the Finnish subsidiaries. To reduce this exposure, major net investments are hedged through loans in foreign currencies. In the group accounts, any exchange rate differences arising on these loans are offset against translation differences in shareholders' equity.

Counterparty risk

Counterparty risk exposure in connection with investments, derivatives contracts and the like are managed within limits set on the basis of external creditratings. Only a number of large Nordic banks and financial institutions and counterparties with extremely high ratings are accepted. Before long-term swap contracts are entered into, an International Swaps and Derivatives Association agreement must be set up with the counterparty. Counterparty risk exposure from derivatives trading is quantified constantly through mark-to-market valuations plus a standard supplement for future changes in value in line with the method laid down by the Swedish Financial Supervisory Authority for institutions required to calculate capital adequacy ratios. Vattenfall has been given the same high creditratings by Standard & Poor's and Moody's for commitments under derivatives contracts as for long-term international borrowing (AA and Aa3).

		Group	
SEK million	note	**1997**	1996
Turnover	1, 2	**28,458**	29,030
Cost of products sold	4, 5	**–18,604**	–18,857
Gross profit		**9,854**	10,173
Selling expenses		**–1,064**	–912
Administration expenses		**–1,580**	–1,513
Research and development costs		**–460**	–486
Exceptional items, net	6	**163**	—
Other operating income		**850**	675
Other operating expenses		**–472**	–403
Participations in the result of associated companies	7	**85**	138
Operating profit	8	**7,376**	7,672
Result from other fixed asset securities	10	**161**	34
Other interest receivable and similar profit/loss items	11	**400**	712
Interest payable and similar profit/loss items	12	**–2,498**	–2,957
Profit before tax and minority interests		**5,439**	5,461
Taxes	14	**–2,011**	–1,686
Minority interests in the profit for the year	15	**–29**	–50
Net profit for the year		**3,399**	3,725

BUSINESS AREAS

	Turnover		Operating profit/loss	
SEK million	**1997**	1996	**1997**	1996
Electricity	**20,496***	21,145*	**4,306**	5,682
Energy	**2,245**	1,990	**629**	205
Electricity Networks	**6,927**	6,857	**1,405**	1,964
Engineering	**443**	768	**4**	51
International	**132**	188	**–176**	–102
Other and eliminations	**–1,785**	–1,918	**1,208**	–128
Total	**28,458**	29,030	**7,376**	7,672

* Excludes re-invoiced sales for transmission from business area Electricity Network.

SEK million	note	Group 31 Dec 97	31 Dec 96
ASSETS			
FIXED ASSETS			
Intangible fixed assets			
Concessions, patents, licences, trademarks and similar rights	16	**306**	218
Renting and similar rights	16	**815**	857
Goodwill	16	**187**	164
Total intangible fixed assets		**1,308**	1,239
Tangible fixed assets			
Buildings and land	17	**18,953**	19,276
Plant and machinery	17	**34,590**	33,893
Equipment, tools, fixtures and fittings	17	**790**	747
Construction in progress	17	**1,231**	1,295
Advances on tangible fixed assets	18	**104**	190
Total tangible fixed assets		**55,668**	55,401
Financial fixed assets			
Participations in associated companies	19, 20	**2,716**	2,950
Amounts owed by associated companies	18	**1,022**	425
Other fixed asset securities	19, 20	**805**	1,080
Other long-term debtors	18	**1,571**	1,614
Total financial fixed assets		**6,114**	6,069
Total fixed assets		**63,090**	62,709
CURRENT ASSETS			
Stocks etc	21	**5,513**	5,299
Current debtors	22	**6,308**	6,284
Current asset investments		**2,031**	3,491
Cash and bank balances		**1,930**	830
Total liquid assets		**3,961**	4,321
Total current assets		**15,782**	15,904
Total assets		**78,872**	78,613

SEK million	note	Group 31 Dec 97	31 Dec 96
EQUITY, PROVISIONS AND LIABILITIES			
Shareholders' equity	24		
Non-distributable equity			
Share capital		**6,585**	6,585
Revaluation reserve		**341**	—
Equity proportion reserve		**512**	422
Other non-distributable reserves		**19,549**	18,279
Distributable equity			
Distributable reserves		**772**	–136
Net profit for the year		**3,399**	3,725
Total shareholders' equity		**31,158**	28,875
Minority interests in equity		**2,304**	1,990
Interest-bearing provisions	25	**3,599**	3,522
Non-interest-bearing provisions	26	**9,942**	8,010
Total provisions		**13,541**	11,532
Long-term interest-bearing liabilities	27	**13,127**	20,763
Long-term non-interest-bearing liabilities	28	**2,101**	1,710
Total long-term liabilities		**15,228**	22,473
Current interest-bearing liabilities	29	**9,585**	4,540
Current non-interest-bearing liabilities	30	**7,056**	9,203
Total current liabilities		**16,641**	13,743
Total equity, provisions and liabilities		**78,872**	78,613
Pledged assets	31	**1,527**	1,507
Contingent liabilities	32	**7,754**	1,351
Commitments under consortium agreements	33		

SEK million	Group 1997	1996
Internally generated funds from the year's operation		
Profit before tax and minority interests net of capital gains/losses	**5,161**	5,371
Depreciation	**4,248**	3,285
Current tax	**–1,498**	–1,053
Participations in the result of associated companies	**–85**	–138
Translation adjustments not charged to profit and loss account	**43**	–10
Total internally generated funds from the year's operation (cash flow)	**7,869**	7,455
Change in working capital excluding liquid assets		
Increase in stocks etc	**–214**	–37
Increase (–) / decrease (+) in current debtors	**–25**	409
Increase (+) / decrease (–) in current liabilities	**2,898**	–4,479
Total change in working capital excluding liquid assets	**2,659**	–4,107
Cash flow before investments	**10,528**	3,348
Investments and disposals		
Acquisitions of subsidiaries	**–902**	–611
Investments in associated companies and other fixed asset securities	**–1,019**	–2,604
Investments in tangible fixed assets	**–2,953**	–2,688
Investments in intangible fixed assets	**–3**	–81
Change in group structure	**29**	62
Disposals of subsidiaries	**392**	197
Disposals of associated companies and other fixed asset securities	**1,645**	25
Disposals of tangible fixed assets	**198**	295
Translation adjustments	**–8**	–74
Cash flow after investments	**7,907**	–2,131
Financing, dividends etc		
Decrease in advances to suppliers	**86**	17
Increase in amounts owed by associated companies and other long-term debtors	**–554**	–354
Increase in provisions net of deferred tax	**991**	159
Decrease (–) / increase (+) in long-term liabilities	**–7,245**	4,639
Contribution from minority shareholders	**—**	436
Dividends to minority shareholders	**–45**	–44
Dividends	**–1,500**	–1,500
Change in liquid assets	**–360**	1,222
Liquid assets		
Opening balance	**4,321**	3,099
Change in current asset investments	**–1,460**	1,732
Change in cash and bank balances	**1,100**	–510
Closing balance	**3,961**	4,321

		Parent company	
SEK million	note	**1997**	1996
Turnover	1, 2, 3	**20,312**	21,325
Cost of products sold	4, 5	**–15,395**	–16,065
Gross profit		**4,917**	5,260
Selling expenses		**–656**	–600
Administration expenses		**–1,202**	–827
Research and development costs		**–270**	–323
Exceptional items, net	6	**381**	—
Other operating income		**284**	324
Other operating expenses		**–221**	–192
Operating profit	8	**3,233**	3,642
Result from participations in subsidiaries	9	**1,037**	526
Result from participations in associated companies	7	**11**	23
Result from other fixed asset securities	10	**882**	1,187
Other interest receivable and similar profit/loss items	11	**458**	263
Interest payable and similar profit/loss items	12	**–1,673**	–1,850
Profit before transfers and tax		**3,948**	3,791
Transfers to/from untaxed reserves	13	**–197**	–1,003
Group tax equalisation contributions, net		**1,020**	699
Profit before tax		**4,771**	3,487
Tax	14	**–1,041**	–787
Net profit for the year		**3,730**	2,700

	Parent company	
SEK million	**1997**	1996
Internally generated funds from the year's operation		
Profit before transfers and tax net of capital gains/losses	**1,195**	3,546
Depreciation	**1,993**	1,267
Tax	**–1,053**	–787
Total internally generated funds from the year's operation (cash flow)	**2,135**	4,026
Change in working capital excluding liquid assets		
Increase (–) / decrease) (+) in stocks	**–70**	32
Increase (–) / decrease) (+) in current debtors	**–3,257**	27
Increase in current liabilities	**524**	660
Merger-related adjustment of working capital	**–302**	—
Total change in working capital excluding liquid assets	**–3,105**	719
Cash flow before investments	**–970**	4,745
Investments in tangible and intangible fixed assets	**–935**	–912
Investments in subsidiaries, associated companies and other fixed asset securities	**–2,347**	–3,469
Disposals of tangible and intangible fixed assets	**259**	185
Disposals of subsidiaries, associated companies and other fixed asset securities	**5,811**	265
Cash flow after investments	**1,818**	814
Increase (–) / decrease) (+) in long-term debtors	**–267**	31
Increase in provisions net of deferred tax	**932**	110
Decrease in long-term liabilities	**–1,945**	–87
Group tax equalisation contributions, net	**1,020**	699
Dividends	**–1,500**	–1,500
Net change in liquid assets	**58**	67

		Parent company	
SEK million	note	**31 Dec 97**	31 Dec 96
ASSETS			
FIXED ASSETS			
Intangible fixed assets			
Concessions, patents, licences, trademarks and similar rights	16	**21**	29
Renting and similar rights	16	**736**	769
Total intangible fixed assets		**757**	798
Tangible fixed assets			
Buildings and land	17	**13,426**	13,826
Plant and machinery	17	**10,621**	11,061
Equipment, tools, fixtures and fittings	17	**206**	192
Construction in progress	17	**618**	592
Advances on tangible fixed assets	18	**43**	97
Total tangible fixed assets		**24,914**	25,768
Financial fixed assets			
Participations in subsidiaries	19, 20	**5,861**	4,931
Amounts owed by subsidiaries	18	**300**	303
Participations in associated companies	19, 20	**585**	2,098
Amounts owed by associated companies	18	**336**	35
Other fixed asset securities	19, 20	**531**	786
Other long-term debtors	18	**121**	98
Total financial fixed assets		**7,734**	8,251
Total fixed assets		**33,405**	34,817
CURRENT ASSETS			
Stocks etc	21	**1,810**	1,740
Current debtors	22	**16,269**	13,012
Current asset investments		**59**	49
Cash and bank balances		**67**	19
Total liquid assets	23	**126**	68
Total current assets		**18,205**	14,820
Total assets		**51,610**	49,637
EQUITY, PROVISIONS AND LIABILITIES			
Shareholders' equity	24		
Non-distributable equity			
Share capital (131, 700,000 shares @SEK 50 par)		**6,585**	6,585
Statutory reserve		**1,316**	1,316
Distributable equity			
Profit brought forward		**1,843**	643
Net profit for the year		**3,730**	2,700
Total shareholders' equity		**13,474**	11,244
Untaxed reserves	13	**11,107**	10,910
Interest-bearing provisions	25	**2,864**	2,793
Non-interest-bearing provisions	26	**923**	27
Total provisions		**3,787**	2,820
Long-term interest-bearing liabilities	27	**5,464**	7,162
Long-term non-interest-bearing liabilities	28	**5,832**	6,079
Total long-term liabilities		**11,296**	13,241
Current interest-bearing liabilities	29	**4,297**	2,137
Current non-interest-bearing liabilities	30	**7,649**	9,285
Total current liabilities		**11,946**	11,422
Total equity, provisions and liabilities		**51,610**	49,637
Pledged assets	31	**—**	—
Contingent liabilities	32	**48,402**	43,775
Commitments under consortium agreements	33		

ACCOUNTING POLICIES

In 1997 the group modified its basis of accounting in line with Sweden's new Annual Accounts Act. The main impact is a change in the layout of the profit and loss account and balance sheet. In addition, interests in associated companies are now reported using the equity method. The figures for previous years have been restated accordingly to aid comparison.

Basis of consolidation

The group accounts cover the parent company and all companies in which Vattenfall held more than 50% of the voting capital or in some other way held a controlling interest at the year-end.

The group accounts have been prepared in line with Swedish Financial Accounting Standards Council Recommendation RR 1:96.

The group accounts have been prepared using the acquisition method of accounting. This means that the group's equity includes only the group's share of a subsidiary's post-acquisition earnings. A subsidiary's assets and liabilities are included in the group balance sheet at their market value. Any outstanding difference between book value and acquisition cost is recorded separately as goodwill.

Where a subsidiary is acquired during the year, the group profit and loss account includes only the results of its operations after acquisition. Where a subsidiary is disposed of during the year, the group profit and loss account includes the results of its operations before disposal.

Internal gains on sales between group companies are eliminated in their entirety.

Associated companies are accounted for using the equity method. The group's share of an associated undertaking's pre-tax profit, net of any goodwill amortisation charges, is reported in the group profit and loss account under "Participations in the result of associated companies ". The group's share of an associated company's tax charge and deferred tax liabilities is included in the group's tax charge.

For practical reasons the results of associated companies are included in the group accounts after a slight delay, normally one calendar quarter. Dividends from associated companies are not included in the group's profit. The book value of the group's interest in an associated company is adjusted to take account of the group's share of the undertaking's net profit net of any dividends received and any surplus values amortisation charges.

Foreign exchange

When preparing the group accounts all profit and loss account items at a foreign subsidiary are translated into Swedish kronor at the average exchange rate for the year, while all balance sheet items except for the year's profit/loss are translated at the exchange rate ruling at the year-end. Changes in the group's equity resulting from fluctuations in the year-end exchange rate from one year to the next are dealt with as movements in distributable and non-distributable reserves as appropriate. The difference arising in the group's balance sheet on account of the net profit of the foreign subsidiary being translated at the average exchange rate for the year is dealt with as a movement in the group's distributable equity.

Debtors and liabilities denominated in foreign currencies are valued at the year-end exchange rates, both by the individual group companies and in the group accounts. When hedging, the spot rate on the date that the currency was hedged is used in the valuation of the underlying receivable or liability. The individual Swedish companies report unrealised exchange gains on long-term debtors and liabilities in a separate foreign exchange reserve. The group accounts divide the gains into a deferred tax liability portion and an equity portion in untaxed reserves.

Exchange rate differences on loans and other financial instruments denominated in foreign currencies used to hedge net assets at foreign subsidiaries are offset (taking account of the tax effect) against translation differences in the subsidiaries' equity.

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

The most important exchange rates used in the group accounts are as follows:

Key exchange rates applied in the group accounts:

		Average		Year-end	
Country	**Currency**	**1997**	1996	**31 Dec 97**	31 Dec 96
Denmark	DKK	**1.158**	1.161	**1.154**	1.156
Finland	FIM	**1.475**	1.458	**1.453**	1.479
Norway	NOK	**1.082**	1.040	**1.072**	1.066
Germany	DEM	**4.417**	4.475	**4.398**	4.420
USA	USD	**7.609**	6.732	**7.870**	6.870

Appropriations, deferred tax provisions and untaxed reserves

Tax legislation in Sweden and some other countries allows companies to defer tax payments through transfers to untaxed reserves.

The group balance sheet divides untaxed reserves into a deferred tax liability portion, which is reported as a provision, and an equity portion, which is included under non-distributable equity. The deferred tax liability portion is calculated on the basis of the anticipated tax rate for the following year in each country (in Sweden's case 28%).

The group profit and loss account includes no transfers to/from untaxed reserves. The group's tax charge is calculated as the sum of the tax charges reported by the parent company and subsidiaries adjusted for the effects of transfers to/from untaxed reserves. This adjustment is equivalent to the year's change in the deferred tax liability portion of these untaxed reserves and is reported under deferred tax liabilities in the group balance sheet.

The parent company and subsidiaries report untaxed reserves as a separate balance sheet item and transfers to/from untaxed reserves as a separate profit and loss account item. The tax charge reported comprises the tax payable on their profit after transfers to/from untaxed reserves.

Turnover

Turnover is reported net of value-added tax and other indirect taxes (primarily energy taxes). Connection charges paid by customers for connection to the electricity network are taken to income at the time of connection.

Research and development

R&D costs are charged against income as they are incurred.

Depreciation and amortisation

Depreciation is calculated on a straight-line basis over the estimated useful life of an asset. The depreciation charge is distributed between the relevant items in the profit and loss account. The parent company also applies accelerated depreciation charges, which are reported under transfers to/from untaxed reserves in the profit and loss account and under untaxed reserves in the balance sheet.

Depreciation rates (years)

	Plant and machinery	Buildings	Land improvements
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 nuclear plant overhaul investments, cf note 6
** 25–35 years for local distribution networks

Intangible fixed assets are amortised over an appropriate period but no longer than any underlying agreement. Goodwill acquired before 1997 is amortised over no more than ten years, while goodwill acquired in 1997 is amortised over no more than five years.

Fixed assets

Tangible and intangible fixed assets are valued at cost plus upward revaluations less accumulated depreciation/amortisation. Upward revaluations are reported taking account of deferred tax. The cost of large plants built for the group's own account includes interest accrued during their construction. This interest is capitalised for plants costing more than SEK 100 million.

Stocks etc

Stocks are valued at the lower of cost and net realisable value using the first-in/first-out principle. Consumption of nuclear fuels is calculated as a reduction in the energy content of the fuel rods and based on the cost of each fuel batch. The value of the energy stored in the form of water in reservoirs is not reported as an asset.

Work in progress and income recognition

Contracts divide into cost-plus contracts and fixed-price contracts. Income from the former is recognised 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 percentage of completion of the contract in question.

Debtors

Debtors are reported 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 value at the year-end. Unrealised losses are offset against unrealised gains. Where losses exceed gains, the surplus is charged against income; where gains exceed losses, the surplus is not included in income.

Pensions

When Vattenfall was incorporated, the group took over the relevant pension liabilities accrued by the state. In the case of most 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 organised into the pension plans and insurance schemes standard in the markets in which Vattenfall operates. This applies to employees at the Swedish companies and some employees at foreign subsidiaries. The provision shown in the balance sheet has been calculated using actuarial principles.

New basis of accounting

In the 1997 accounts and the restated figures for 1996, associated companies have been accounted for using the equity method (cf above section on basis of consolidation). The effects of the application of the equity method on the group's profit and loss account and balance sheet are illustrated below in line with Swedish Financial Accounting Standards Council Recommendation RR 5:

	1996 New basis	1996 Previous basis
Group profit and loss account		
Turnover	**29,030**	29,030
Operating profit	**7,672**	7,534
Profit before tax and minority interests	**5,461**	5,367
Taxes	**–1,686**	–1,659
Minority interests in profilt for the year	**–50**	–50
Net profit for the year	**3,725**	3,658
Group balance sheet		
Assets		
Investments in associated companies	**2,950**	2,528
Other assets	**75,663**	75,663
Total assets	**78,613**	78,191
Equity, provisions and liabilities		
Shareholders' equity	**28,875**	28,453
Provisions	**11,532**	11,532
Liabilities	**38,206**	38,206
Total equity, provisions and liabilities	**78,613**	78,191

NOTE 1
TURNOVER

	Group		Parent company	
	1997	1996	**1997**	1996
Sales including indirect taxes	**29,874**	30,097	**21,255**	22,144
Indirect taxes	**–1,416**	–1,067	**–943**	–819
Turnover	**28,458**	29,030	**20,312**	21,325

NOTE 2
TURNOVER BY BUSINESS AREA

	Group		Parent company	
	1997	1996	**1997**	1996
Electricity	**20,496***	21,145*	**19,685**	20,727
Energy	**2,245**	1,990	**806**	621
Networks	**6,927**	6,857	**87**	103
Engineering	**443**	768	**—**	—
International	**132**	188	**4**	4
Other/adjustments	**–1,785**	–1,918	**–270**	–130
Total	**28,458**	29,030	**20,312**	21,325

* Excludes re-invoiced sales for transmission from business area Electricity Network.

Sweden accounted for 87% (87) of turnover and the other Nordic countries for 12% (12).

NOTE 3
INTRA-GROUP TRANSACTIONS

Transactions with subsidiaries accounted for 9% (8) of the parent company's turnover and 49% (49) of its costs.

NOTE 4
COST OF PRODUCTS SOLD

Cost of sales includes production taxes and duties of SEK 1,629 million (2,609) for the group and SEK 1,038 million (1,586) for the parent company, as well as property taxes of SEK 1,390 million (416) for the group and SEK 1,124 million (302) for the parent company. With effect from 1997 the production tax on hydro power has taken the form of a property tax based on taxable land values.

NOTE 5
COST OF HANDLING NUCLEAR WASTE

	Group		Parent company	
	1997	1996	**1997**	1996
Fee to Swedish Nuclear Waste Fund	**560**	928	**214**	482
Provisions for future low/intermediate-level waste	**59**	69	**37**	46
Total	**619**	997	**251**	528

Under the act of parliament on the financing of the future cost of dealing with spent nuclear fuels (1995: 1,544), those with a licence to own or operate a nuclear reactor are to pay an annual fee to finance the handling of spent nuclear fuels and other radioactive waste. This fee is to be paid to the Swedish Nuclear Waste Fund and is based on the amount of energy supplied from the reactor. The fund then returns these fees in the form of government grants when the owner/operator incurs costs for (a) handling and storing spent nuclear fuels and other radioactive waste from the reactor once removed from the plant; (b) decommissioning and demolishing the reactor unit; or (c) research and development required for (a) and (b) to take place.

In 1997 a total of SEK 355 million (262) was paid out by the fund in respect of costs which the Vattenfall group is liable to pay. The market value of the group's share of the fund at the year-end was SEK 13,324 million (12,046). A total of SEK 197 million (146) was paid out by the fund in respect of the parent company's share, which had a market value of SEK 7,390 million (6,754) at the year-end.

NOTE 6
EXCEPTIONAL ITEMS

	Group		Parent company	
	1997	1996	**1997**	1996
Capital gains on sales of generation facilities	**1,930**	—	**1,930**	—
Change in depreciation rates	**–752**	—	**–699**	—
Restructuring provision	**–1,015**	—	**–850**	—
Total	**163**	—	**381**	—

The prepayment which arose in 1996 in respect of the sale of a minority holding in Kraftgården AB to i/s Sjællandske Kraftværker was reclassified as income in 1997 to give the group and parent company a capital gain of SEK 1,930 million.

The estimated useful life of nuclear plant overhaul investments has been reduced from 25 years to 15 years, resulting in a one-off increase in depreciation charges of SEK 752 million for the group and SEK 699 million for the parent company.

The rapid transformation of the electricity market is necessitating changes in the group's skills profile and increases in efficiency. The group has set aside SEK 1,015 million for these measures and the parent company SEK 850 million.

NOTE 7
PARTICIPATIONS IN THE RESULT OF ASSOCIATED COMPANIES

	Group		Parent company	
	1997	1996	**1997**	1996
Share of profits	**85**	116	**—**	—
Dividends	**—**	—	**11**	23
Capital gains on disposals	**—**	22	**—**	—
Total	**85**	138	**11**	23

Goodwill of SEK 267 million arose in connection with the acquisition of 50% of the German distributor VASA Energy GmbH & Co KG. Swedish Financial Accounting Standards Council Recommendation RR 1:96 requires goodwill to be amortised over five years unless a longer period can be justified, and then over a maximum of 20 years. Vattenfall's entry into the European market must be seen as a strategic move, and the investment and associated goodwill are being treated accordingly. Similarly, a number of major agreements with customers run for more than five years. The annual effect of amortising goodwill over ten years rather than five is SEK 26.7 million.

NOTE 8
DISTRIBUTION OF DEPRECIATION CHARGES BY PROFIT AND LOSS ACCOUNT ITEMS

	Group		Parent company	
	1997	1996	**1997**	1996
Cost of products sold	**3,367**	3,186	**1,260**	1,207
Selling expenses	**51**	65	**23**	50
Administration expenses	**77**	33	**10**	9
Research and development costs	**1**	1	**1**	1
Exceptional items	**752**	—	**699**	—
Total	**4,248**	3,285	**1,993**	1,267

NOTE 9
RESULTS FROM INTERESTS IN SUBSIDIARIES

	Parent company	
	1997	1996
Dividends	**302**	366
Shareholder contributions	**–28**	–2
Write-downs	**–265**	–4
Capital gains on disposals	**1,028**	166
Total	**1,037**	526

NOTE 10
RESULT FROM OTHER FIXED ASSET SECURITIES

	Group		Parent company	
	1997	1996	**1997**	1996
Dividends	**97**	2	**4**	—
Interest receivable	**—**	—	**813***	1,141
Capital gains on disposals	**64**	32	**65**	46
Total	**161**	34	**882**	1,187

* Includes SEK 754 million (839) in interest receivable from subsidiaries.

NOTE 11
OTHER INTEREST RECEIVABLE AND SIMILAR PROFIT/LOSS ITEMS

	Group		Parent company	
	1997	1996	**1997**	1996
Interest receivable	**374**	705	**399***	244
Exchange gains	**26**	7	**59**	19
Total	**400**	712	**458**	263

* Includes SEK 399 million (222) in interest receivable from subsidiaries.

NOTE 12
INTEREST PAYABLE AND SIMILAR PROFIT/LOSS ITEMS

	Group		Parent company	
	1997	1996	**1997**	1996
Interest payable *	**2,467*****	2,940	**1,569****	1,836
Exchange losses	**31**	17	**104**	14
Total	**2,498**	2,957	**1,673**	1,850

* In line with Swedish Institute of Authorised Public Accountants Recommendation FAR 4, the interest element in pension provisions has not been charged against operating profit but reported under interest payable.
** Includes SEK 1,421 million (1,630) in interest payable to subsidiaries.
*** The early repayment of National Debt Office loans at the end of 1997 led to a compensatory interest charge of SEK 238 million.

NOTE 13
TRANSFERS TO/FROM UNTAXED RESERVES

Parent company 1997	**1 Jan**	**Change**	**31 Dec**
Accelerated depreciation	9,616	**–518**	**9,098**
1996 tax allocation reserve	363	**—**	**363**
1997 tax allocation reserve	931	**—**	**931**
1998 tax allocation reserve	—	**715**	**715**
Total	10,910	**197**	**11,107**

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

1996 saw the following movements in untaxed reserves: SEK 91 million to accelerated depreciation, SEK 19 million from foreign exchange reserve and SEK 931 million to 1997 tax allocation reserve.

NOTE 14
TAXES

	Group		Parent company	
	1997	1996	**1997**	1996
Direct tax on profit for 1997 and previous years	**1,498**	1 ,053	**1,053**	787
Share of tax at associated companies	**23**	27	**—**	—
Deferred tax	**490**	606	**–12**	—
Total	**2,011**	1,686	**1,041**	787

The year's tax charge of SEK 2,011 million (1,686) is equivalent to 37% (31) of profit before tax and minority interests.

The parent company's invisible deferred tax charges on transfers to untaxed reserves in 1997 is SEK 55 million (281).

No deferred tax assets have been reported for 1997's restructuring provision.

Like many other major Swedish companies, Vattenfall companies have been subject to regularly scheduled tax examinations. These examinations are still in progress. The tax authorities' opinions have been evaluated and appropriate provisions have been made for estimated additional tax charges.

NOTE 15
MINORITY INTERESTS IN PROFIT FOR THE YEAR

	Group	
	1997	1996
Share of profit before tax	**24**	75
Share of tax	**5**	–25
Total	**29**	50

NOTE 16
INTANGIBLE FIXED ASSETS

	Concessions and similar rights		Renting and similar rights		Goodwill		Total	
	1997	1996	**1997**	1996	**1997**	1996	**1997**	1996
Group								
Cost								
Opening balance	**408**	15	**925**	812	**515**	684	**1,848**	1,511
Balances in subsidiaries acquired	**133**	41	**3**	6	**48**	—	**184**	47
Additions	**1**	29	**2**	46	**—**	6	**3**	81
Reclassifications	**—**	328*	**—**	62	**—**	–175	**—**	215
Translation adjustments	**–3**	–5	**–1**	–1	**—**	—	**–4**	–6
Closing balance	**539**	408	**929**	925	**563**	515	**2,031**	1,848
Amortisation according to plan								
Opening balance	**–190**	–2	**–68**	–16	**–351**	–456	**–609**	–474
Balances in subsidiaries acquired	**—**	—	**–3**	—	**—**	—	**–3**	—
Year's amortisation charges	**–44**	–58	**–43**	–44	**–24**	–25	**–111**	–127
Reclassifications	**—**	–130	**—**	–8	**—**	130	**—**	–8
Balances subsidiaries sold	**—**	—	**—**	—	**–2**	—	**–2**	—
Translation adjustments	**1**	—	**—**	—	**1**	—	**2**	—
Closing balance	**–233**	–190	**–114**	–68	**–376**	–351	**–723**	–609
Residual value according to plan	**306**	218	**815**	857	**187**	164	**1,308**	1,239
Parent company								
Cost								
Opening balance	**198**	—	**806**	749	**—**	172	**1,004**	921
Additions	**—**	23	**—**	60	**—**	—	**—**	83
Reclassifications	**—**	175	**—**	–3	**—**	–172	**—**	—
Closing balance	**198**	198	**806**	806	**—**	—	**1,004**	1,004
Amortisation according to plan								
Opening balance	**–169**	—	**–37**	–6	**—**	–130	**–206**	–136
Year's amortisation charges	**–8**	–39	**–33**	–31	**—**	—	**–41**	–70
Reclassifications	**—**	–130	**—**	—	**—**	130	**—**	—
Closing balance	**–177**	–169	**–70**	–37	**—**	—	**–247**	–206
Residual value according to plan	**21**	29	**736**	769	**—**	—	**757**	798

* Reclassifications on account of change in the treatment of surplus values paid on acquisitions.

NOTE 17
TANGIBLE FIXED ASSETS

	Buildings and land		Plant and machinery		Equipment, tools, fixtures and fittings		Construction in progress		Total	
	1997	1996	**1997**	1996	**1997**	1996	**1997**	1996	**1997**	1996
Group										
Cost										
Opening balance **	**27,073**	26,400	**62,616**	60,508	**2,586**	2,638	**1,295**	1,172	**93,570**	90,718
Balances in subsidiaries acquired	**80**	100	**1,053**	1,313	**45**	22	**—**	38	**1,178**	1,473
Additions ***	**17**	1	**363**	502	**248**	241	**2,325**	1,944	**2,953**	2,688
Transfers from plant in progress	**183**	213	**2,118**	1,640	**62**	5	**–2,363**	–1,858	**—**	—
Disposals	**–42**	–112	**–601**	–853	**–149**	–139	**–7**	–3	**–799**	–1,107
Reclassifications	**27**	36	**–114**	–117	**119**	–137	**–19**	3	**13**	–215
Other changes during the year	**—**	467	**—**	—	**—**	—	**—**	—	**—**	467
Sales of subsidiaries	**–3**	–25	**–1**	–305	**–1**	–36	**—**	—	**–5**	–366
Translation adjustments	**–3**	–7	**–40**	–72	**–4**	–8	**—**	–1	**–47**	–88
Closing balance	**27,332***	27,073	**65,394**	62,616	**2,906**	2,586	**1,231**	1,295	**96,863**	93,570
Depreciation according to plan										
Opening balance	**–7,858**	–7,336	**–28,723**	–26,716	**–1,839**	–1,707	**—**	—	**–38,420**	–35,759
Balances in subsidiaries acquired	**–32**	—	**–165**	–394	**–31**	–8	**—**	—	**–228**	–402
Year's depreciation charges	**–557**	–534	**–3,275**	–2,357	**–305**	–248	**—**	—	**–4,137**	–3,139
Disposals	**21**	37	**332**	594	**139**	78	**—**	—	**492**	709
Reclassifications	**–13**	–35	**82**	28	**–82**	15	**—**	—	**–13**	8
Sales of subsidiaries	**—**	6	**1**	98	**—**	26	**—**	—	**1**	130
Translation adjustments	**1**	4	**14**	24	**2**	5	**—**	—	**17**	33
Closing balance	**–8,438**	–7,858	**–31,734**	–28,723	**–2,116**	–1,839	**—**	—	**–42,288**	–38,420
Revaluations										
Opening balance	**61**	82	**—**	4	**—**	—	**—**	—	**61**	86
Year's revaluations	**—**	—	**931**	—	**—**	—	**—**	—	**931**	—
Year's write-downs of previous revaluations	**—**	–19	**—**	—	**—**	—	**—**	—	**—**	–19
Disposals	**—**	—	**—**	–3	**—**	—	**—**	—	**—**	–3
Sales of subsidiaries	**—**	—	**—**	–1	**—**	—	**—**	—	**—**	–1
Translation adjustments	**–2**	–2	**–1**	—	**—**	—	**—**	—	**–3**	–2
Closing balance	**59**	61	**930**	—	**—**	—	**—**	—	**989**	61
Residual value according to plan	**18,953**	19,276	**34,590**	33,893	**790**	747	**1,231**	1,295	**55,564**	55,211

* Includes non-depreciable cost of land and water rights at SEK 8,865 million (8,850).
** Government grants received to 1 Jan: SEK 2,546 million (2,483).
*** Government grants received during year: SEK 158 million (63).

continued

	Buildings and land 1997	1996	Plant and machinery 1997	1996	Equipment, tools, fixtures and fittings 1997	1996	Construction in progress 1997	1996	Total 1997	1996
Parent company										
Cost										
Opening balance **	**18,770**	18,725	**20,890**	20,538	**728**	675	**592**	543	**40,980**	40,481
Balances in subsidiaries merged	**86**	—	**413**	—	**1**	—	**4**	—	**504**	—
Additions ***	**—**	5	**52**	46	**52**	83	**831**	690	**935**	824
Capitalised merger losses	**—**	—	**124**	—	**—**	—	**—**	—	**124**	—
Transfers from plant in progress	**87**	84	**670**	552	**52**	2	**–809**	–638	**—**	—
Disposals	**–280**	–47	**–24**	–243	**–167**	–32	**—**	–3	**–471**	–325
Reclassifications	**1**	3	**–17**	–3	**16**	—	**—**	—	**—**	—
Closing balance	**18,664***	18,770	**22,108**	20,890	**682**	728	**618**	592	**42,072**	40,980
Depreciation according to plan										
Opening balance	**–4,944**	–4,625	**–9,829**	–9,187	**–536**	–476	**—**	—	**–15,309**	–14,288
Balances in subsidiaries merged	**–9**	—	**–136**	—	**–1**	—	**—**	—	**–146**	—
Year's depreciation charges	**–354**	–324	**–1,537**	–792	**–62**	–81	**—**	—	**–1,953**	–1,197
Disposals	**70**	7	**8**	148	**129**	21	**—**	—	**207**	176
Reclassifications	**–1**	–2	**7**	2	**–6**	—	**—**	—	**—**	—
Closing balance	**–5,238**	–4,944	**–11,487**	–9,829	**–476**	–536	**—**	—	**–17,201**	–15,309
Residual value according to plan	**13,426**	13,826	**10,621**	11,061	**206**	192	**618**	592	**24,871**	25,671
Accelerated depreciation	**–16**	–16	**–8,909**	–9,436	**–173**	–164	**—**	—	**–9,098**	–9,616
Net book value on 31 December	**13,410**	13,810	**1,712**	1,625	**33**	28	**618**	592	**15,773**	16,055

* Includes non-depreciable cost of land and water rights at SEK 6,833 million (SEK 6,821 million).
** Government grants to 1 Jan: SEK 2 million (0).
*** Government grants received during year: SEK 0 million (2).

Tax values

	Group 1997	1996	Parent company 1997	1996
Buildings	**47,531**	47,698	**31,543**	31,684
Land	**37,242**	37,719	**31,268**	31,379
Total	**84,773**	85,417	**62,811**	63,063

Transmission lines and transformer stations are not subject to tax value assessments.

Leasing

Swedish Financial Accounting Standards Council Recommendation RR 6 on leasing contracts requires information to be provided on assets under financial leases broken down by balance sheet item. Vattenfall has no assets under leasing contracts of this kind. However, Vattenfall has a limited number of assets under operating leases. In 1997 the charges under these leases totalled SEK 82 million for the group and SEK 140 million for the parent company. The annual charges under these operating leases will remain around these levels in the coming years.

NOTE 18
ADVANCES AND LONG-TERM DEBTORS

	Advances to suppliers for tangible fixed assets		Amounts owed by subsidiaries		Amounts owed by associates		Other long-term debtors	
	1997	1996	**1997**	1996	**1997**	1996	**1997**	1996
Group								
Opening balance	**190**	207	**—**	—	**425**	513	**1,614**	1,172
Balanses in subsidiaries acquired	**—**	—	**—**	—	**—**	—	**3**	—
Additions	**46**	112	**—**	—	**1,069**	175	**14**	450
Capitalised advances	**–43**	–129	**—**	—	**—**	—	**—**	—
Payments received	**—**	—	**—**	—	**–584**	–263	**–75**	–3
Write-downs and write-offs	**—**	—	**—**	—	**—**	—	**–1**	–5
Translation adjustments	**—**	—	**—**	—	**12**	—	**—**	—
Reclassifications	**–89**	—	**—**	—	**100***	—	**16**	—
Closing balance	**104**	190	**—**	—	**1,022**	425	**1,571**	1,614
Parent company								
Opening balance	**97**	94	**303**	343	**35**	36	**98**	91
Additions	**47**	4	**20**	188	**210**	—	**14**	12
Payments received	**—**	—	**–23**	–242	**–22**	—	**–76**	–1
Capitalised advances	**–12**	—	**—**	—	**—**	—	**—**	—
Write-downs and write-offs	**—**	—	**—**	—	**—**	–1	**–1**	–2
Translation adjustments	**—**	—	**—**	—	**13**	—	**—**	—
Reclassifications	**–89**	–1	**—**	14	**100***	—	**86**	–2
Closing balance	**43**	97	**300**	303	**336**	35	**121**	98

* Reclassified from current debtors.

NOTE 19
PARTICIPATIONS IN SUBSIDIARIES, ASSOCIATED COMPANIES AND OTHER FIXED ASSET SECURITIES

	Participations in subsidiaries		Participations in associated companies		Other fixed asset securities	
	1997	1996	**1997**	1996	**1997**	1996
Group						
Opening balance	**—**	—	**2,950**	1,017	**1,080**	341
Balances in subsidiaries acquired	**—**	—	**1,505**	—	**44**	—
Additions	**—**	—	**465**	332	**494**	2,272
New issues	**—**	—	**3**	—	**55**	—
Shareholder contributions	**—**	—	**2**	—	**—**	—
Disposals	**—**	—	**–1,520**	–11	**–125**	–17
Reclassifications	**—**	—	**–754**	1,496	**–741**	–1,496
Income from interests in associated companies	**—**	—	**36**	116	**—**	—
Downward revaluations	**—**	—	**—**	—	**—**	–8
Translation adjustments	**—**	—	**29**	—	**–2**	–12
Closing balance	**—**	—	**2,716**	2,950	**805**	1,080
Parent company						
Opening balance	**4,931**	3,768	**2,098**	613	**786**	21
Additions	**768**	717	**—**	—	**494**	2,272
New issues	**59**	50	**3**	—	**—**	—
Shareholder contributions made	**1,023**	433	**—**	—	**—**	—
Shareholder contributions repaid	**–1,495**	—	**—**	—	**—**	—
Disposals	**–522**	–29	**–21**	–11	**–749**	–3
Mergers of share holdings	**–133**	—	**—**	—	**—**	—
Reclassifications	**1,495**	—	**–1,495**	1,496	**—**	–1,496
Upward revaluations	**—**	45	**—**	—	**—**	—
Downward revaluations	**–265**	–53	**—**	—	**—**	–8
Closing balance	**5,861**	4,931	**585**	2,098	**531**	786

NOTE 20
SHARES AND PARTICIPATIONS

The following lists the main holdings held directly or indirectly by the parent company:

SUBSIDIARIES

	Reg no	Domicite	% holding	Shares held	Net book value
Bastusels Kraft AB	556117-7279	Malå	72	4,932	151
Forsaströms Kraft AB	556010-0819	Åtvidaberg	100	400,000	294
Forskraft Distributions AB	556525-8992	Norrköping	100	2,000	462
Forsmarks Kraftgrupp AB	556174-8525	Östhammar	74.5	223,500	223
Försäkrings AB Vattenfall Insurance	516401-8391	Stockholm	100	200,000	200
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	672
Svensk Kärnbränslehantering AB *	556175-2014	Stockholm	36	360	0
SwedPower AB	556192-6212	Stockholm	58	2,320	7
Vattenfall Bohus-Dal Elnät AB	556022-0369	Trollhättan	100	600	118
Vattenfall Bråviken AB	556507-8572	Nyköping	100	200	33
Vattenfall Bränsle AB	556440-2609	Stockholm	100	100	96
Vattenfall Data AB	556439-0614	Stockholm	100	50	10
Vattenfall Deutschland GmbH	(HRB) 62659	Hamburg	100	2	79
Vattenfall ElnätService AB	556417-0859	Trollhättan	100	16,000	18
Vattenfall Energimätning AB	556329-0757	Motala	100	500	15
Vattenfall Energisystem AB	556383-5627	Stockholm	100	10,000	10
Vattenfall Engineering AB	556383-5643	Stockholm	100	160,000	199
Vattenfall Fastigheter AB	556438-5952	Sundsvall	100	50	120
Vattenfall Generation Services AB	556013-1574	Stockholm	100	150,000	16
Vattenfall Huvudsta Elnät AB	556455-8806	Stockholm	100	15,000	18
Vattenfall Hydropower AB	556333-2476	Ludvika	100	3,000	5
Vattenfall Hånö AB	556249-7494	Nyköping	100	120,000	15
Vattenfall Latvia SIA	(LV) 0003 18006	Riga	100	100	0
Vattenfall Lithuania UAB	(UI) 94-130	Vilnius	100	100	1
Vattenfall Mälarnät AB	556438-0268	Uppsala	100	100	239
Vattenfall Naturgas AB	556181-1034	Stockholm	51	161,210	10
Vattenfall Norge AS	(NO) 978-641423	Oslo	100	80,000	109
Vattenfall Norrnät AB	556437-8502	Luleå	100	100	283
Vattenfall Oy	1071366-1	Helsinki	100	10,000	445
Vattenfall Regionnät AB	556417-0800	Stockholm	100	8,000	11
Vattenfall Reinsurance S.A.	(B) 49528	Luxembourg	100	12,999	13
Vattenfall Support AB	556438-6026	Stockholm	100	50	1
Vattenfall Södertörn Elnät AB	556143-9166	Haninge	100	50,000	856
Vattenfall Transmission AB	556383-5619	Stockholm	100	12,500	15
Vattenfall Treasury AB	556439-0606	Stockholm	100	500	6
Vattenfall Utveckling AB	556390-5891	Älvkarleby	100	14,000	17
Vattenfall Västgötanät AB	556011-5189	Kinna	100	20,000	318
Vattenfall VätterNät AB	556005-0279	Motala	89	19,113	23
Vattenfall Östnät AB	556215-7494	Söderköping	100	1,000	457
Västerbergslagens Energi AB	556194-9784	Ludvika	58	89,726	19
Others					84
Total parent company					**5,861**

* The group holds a further 22% through Forsmarks Kraftgrupp AB.

Major holdings held by subsidiaries	Domicite	% holding
Hämeen Sähkö Oy	Tavastehus	100
Lapuan Sähkö Oy	Lappo	100
Vattenfall AS	Oslo	100
Vattenfall Indalsälven AB	Bispgården	74

ASSOCIATED COMPANIES

	Reg no	Domicite	% holding	Shares	Net book value Group	Net book value Parent company
Direct holdings						
i/s Avedøreværket 2	(LEV) 221005	Gentofte	40	n/a	14	14
Bullerforsens Kraft AB	556036-4514	Falun	37	111,000	169	161
Gulsele AB	556001-1800	Skellefteå	35	84,000	330	332
Jämtkraft AB	556001-6064	Östersund	20*	13,000	52	23
Baltic Cable AB	556420-6026	Malmö	33	10,000	80	1
Bodens Energi AB	556200-9117	Boden	40	20	49	1
Fagersta Energi AB	556159-4432	Fagersta	35	32,300	24	8
Luleå Energi AB	556139-8255	Luleå	30	54,000	116	4
AB Pite Energi	556330-9227	Piteå	50	70,000	155	7
Preem Gas AB	556037-2970	Stockholm	30	750	7	7
Tierps Fjärrvärme AB	556249-4723	Tierp	40	1,000	6	1
SwePol Link AB	556530-9829	Stockholm	48	288,000	3	3
Älvkarleby Fjärrvärme AB	556246-1425	Älvkarleby	49	980	5	1
Others					23	22
Indirect holdings						
A-Train AB	556500-3745	Stockholm	20	1,000,000	86	—
Hafslund ASA	(NO) 912230252	Sarpsborg	12**	13,658,200	767	—
Tosli Investments BV	33.262.554	Amsterdam	50	9,000	506	—
VASA Energy GmbH & Co KG	(HRB) 86274	Hamburg	50	n/a	271	—
Suomen Voimateknikka Oy	0959028-9	Harjavalta	33	1,800	29	—
Others					24	—
Total					**2,716**	**585**

* 35% of voting rights.
** 20% of voting rights

OTHER FIXED ASSET SECURITIES

	Country	% holding	Shares held	Net book value Group	Net book value Parent company
Direct holdings					
NESA A/S	Denmark	12	155,003	351	351
Vychodoceska Energetika a.s.	Czech Republic	8	191,699	174	174
Others				6	6
Indirect holdings					
Etelä-Pohjanmaan Voima Oy	Finland	11	504	121	—
The Cogeneration Co Ltd (COCO)	Thailand	11	59,576,522	144	—
Others				9	—
Total				**805**	**531**

NOTE 21
STOCKS ETC

	Group		Parent company	
	1997	1996	**1997**	1996
Raw materials etc				
Nuclear fuel *	**4,800**	4,576	**1,541**	1,447
Oil	**272**	292	**255**	279
Coal etc	**6**	3	**4**	2
Materials and spare parts	**435**	428	**10**	12
Total	**5,513**	5,299	**1,810**	1,740

* Including emergency stock.

NOTE 22
CURRENT DEBTORS

	Group		Parent company	
	1997	1996	**1997**	1996
Trade debtors	**4,691**	4,937	**3,123**	3,309
Amounts owed by subsidiaries	**—**	—	**12,134**	9,196
Amounts owed by associated companies	**485**	520	**451**	252
Other debtors	**680**	407	**395**	57
Prepayments and accrued income	**452**	420	**166**	198
Total	**6,308**	6,284	**16,269**	13,012

Breakdown of prepayments and accrued income:

	Group		Parent company	
	1997	1996	**1997**	1996
Prepaid insurance premiums	**88**	37	**57**	7
Other prepayments	**197**	170	**57**	80
Prepayments and accrued income, electricity trading	**47**	178	**34**	104
Other accrued sales	**120**	35	**18**	7
Total	**452**	420	**166**	198

NOTE 23
LIQUID ASSETS

The parent company's current asset investments, cash and bank deposits are managed by subsidiary Vattenfall Treasury AB. Deposits in the group-wide account managed by Vattenfall Treasury totalled SEK 10,996 million (8,783) and are reported under current assets as amounts owed by subsidiaries.

NOTE 24
SHAREHOLDERS' EQUITY

	Share capital	Re-valua-tion reserve	Equity pro-portion reserves	Other non-distrib-utable reserves	Distrib-utable equity
Group					
1 Jan	6,585	—	—	18,279	3,589
New basis of accounting	—	—	422	—	—
1 Jan, restated	6,585	—	422	18,279	3,589
Dividends	—	—	—	—	–1,500
Transfers to non-distributable reserves	—	—	—	1,436	–1,436
Transfers to revaluation reserve	—	341	—	—	—
Transfers between reserves	—	—	36	–157	121
Translation adjustments	—	—	54	–9	–2
Net profit	—	—	—	—	3,399
31 Dec	**6,585**	**341**	**512**	**19,549**	**4,171**

Untaxed reserves at companies in the group totalled SEK 27,866 million, including SEK 24,821 million in accelerated depreciation. The equity portion is included in other non-distributable reserves (cf accounting policies).

SEK 4,919,000 of the distributable equity at the year-end is expected to be transferred to non-distributable reserves as proposed by the boards of subsidiaries.

After taking account of deferred tax liabilities, revaluation in Vattenfall Naturgas AB amounts to SEK 670 million. SEK 341 million of this has been transferred to the revaluation reserve and the remainder has been included under minority interests in equity.

	Share capital	Statutory reserve	Distrib-utable equity	Total
Parent company				
1 Jan	6,585	1,316	3,343	11,244
Dividends	—	—	–1,500	–1,500
Net profit	—	—	3,730	3,730
31 Dec	**6,585**	**1,316**	**5,573**	**13,474**

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

NOTE 25
INTEREST-BEARING PROVISIONS

Interest-bearing provisions are those for pensions and similar liabilities which group companies have a duty to pay.

	Group		Parent company	
	1997	1996	**1997**	1996
Pensions with state guarantee	**2,344**	2,317	**2,344**	2,317
FPG/PRI pensions	**976**	803	**462**	415
Other pensions	**279**	402	**58**	61
Total	**3,599**	3,522	**2,864**	2,793

The provisions for 1996 have been restated to take account of a new basis of calculation (including new average lifetime assumptions), resulting in an increase of SEK 267 million for the group and SEK 126 million for the parent company.

NOTE 26
NON-INTEREST-BEARING PROVISIONS

	Group		Parent company	
	1997	1996	**1997**	1996
Provisions for deferred tax liabilities	**8,979**	7,961	**35**	—
Other provisions	**963**	49	**888**	27
Total	**9,942**	8,010	**923**	27

Other provisions are the restructuring provision for the Skills Swap programme and a provision for handling low/intermediate-level nuclear waste which has been used to fund a central facility for the permanent storage of this waste (SFR).

NOTE 27
LONG-TERM INTEREST-BEARING LIABILITIES

	Group		Parent company	
	1997	1996	**1997**	1996
National Debt Office loans	**—**	3,471	**—**	—
Medium-term notes	**8,624**	13,435	**—**	—
Amounts owed to other financial institutions	**2,451**	1,733	**—**	—
Amounts owed to associated companies	**—**	51	**—**	51
Amounts owed to minority owners	**1,820**	1,787	**—**	—
Amounts owed to subsidiaries	**—**	—	**5,254**	7,098
Other long-term borrowings	**232**	286	**210**	13
Total	**13,127**	20,763	**5,464**	7,162

For the group, the following amounts do not fall due for at least five years: MTNs SEK 4,710 million (5,026), other financial institutions SEK 1,446 million (1,513), minorities SEK 1,737 million (1,647), other borrowings SEK 225 million (143).

For the parent company, SEK 193 million (168) owed to subsidiaries does not fall due for at least five years. Amounts owed to subsidiaries comprise mainly long-term borrowing from Vattenfall Treasury AB.

Virtually all borrowings in foreign currencies are hedged.

NOTE 28
LONG-TERM NON-INTEREST-BEARING LIABILITIES

	Group		Parent company	
	1997	1996	**1997**	1996
Amounts owed to associated companies	**186**	203	**186**	203
Amounts owed to subsidiaries	**—**	—	**4,807**	5,212
Amounts owed to others	**1,915**	1,507	**839**	664
Total	**2,101**	1,710	**5,832**	6,079

For the group, the following amounts do not fall due for at least five years: associated companies SEK 186 million (203), others SEK 368 million. For the parent company, SEK 186 million (203) owed to associated companies does not fall due for at least five years. Amounts owed to subsidiaries comprise mainly a long-term interest-free credit from Forsmarks Kraftgrupp AB and others relating to power charges.

NOTE 29
CURRENT INTEREST-BEARING LIABILITIES

	Group		Parent company	
	1997	1996	**1997**	1996
National Debt Office loans	**—**	1,735	**—**	—
Medium-term notes	**4,458**	247	**—**	—
Commercial paper	**4,377**	2,395	**—**	—
Amounts owed to financial institutions	**716**	45	**—**	—
Amounts owed to minority owners	**2**	2	**—**	—
Amounts owed to associated companies	**3**	35	**—**	—
Amounts owed to subsidiaries	**—**	—	**4,295**	2,137
Other current borrowings	**29**	81	**2**	—
Total	**9,585**	4,540	**4,297**	2,137

NOTE 30
CURRENT NON-INTEREST-BEARING LIABILITIES

	Group		Parent company	
	1997	1996	**1997**	1996
Advances from customers	**15**	18	**4**	1
Trade creditors	**2,044**	2,279	**632**	619
Amounts owed to subsidiaries	**—**	—	**4,533**	4,424
Amounts owed to associated companies	**58**	25	**55**	38
Tax liability	**1,004**	551	**731**	343
Amounts owed to other creditors	**1,782**	2,259	**951**	1,585
Accrued expenses and deferred income	**2,153**	4,071	**743**	2,275
Total	**7,056**	9,203	**7,649**	9,285

Breakdown of accrued expenses and deferred income

	Group		Parent company	
	1997	1996	**1997**	1996
Accrued payroll costs	**603**	521	**298**	270
Accrued nuclear-related taxes and charges	**232**	343	**69**	147
Accrued interest charges	**492**	602	**3**	1
Other accrued expenses	**526**	371	**—**	142
Deferred income and accrued expenses, electricity trading	**160**	36	**184**	5
Other deferred income	**140**	2,198	**189**	1,710
Total	**2,153**	4,071	**743**	2,275

NOTE 31
PLEDGED ASSETS

	1997	1996
Group		
For own liabilities and provisions		
Borrowings from financial institutions:		
Floating charges	**487**	486
Property mortgages	**1,028**	1,015
Other collateral	**6**	6
Other secured assets		
Other collateral	**6**	—
Total	**1,527**	1,507

The parent company has no liabilities secured against its assets.

NOTE 32
CONTINGENT LIABILITIES

	1997	1996
Group		
Guarantees	**6,398**	1,259
Other contingent liabilities	**1,356**	92
Total	**7,754**	1,351
Parent company		
Guarantees		
Vattenfall Treasury lending to subsidiaries and associates	**20,213**	19,022
subsidiaries and associates	**19,840**	21,840
subordinate guarantees	**1,620**	1,877
Nuclear Waste Fund	**5,211**	—
Contract guarantees	**1,342**	1,011
Others	**176**	25
Total	**48,402**	43,775
Other contingent liabilities		
Compensatory and free power supplies:		
Wholesale supplies		
– Number of commitments	**16**	16
– Capacity in MW	**222**	220
– Energy supplies in TWh/year	**0.9**	0.9

SEK 44,515 million (42,487) 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 plants share regulation facilities and the owners of each station are liable for their share of regulation costs.

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

Besides those specified above, further guarantees will be put up for the fulfilment of contractual commitments as a natural part of the group's business.

NOTE 33
COMMITMENTS UNDER CONSORTIUM AGREEMENTS

Power plants are often built on a joint venture basis. The consortium agreements entitle each owner to a proportion of the plant's subsequent output and make each owner 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 ownership interests.

NOTE 34
WORKFORCE AND PAYROLL COSTS

Average workforce	1997 Men	Women	Total	1996 Men	Women	Total
Group						
Sweden	**5,920**	**1,572**	**7,492**	6,196	1,516	7,712
Finland	**208**	**86**	**294**	388	103	491
Norway	**11**	**2**	**13**	5	2	7
Elsewhere	**45**	**3**	**48**	50	3	53
Total	**6,184**	**1,663**	**7,847**	6,639	1,624	8,263
Parent company						
Sweden	**2,151**	**633**	**2,784**	2,253	652	2,905
Elsewhere	**10**	**1**	**11**	5	—	5
Total	**2,161**	**634**	**2,795**	2,258	652	2,910

	Group		Parent company	
Payroll costs	**1997**	1996	**1997**	1996
Salaries and other remuneration	**2,531**	2,391	**938**	937
National insurance contributions	**1,508**	1,531	**712**	768
(of which pension costs)	**(672)***	(737)	**(394)****	(454)
Total	**4,039**	3,922	**1,650**	1,705

* SEK 6 million of the group's pension costs relate to presidents, executive vice presidents and former executive vice presidents. The group's outstanding pension provisions in respect of these officers total SEK 35 million.
** The parent company's pension costs include SEK 1 million for presidents, executive vice presidents and former executive vice presidents. The company's outstanding pension liabilities in respect of these officers total SEK 20 million.

None of the directors of the company receive any pension benefits in connection with their board duties.

Salaries and other remuneration	1997 Directors and presidents *	Other employees	Total	1996 Directors and presidents *	Other employees	Total
Group						
Sweden	**37**	**2,382**	**2,419**	29	2,225	2,254
Finland	**3**	**85**	**88**	4	108	112
Norway	**1**	**5**	**6**	1	3	4
Elsewhere	**—**	**18**	**18**	—	21	21
Total	**41****	**2,490**	**2,531**	34	2,357	2,391
Parent company						
Sweden	**8**	**926**	**934**	6	928	934
Elsewhere	**—**	**4**	**4**	—	3	3
Total	**8*****	**930**	**938**	6	931	937

* "Directors and presidents" includes alternates, executive vice president and former directors, alternates, presidents and executive vice presidents.
** Includes bonuses of SEK 1.8 million (2.8).
*** Includes bonuses of SEK 0.6 million (0.8).

Remuneration of the senior officers of Vattenfall AB

In 1997 the board had two chairmen. Current chairman Lars Rekke received a fixed fee of SEK 64,000 while former chairman Karl-Erik Sahlberg received a fixed fee of SEK 83,000. The President of the group and parent company received a salary and other benefits (including the value of a company car) of SEK 2,406,000, including a bonus of SEK 415,000. The bonus was subject to the group's profit target for 1996 being met. The President's future pension comprises pension benefits under the applicable ITP plan plus some additional benefits. Having reached the age of 60, the President has the right at his own request, and a duty at the company's request, to take early retirement and receive an early retirement pension equivalent to 75% of his final salary. Should his employment be terminated by the company, the President is entitled to the early retirement pension as set out above.

For other members of the group management, future pensions are based on the pension plans in place or on equivalent terms. Most of these 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 period of notice (6–12 months) plus a severance payment of 18–24 months' salary.

Stockholm, 3 March 1998

Lars Rekke
Chairman

Helge Eklund	Ivar Franzén	Lars Hjorth
Göran Johansson	Bo Marking	Christina Striby
Johnny Bernhardsson *(union representative)*	Jan Rudén *(union representative)*	Rose-Marie Ågren *(union representative)*

Carl-Erik Nyquist
President

To the general meeting of the shareholders
of Vattenfall AB (publ)

Registered Number 556036-2138

We have audited the parent company and the consolidated financial statements, the accounts and the administration of the board of directors and the President of Vattenfall AB for 1997 financial year. 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 financial statements 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 financial statements are free of material misstatement. An audit includes examining, on a test basis, evidence supporting the amounts and disclosures in the financial statements. 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 financial statements. We examined significant decisions, actions taken and circumstances of the Company in order to be able to determine the possible liability to the Company of any board member or the President or whether they have in some 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.

In our opinion, the parent company and the consolidated financial statements have been prepared in accordance with the Annual Accounts Act, and, consequently we recommend

that the profit and loss accounts and the balance sheets of the Parent Company and the Group be adopted, and

that the profit of the Parent Company be dealt with in accordance with the proposal in the Directors' Report.

In our opinion, the board members and the President have not committed any act or been guilty of any omission, which could give rise to any liability to the Company. We therefore recommend

that the members of the board of directors and the President be discharged from liability for the financial year.

Stockholm, 4 March 1998

Ernst & Young AB
Lars Träff
Authorised public accountant

Filip Cassel
Authorised public accountant
Swedish National Audit Bureau

Basis of accounting

Many of Vattenfall's subsidiaries are involved in electricity generation consortia, where each partner's rights to a particular plant's output and liability to meet the plant's costs and financing are proportional to their ownership interests.

The restated group accounts here illustrate the impact of these consortium agreements on the Vattenfall group's financial results. The restated accounts use the proportional consolidation method, which means that they include only those portions of the subsidiaries' income, costs, assets and liabilities which are actually in the group's ownership.

The reason for applying proportional consolidation here is that Vattenfall's interests in these companies are strictly limited to its ownership interests. This gives a more accurate picture of the group than traditional methods of consolidation.

Profit

The restated operating profit is SEK 214 million lower at SEK 7,162 million, while the restated profit before tax and minority interests is SEK 7 million higher at SEK 5,446 million.

Balance sheet

The restated total assets are SEK 6,735 million lower at SEK 72,137 million, pushing up the equity/assets ratio by four percentage points, because the restated balance sheet includes only those portions of the assets and liabilities of the generation companies which are actually owned by the group.

PROFIT AND LOSS ACCOUNT (SEK million)	**1997**	1996
Turnover	**26,696**	27,748
Cost of products sold	**–17,366**	–17,643
Gross profit	**9,330**	10,105
Expenses for sales, R&D and administration	**–3,013**	–2,820
Exceptional items, net	**381**	—
Other operating income and expenses	**379**	–13
Income from interests in associated companies	**85**	138
Operating profit	**7,162**	7,410
Interest receivable	**520**	687
Interest payable	**–2,236**	–2,633
Profit before tax and minority interests	**5,446**	5,464
Taxes	**–1,929**	–1,685
Minority interests in profit for the year	**–118**	–54
Net profit for the year	**3,399**	3,725

BALANCE SHEET (SEK million)	**1997**	1996
Assets		
Fixed assets	**57,879**	57,263
Current assets excluding liquid assets	**10,678**	10,441
Liquid assets	**3,580**	4,204
Total assets	**72,137**	71,908
Equity, provisions and liabilities		
Shareholders' equity		
Non-distributable equity	**26,987**	25,286
Distributable equity	**4,171**	3,589
Total shareholders' equity	**31,158**	28,875
Minority interests in equity	**649**	246
Provisions and liabilities		
Interest-bearing provisions and liabilities	**22,916**	25,827
Non-interest-bearing provisions and liabilities	**17,414**	16,960
Total equity, provisions and liabilities	**72,137**	71,908

KEY RATIO	**1997**	1996
Return on capital employed (%)	**14.0**	15.1
Return on equity after full tax (%)	**11.3**	13.5
Return on assets (%)	**10.7**	11.6
Pre-tax profit margin (%)	**20.4**	19.7
Equity/assets ratio (%)	**44**	41
Interest cover (times)	**3.4**	3.1
Asset turnover (times)	**0.37**	0.39

Definition and calculation of key financial ratios:

Figures for the group in 1997 (SEK million)

Return on capital employed

Operating profit plus interest receivable relative to average total assets net of non-interest-bearing liabilities and provisions.

Operating profit plus interest receivable	7,937
Average capital employed	59,732
Return on capital employed (%)	13.3

Return on equity after full tax

Net profit for the year relative to the average of equity at the start and end of the year.

Net profit for the year	3,399
Average shareholders' equity	30,017
Return on equity after full tax (%)	11.3

Return on equity after standard tax

Profit before tax and minority interests less minority interests and tax at a standard rate of 28% relative to the average of equity at the start and end of the year.

Profit before tax and minority interests less minority interests and 28% tax	3,895
Average shareholders' equity	30,017
Return on equity after standard tax (%)	13.0

Return on assets

Operating profit plus interest receivable relative to the average of total assets at the start and end of the year.

Operating profit plus interest receivable	7,937
Average total assets	78,743
Return on assets (%)	10.1

Operating margin

Operating profit relative to turnover.

Operating profit	7,376
Turnover	28,458
Operating margin (%)	25.9

Pre-tax profit margin

Profit before tax and minority interests relative to turnover.

Profit before tax and minority interests	5,439
Turnover	28,458
Pre-tax profit margin (%)	19.1

Equity/assets ratio

Shareholders' equity relative to total assets at the year-end less interest arbitrage transactions and arbitrage with refinancing risk.

Shareholders' equity	31,158
Total assets less interest rate hedging	77,281
Equity/assets ratio (%)	40.3

Debt cover

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

Interest-bearing debt plus minority interests in equity less liquid assets	24,654
Shareholders' equity	31,158
Debt cover (times)	0.8

Interest cover

Operating profit plus interest receivable relative to interest payable.

Operating profit plus interest receivable	7,937
Interest payable	2,498
Interest cover (times)	3.2

Degree of self-financing

Internally generated funds relative to the year's total investments.

Internally generated funds	7,869
Total investments	4,877
Degree of self-financing (times)	1.6

Asset turnover

Turnover relative to total assets at the year-end.

Turnover	28,458
Total assets	78,872
Asset turnover (times)	0.36

SEK million	1997	1996	1995	1994	1993
Profit and loss account					
Turnover	**28,458**	29,030	26,796	24,575	23,278
Exceptional items, net	**163**	—	–250	—	—
Operating profit	**7,376**	7,672	7,354	7,600	7,126
Interest receivable	**561**	746	930	556	963
Interest payable	**–2,498**	–2,957	–3,158	–3,050	–3,623
Profit before tax and minority interests	**5,439**	5,461	5,126	5,106	4,466
Net profit for the year	**3,399**	3,725	3,576	3,718	3,860
Balance sheet					
Liquid assets	**3,961**	4,321	3,099	3,052	2,377
Shareholders' equity	**31,158**	28,875	26,305	24,084	21,565
Minority interests in equity	**2,304**	1,990	1,097	1,094	1,114
Interest-bearing provisions and liabilities	**26,311**	28,825	29,253	29,728	32,911
Non-interest-bearing provisions and liabilities	**19,099**	18,923	17,425	15,631	13,688
Total assets	**78,872**	78,613	74,080	70,537	69,278
Key financial ratios					
Return on capital employed (%)	**13.3**	14.5	14.9	14.8	14.7
Return on equity after full tax (%)	**11.3**	13.5	14.2	16.3	19.3*
Return on equity after standard tax (%)	**13.0**	14.1	14.5	16.1	15.2
Return on assets (%)	**10.1**	11.0	11.5	11.7	11.7
Operating margin (%)	**25.9**	26.4	27.4	30.9	30.6
Pre-tax profit margin (%)	**19.1**	18.8	19.1	20.8	19.2
Equity/assets ratio (%)	**40**	37	36	34	31
Debt cover (times)	**0.8**	0.9	1.0	1.2	1.5
Interest cover (times)	**3.2**	2.8	2.6	2.7	2.2
Degree of self-financing (times)	**1.6**	1.2	1.3	2.8	3.1
Asset turnover (times)	**0.36**	0.37	0.36	0.35	0.34
Other information					
Dividends (SEK m)	**1,500****	1,500	1,500	1,343	1,198
Total investments (SEK m)	**4,877**	5,984	6,043	2,992	2,318
Funds generated internally (SEK m)	**7,869**	7,455	7,711	8,238	7,101
Electricity sold (TWh)	**78.7**	78.4	79.3	74.0	76.6
Average workforce (FTEs)	**7,847**	8,263	8,460	9,071	9,234

**) 17.9% net of the one-off effect of reducing the basis of the group's deferred tax liabilities from 30% to 28%*
***) Proposed*
Figures for 1993–95 not restated in line with new basis of accounting (equity method)

BOARD OF DIRECTORS

Lars Rekke
Appointed Chairman in 1997.
Born 1944. Under-Secretary of State, Ministry of Trade and Industry.

Carl-Erik Nyquist
President and Chief Executive Officer.
Born 1936. Director-General of Vattenfall 1985–91. President and Chief Executive Officer from 1992. Board member of the public utility from 1985 to 1991 and of Vattenfall AB since 1992.

Helge Eklund
Born 1944. Chief Executive Officer of SÖDRA. Joined board in 1997.

Ivar Franzén
Born 1932. Estate manager.
Joined board in 1992.

Lars Hjorth
Born 1943. Executive Vice President of KF. Joined board in 1997.

Göran Johansson
Born 1945. Municipal Councillor, Gothenburg, Board member of public utility 1982–91 and of Vattenfall AB in1995 (alternate 1992–94).

Bo Marking
Born 1937. Former President of AB Svensk Exportkredit. Joined board in 1996.

Christina Striby
Born 1944. Senior Legal Adviser at Posten AB. Joined board in 1997.

Johnny Bernhardsson
Born 1952. Union representative (SIF) from 1995.

Bengt Jonasson
Born 1946. Union representative (CF) 1996–97.

Rose-Marie Ågren
Born 1958. Union representative (CF) from 1998.

Jan Rudén
Born 1951. Union representative (SEKO) from 1995.

Alternates
Hans Christer Olson
Born 1944. Assistant Under-Secretary. Ministry of Trade and Industry.

Kent Ögren
Born 1955. Municipal Councillor.

Lars Carlsson
Born 1951. Union representative (SIF).

Janerik Johansson
Born 1948. Union representative (SEKO).

Stig Lindberg
Born 1946. Union representative (Ledarna).

AUDITORS

Ernst & Young AB
Lars Träff, authorised public accountant.

Filip Cassel
Authorised public accountant, Swedish National Audit Bureau.

Alternate
Staffan Nyström
Authorised public accountant, Swedish National Audit Bureau.


Lars Rekke, Carl-Erik Nyquist


Christina Striby, Helge Eklund


Göran Johansson, Bo Marking


Ivar Franzén, Hans Christer Olson


Lars Hjorth, Kent Ögren


Jan Rudén


Rose-Marie Ågren


Johnny Bernhardsson


Carl-Erik Nyquist


Bertil Agrenius


Berndt-Olof Helzén


Alf Lindfors


Stig Göthe


Anders Hedenstedt


Staffan Nordin


Gunnar Vallin


Lars Segerstolpe


Helge Jonsson


Bertil Tiusanen


Jan C Johansson


Inger Holmström-Lindgren


Mats Fagerlund

GROUP MANAGEMENT

Senior executives

Carl-Erik Nyquist
Born 1936. President and Chief Executive Officer.

Anders Hedenstedt
Born 1947. Executive Vice President and Director of Vattenfall Europe.

Bertil Tiusanen
Born 1949. Executive Vice president and Chief Financial Officer.

Berndt-Olof Helzén
Born 1943. Senior Vice President, Director of Vattenfall Network Operations.

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

Staffan Nordin
Born 1939. Senior Vice President, Director of Vattenfall Electricity Generation.

Other senior officers

Bertil Agrenius
Born 1944. Senior Vice President, Deputy Director of Vattenfall Energy Market.

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

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

Stig Göthe
Born 1941. Senior Vice President, Environment & Strategic Development.

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

Helge Jonsson
Born 1940. Senior Vice President, EU Office in Brussels.

Alf Lindfors
Born 1946. Senior Vice President, Human Resources.

Lars Segerstolpe
Born 1941. Senior Vice President, Internal Auditing.

ENERGY UNITS

Power

A measure of the rate of work, expressed in watts (W).
1 kW (kilowatt) = 1,000 W
1 MW (megawatt) = 1,000 kW
1 GW (gigawatt) = 1,000,000 kW

Electrical energy

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

Voltage

A measure of electrical potential.
1 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 at 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 at the Harsprånget hydro plant or in 20 minutes at the Forsmark nuclear plant.

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

GLOSSARY

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

Compensatory power Power supplied from the owners of one power plant to the owners of another plant on the same river pursuant to a Water Rights Court ruling.

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

Conversion efficiency Measure of how much of the energy in a fuel is converted into electrical energy.

District heating Giant central heating system based on hot water or steam covering many different buildings in a particular area.

EL-EX The Finnish electricity exchange.

Färdig El 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 Värme Equivalent to Färdig El above but covers a customer's heating systems rather than electricity facilities.

Installed capacity The total rated generation capacity of a power station.

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.

Nord Pool The joint Norwegian-Swedish eletricity exchange.

NUTEK The Swedish National Board of Industrial and Technical Development.

Pool trading Trading on a power exchange or equivalent.

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

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

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

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

Unit capability factor The ratio of the available energy generation over a given time period to the reference enery generation over the same time period, expressed as a percentage. Both of these energy generation terms are determined relative to reference ambient conditions. Available energy generation is the energy that could have been produced under reference ambient conditions considering only limitations within control of plant management, i.e., plant equipment and personnel performance, and work control.

Production: Vattenfall Communications & Vattenfall Support
Project manager: Ola Thorén, Vattenfall Communications
Coordinator & editor: Charlotte Hernmarck, Vattenfall Support External Relations
Graphic design: Karin Röstin, Vattenfall Support Studio
Photos:Bildbyrån Denny Calvo, Hans Blomberg, FLT-PICA Bild AB, Sören Fröberg, Göran Hansson, Mathias Landefjord, Elena von Kraskowski, Jan Louis, Stewen Quigley.
Translation:Cyber Word Translations, Stockholm
Printing: Tryckindustri AB (Nordic Swan reg 341077), Stockholm, March 1998
Printed on environmentally certified paper from Svenskt Papper/MoDo

FINANCIAL INFORMATION FROM VATTENFALL IN 1998

The Annual General Meeting will be held on 28 April
Interim reports will be published in May, August and November 1998
Reports available from Vattenfall Support AB, 162 87 Stockholm, Sweden, tel: +46 8 739 65 92, fax: +46 8 739 64 44, e-mail: info@vattenfall.se
Visit Vattenfall's website at: www.vattenfall.se

This report is a translation from the Swedish original annual report.

VATTENFALL AB (publ)
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax: +46 8 37 01 70
Visitors: Jämtlandsg 99,
Vällingby

Business areas:

Vattenfall Energy Market
Vattenfall Electricity Generation
Vattenfall Europe
Vattenfall International
Vattenfall Network Operations

Energy Market

Sales divisions:

Industrial Customers
Vattenfall AB
S-851 74 SUNDSVALL
Tel: +46 60 19 80 00
Fax: +46 60 19 83 00

Vattenfall AB
Stortorget 3
S-211 22 MALMÖ
Tel: +46 40 10 20 00
Fax: +46 40 611 80 20

Business Customers
Vattenfall AB
S-461 88 TROLLHÄTTAN
Tel: +46 520 880 00
Fax: +46 520 880 67

Household Customers
Vattenfall AB
Box 10702
S-121 29 STOCKHOLM
Tel: +46 8 725 05 00
Fax: +46 8 725 05 01

Power Companies
Market Partners
Vattenfall AB
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax:
Energy Companies +46 8 739 52 60
Market Partners +46 8 739 64 99

Product areas:

Electricity
Energy
Energy Service
Development
Vattenfall AB
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax:
Electricity +46 8 739 50 65
Energy +46 8 739 55 62
Energy Service +46 8 739 61 75
Development +46 8 739 74 00

Consulting
Vattenfall Energisystem AB
Box 528
S-162 16 STOCKHOLM
Tel: +46 8 739 60 00
Fax: +46 8 739 62 26
Vattenfall Transmission AB
Box 527
S-162 16 STOCKHOLM
Tel: +46 8 739 60 10
Fax: +46 8 87 98 89

Vattenfall Hydropower AB
Box 800
S-771 28 LUDVIKA
Tel: +46 240 872 00
Fax: +46 240 873 50

Electricity Generation

Forsmarks Kraftgrupp AB
S-742 03 ÖSTHAMMAR
Tel: +46 173 810 00
Fax: +46 173 551 16

Vattenfall Ringhals
S-430 22 VÄRÖBACKA
Tel: +46 340 66 70 00
Fax: +46 340 66 51 84

Vattenfall Vattenkraft
S-971 77 LULEÅ
Tel: +46 920 770 00
Fax: +46 920 772 81

Vattenfall Generation Services AB
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax: +46 8 739 55 85

Vattenfall Bränsle AB
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax: +46 8 87 78 79

Network Operations

Vattenfall Regionnät AB
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax: +46 8 739 66 63

Vattenfall ElnätService AB
S-461 88 TROLLHÄTTAN
Tel: +46 520 880 00
Fax: +46 520 880 61

Vattenfall Bohus-Dal Elnät AB
Box 1400
S-462 28 VÄNERSBORG
Tel: +46 521 944 00
Fax: +46 521 944 03

Vattenfall Västgötanät AB
Box 252
S-511 23 KINNA
Tel: +46 320 307 00
Fax: +46 320 307 60

Vattenfall Östnät AB
S-611 83 NYKÖPING
Tel: +46 155 25 05 00
Fax: +46 155 25 06 01

Gotlands Energiverk AB
Box 17
S-620 30 SLITE
Tel: +46 498 28 15 00
Fax: +46 498 28 17 90

Vattenfall VätterNät AB
Box 947
S-591 29 MOTALA
Tel: +46 141 22 73 00
Fax: +46 141 542 92

Forskraft Distribution AB
Box 258
S-597 26 ÅTVIDABERG
Tel: +46 120 848 00
Fax: +46 120 848 05

Vattenfall Södertörn Elnät AB
Box 643
S-136 26 HANINGE
Tel: +46 8 707 01 00
Fax: +46 8 707 01 01

Vattenfall Huvudsta Elnät AB
Box 1299
S-171 25 SOLNA
Tel: +46 8 629 49 00
Fax: +46 8 629 49 49

Flens Energinät AB
N. Kungsgatan 28
S-642 28 FLEN
Tel: +46 157 193 50
Fax: +46 157 511 44

Vattenfall Mälarnät AB
Box 285
S-751 05 UPPSALA
Tel: +46 18 18 60 00
Fax: +46 18 12 96 50

Västerbergslagens Elnät AB
Box 860
S-771 28 LUDVIKA
Tel: +46 240 798 00
Fax: +46 240 107 59

Vattenfall Norrnät AB
S-971 77 LULEÅ
Tel: +46 920 770 00
Fax: +46 920 771 45

Hämeen Sähkö Oy
Parolantie 104, Pl 4
FIN-131 01 HÄMEENLINNA
Tel: +358 3 65 8 01
Fax: +358 3 616 1670

Lapuan Sähkö Oy
Poutuntie 17
FIN-621 00 LAPUA
Tel: +358 6 43 161 11
Fax: +358 6 43 881 40

Vattenfall Energimätning AB
Box 940
S-591 29 MOTALA
Tel: +46 141 22 72 30
Fax: +46 141 22 72 99

Vattenfall Europe

Vattenfall Deutschland GmbH
Neuer Wall 72
D-203 54 HAMBURG
Tel: +49 40 37 47 22 60
Fax: +49 40 37 47 22 66

VASA Energy GmbH & Co KG
Neuer Wall 72
D-203 54 HAMBURG
Tel: +49 40 37 47 22 0
Fax: +49 40 37 47 22 99

Vattenfall Estonia OÜ
Ahtri 12, Room 508
EE-0001 TALLINN
Tel: +372 611 65 63
Fax: +372 611 65 64

Vattenfall Latvia SIA
Pulkveza Brieza 12
LV-1010, RIGA
Tel: +371 7 830 242
Fax: +371 7 830 243

Vattenfall Lithuania UAB
Jouzapaviciaus St 13
LT-2600 VILNIUS
Tel: +370 275 19 71
Fax: +370 261 82 48

Vattenfall Poland Sp. z o. o.
ul. Krakowskie
Przedmiescie 47/51
PL-00 071 WARSZAWA
Tel: +48 22 828 12 78
Fax: +48 22 828 46 09

Vattenfall International

Nordic Power Invest AB
Vasag 15–17, Box 34
S-101 20 STOCKHOLM
Tel: +46 8 677 65 50
Fax: +46 8 24 97 71

Nordic Power Invest
South East Asia Office
25th fl Times Square Building
246 Sukhumvit Road (Soi 12–14)
BANGKOK 101 10 Thailand
Tel: +66 2 253 9394
Fax: +66 2 253 9398

SwedPower AB
Vasag 15–17, Box 34
S-101 20 STOCKHOLM
Tel: +46 8 677 65 00
Fax: +46 8 21 33 06

Others

Vattenfall Treasury AB (publ)
S-162 87 STOCKHOLM
Tel: +46 8 739 50 00
Fax: +46 8 37 59 41

Vattenfall Naturgas AB *(from May 1)*
Box 824
S-101 36 STOCKHOLM
Tel: +46 8 796 38 00
Fax: +46 8 796 38 40

Vattenfall Oy
Aleksanderinkatu 15 B
FIN-00100 HELSINKI
Tel: +358 9 47 620 20
Fax: +358 9 47 620 299

Vattenfall AS
Rådhusgata 1–3
N-0151 OSLO
Tel: +47 22 00 84 00
Fax: +47 22 00 84 84

Vattenfall Utveckling AB
S-814 26 ÄLVKARLEBY
Tel: +46 26 835 00
Fax: +46 26 836 70

EU Office in Brussels
Vattenfall European Affairs
Avenue de Tervueren 12, Bte 3
B-1040 BRUSSELS
Tel: +32 2 735 40 00
Fax: +32 2 732 33 99

For the addresses and phone numbers of other subsidiaries and units, as well as any other information about Vattenfall, please contact the relevant business ares or Vattenfall Support AB (see opposite)

VATTENFALL S-162 87 STOCKHOLM, SWEDEN. TEL: +46 8 739 50 00.

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