



Annual Report 1999 – Nature at work

# Summary

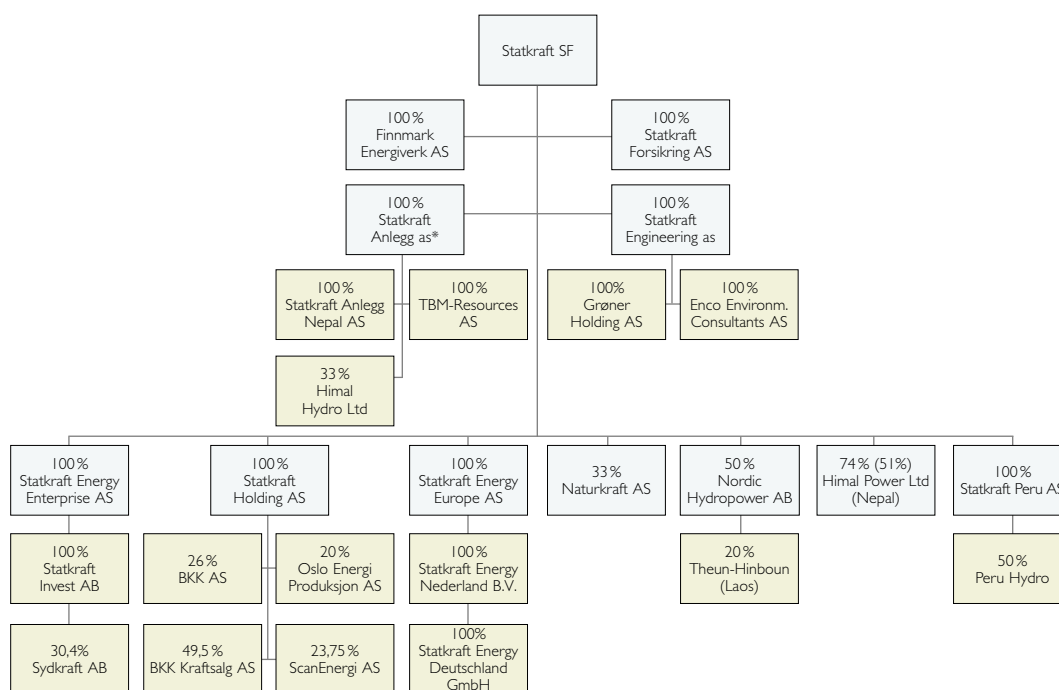
At the beginning of the year 2000 Statkraft is relatively well positioned in the Northern European energy market. The Group has many of the advantages needed to exploit business opportunities that lie in the restructuring of the energy industry that is presently underway. Despite falling prices in the Nordic market, which is exposed to competition, the Group's earnings were sound and it achieved an acceptable result in 1999. This was due not least to a commercially orientated corporate culture and efficient operations. However, revenues were not sufficient to generate a reasonable return on capital. During the year, Statkraft bought shares in Bergenshalvøens kommunale kraftselskap (BKK), increased its stake in Sydkraft AB and established trading operations in Germany. In the first quarter of 2000, Statkraft Anlegg was sold.

Equity was increased and the higher loan ceiling that our owner approved in 1999 allows Statkraft to participate in the further restructuring of the European energy sector.

Compared to other players in the European market, Statkraft is the leader in such competence fields as power trading and operation optimisation, but weak if size and equity are the standards on which it is measured.

If Statkraft is to strengthen its position vis-à-vis foreign participants in the future, more of the added value created by the company must be retained by the company, so that equity allows for further growth.

## Ownership interests



\* An agreement has been reached to sell the company

# Introducing Statkraft

Statkraft was established on 1 January 1992 as a State-owned enterprise, owned by the Government of Norway, represented by the Ministry of Petroleum and Energy. It operates on commercial principles. Statkraft is to own, build and operate power plants, engage in power trading and in other activities naturally related thereto. Statkraft's vision is to become one of the leading energy companies in Northern Europe with cutting-edge competence in the field of hydro power. With a staff of more than 1,500 Statkraft is one of the country's largest employers in land-based energy industry and the largest land-based taxpayer.

Statkraft is Norway's largest producer of power and the second largest producer of hydro-electric power in the Nordic region. Statkraft owns, wholly or partly, 91 hydro power plants. The company is responsible for operating 55 of these plants, while 36 are operated by others. Statkraft owns an aggregate production capacity of 33.7 TWh and accounts for about 30 per cent of the country's electric power production. It owns 113 water reservoirs corresponding to a good 40 per cent of the nation's water reservoir capacity. Statkraft owns two subsidiaries in the engineering and construction fields, namely Statkraft Anlegg as and Statkraft Engineering as.

Statkraft has considerable ownership interests in other energy companies. In Norway it owns 20 per cent of Oslo Energi Produksjon, 26 per cent of Beregenhalvøens kommunale kraftselskap (BKK) and 49.5 per cent of BKK Kraftsalg. Furthermore, the company owns 1/3 of the shares in Naturkraft AS. In Sweden Statkraft owns 30.4 per cent of the Swedish energy company Sydkraft AB. Together with BKK, Statkraft has bought a considerable shareholding in the Danish trading company ScanEnergi A/S. Statkraft's shareholding is 24 per cent. Statkraft has expanded its trading

activities on the Continent through the establishment of wholly owned trading companies in the Netherlands and Germany.

Statkraft also exploits its hydro power competence by developing, owning and operating power production facilities outside of Europe. It has a 10 per cent indirect ownership interest in the Theun-Hinboun power plant in Laos and owns 74 per cent of the Khimti I power plant in Nepal that will be put into operation in the year 2000.

Statkraft's organisation is built on the Group's areas of concentration and divided as follows (ref. page 48):

**Strategic business development's** responsibility is to monitor and follow up new commercial opportunities, in Norway, in the Nordic region and in Northern Europe. The main goal is to provide a sound basis for decisions on the company's development based on Statkraft's vision. Strategic business development is to have the overall strategic perspective of the Group's activities. The division is to have an overview of the development in important framework conditions under which the Group operates and it is to initiate necessary measures to influence these. The overall evaluation of Statkraft's business portfolio is carried out in association with the Economics Department.

**Marketing's** principal target is to maximise Statkraft's revenue in the short and long term by optimal exploitation of water resources and by entering into profitable contracts for purchasing and selling energy.

Important tasks include sales and customer follow-up in various markets, market analyses and strategy, developing and following up the marketing strategy, including price forecasts and production planning.

It is responsible for all sales and purchase contracts in the Nordic region and these

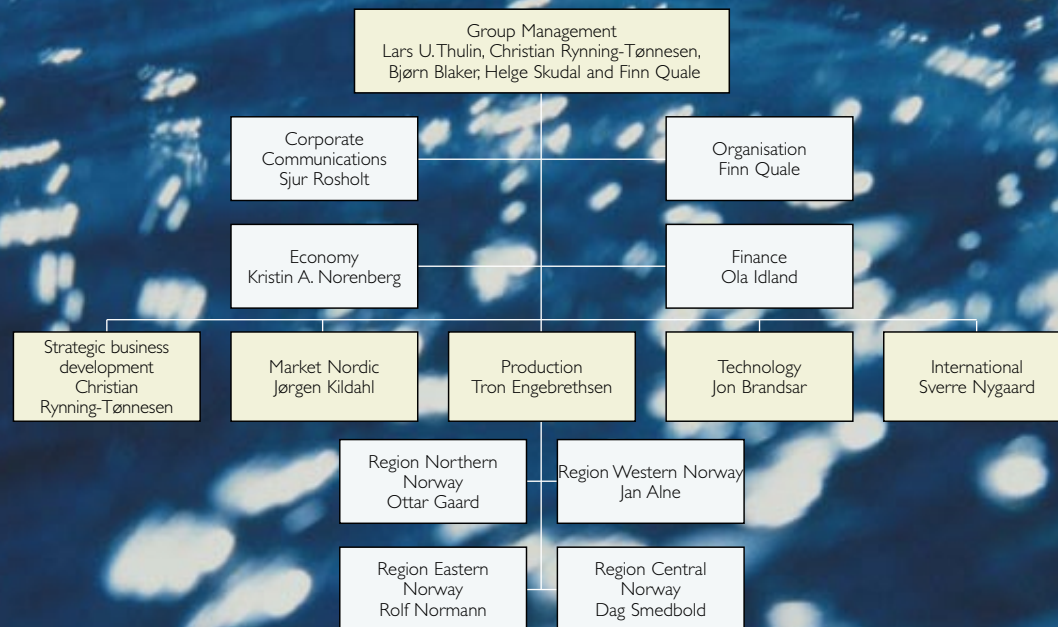
are managed on a portfolio basis. Together with the production organisation, the portfolio is managed so maximum earnings are achieved, assuming an acceptable risk level.

**Production** is responsible for all technical activities related to the operation, upgrading and maintenance of the company's electric power production facilities, so that Statkraft's added value over time is as high as possible.

The division's responsibilities are primarily: Effective exploitation of the production facilities, maintaining necessary availability, carrying out maintenance and the development of the production facilities. Most of the resources are used for keeping the production plants operative and for ensuring that the real value of the plants is maintained and developed over time. The Production Division's operations are divided into four regions: Region Northern Norway, Region Central Norway, Region Western Norway and Region Eastern Norway, accounting for about 570 man-years.

**Technology** is responsible for organising technology and for planning and realising Statkraft's new production capacity in Norway in a profitable manner. This applies to new hydro power development and projects based on other renewable energy sources. The division follows up all major constructions and technology projects and co-ordinates Statkraft's R&D. The division is also responsible for following up projects that Statkraft has an interest or a stake in.

**International** helps establish Statkraft as an energy company with an international image by developing, owning and operating energy projects in prioritised geographical growth areas. The division's most important activities are related to the development, implementation and follow-up of Statkraft's engagements outside of Northern Europe by being active owners.



# Consolidation and profitability

**By Lars U. Thulin, President and Chief Executive Officer**

Despite extremely low energy prices in 1999, Statkraft presented an acceptable result, but the return on total assets is still low. We must constantly focus on profitability. In themselves, growth and size have little meaning if they do not generate a higher return. Our owner is to receive a return on the assets invested in the company that is at least the same as the return received from alternative investments. Every Norwegian citizen owns a good NOK 5,000 in our company. How we manage these assets and contribute to further value added is decisive for our success and legitimacy.

In the autumn, the Storting (Parliament) debated the conversion of a subordinated loan to equity and an increase in Statkraft's borrowing ceiling. We are satisfied with the interest we were shown during these debates. At the same time, it was resolved that Statkraft should declare a dividend of NOK 600 million or more than 60 per cent of net income after taxes. For a company that is expected to play a decisive role in the restructuring

that is going on in the power industry, a high payout ratio is hardly future-oriented. The Storting also acknowledged this and instructed the Government to prepare a long-term dividend policy for our company. A predictable dividend policy is important in an industry that is very capital intensive, like ours is, and for a company that has ambitions to become one of the leading energy companies in Northern European.

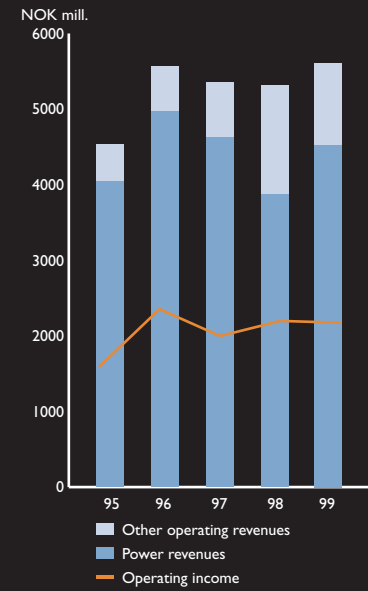
We can gradually see an outline of the alliances and companies that will dominate the energy industry in the time to come. Size and financial strength will be extremely important factors. But also other factors will determine how the companies cope in the toughening international competition. Core competence in power trading, water management and the optimisation of operations will continue to be vital. In addition, companies that have the ability and the will to make decisions will be to the fore when the new ownership structure is determined. Compared to the massive restructuring that is taking place in Norway, Statkraft has limited resources. Alliance building and acquisitions that we are participa-

te in must be driven by the realisation of significant values that can be returned to the owners of Statkraft. There are synergies to be had from a more optimal production structure. This will be decisive for how we react to the invitations we receive regarding closer co-operation with other companies.

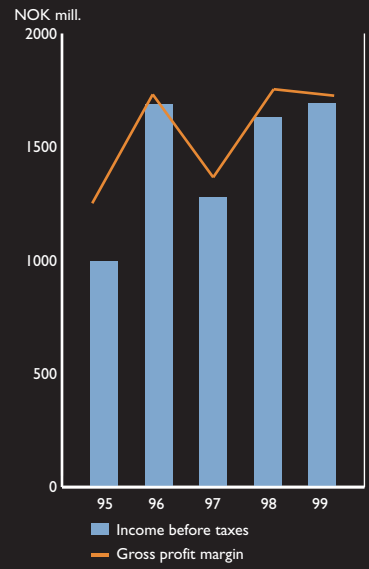
Taking out rationalisation gains will be very demanding while the company is in an expansive period. Nevertheless, this will be given extremely high priority in the future. The objective must be that the overall knowledge and experience is to transform the company into a more efficient unit. In this respect, the transfer of know-how will be given priority. The organisational structure will be changing and the motivation to do things in a more rational manner must always underpin the changes we make. This means that we must consider the activities we are engaged in and ask ourselves whether we are the right organisation to develop these activities even further.



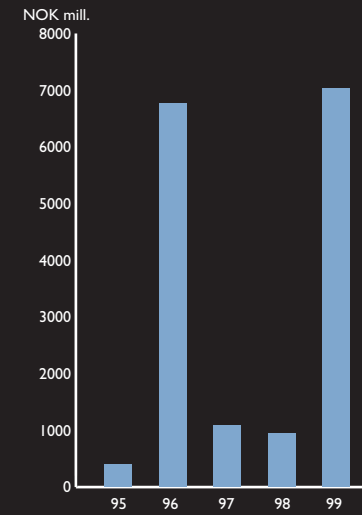
### Gross operating revenues



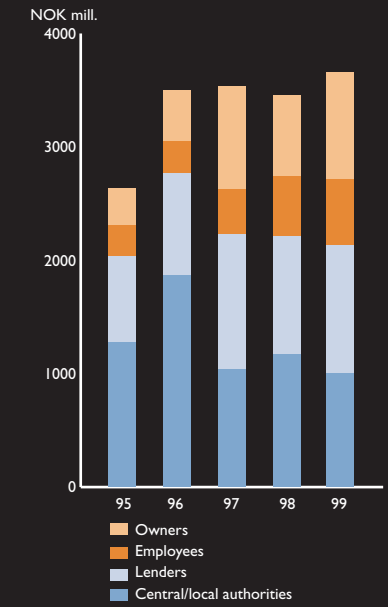
### Income before taxes



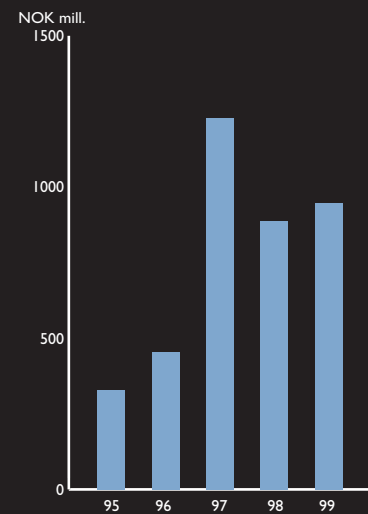
### Investments



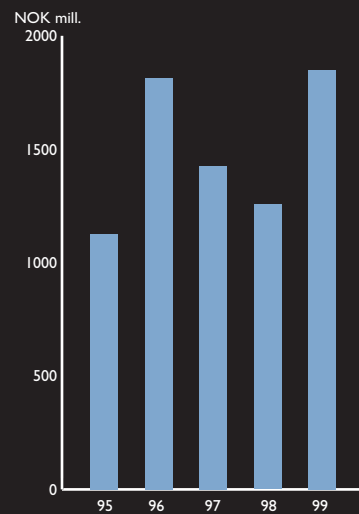
### Social audit – distribution of value added



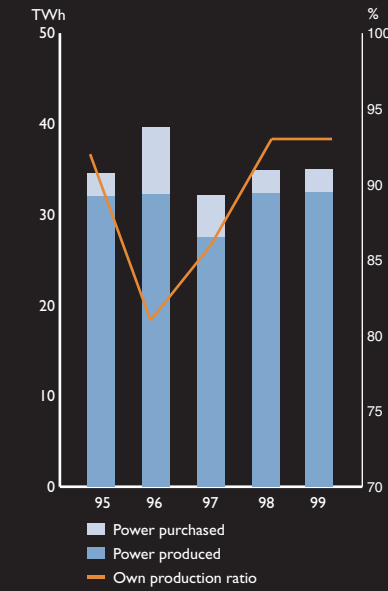
### Net income



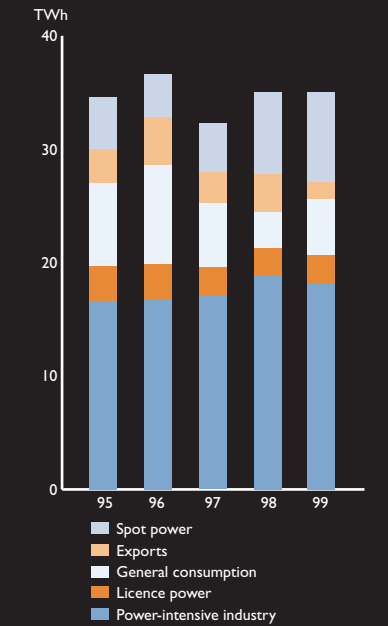
### Cash flow from operations



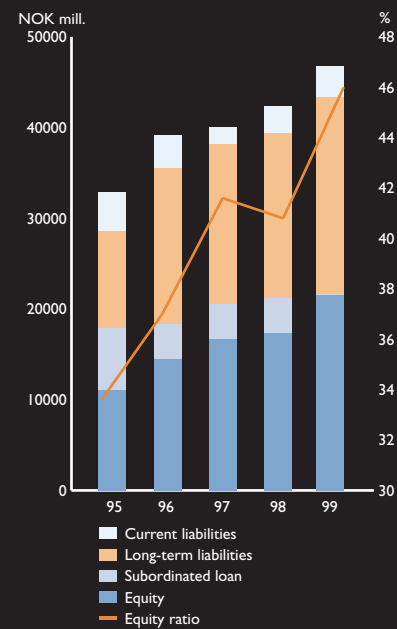
### Physical power balance



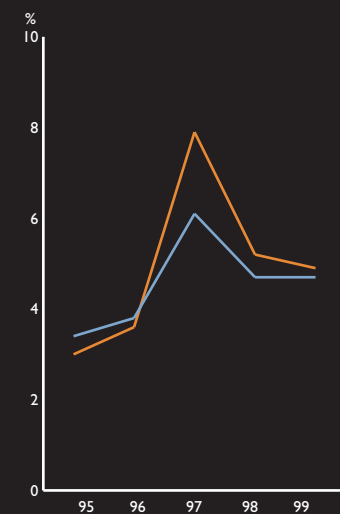
### Energy volume sold, by market segment



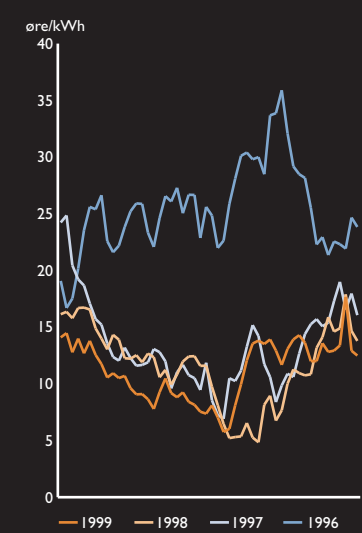
### Balance sheet structure



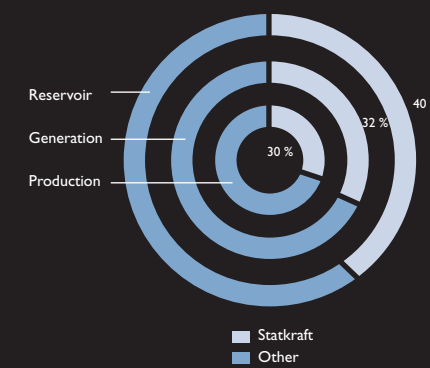
### Return on assets and equity



### Spot prices



### Share of Norway's production, installed generator and reservoir capacity



# Report of the Board of Directors

In 1999, Statkraft's consolidated income before taxes was NOK 1,691 million. This was NOK 60 million higher than in 1998 and is an improvement of 4 per cent. Net income after taxes amounted to NOK 946 million, which is NOK 59 million or 7 per cent higher than in 1998.

The development in power production and trading was weaker than expected in 1999. The main reason for this was the difficult market situation with more precipitation and higher average temperatures than are normal. The average price of electricity in 1999 was the lowest since 1993. This business area's net income was NOK 686 million, which is an improvement of NOK 44 million on the preceding year. Statkraft's engagements in other companies and markets showed a positive trend, making a contribution of NOK 305 million before group items, or NOK 105 million more than in 1998. This increase is to a great extent due to higher ownership interests in associated companies. In 1999, the Group's net income represents a return on equity of 4.9 per cent and a return on total assets of 4.7 per cent. Despite the fact that the return on assets is still not satisfactory, the Group has shown robustness in a difficult market situation.

Statkraft's financial statements for 1999 are prepared on the going concern assumption.

## Power production and trading

**The Nordic power market.** Throughout 1999, the situation in the Nordic power market was yet again characterised by ample resources and above-normal temperatures. 1999 was the third wet-year in a row after the record dry-year of 1996. At the beginning of the year there were signs of snow reservoirs failing. However, the first part of the summer was extremely wet and the effect of a lack of snow in the mountains was not felt. For the year as a whole precipitation in Norway and Sweden was 110 per cent of a normal year. In Norway, exploitable inflow was 13 TWh above the norm, while in Sweden it was 3 TWh above the norm. As a consequence of above-normal temperatures, consumption was relatively low in the Nordic region. In Norway, Sweden and Finland consumption grew by 0.2 per cent, minus 0.8 per cent and 1.6 per cent respectively. Consumption by the power-intensive industry in Norway showed a modest growth, while electric boiler consumption fell by 14 per cent.

Had the growth in consumption been

adjusted for the high temperatures it would have been considerably higher in Norway and Sweden. Compared to 1998, the temperature-adjusted general consumption rose by almost 3 per cent in Norway and by 0.7 per cent in Sweden. The underlying growth in consumption in the Nordic countries is thus showing few signs of slowing.

Reservoir levels at the beginning of 1999 were well above average in both Norway and Sweden. As a result of the high inflow, those levels rose during the year and at year-end Norwegian reservoirs amounted to 80 per cent of capacity.

Domestic hydro-power production in Norway rose by 5 per cent to 122 TWh. Swedish power production fell 3 per cent in 1999 compared to the preceding year, mainly as a result of 1998 production being unusually high as a result of high inflow levels.

High inflow levels and low consumption in Norway in 1999 resulted in Norway being a net exporter of power for the first time since 1995. Exports rose from 4.4 TWh in 1998 to 8.8 TWh in 1999, while imports fell from 7.9 TWh to 6.8 TWh. This means that a net import of 3.5 TWh in 1998 was turned to a net export of 2 TWh in 1999.

Power prices stayed low in 1999 because of the plentiful access to resources. Compared to the preceding year, the system price fell from NOK 0.117/kWh to NOK 0.112/kWh. Despite the weak trend in power prices new records are being set on the Nordic Power Exchange. Jutland



and Funen in Denmark were included as a separate area with effect from 1 July, and the percentage that is traded there has grown rapidly.

Throughout 1999 the market situation has been affected by important events in neighbouring countries. The deregulation of the energy market in the EU reached a new milestone early in the year when the largest consumers were given free market access. On 1 December, the nuclear power plant Barsebäck I in Sweden was closed down. The introduction of a CO<sub>2</sub> duty on coal-based power production in Denmark was postponed until the year 2001.

#### **Statkraft's power production and trading.**

In 1999, precipitation in Norway was 110 per cent of a normal year. The west and south of the country in particular received more than is normal. Statkraft also enjoyed higher inflow, but somewhat less than the rest of Norway. Statkraft's exploitable inflow was about 107 per cent of the norm, while the rest of the country registered about 114 per cent. Statkraft's saleable production amounted to 32.5 TWh or about the same as average production. The most important reason for production not being higher despite more precipitation and inflow than is normal, was that it long appeared that there would be a shortage of snow, especially in the north of the country. As a result, Statkraft's production was relatively low in the first few months of 1999. Subsequent amply inflow resulted in production exceeding normal levels in order to avoid water losses. In August and September production was kept high at relatively good prices. Normal production throughout 1999 and high inflow resulted in Statkraft's reservoir levels being higher at the end of 1999 than at the beginning of the year.

In 1999, the Storting (Parliament) debated Proposition to the Storting no. 52 "On Statkraft's industrial contracts and leases". The result of the parliamentary

debate is of great importance to Statkraft's future regulatory environment. Contracts for about 18 TWh whose terms were previously publicly determined are to be phased out from 2001 to 2011 and will be replaced by:

- A continuation of the industrial contract scheme under which 18 named industrial companies are offered industrial power contracts. The contracts will have a term of 20 years and expire on 31 December 2020. The contract price is fixed at NOK 0.155/kWh (1999). The volume is estimated at about 4.6 TWh in 2011, and will thereafter be gradually reduced to 50 per cent of the original volume allocated.
- Lease of power plants to industrial companies. The leases are for Sauda I – IV, Svelgen I–II and Tysso II. They run for 30 years from the year 2001 and the price is fixed at NOK 0.1575/kWh (1999). With the planned Sauda development, a good 3.3 TWh of Statkraft's production volume will be leased to others in this period.

The arrangement that has been adopted is a transition from the publicly fixed price regime to ordinary commercial contracts. Permission was not granted to issue new contracts during the period.

**Power plant operations.** Availability at the company's production plants was good in 1999 and there were no major operational interruptions or serious breakdowns. Non-availability resulting from unsuccessful start-ups and breakdowns was 1.3 per cent, or the same level as in the preceding year.

Statkraft places emphasis on the effectiveness of power plant maintenance. In 1999, the company worked on developing maintenance control systems with a shift toward more differentiated maintenance. The objective is to concentrate efforts on plants and functions that, in the event of failure, have major consequences.

Furthermore, work on improving analyses of residual life of assets and safety at the production plants continued.

The most comprehensive rehabilitation currently underway is on the regulation plants and dams where Statkraft, with the agreement of the Norwegian Water Resources and Energy Administration (NVE) is following a corrective maintenance plan involving 32 plants, 24 of which have been completed. NOK 230 million has been spent. The remaining work will call for a further NOK 115 million. It is expected that 20 more projects will be implemented by 2006.

The new millennium was ushered in with extra high preparedness in order to meet possible Y2K problems. As expected, Statkraft's power production continued uninterrupted. The administrative systems also functioned without any Y2K errors arising. An estimated NOK 20 million has been used on replacements and upgrading.

#### **Involvement in Northern European power markets**

The development on the European power markets toward deregulation and cross-border trading continued in 1999. Statkraft is taking an active part in the restructuring that is in progress, inter alia through long-term power exchange contracts, by establishing trading operations on the Continent and by acquiring ownership interests in companies.

Statkraft's largest single investment over the last few years is the acquisition of an ownership stake in Sydkraft AB in Sweden. In 1999, Statkraft bought 7.2 million A-shares and 14.4 million C-shares. At the end of the year Statkraft owned 29.4 per cent of the capital and 28.2 per cent of the votes. A further purchase of shares in the year 2000 brought the ownership up to 30.4 per cent and 28.4 per cent of the votes. Sydkraft expects an after-tax profit of almost SEK 2 billion in the year 2000. In February 1998, the Swedish government decided that the phase out of the country's nuclear power should start with

one of the reactors at the Barsebäck Power plant that is owned by Sydkraft. The reactor was closed down on 1 December 1999 and a voluntary agreement was reached with the government, which compensates Sydkraft in full for this reduction in capacity by way of an ownership interest in the government-owned Vattenfall's nuclear power plants at Ringhals. The agreement is subject to the approval of the Swedish Riksdagen (Parliament).

In 1999, Statkraft established a power trading operation in Germany in order to participate in the business opportunities offered by this market. The Norwegian holding company Statkraft Energy Europe AS owns both Statkraft Energy Deutschland GmbH and Statkraft Energy Nederland B.V. which was established in 1998 to engage in power trading in the Netherlands. At the beginning of the year the Dutch market is in considerable imbalance with very high prices and a high level of risk. The market situation is expected to normalise gradually.

Together with BKK Kraftsalg, Statkraft became a co-owner of the Danish trading and end-user company ScanEnergi in 1999. ScanEnergi is established in Jutland and is owned by 9 Danish distribution companies and the two Norwegian companies.

At the beginning of 1999, 26 per cent of BKK AS and 49.5 per cent of BKK Kraftsalg AS were bought.

#### **Power development projects in Norway**

Statkraft is currently considering possible profitable development projects of between 4-5 TWh in annual production capacity. These are in the form of watercourses that have not been developed or unexploited potential in existing production facilities. Emphasis is placed on developing projects in combination with environmental considerations and technical/financial solutions. The new projects that have come furthest are the power plants at Beiam, Bjellånes and Melfjord, and the new power plant to replace the old Bjølvo plant.

The changes in the plans for Beiam were sent from the Norwegian Water Resources and Energy Administration (NVE) to the Ministry of Petroleum and Energy in February 1999, with a positive recommendation. Processing the application has been delayed and the investment is therefore postponed compared to earlier plans. Furthermore, work on Bjellånes and Melfjord has been put off pending the Ministry's decision on the Beiam development. Bjølvo Power Plant is old and directions have been issued to replace the forge-welded pipes. The application for a new power plant that will replace the old one was recommended by NVE in June 1999 and forwarded to the Ministry of Petroleum and Energy. Statkraft expects a licence to be issued in the 2nd quarter of 2000 and if this is the case, construction can start in the summer of 2000.

As a result of the parliamentary debate on Proposition to the Storting no. 52 (1998-99) Elkem was given the right to further develop the Sauda watercourse based on a lease from Statkraft that runs through to 2029. This development project has therefore been withdrawn from Statkraft's portfolio.

Naturkraft, which is owned by Statoil, Norsk Hydro and Statkraft (one-third each) was granted an emission permit in January 1999 for the new plants at Kårstø and Kollsnes. This permit was appealed to the Ministry of the Environment, which by and large upheld the decision. The emission requirements cannot be satisfied with today's technology and before a scheme for international trading in CO<sub>2</sub> quotas is established. Statkraft expects the gas power situation in Norway to be clarified in connection with the parliamentary debate on the Energy Report in the Storting in the spring of 2000.

#### **International development projects**

Statkraft has been engaged in the development and construction of hydro power plants in developing countries since the early 1990s. The 210 MW run-of-the-

river power plant Theun-Hinboun in Laos, in which Statkraft has a 10 per stake, was put into operation in 1998. Virtually all of the electricity produced is sold to Thailand on a long-term power agreement. In 1999, the company reached the expected production level and returned a satisfactory financial result.

The development of the 60 MW run-of-the-river power plant in Nepal, Khimti, is nearing completion. Unfavourable rock qualities have impaired technical progress, but completion is expected in July 2000 in accordance with the original schedule. Statkraft owns 74 per cent of the shares in the project company, Himal Power Ltd. In 1999 an agreement was reached to sell a 23 per cent interest to BKK as part of a long planned reduction of Statkraft's stake. This transaction has not been carried out as yet, pending necessary approvals.

Over the last couple of years, Statkraft has also been considering market opportunities in Latin America and in 1998, in association with Peruvian partners, applied for a licence to build a 525 MW run-of-the-river plant north of Lima, Peru. In July 1999 the application was rejected. This decision has been appealed and there is uncertainty as to whether or when a licence might be granted.

#### **Engineering and construction**

In 1999, Statkraft Engineering's activities were characterised by difficult national market conditions in some of its business areas and delays and even cancellations of some international projects. Work continued on introducing a new group structure to better exploit resources after the ownership interest in Grøner was increased to a good 90 per cent in 1999. Revenue and net income for the year were somewhat lower than expected at NOK 335 million and NOK 0 respectively. The company intends to improve future results through closer company integration and by co-ordinating business areas.

Statkraft Anlegg recorded revenue of NOK 420 million and net income after

taxes of NOK 0.1 million. This was weaker than expected as a result of pressure on the domestic construction and building market and the weak profitability of certain projects. The result was also affected by relatively low revenue from tunnelling even though this business area is fairly profitable. International hydro power development has been focused on completing the projects in Nepal, including the Khimti development, which has been one of the company's main projects. There is still some financial risk inherent in the completion of the project. Prospects are rather bleak because of the low activity levels in the national markets and widespread competition. The challenge lies in exploiting the possibilities in tunnelling and in international projects. To ensure continued international growth and at the same time adjust to the structural changes in the Scandinavian market, the company has continually been considering entering into suitable strategic alliances, including changing the company's ownership. An agreement has been reached to sell the company to a major Scandinavian contracting group. It is expected that the sale process will be completed by the end of March 2000.

#### Research and Development

R&D is an important tool with which to reach Statkraft's long-term goals. The company expects the importance of technology and innovation to rise in the industry and will actively participate in the development work related to production of new energy and in investigating the possibilities for and the need of new energy carriers.

One of the greatest challenges is to ensure the long-term profitability of existing and new hydro power projects. This can be achieved, for example, by applying new technical solutions and new production methods. Clarifying the environmental consequences of choosing different technologies is also important, as is working for framework conditions that in light of

commercial requirements take care of environmental demands to the greatest extent possible. In 1999, Statkraft continued its R&D projects related to energy dispositions, maintenance and production control and market activities.

It is important for Statkraft to develop alternatives to traditional hydro power since the unexploited hydro power potential in Norway is limited. Statkraft is currently assessing the possibility of investing in wind power in Norway. Applications for licences for three locations were submitted to the authorities at the beginning of the year 2000. A profitable development of windmills is conditional on the regulatory framework being suitable, i.e. by being granted investment subsidies and operational support. Participation in an R&D project under the auspices of the Norwegian Research Council on the integration of wind power in the production system has increased insight into and knowledge of the development of components, local conditions for windmill parks and problems linked to the transmission grid.

In addition to new renewable energy sources, the energy system of the future might demand a renewable energy carrier and many indications point to hydrogen. Statkraft has initiated a project that is expected to provide a great deal of insight into the production, storage, transportation and application of hydrogen with related technologies, and these technologies' future potential.

#### Income statement

**Revenues.** Statkraft's combined revenues in 1999 amounted to NOK 5,601 million. This was NOK 287 million more than in 1998.

Net operating revenues totalled NOK 4,912 million compared to NOK 4,760 million, up NOK 152 million on the preceding year, or a good 3 per cent.

Net revenue from power sales, after covering transmission costs, made a NOK 3,836 million contribution to net opera-

ting revenues. This was NOK 524 million more than in 1998. Much of the increase refers to the reversal of earlier provisions related to disputes where final judgements have now been made. Adjusted for this, net power sales rose by NOK 118 million or 3 per cent. This modest increase in earnings from power sales reflects the fact that the situation in the power market was quite similar in both years, with ample access to power and low prices.

Other operating revenues totalled NOK 1,076 million in 1999. This was NOK 372 million lower than in 1998. This decline is due to approximately NOK 450 million in a gain on the sale of part of Svartisen Power Plant being included in 1998 revenue. Adjusted for this, other operating revenues rose by NOK 95 million or 10 per cent from 1998 to 1999. NOK 46 million of this increase came from higher revenue in the subsidiaries.

**Costs.** Operating costs rose by NOK 176 million, from NOK 2,562 million in 1998 to NOK 2,738 million in 1999. This rise was mainly in the subsidiaries, and is in part a result of their increased sales. Costs of operating and maintaining the power plans rose insignificantly.

Net financial costs rose by NOK 43 million, from NOK 882 million in 1998 to NOK 925 million in 1999. This increase was mainly higher interest costs due to higher borrowing, inter alia in connection with the acquisition of interests in other companies.

**Taxes and duties.** Taxes were charged against income in the amount of NOK 744 million in 1999 compared to NOK 741 million in 1998. Taxes payable were NOK 60 million lower in 1999 than in 1998.

Including licence-related duties and compensation, the total tax and duty burden was NOK 975 million in 1999, or 51 per cent of net income before taxes and duties.

There are considerable differences in the level of taxes and duties on power production in the different countries in the





Northern European power market, and Norwegian power producers have a considerably heavier tax and duties burden than producers do in other countries. Similarly, tariff systems for distributing transmission costs between producers and receivers of power represent a relatively heavier burden on Norwegian producers than on producers in other countries. An effort should be made to harmonise these framework conditions so that the Norwegian producers are offered the same terms as the competitors.

**Results.** Operating income in 1999 amounted to NOK 2,174 million compared to NOK 2,198 million in 1998.

In 1999, the company's share of the results of the associated companies Sydkraft AB, Oslo Energi Produksjon AS and BKK AS have been included in the aggregate amount of NOK 442 million, compared to NOK 315 million in the preceding year. This increase is mainly a result of acquiring a stake in BKK in 1999 and a higher ownership interest in Sydkraft.

Income before taxes amounted to NOK 1,691 million, compared to NOK 1,631 million in 1998. After taxes and minority interests, net income for the year amounted to NOK 946 million compared to NOK 887 million in 1998.

The year's operations generated a net cash flow of NOK 2,099 million.

#### **Balance Sheet, investments and liquidity**

Statkraft invested a total of NOK 7,003 million in 1999.

NOK 165 million was invested in Statkraft's own facilities in Norway, covering a range of rehabilitation projects on power plants and dams. NOK 226 million refers to investments in plants etc. with subsidiaries, including the Khimti development project in Nepal.

NOK 6,635 million was spent on purchasing ownership interests in other companies and as capital contributions in international power development pro-

jects. This refers first and foremost to the purchase of a 26 per cent interest in BKK AS and the purchase of further shares in Sydkraft AB.

At year-end, owner's capital rose from NOK 15.4 billion to NOK 19.25 billion by converting the outstanding subordinated loan from the Government of NOK 3.85 billion. At the same time, Statkraft SF's total loan and guarantee ceiling, as set out in the company's Articles of Association, was increased from NOK 32.5 billion to NOK 42.5 billion. The company is therefore well equipped for further expansion.

Statkraft took up loans both at home and abroad in 1999. New long-term loans aggregating NOK 5.9 billion were raised. Repayments of long-term loans totalled NOK 2.3 billion. The average term of the company's loans at year-end was 4.6 years. Statkraft SF's total loan and guarantee obligations amounted to NOK 24.5 billion at the end of the year. Hence, the company can increase its loan and guarantee obligations by up to NOK 18 billion before reaching the set ceiling of NOK 42.5 billion. Moody's continues its Aaa long-term rating of Statkraft and Standard & Poor's maintains its rating of the company at AA+.

Statkraft's liquidity was satisfactory throughout the year and at year-end the Group's net cash and cash equivalents amounted to NOK 1.4 billion. Unutilised drawing rights totalled NOK 2.1 billion. By way of comparison, short-term liabilities and the current portion of long-term loans totalled NOK 2.5 billion.

At the end of 1999, Statkraft's equity totalled NOK 21.5 billion. The equity ratio stood at 46 per cent.

#### **The working environment**

At the end of 1999, the Statkraft Group employed the equivalent of 1,328 man-years, of which 778 with the parent company and 550 with the subsidiaries. In addition, the company had 28 apprentices. In 1999, important elements in the development of the organisation included the

preparation of job plans, the implementation of competence development projects including vocational training and project management, and a continuation of management development through central and local management development programmes.

In 1999, preparations were made to implement measures aimed at making the production-related operational organisation more effective, based on surveys of the potential for improvement carried out in 1998.

After recording uninterrupted positive development in HSE figures (Health, Safety and the Environment) from 1992 to 1998, Statkraft experienced a rise in the number of accidents and in sick leave in 1999. In 1999 the Statkraft Group recorded 24 injuries resulting in sick leave, compared to 15 in the preceding year. The injury frequency (HI factor) was 11 compared to 7 in 1998. The injury frequency based on total injuries, with and without sick leave (H2 factor) was 20.1 compared to 13.6 in 1998.

Injury absence figures or the injury seriousness factor (F factor) stood at 110 compared to 104 in 1998. No serious injuries were suffered in the Group in 1999.

Sick leave rose from 3.1 per cent in 1998 to 4.2 per cent in 1999. This was for the most part a result of an increase in long-term sick leave.

The Board has noted the development in HSE figures and will carefully monitor improvement measures and results in the time to come. Efforts have been implemented to review and improve routines and attitudes relating to risk monitoring and safety and at the same time various measures are being introduced to turn the negative sick leave tendency.

#### **The external environment**

Hydro power is a renewable energy source. In a global climatic perspective hydro power is environmentally friendly seen in comparison to other dominant

energy carriers, and the company's operations do not result in any significant emission or discharges.

However, the development and operation of hydro power plants does result in encroachment on nature and has an impact on the environment. The operations are subjected to comprehensive licensing terms with appurtenant regulations that are meant to assuage negative impacts on the external environment. Statkraft has registered the environmental aspects in their entirety, and has made this information available in a special report. Statkraft is in extensive dialogue with local and central authorities and participates in and finances a series of research activities linked to the environmental aspects of hydro power and alternative energy.

Compensatory environmental measures in the form of maintenance of thresholds, fish ladders and other biotope-adjustment measures are part of the day-to-day operations and are continual. In 1999, about 450,000 smolt, young fish and fry of salmon and trout were released. Statkraft owns and operates 5 fish hatcheries.

In 1999, Statkraft registered certain breaches of requirements regarding minimum water flow. Work on improving equipment, reporting routines and follow-up has started. Further more, 4 minor oil spillages from transformers were recorded. These were quickly dealt with, the transformers were repaired and the spillages caused no traceable damage. Glacial sludge from Svartisen is carried out into Holand Fjord with the water passing through Svartisen Power Station and is visible as cloudy water. After the power plant operations normalised, conditions in the fjord improved over the last year. Statkraft is considering other measures, in association with the State Pollution Control Authority and local environmental authorities.

Allegations were made that rock filling from the Svartisen development contained materials that were hazardous to the

environment. The matter was followed up with water samples, and no form of pollution that can be related to Statkraft's operations has been documented. Nevertheless, the basis for the case has resulted in the company being fined by the National Authority for the Investigation and Prosecution of Economic and Environmental Crime in Norway (Økokrim). This has been appealed but no final decision has yet been made. The registration of possible pollution from other deposits and stone tips from earlier construction periods has been completed. The final report will be published in the first half of 2000.

#### **Legal disputes**

The new taxation system that was introduced from 1997 has not yet resulted in any lawsuits, but Statkraft has brought action relating to the tax assessment for 1997. The dispute is whether a deduction can be made for production levies when calculating resource rent income.

In connection with the power exchange agreement with Denmark's Elsam a dispute has arisen on certain elements in connection with the financial settlement between the parties. In accordance with the agreement, Statkraft has brought the case before the Stockholm Chamber of Commerce Arbitration Institute.

In December 1998, Troms County Authorities and AS Nordlandskraft sued Statkraft, and Troms kraftforsyning. The reason is that Statkraft has acquired Troms kraftforsyning's right to take out 17.5 per cent of the production from Kobbelv Power Plant. A settlement has been negotiated that calls for the approval of all parties.

From before, Statkraft is engaged in disputes that are still being heard regarding central grid costs in connection with the supply of licence hydro power and the control rule for the Kjela Power Plant.

In the accounts, provisions have been made for these disputes, based on a conservative assessment of the obligations.

#### **Prospects**

Seen in a longer perspective. Statkraft has reported considerable improvements in its results over many years. However, earnings are not sufficient to provide a reasonable return on equity. Priority will therefore continue to be given to improving the company's earnings. In a market where the power balance is becoming increasingly tight, Statkraft will exploit its competence in order to develop Norway's hydro power potential further. Emphasis will also be placed on developing alternative renewable energy on a commercial basis, including wind power.

A deregulated Northern European market and increasing competition have resulted in significant structural changes. This development will also have an impact on the Nordic power market. Statkraft will take part in the business opportunities such changes offer both in the Northern European market and the Nordic market in order to meet future demands on energy companies. Focus will be on both alliances and on acquiring ownership interests in other companies as well as participating in power trading activities. Furthermore, focus will be on developing the company's resources and competence in market activities and a flexible production system in order to meet the considerable challenges Statkraft will be facing in the future. Within adopted limits, Statkraft will continue its concentration on hydro power development in countries where there are still development opportunities, based on the company's project competence.

At the beginning of 2000, Statkraft's reservoir levels were higher than normal. Assuming that inflow and market conditions are more normal than in 1999, this should improve the result of power production and trading in 2000. However, market prices are still low and the market situation is difficult. There is therefore a great deal of uncertainty surrounding the development in results, but it is assumed that the financial result for 2000 will be on a par with the 1999 result.

### Allocation of the net income for the year

The Board considers that any dividend distributed by Statkraft must be set taking into consideration the company's central role in the energy sector. Statkraft should have the financial strength and soundness to be able to participate as a major player in the development of the Norwegian and Northern European power market and to carry out major projects. Against this background, the Board has proposed a dividend policy where 30 per cent of the Group's net income for the year after tax is distributed as dividend.

In line with this, the Board proposed that a dividend of NOK 216 million be paid

for the 1998 accounting year. At the company's Corporate Meeting in June 1999 the dividend was fixed at NOK 309 million, which was the same as unrestricted equity at the end of 1998. The increase in dividend, NOK 93 million, was charged to the accounts in 1999.

The possibility of distributing a dividend is regulated by the Act relating to State-owned Enterprises, which stipulates that net assets that exceed paid in capital can be distributed. Had the limitations that apply to the distribution of dividends by limited companies been applied, unrestricted equity would have been NOK 661 million. Statkraft has raised the question of harmonising the State Enterprise Act

with the Limited Companies Act with the authorities.

The proposed dividend policy would have implied a dividend of NOK 284 million for 1999. In the Ministry of Petroleum and Energy's budget for the year 2000, dividend from Statkraft is set at NOK 600 million. The Board has noted this and proposes the following allocation of net income for 1999 (in NOK million):

### Statkraft SF

Dividend	600
Transferred to other equity	86
<u>Net income for the year</u>	<u>686</u>

The Board of Directors of Statkraft SF  
Bærum, 7 March 2000

Hans O. Bjøntegård  
Chairman

Halvard Kaasa

Jon Ivar Nålsund

Britt Solvik

Marit Büch-Holm

Tom Andersen

Anders Eckhoff

Odd Vanvik

Toril Mølmshaug

Lars Uno Thulin

President and Chief Executive Officer

# Income statement

the Group			Statkraft SF				
1999	1998	1997	amounts in NOK million	Note	1999	1998	1997
<b>4 525</b>	3 866	4 627	Power revenues	2,3	<b>4 539</b>	3 865	4 628
<b>1 076</b>	1 448	726	Other operating revenues	4	<b>410</b>	828	381
<b>5 601</b>	5 314	5 353	<b>Gross operating revenues</b>		<b>4 949</b>	4 693	5 009
<b>-689</b>	-554	-651	Transmission costs		<b>-690</b>	-553	-651
<b>4 912</b>	4 760	4 702	<b>Net operating revenues</b>		<b>4 259</b>	4 140	4 358
<b>644</b>	597	436	Salaries and other payroll costs	5,19	<b>335</b>	309	260
<b>231</b>	231	220	Compensation and licence fees	6	<b>231</b>	225	220
<b>-</b>	-	456	Production levies		<b>-</b>	-	456
<b>1 064</b>	904	768	Other operating costs	7	<b>730</b>	695	663
<b>799</b>	830	824	Ordinary depreciation	11,12	<b>759</b>	793	787
<b>2 738</b>	2 562	2 704	<b>Operating costs</b>		<b>2 055</b>	2 022	2 386
<b>2 174</b>	2 198	1 998	<b>Operating income</b>		<b>2 204</b>	2 118	1 972
<b>442</b>	315	255	<b>Result from associated companies</b>	13	<b>-</b>	-	-
<b>210</b>	156	217	Financial revenues	8	<b>354</b>	295	276
<b>-1 135</b>	-1 038	-1 193	Financial costs	8	<b>-1 118</b>	-1 056	-1 209
<b>-925</b>	-882	-976	<b>Net financial items</b>		<b>-764</b>	-761	-933
<b>1 691</b>	1 631	1 277	<b>Pre-tax income</b>		<b>1 440</b>	1 357	1 039
<b>-636</b>	-696	-654	Taxes	9	<b>-637</b>	-646	-613
<b>-108</b>	-45	615	Changes in deferred tax	9	<b>-117</b>	-69	662
<b>-744</b>	-741	-39	<b>Taxes</b>		<b>-754</b>	-715	49
<b>947</b>	890	1 238	<b>Net income for the year before minorities</b>		<b>686</b>	642	1 088
<b>-1</b>	-3	-10	Minority interests		<b>-</b>	-	-
<b>946</b>	887	1 228	<b>Net income for the year</b>	10,18	<b>686</b>	642	1 088
<b>600</b>	309	-	Dividend		<b>600</b>	309	-
<b>346</b>	578	1 228	Provision to distributable reserve		<b>86</b>	333	1 088
<b>-</b>	-	-	Group contribution paid		<b>14</b>	-	-

# Balance sheet

the Group				Statkraft SF			
1999	1998	1997	amounts in NOK million	Note	1999	1998	1997
<b>ASSETS</b>							
<b>2 123</b>	2 230	2 272	Intangible assets	11	<b>2 026</b>	2 143	2 209
<b>26 095</b>	26 520	27 272	Property, plant and equipment	12	<b>24 600</b>	25 214	26 757
<b>14 348</b>	7 616	7 262	Investments in subsidiaries and associated companies	13	<b>8 262</b>	5 752	5 612
<b>1 698</b>	1 372	1 159	Other financial assets	14	<b>8 184</b>	3 928	3 530
<b>44 264</b>	37 738	37 965	<b>Fixed assets</b>		<b>43 072</b>	37 037	38 108
<b>31</b>	31	30	Inventories		<b>30</b>	30	30
<b>1 308</b>	1 326	927	Receivables	15	<b>1 114</b>	1 195	868
<b>146</b>	1 520	402	Investments	16	<b>6</b>	1 405	402
<b>1 299</b>	1 796	751	Bank deposits, cash and cash equivalents	17	<b>1 012</b>	1 623	322
<b>2 784</b>	4 673	2 110	<b>Current assets</b>		<b>2 162</b>	4 253	1 622
<b>47 048</b>	42 411	40 075	<b>Assets</b>		<b>45 234</b>	41 290	39 730
<b>EQUITY AND LIABILITIES</b>							
<b>19 250</b>	15 400	15 400	Owner's capital	18	<b>19 250</b>	15 400	15 400
-	-	-	Share premium fund		-	-	-
<b>19 250</b>	15 400	15 400	<b>Paid-in capital</b>		<b>19 250</b>	15 400	15 400
<b>83</b>	87	25	<b>Minority interests</b>		-	-	-
-	-	-	Reserve for valuation variances		-	-	-
<b>2 170</b>	1 835	1 244	Other equity	18	<b>1 444</b>	1 359	1 016
<b>2 170</b>	1 835	1 244	<b>Retained earnings</b>		<b>1 444</b>	1 359	1 016
<b>21 503</b>	17 322	16 669	<b>Total equity</b>		<b>20 694</b>	16 759	16 416
<b>127</b>	12	172	Provisions	19	<b>99</b>	-2	160
<b>82</b>	3 921	3 850	Subordinated loan	20	-	3 850	3 850
<b>21 681</b>	18 097	17 470	Other long-term liabilities	21	<b>21 018</b>	17 782	17 641
<b>21 890</b>	22 030	21 492	<b>Long-term liabilities</b>		<b>21 117</b>	21 630	21 651
<b>1 348</b>	500	-	Interest-bearing liabilities	22	<b>1 348</b>	500	-
<b>573</b>	611	632	Taxes payable	9	<b>578</b>	572	591
<b>1 734</b>	1 948	1 282	Other non interest-bearing liabilities	23	<b>1 497</b>	1 829	1 072
<b>3 655</b>	3 059	1 914	<b>Current liabilities</b>		<b>3 423</b>	2 901	1 663
<b>47 048</b>	42 411	40 075	<b>Equity and liabilities</b>		<b>45 234</b>	41 290	39 730
<b>2 105</b>	2 109	1 887	Mortgages	24	<b>2 105</b>	2 106	2 109
<b>2 466</b>	1 426	1 553	Guarantees	24	<b>2 172</b>	1 780	1 231

The Board of Directors of Statkraft SF  
Bærum, 7 March 2000

  
Hans O. Bjøntegård  
Chairman

  
Britt Solvik

  
Anders Eckhoff

  
Halvard Kaasa

  
Marit Büch-Holm

# Cash flow analysis

the Group			Statkraft SF				
1999	1998	1997	amounts in NOK million	Note	1999	1998	1997
<b>CASH FLOWS PROVIDED BY/ USED IN OPERATING ACTIVITIES</b>							
946	887	1 228	Provided by the year's operations		686	642	1 088
-4	-507	-10	Gain/loss on sale of fixed assets		-1	-463	-6
799	830	824	Ordinary depreciation		759	793	787
108	46	-615	Change in deferred tax/deferred tax asset		117	69	-662
<b>1 849</b>	<b>1 256</b>	<b>1 427</b>	<b>Cash flow provided by operations</b>		<b>1 561</b>	<b>1 041</b>	<b>1 207</b>
18	-730	200	Change in inventories, debtors and creditors		-189	-610	164
-215	-50	-255	Share of result in associated companies		-	-	-
447	529	518	Change in other current assets and liabilities		527	778	528
<b>2 099</b>	<b>1 005</b>	<b>1 890</b>	<b>Net cash flow provided by operations</b>	A	<b>1 899</b>	<b>1 209</b>	<b>1 899</b>
<b>CASH FLOWS PROVIDED BY/ USED IN INVESTMENT ACTIVITIES</b>							
-391	-1 347	-281	Investments in fixed assets		-161	-563	-286
23	1 772	31	Proceeds from sale of fixed assets		16	1 771	13
-6 635	-286	-676	Investments in other companies		-2 510	-136	-89
<b>-7 003</b>	<b>139</b>	<b>-926</b>	<b>Net cash flow used in investment activities</b>	B	<b>-2 655</b>	<b>1 072</b>	<b>-362</b>
<b>CASH FLOWS PROVIDED BY/ USED IN FINANCING ACTIVITIES</b>							
5 928	-	1 073	Loan proceeds		5 743	-	1 073
-2 314	-632	-441	Repayment of long-term liabilities and subordinated loans		-2 584	-632	-441
-581	1 646	-1 757	Change in long-term receivables and liabilities		-4 413	656	-2 289
<b>3 033</b>	<b>1 014</b>	<b>-1 125</b>	<b>Net cash flow from financing activities</b>	C	<b>-1 254</b>	<b>24</b>	<b>-1 657</b>
<b>-1 871</b>	<b>2 158</b>	<b>-161</b>	<b>Net change in cash and cash equivalents</b>	A+B+C	<b>-2 010</b>	<b>2 305</b>	<b>-120</b>
3 316	1 153	1 314	Cash and cash equivalents as per 01.01		3 028	723	843
1 445	3 311	1 153	Cash and cash equivalents as per 31.12.		1 018	3 028	723

Odd Vanvik

Jon Ivar Nælsund

Tom Andersen

Toril Malmshaug

Lars Uno Thulin  
President and C.E.O.

# Accounting principles

## Accounting principles

The accounts are prepared in accordance with the law and Norwegian accounting standards. Statkraft SF is established as a state-owned enterprise, and its activities are regulated by the Act relating to State-owned Enterprises. The company has changed some accounting principles in accordance with the Accounting Act of 1998. Reference is made to note 1 for a description of the changes and the impact they have on the accounts.

## Consolidation and Group accounts

The Group accounts include those companies where Statkraft has a controlling interest. If a subsidiary is considered immaterial to the Group, this might result in it not being consolidated. Subsidiaries that are acquired or established during the year are included with effect from the date of acquisition/date of establishment. Subsidiaries are included in the consolidated accounts in accordance with the purchase method of accounting. The difference between the price paid for the subsidiary's shares and the book value of the equity is, on the basis of a valuation, allocated to those specific company assets and liabilities that have values that differ from the book values. Insofar as differences cannot be assigned to the values of assets and liabilities, they are recorded as goodwill/-negative goodwill. In the Group accounts, inter-company sales and receivables are eliminated, as are inter-company profits related to the Group's own investments.

The income statements of foreign subsidiaries are translated to Norwegian kroner at the average exchange rates for the year. Balance sheets are translated at the exchange rate on the balance sheet date. Possible conversion differences are recorded directly against other equity.

Power plants with joint ownership, being power plants operated by Statkraft but with other owners as well, and plants others operate but where Statkraft has an ownership interest, are carried on the balance sheet at the value of Statkraft's holding in accordance with the gross method of accounting. Co-owners directly administer electricity produced, with the exception of licensed power. Statkraft's

share of the electricity is included in gross power revenues. Other operating revenues and operating costs are recorded in accordance with the gross method of accounting in accordance with Statkraft's pro rata shares.

Power drawn from partly owned companies organised as joint-stock companies is included in power revenues. Statkraft's share of other operating revenues and operating costs is included in accordance with the shareholder agreement. The shares are recorded at cost.

Power plants that are leased to others are recorded gross in the accounts, the gross leasing charge being recorded as other operating revenues and operating costs etc. under their respective cost caption.

Associated companies, defined as companies where the Group has a considerable but not decisive influence, are treated in accordance with the equity method of accounting in the consolidated accounts if their size is significant. This means that the Group's share of the associated company is recorded at cost as a fixed asset in the balance sheet, adjusted for the part of the accumulated net result after tax, less dividend received, depreciation of added value and possible currency adjustments.

The Group's part of the associated company's net income after tax less added value depreciation is shown as a separate item in the income statement.

## Principles governing revenue and cost accounting

Revenues relating to goods and services are, as a general rule, recognised when they are earned, while costs are recorded in accordance with the accrual principle. Dividend from companies where Statkraft has a decisive influence is recognised according to the earnings principle, while dividend from other companies is recognised in accordance with the cash principle. Contracts involving substantial prepayments are recognised as delivery is made. Interest revenue on the prepayment is classified as operating revenue.

## Financial instruments

Financial instruments in power trading are

financial bilateral contracts, forward/futures contracts, and options. The valuation of the financial instruments is dependent on whether they are considered to be hedging or trading contracts. The principles for valuation appear from the paragraph on revenue from power trading below.

## Option premium

Paid and received option premium for future power supplies on fixed terms is recorded in the balance sheet and taken to income in line with realised deliveries, or at the time that the option lapses or the date of a counter-trade or at the time it is realised that the value of the contract is lower than the premium paid.

## Recording of revenue from power trading

**Power production** Statkraft's power production is taken to income as produced volume times sales price.

**Hedging** Statkraft hedges power production by entering into physical or financial contracts. All physical and financial trading within the company's production capacity is accounted for as hedging. Production capacity is defined as the production capacity that the company is 80 per cent certain to achieve. Both sales and purchase positions are considered hedging. Loss/gains on hedging contracts, calculated as the margin between contract price and spot price, are recorded on realisation as a correction to power revenues. No valuation is made in the intermediate period. If net sales obligations exceed the ability to produce, the hedging contracts are transferred to the trading portfolio based on the LIFO principle.

**Trading** Physical sales and purchase contracts that are not covered by production capacity are recorded as trading. Trading contracts are valued on the lower value principle on a portfolio basis. Unrealised losses are recorded, but unrealised gains are not recognised.

Contracts originally entered into for trading are not transferred to the hedging portfolio, even if they can be satisfied by production capacity. These are valued on the lower principle on a portfolio basis.

Unrealised losses are charged to the accounts, but unrealised gains are not recognised.

## Current production contracts

In the case of ongoing projects, revenues are recorded by the Group's companies in accordance with the percentage of completion method. This implies that income is recorded in line with the progress of the individual project. A project's income is defined as revenue less assignable costs. Assignable costs comprise of materials, payroll costs, subcontractors, machine leases and local management.

Current appraisal of work in progress will, in many cases, entail uncertainty and estimates. The final result of the individual project may, therefore, deviate from what is reflected in the accounts for the previous years. In the case of projects that are expected to result in an overall loss, the total estimated loss is charged as per 31 December.

## Public grants

Public grants are assessed on an individual basis, and are recorded in the accounts as a correction to the item for which the subsidy is intended.

## Compensation

The Group pays compensation to landowners for the right to use waterfalls and ground. In addition, compensation is paid to others for damage caused to forests, land, telecommunication lines etc. These payments are in part lump sum, and in part recurring in the form of cash payments or in kind by the supply of compensatory power. Lump sum payments of compensation in relation to new power plants are capitalised as part of the investment in the plant, and depreciated over the life of the plant, while recurring payments are charged as costs as and when they arise. The present value of future compensation is calculated, and can be seen from the Notes to the Accounts.

## Licence fees

Licence fees are paid annually to the Government and to local authorities, for the increase in hydro-electric power that is obtained from regulating water courses and catchment transfers. These fees

are therefore permanent and payable so long as the licensee uses the water course regulations on which they are based. These licence fees are expensed as incurred. The present value of future fees is calculated and can be seen from the Notes to the Accounts.

## Production levies

Production levies were a special tax on the production of electrical power that was discontinued with effect from 1998, in connection with the introduction of a new taxation system.

## Research and development costs

Project development and project engineering costs are expensed through to critical action. Critical action is in place when necessary resolutions are passed and approval given. In the case of domestic projects, this means a Board resolution and a licence is obtained, if required, and for foreign projects a Board resolution and financial closing.

## Maintenance

Ongoing maintenance is recorded as an expense on a continuous basis.

## Taxes

With effect from 1997, new tax regulations for the power sector were introduced. Both Statkraft SF and its subsidiary Finnmark Energiverk AS are subject to these taxation rules. The other companies in the Group are subject to ordinary income tax pursuant to the Tax Act. The Group must therefore deal with four different types of tax, namely property tax, natural resource tax, resource rent tax, and income tax.

**Property tax** This tax is not related to income and is calculated on the basis of the assessed value for taxation purposes. Property tax amounts to up to 0.7 per cent of these values. New rules for the calculation of property tax will be introduced with effect from the year 2001.

**Natural resource tax** Natural resource tax is an income-independent tax that is calculated on the basis of the individual power plant's average production over the last seven years. The tax rate is NOK 0.013 per kWh. Income tax can be offset against natural resource tax. Any natural resource tax not offset can be carried for-

ward, together with interest, to later years, and is recorded as prepaid tax.

**Resource rent tax** The resource rent tax is to some extent income-related. It is calculated on the individual plant's production, hour by hour, multiplied by the spot price in the corresponding hour. In the case of supplies of licence power and power on long-term contracts with a term of more than seven years, the actual contract price is applied. The calculated revenue is thereafter reduced by the actual operating costs, depreciation and tax-free revenues, in order to arrive at the tax base net resource rent revenue. Tax-free revenues amount to 9 per cent of the value of the plant's operating assets for taxation purposes. The resource rent tax amounts to 27 per cent of net resource rent revenues at each power plant. Negative net resource rent revenues per power plant can be carried forward with interest and offset against later positive resource rent income in the same power plant. This forms part of the basis for calculating deferred tax assets together with temporary differences related to operating assets in power production. When calculating deferred tax benefits related to the resource rent taxation, the tax free income is taken into account, because this income appears as a correction to the nominal surtax rate. The estimate for effective resource rent tax is based on assessments made for all power plants where it is probable that there will be positive resource rent revenues within a 15-year horizon. The average tax rate over the selected time horizon is 20 per cent and that has been used as the effective rate for deferred tax assets in the resource rent taxation.

**Income tax** Income tax is calculated in accordance with ordinary taxation rules. The tax charge in the income statement comprises taxes payable and changes in deferred tax/tax assets. Taxes payable are calculated on the basis of the year's taxable result.

Deferred tax/tax assets are calculated on the basis of temporary differences between values for accounting and taxation purposes and the effect on taxes of carry forward losses. Deferred tax assets in the balance sheet are only recorded to the extent that it is probable that the asset will be realised in the future. Tax related to

equity transactions, for example group contributions, is recorded against equity.

### **Classification of balance sheet items**

Assets intended for retention by, or long-term use in Group companies are classified as fixed assets. Other assets are classified as current assets. Receivables falling due within one year are nevertheless classified as current assets. The same criteria are applied to current and long-term liabilities.

Fixed assets are recorded at acquisition cost and are written down to market value when the decrease in value is not considered to be of a temporary nature. Fixed assets with a limited useful economic life are depreciated systematically. Long-term liabilities are recorded in the balance sheet at the nominal amount received at the time the liability was established. Long-term liabilities are not appreciated to market value as a result of changes in interest rates. Current assets are assessed at the lower of cost and real value. Current liabilities are recorded in the balance sheet at the nominal amount received at the time the liability was established. Current liabilities are not appreciated to market value as a result of changes in interest rates.

### **Intangible assets**

Costs relating to intangible assets, including costs of research and development, are recorded in the balance sheet to the extent the requirements for such recording have been fulfilled.

### **Property, plant and equipment**

Investments in production facilities and other long-term assets are capitalised and depreciated on a straight-line basis over the expected useful economic life of the asset from the date the asset is put into ordinary operations. Investments in power plants not operated by Statkraft SF are similarly depreciated using an average rate of depreciation.

Accrued costs of inter-company construction work are recorded as cost reductions. Interest on building loans for major investments is calculated and capitalised. Rights associated with waterfalls, and rights to take over power plants that

have reverted to state ownership, are capitalised at cost and are not depreciated. Future power plants that revert will be depreciated from the date they are taken over.

### **Shares and interests in subsidiaries and associated companies**

These are recorded in accordance with the cost method in the company's accounts. Dividend received and other distributions of income from the companies are recorded as financial income. Shareholdings in associated companies of a significant size are dealt with in accordance with the equity method in the consolidated accounts, while shareholdings of an insignificant size are dealt with according to the cost method.

### **Other shares and interests classified as fixed assets**

These are recorded according to the cost method in the company's accounts and the consolidated accounts. Dividend received is recorded as financial income.

### **Inventories/spare parts**

Standard inventories and spare parts that have been purchased for the operations of the power plants are recorded as current assets and evaluated on the lower value principle. Non-standard spare parts that are related to specific long-term assets or groups of capital assets are capitalised, and depreciated over the economic life of the underlying asset.

### **Reservoir inventory**

Water in the reservoirs is not recorded as an asset in the accounts. Details of volumes are to be found in the Notes to the Accounts.

### **Receivables**

Accounts receivable and other receivables are recorded at nominal value less provisions for bad debts. Provisions for bad debts are made on the basis of an individual assessment of each receivable.

### **Shares, bonds, certificates etc.**

Shares, bonds and certificates etc. that are classified as current assets are, for each group of assets, valued on a portfolio basis on the lower value principle.

### **Foreign currencies**

Monetary items denominated in foreign currencies are translated at the exchange rates on the balance sheet date. Liabilities in foreign currencies that are taken up as part of the hedging of assets or future income in the same foreign currency are, however, recorded at the rate applicable on the date of the transaction. Liabilities in the consolidated accounts that secure assets that are converted at the current rate are also converted at the current rate. Conversion differences are recorded directly against equity.

### **Pension costs**

In the accounts, pension costs and pension obligations are treated in accordance with the Draft Norwegian Accounting Standard for pension costs. The enterprise's pension scheme is treated as a benefit plan.

The net pension cost for the period is included in salaries and other payroll costs and is made up of the period's pension earnings, the interest costs for the obligation that has occurred and the expected yield on pension assets.

Prepaid pension is the difference between a fair value of the pension assets and the present value of the estimated pension obligations, and is entered as a long-term asset in the balance sheet. Correspondingly, a long-term liability arises in the accounts when the pension obligations exceed the pension assets. The effect of a change in assumptions, estimate deviations when calculating pension obligations, and the difference between projected and actual yield on pension assets are recorded in the accounts in the year they arise.

### **Principles for cash flow analysis**

The cash flow analysis is prepared using the indirect method. This implies that the analysis is based on the company's net income/loss for the year in order to show cash flows generated by the operating activities, investment activities, and financing activities respectively.

# NOTES TO THE ACCOUNTS

## NOTE 1 CHANGES IN ACCOUNTING PRINCIPLES ETC.

### Change in accounting principles

With effect from 1 January 1999, Statkraft SF introduced new accounting principles in accordance with the Accounting Act of 1998. The largest change is that deferred tax assets where a future use of the assets is probable now is recorded in the balance sheet. The effect of the changes in accounting principles is recorded against equity and the effect on equity is shown below

amounts in NOK million	The Group	Statkraft SF
	Equity 1.1.99	Equity 1.1.99
Current rate on monetary items in foreign currencies	10	10
Recording deferred tax assets	1 429	1 350
<b>Total</b>	<b>1 439</b>	<b>1 360</b>

### Comparative figures

Comparative figures in the income statement and balance sheet have been restated in accordance with the new principles.

### Reclassifications

The Corporate Meeting of the company resolved a dividend of NOK 309 million for 1998, which was NOK 93 million higher than the dividend proposed by the Board of Directors of Statkraft SF. As a result of this, NOK 93 million has been reclassified from equity to current liabilities in the 1998 accounts.

## NOTE 2 POWER REVENUES

Statkraft optimises its power production based on an assessment of the value of available water compared to the actual and expected future spot price. This is done irrespective of contracts entered into.

In the event that Statkraft has physical contractual obligations to supply power that deviate from actual production, the difference is either bought or sold in the open market. Necessary spot purchases are recorded as a correction of power revenues.

Physical and financial contracts are used to hedge the underlying production by way of entering into options to buy or sell. Sales positions are assumed to hedge the price of a specific part of planned future production. Purchase positions are entered into to adjust the hedging level if assumptions change and Statkraft realises that it has a too high hedged position. All contracts are recorded as an adjustment of the underlying revenue from production based on the margin between contract price and spot price

amounts in NOK million	Statkraft SF		
	1999	1998	1997
Production at spot prices	3 654	3 773	3 720
Industrial contracts	-266	-452	-487
Price hedging free contracts	387	459	1 101
Other net revenue power sales <sup>1)</sup>	764	85	294
<b>Total</b>	<b>4 539</b>	<b>3 865</b>	<b>4 628</b>

1) Includes gain/loss on trading, margin on production optimising, international exchange contracts and licence power for power plants outside the Group.

Statkraft has the following long-term sales contracts with the power-intensive industry and the wood processing industry at terms set by the Storting (Parliament) together with delivery obligations at cost to licence power recipients: (the figures have not been adjusted for possible Storting Proposition 52 contracts):

figures in TWh	2000	2001	2002	2003	2004	2005	2006	2007	2008	2009	2010
Firm sales agreements	20.7	20.7	20.7	20.4	20.5	17.6	15.9	13.8	11.7	11.7	11.6



In addition, Statkraft has other physical contractual obligations of varying duration to both domestic and foreign customers. Statkraft has no long-term physical purchase obligations of significance.

The present value of the contract portfolio depends on the assumptions applied i.a. to the required rate of return and price ranges. Free contracts include both physical and financial contracts entered into on commercial terms. At 31 December 1999, the estimated value of Statkraft's free contracts for the period 2000-2010 (excluding export contracts) is approximately NOK 100-150 million.

Power trading was divided among the geographic markets as follows:

Figures in TWh	Statkraft SF		
	1999	1998	1997
Home market (incl. Sweden and Finland)	31,0	31,5	26,9
Denmark	0,7	0,7	0,6
Germany	0,8	0,2	-
<b>Total</b>	<b>32,5</b>	<b>32,4</b>	<b>27,5</b>

### NOTE 3 WATER RESERVOIRS AND SALEABLE PRODUCTION

Figures in TWh	Reservoirs				Saleable production			
	31.12.1999	31.12.1998	31.12.1997	max. capacity	1999	1998	1997	mean
	28,5	25,3	24,8	33,1	32,5	32,4	27,5	32,3

In a normal year, the water in reservoirs varies by - 11 TWh with a minimum in April, and + 5 TWh with a maximum level in October. The increase in reservoir levels in 1999 was a result of above normal inflows. The use of this water in the reservoirs will have an impact of Statkraft's ability to produce power and its financial result in the future. However, this will depend on precipitation in the future.

### NOTE 4 OTHER OPERATING REVENUES

1999	The Group			amounts in NOK million	Statkraft SF		
	1998	1997	1999		1998	1997	
223	181	204		223	197	216	
121	77	92		119	78	90	
720	663	416		60	62	65	
10	507	10		6	471	6	
2	20	4		2	20	4	
<b>1 076</b>	<b>1 448</b>	<b>726</b>		<b>410</b>	<b>828</b>	<b>381</b>	

The tax refunds refer to refunds of tax by local authorities for the years prior to the establishment of the State enterprise.

Pursuant to the regulations in the Energy Act, separate accounting information is presented for the profit centres for the central grid, the regional grid and the distribution grid (monopoly activities) for Statkraft SF, cf. revenues from leasing power transmission lines above. The figures for 1999 will be finally settled in 2000. The revenue ceiling for 1999 is NOK 103.3 million.

amounts in NOK million	Central grid		Regional grid		Distribution grid
	1999	1998	1999	1998	1999
Operating revenues <sup>1)</sup>	65,3	56,0	31,6	19,1	0,1
Operating costs	26,6	26,9	15,6	13,7	0,9
Result	38,7	29,1	16,0	5,4	- 0,8
Correction <sup>2)</sup>	9,5	2,4	9,3	12,2	5,0
Corrected result	48,2	31,5	25,3	17,6	4,2
Yield	25,2 %	13,8 %	12,2 %	12,2 %	25,5 %

1) Revenues from plants run by others are not included.

2) Revenues for 1999 are corrected with the increase in the revenue ceiling for 1997 and 1998

### NOTE 5 SALARIES AND OTHER PAYROLL COSTS

1999	The Group			amounts in NOK million	Statkraft SF		
	1998	1997	1999		1998	1997	
507	484	371		268	257	206	
72	61	34		35	30	29	
51	31	28		31	21	24	
14	21	3		1	1	1	
<b>644</b>	<b>597</b>	<b>436</b>		<b>335</b>	<b>309</b>	<b>260</b>	

Salary to the President and C.E.O. of Statkraft SF amounted to NOK 1,459,000 in 1999 and other remuneration amounted to NOK 90,000. Remuneration to the Board of Directors totalled NOK 945,000, of which NOK 160,000 to the Chairman of the Board. The President and C.E.O.'s pensionable age is 65 years, with a right to 66 per cent of his salary on the date he retires, irrespective of the pension rights earned at the time of retirement. Should he retire between the age of 60 and 65 years the C.E.O. can still satisfy these pension terms through an agreement signed regarding mutual reduction in working hours. This agreement implies a mutual decline in work assignments and remuneration for work carried out. Neither the President nor the members of the Group Management have severance arrangements above what is mentioned above, nor are there any bonus schemes. In 1999, the average number of employees in the Group was 1,504, while it was 832 in the parent company.

### NOTE 6 COMPENSATION AND LICENCE FEES

1999	The Group			amounts in NOK million	Statkraft SF		
	1998	1997	1999		1998	1997	
186	194	181		186	194	181	
45	37	39		45	31	39	
<b>231</b>	<b>231</b>	<b>220</b>		<b>231</b>	<b>225</b>	<b>220</b>	

Licence fees are adjusted, based on the Consumer Price Index, 5 years after the licence has been issued, and thereafter at intervals of 5 years. Annual and permanent fixed compensation payments for damage and inconvenience, which arise as a result of hydro power development, are adjusted in accordance with the same rules that apply to licence fees. The present value of current and fixed licence fees and compensation obligations related to plants are estimated to be NOK 2.79 billion and NOK 0.34 billion, respectively, discounted at an interest rate of 7 per cent in accordance with the regulations applicable to redemption.

**NOTE 7 OTHER OPERATING COSTS**

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
<b>309</b>	252	202	Materials	<b>30</b>	50	44
<b>245</b>	252	206	External services	<b>340</b>	311	247
<b>83</b>	81	116	Costs, power plants leased out	<b>83</b>	81	116
<b>64</b>	50	58	Costs, power plants operated by others	<b>64</b>	50	58
<b>2</b>	1	2	Bad debts	<b>1</b>	-	2
<b>-</b>	17	-	Write-down on shares	<b>17</b>	17	-
<b>361</b>	251	184	Other operating costs	<b>195</b>	186	196
<b>1 064</b>	904	768	<b>Total</b>	<b>730</b>	695	663

Other operating costs increased as a result of the higher activity level in the subsidiaries and more work on maintenance projects.

In 1999, Statkraft SF paid auditor's fees of NOK 810,000 for external audit services, NOK 3,030,000 for internal audit services and NOK 3,450,000 for consultancy services. Correspondingly, NOK 1,084,000 and NOK 1,338,125 were charged to the accounts of Norwegian subsidiaries for external audit and consultancy services respectively.

**NOTE 8 FINANCIAL REVENUES AND COSTS**
**Financial income:**

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
<b>-</b>	-	-	Interest income from companies in the same group	<b>180</b>	161	95
<b>185</b>	154	216	Other interest revenues	<b>153</b>	136	119
<b>25</b>	2	1	Other financial revenues	<b>21</b>	-2	62
<b>210</b>	156	217	<b>Total</b>	<b>354</b>	295	276

**Financial costs:**

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
<b>-</b>	-	-	Interests costs to companies in the same group	<b>-</b>	-22	-6
<b>-1 112</b>	-1 029	-1 200	Other interest costs	<b>-1 112</b>	-1 028	-1 198
<b>-23</b>	-9	7	Other financial costs	<b>-6</b>	-6	-5
<b>-1 135</b>	-1 038	-1 193	<b>Total</b>	<b>-1 118</b>	-1 056	-1 209

**Net financial items:**

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
<b>-925</b>	-882	-976	<b>Total</b>	<b>-764</b>	-761	-933

**NOTE 9 TAXES**

Taxes for 1997 and 1998 have been restated in accordance with new principles. In 1997 and 1998 carry forward natural resource tax was included in deferred tax assets, which because of the upper-limit regulation was not recorded in the balance sheet. In the accounts for 1999 carry forward natural resource tax is included as a prepaid tax and this is also shown for 1997 and 1998.

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
<b>448</b>	451	421	Natural resource tax	<b>442</b>	446	417
<b>335</b>	349	341	Property tax	<b>331</b>	344	337
<b>-5</b>	-56	-79	Refunded/reversed tax from previous years	<b>-5</b>	-56	-79
<b>778</b>	744	683	Income independent taxes	<b>768</b>	734	675
<b>190</b>	263	331	Income tax	<b>177</b>	218	292
<b>-183</b>	-223	-237	Income tax offset <sup>1)</sup>	<b>-177</b>	-218	-233
<b>-265</b>	-228	-184	Prepaid tax <sup>2)</sup>	<b>-265</b>	-228	-184
<b>116</b>	126	113	Resource rent tax	<b>116</b>	126	113
<b>-</b>	14	-52	Changes for previous years/restatements	<b>18</b>	14	-50
<b>-142</b>	-48	-29	Income-dependent tax	<b>-131</b>	-88	-62
<b>636</b>	696	654	Taxes payable	<b>637</b>	646	613
<b>108</b>	45	-615	Change in deferred tax	<b>117</b>	69	-662 <sup>3)</sup>
<b>744</b>	741	39	Taxes	<b>754</b>	715	-49

1) Power plant taxation allows for offsetting income tax against paid natural resource tax. In 1997, the offset of the income tax was limited to the common tax to the State (21.25%). W.e.f. 1998 all corporate tax will devolve on the State and the entire income tax (28%) may be used to offset natural resource taxes in the individual company.

2) In the event that the natural resource tax cannot be fully co-ordinated with income tax, the excess amount of natural resource tax and interest can be carried forward and offset against income tax in later years.

3) In the accounts for 1996, a provision of NOK 630 million was made for Statkraft SF's deferred tax obligation. This provision was based on the preliminary replacement value calculations for Statkraft SF's operating assets in power plants. These replacement values were in turn used as the basis for Statkraft's values for taxation purposes at 31 December 96. When the Norwegian Water Resources and Energy Administration (NVE) made the final replacement values available in January 1998, they were considerably higher than expected at 31 December 1997. This resulted in the deferred tax provision being reversed in 1997.

The following shows how one arrives at the tax base for calculating income tax on the basis of the accounts. Comparative figures for temporary differences have been changed because of improved estimates.

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
<b>1 691</b>	1 631	1 277	Pre-tax income	<b>1 440</b>	1 357	1 039
<b>-565</b>	-294	-57	Permanent differences	<b>-332</b>	-146	-31
<b>-435</b>	-296	158	Changes in temporary differences	<b>-467</b>	-378	89
<b>-</b>	-	-94	Loss brought forward	<b>-</b>	-	-
<b>691</b>	1 041	1 284	Tax basis for the year	<b>641</b>	833	1 097
<b>28 %</b>	28 %	28 %	Tax rate	<b>28%</b>	28 %	28 %
<b>194</b>	292	359	Estimated income tax	<b>180</b>	233	307
<b>-4</b>	-29	-29	Tax credit for deduction	<b>-3</b>	-15	-15
<b>-183</b>	-223	-237	Natural resource tax offset	<b>-177</b>	-218	-233
<b>7</b>	40	93	Income tax after offset	<b>-</b>	-	59

The following is a specification of the temporary differences and the taxable loss to be carried forward as well as the calculation of deferred tax/deferred tax assets on the balance sheet date. Pursuant to the new Accounting Act, deferred tax assets are recorded in the balance sheet to the extent that it is probable that they will be used. The deferred tax assets related to operating assets includes temporary differences in both income taxation and resource rent taxation. The figures for 1997 and 1998 have been restated to show recorded deferred tax assets without the upper limit rule.

The Group			amounts in NOK million	Statkraft SF		
1999	1998	1997		1999	1998	1997
- 327	- 632	- 307	Current assets/current liabilities	- 244	-596	- 384
-2 051	-2 180	-2 708	Fixed assets	-1 825	-1 939	-2 530
-	-	- 94	Loss brought forward	-	-	-
-2 379	-2 812	-3 109	Total temporary differences and loss brought forward	- 2 069	-2 535	-2 914
-666	-787	-870	Deferred tax/deferred tax assets	- 579	-710	-816
-395	-527	-563	Temporary differences, resource rent taxation	- 395	-527	-563
- 126	-86	-41	Resource rent tax brought forward	- 126	- 86	-41
-205	-191	154	Deferred tax assets resource rent taxation	- 205	-191	-154
-871	-979	-1 024	Total deferred tax/deferred tax asset	-784	-901	- 970
28/20%	28/20%	28/20%	<b>Tax rate</b>	28/20%	28/20%	28/20%

#### NOTE 10 TREATMENT OF REVENUES AND COSTS IN POWER PLANTS OPERATED BY OTHERS

In companies where Statkraft has an ownership interest without operating responsibility, cf. note 12, the enterprise takes out for own sale a part of that company's electricity production that corresponds to the ownership share. This is part of ordinary power revenues, in line with the power produced by the power plants the company operates itself. Exception is made for contractual sales of licence power arranged by the power company in question, where the revenue on sales is distributed among the owners. For such joint ventures, the power company's operating costs and revenues related to the sale of licence power are distributed among the owners by means of current settlement accounts. The following is a review of Statkraft SF's share of the income statement items in these power plants. Calculated revenues are Statkraft's actual take-out of power multiplied by the average hourly-weighted spot price, and Statkraft's share of licence power revenue.

amounts in NOK million	Statkraft SF		
	1999	1998	1997
Calculated revenues	440	373	447
Other operating revenues	9	13	10
Transmission costs	-39	-33	- 49
<b>Net operating revenues</b>	<b>410</b>	<b>353</b>	<b>408</b>
Compensation and licence fees	22	19	20
Production levies	-	-	53
Other operating costs	61	59	58
Ordinary depreciation	60	60	62
<b>Operating costs</b>	<b>143</b>	<b>138</b>	<b>193</b>
<b>Net financial items</b>	<b>2</b>	<b>8</b>	<b>11</b>
<b>Calculated income before taxes</b>	<b>265</b>	<b>207</b>	<b>204</b>

#### NOTE 11 INTANGIBLE ASSETS

The Group			amounts in NOK million	Statkraft SF		
1999	1998	1997		1999	1998	1997
-	-	-	Research and development	-	-	-
1 249	1 249	1 245	Licences, fall rights etc.	1 243	1 243	1 239
871	978	1 024	Deferred tax assets	783	900	970
3	3	3	Goodwill	-	-	-
<b>2 123</b>	<b>2 230</b>	<b>2 272</b>	<b>Total</b>	<b>2 026</b>	<b>2 143</b>	<b>2 209</b>

#### Statkraft SF

amounts in NOK million	Rights	Goodwill	Total
Acquisition cost 01.01.99	1 238	-	1 238
Added in 1999	5	-	5
Disposals in 1999	-	-	-
Acc. depreciation 31.12.99	-	-	-
Book value 31.12.99	1 243	-	1 243
Year's ordinary depreciation	-	-	-

#### The Group

amounts in NOK million	Rights	Goodwill	Total
Acquisition cost 01.01.99	1 244	12	1 256
Added in 1999	5	1	6
Disposals in 1999	-	-	-
Acc. depreciation 31.12.99	-	10	10
Book value 31.12.99	1 249	3	1 252
Year's ordinary depreciation	-	1	1
Estimated economic life	-	5 year	-

Deferred tax assets are referred to in detail in note 9.

**NOTE 12 PROPERTY, PLANT AND EQUIPMENT**

amounts in NOK million	regulating-plants	turbines, generators etc.	shares in power plants operated by others	buildings, roads, bridges and quays	plants under construction	other	total
<b>Statkraft SF</b>							
Acquisition cost 01.01.99	15 489	6 247	2 695	4 621	295	1 136	30 483
Added in 1999	14	45	9	20	81	153	322
Disposals in 1999	-	-	-	12	161	3	176
Acc. depreciation 31.12.99	2 220	2 136	486	739	-	448	6 029
Book value 31.12.99	13 283	4 156	2 218	3 890	215	838	24 600
Ord. depreciation for the year	302	240	60	91	-	66	759
<b>The Group</b>							
Acquisition cost 01.01.99	15 922	6 446	2 695	4 854	1 106	1 325	32 348
Added in 1999	13	48	9	20	168	168	510
Disposals in 1999	-	-	-	12	162	18	192
Acc. depreciation 31.12.99	2 431	2 244	486	847	-	563	6 571
Book value 31.12.99	13 504	4 250	2 218	4 015	1 196	912	26 095
Ord. depreciation for the year	309	246	60	95	-	88	798
Estimated useful economic life	30–60 years	15–30 years	5–50 years	50–60 years	-	3–40 years	-

Power plants etc. where ownership is shared between Statkraft and others or where the county local authorities etc. have a right to take out and administer part of the power produced in return for financing part of the costs involved, are recorded after deducting the value of others' take-off rights, calculated as their relative share of the off-take.

County local authorities and publicly owned power companies have the following rights to take out power from power plants owned by Statkraft:

Power plant	Others' shares
Kobbelv	35,00 %
Grytten	12,00 %
Svorka	50,00 %
Leirdøla	35,00 %
Vikfalli	12,00 %
Ulla-Førre	28,00 %
Folgefonn	14,94 %
Eidfjord	35,00 %

Statkraft has the following ownership interests in power plans operated by others.

amounts in NOK million	Ownership	Share of fixed assets
Kraftverkene i Øvre Namsen	50,00 %	268
Mørkfoss-Solbergfoss	33,33 %	92
I/S Sira-Kvina kraftselskap	32,10 %	1 448
Aurlandsverkene	7,00 %	410
Røldal-Suldal Kraft AS	8,74 %	-
<b>Total</b>		<b>2 218</b>

Additions and disposals in 1999 for plants under construction are specified below

amounts in NOK million	plant under construction
Book value 01.01.99	295
Direct investments	81
Capitalisation of building loan interest	-
Transfers to fixed assets	-161
<b>Book value 31.12.99 Statkraft SF</b>	<b>215</b>
Book value 01.01.99	1 106
Direct investments	252
Capitalisation of building loan interest	-
Transfers to fixed assets	-162
<b>Book value 31.12.99 The Group</b>	<b>1 196</b>

**NOTE 13 INVESTMENTS IN SUBSIDIARIES AND ASSOCIATED COMPANIES**

Shares in subsidiaries and associated companies are dealt with in accordance with the cost method in the company's accounts.

amounts in NOK 1 000	registered office	ownership	share of votes	book value
<b>Shares in subsidiaries owned by the parent company</b>				
Statkraft Energy Enterprise AS	Bærum	100 %	100 %	2 946 706
Statkraft Holding AS	Bærum	100 %	100 %	4 619 851
Finnmark Energiverk AS	Alta	100 %	100 %	343 256
Himal Power Limited	Kathmandu	74 %	74 %	153 458
Statkraft Energy Europe AS	Bærum	100 %	100 %	82 996
Statkraft Forsikring AS	Bærum	100 %	100 %	30 000
Statkraft Anlegg AS	Bærum	100 %	100 %	25 000
Statkraft Engineering AS	Bærum	100 %	100 %	18 500
Statkraft Peru AS	Bærum	100 %	100 %	100
<b>Total</b>				<b>8 219 867</b>
<b>Shares in associated companies owned by the parent company</b>				
Naturkraft AS	Bærum	33 %	33 %	36 994
Peru Hydro SA	Peru	50 %	50 %	4 461
Settefiskanlegget Lundamo AS	Trondheim	47 %	47 %	700
Norsk Krafteksport AS	Bærum	40 %	40 %	200
Nordic Hydropower AB	Stockholm	50 %	50 %	55
Fjordkraft AS	Sandane	50 %	50 %	25
Aursjøveien AS	Sunndalsøra	33 %	33 %	17
<b>Total</b>				<b>42 452</b>
<b>Shares in subsidiarier and associated companies owned by the parent company</b>				<b>8 262 319</b>

Statkraft Anlegg South Africa has not been consolidated because of the insignificant size of the company.

Shares in associated companies that are considered to be of an insignificant size for the Group are dealt with according to the cost method in the consolidated accounts too. This applies to all the parent company's shares in the table above and shares owned by other group companies as shown in the table below

#### Shares in associated companies and non-consolidated subsidiaries owned by other group companies

amounts in NOK   000	registered office	ownership	share of votes	book value
ScanEnergi AS	Herring	24 %	24 %	14 511
Fosdalen Industrier AS	Fosdalen	33 %	33 %	1 660
Himal Hydro	Kathmandu	33 %	33 %	243
Statkraft Anlegg Sør-Afrika	Bærum	100 %	100 %	5
Mias AS	Oslo	34 %	34 %	200
Grøner Currie & Brown AS	Bærum	50 %	50 %	752
GBS Data	Bærum	50 %	50 %	276
Norterminal	Trondheim	40 %	40 %	-
Norinvest	Alta	33 %	33 %	100
<b>Total</b>				<b>17 747</b>

Shares in associated companies of a significant size are dealt with in accordance with the equity method in the consolidated accounts. This applies to the following companies.

Name	head office	ownership	share of votes
Oslo Energi Produksjon AS	Oslo	20,0 %	20,0 %
Sydkraft AB	Malmö	29,4 %	28,2 %
BKK AS	Bergen	26 %	26 %
BKK Kraftsalg AS	Bergen	49,5 %	49,5 %

amounts in NOK million	OEP	Sydkraft	BKK AS	BKKK AS	SUM
Book value 31.12.98	1 941	5 624	-	-	7 565
Acquired	-	3 983	2 532	63	6 578
Result associated companies	57	325	62	-2	442
Dividend	-	-179	-	-	-179
Foreign exchange gains/losses	-	-117	-	-	-117
Book value 31.12.99	1 998	9 636	2 594	61	14 289

Depreciation added value 1999	-	104	18	-3	119
Added value 31.12.99	-	4 024	945	-30	4 939
Depreciable added value 31.12.99	-	3 362	259	-30	3 591

acquisitions in 1999	Sydkraft	BKK AS	BKKK AS
Cost of acquisition	3 983	2 532	63
Equity recorded in balance sheet at time of acquisition	2 174	1 535	87
<b>Added value</b>	<b>1 809</b>	<b>997</b>	<b>-24</b>

The calculation of the share of the result for the year from Sydkraft is based on the actual figures at 30.09.99 plus the actual result for the period 01.10 – 31.12.98. For Oslo Energi Produksjon, BKK AS and BKKK AS forecasts for 1999 have been used.

#### NOTE 14 OTHER FINANCIAL FIXED ASSETS

The Group			Statkraft SF			
1999	1998	1997	amounts in NOK million	1999	1998	1997
779	803	843	Loans to associated companies	779	803	843
-	-	-	Loans to group companies	6 534	2 594	2 404
921	562	309	Bonds and other long-term receivables	864	524	276
8	7	7	Other shares and interests	7	7	7
<b>1 698</b>	<b>1 372</b>	<b>1 159</b>	<b>Total</b>	<b>8 184</b>	<b>3 928</b>	<b>3 530</b>

#### Specification of other shares and interests

amounts in NOK   000	ownership	book value
<b>Other shares and interests owned by parent company</b>		
Røldal-Suldal Kraft AS <sup>1)</sup>	9 %	958
Settefisk AL	19 %	566
EXPO 2000	11 %	250
Sauda Industriutvikling AS	9 %	40
Vefsenlaksen AS	10 %	10
Capital contribution Statkraft's Pension Fund		5,000
Interest in housing co-operative		160
<b>Total</b>		<b>6,984</b>

#### Other shares owned by Finnmark Energiverk AS

NEFO AS	1 %	450
Kvæningen Kraftverk AS	5 %	25
<b>Total</b>		<b>475</b>

#### Total the Group

**7,459**

1) Statkraft owns 8.74 per cent of the shares in Røldal-Suldal Kraft AS, which in turn owns 54.79 per cent of the power plant IS Røldal-Suldal Kraft. Thus, Statkraft's indirect stake in that partnership is 4.79 per cent.

#### NOTE 15 RECEIVABLES

The Group			Statkraft SF			
1999	1998	1997	amounts in NOK million	1999	1998	1997
151	206	212	Accounts receivable	340	100	119
226	273	328	Accrued revenues etc	185	277	335
77	273	217	Prepaid costs	65	42	89
854	574	170	Other receivables	135	559	155
-	-	-	Current receivables from group companies	389	217	170
<b>1 308</b>	<b>1 326</b>	<b>927</b>	<b>Total</b>	<b>1 114</b>	<b>1 195</b>	<b>868</b>

Accounts receivable are recorded after provision of NOK 10 million for bad debts, compared to NOK 10 million at 31.12.98 and NOK 26 million at 31.12.97.

NOTE 16 INVESTMENTS

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
24	2	-	Quoted shares	-	-	-
122	178	149	Quoted bonds	6	65	149
-	1 340	253	Certificates and promissory notes	-	1 340	253
146	1 520	402	<b>Total</b>	6	1 405	402

Bonds by debtor category

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
10	10	-	Housebank	-	-	-
31	13	30	Commercial/savings banks	6	-	30
5	70	66	Mortgage companies	-	65	66
10	10	-	Industry	-	-	-
66	75	53	Public sector	-	-	53
122	178	149	<b>Total</b>	6	65	149

All the bonds are in NOK.

NOTE 17 BANK DEPOSITS, CASH AND CASH EQUIVALENTS

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
1 299	1.796	751	Cash and bank deposits	1 012	1 623	322

Restricted bank accounts for withholding taxes at source totalled NOK 29.6 million for the Group and NOK 17.2 million for Statkraft SF. In addition, NOK 254.8 million is security for organised energy trading. Statkraft SF has a long-term committed credit line of USD 250 million (NOK 2,008 million) that is undrawn and an overdraft facility of NOK 100 million. This was not drawn on at 31 December 1999.

NOTE 18 EQUITY

amounts in NOK million	The Group	Statkraft SF
Equity as per 31.12.98	17 322	16 758
Result for the year	946	686
Conversion of loan to equity	3 850	3 850
Dividend	-600	-600
Change in minorities	-4	-
Conversion differences	-11	-
<b>Equity as per 31.12.99</b>	<b>21 503</b>	<b>20 694</b>

NOTE 19 PROVISIONS FOR LIABILITIES

The Group				Statkraft SF		
1999	1998	1997	amounts in NOK million	1999	1998	1997
21	28	46	Pension obligations	13	14	30
106	-16	126	Other provisions for liabilities	86	-16	130
127	12	172	<b>Total</b>	99	-2	160

The National Pension Fund/Other group pension schemes

Statkraft has a group pension scheme for its employers with the National Pension Fund. The pension scheme in the National Pension Fund provides benefits in accordance with the National Pension Fund Act. These benefits are retirement pension, disability pension, surviving spouse's and dependent children's pension, and Agreement-linked early retirement pension (AFP). The pension benefits are co-ordinated with the benefits from the National Insurance Scheme.

Grøner has a group pension scheme for its employees with a private insurance company. This covers salaries up to 12G (the basic amount in the National Insurance Scheme). For accounting purposes, the pension schemes are treated in accordance with the Draft Norwegian Accounting Standard for pension costs. The fixing of premiums and estimates of the value of pension obligations are made on actuarial principles. However, the National Pension Fund scheme is not asset-based. Payment of pensions is guaranteed by the State (Section 1 of the Pension Act). A management of the pension assets (fictive assets) is simulated as though the assets were invested in long-term Government bonds. In this simulation, it is assumed that the bonds are held to maturity. The pension assets are therefore valued at book value.

Statkraft's own pension fund

Statkraft has approved a supplementary pension scheme that provides benefits in addition to those from the National Pension Fund. The supplementary scheme covers full pension (66 per cent) up to 12 times the basic amount in the National Insurance Scheme (G), as well as full surviving spouse's pension for all employees. All Statkraft employees are members of the scheme.

Uncovered pension obligations

In addition to the above, Statkraft has entered into pension agreements with 10 of the Group's senior executives. These pensions are covered through the company's running operation. Grøner has pension obligations in respect of 9 people that are covered through the company's running operation.

Assumptions

When calculating the year's net pension cost, and net pension assets (obligations), the following assumptions were made:

Annual discount rate	6.0 %
Salary adjustments	3.3 %
Pension adjustments	2.9 %
Annual increase in G (Nat. Insurance Scheme's basis amount)	2.9 %
Forecasted voluntary retirement:	
• Up to 45 years of age	2.5 %
• Between 45 and 60 years	0.5 %
• Over 60 years	0.0 %
Anticipated yield	5.6 %/7.5 %
Rate of inflation	2.5 %

The pension costs for the period were as follows:

amounts in NOK million	The Group 1999	Statkraft SF 1999	The Group 1998	Statkraft SF 1998
Present value of earned pension rights for the year	28,1	20,0	36,9	23,8
Interest costs on pension obligations	37,8	22,8	34,1	20,0
Gross pension cost for the year	65,9	42,8	71,0	43,8
Expected yield on pension funds	42,6	24,9	38,5	22,6
Recognised effect of change in estimates, pension plans and deviations in yield	27,6	13,4	0,7	-
<b>Net pension costs for the year</b>	<b>50,9</b>	<b>31,3</b>	33,2	21,2

## Reconciliation of pension obligations and pension fund assets

amounts in NOK million	The Group	Statkraft	The Group	Statkraft SF
	31.12.99	31.12.99	31.12.98	31.12.98
Gross pension obligations	645,3	398,2	486,7	347,8
Pension fund assets	655,0	398,7	512,2	355,3
<b>Net pension fund assets (obligations)</b>	<b>9,7</b>	<b>0,5</b>	25,5	7,5

### NOTE 20 SUBORDINATED LOAN

On 16.12.1999 the company's subordinated loan was converted to equity. The converted amount is NOK 3,850 million. No interest costs were recorded on this loan in 1999, as the company's net income did not reach the level that triggered off any interest burden

### NOTE 21 OTHER LONG-TERM LIABILITIES

amounts in NOK million	The Group			Statkraft SF		
	1999	1998	1997	1999	1998	1997
Bond loan	15 706	12 251	11 729	15 706	12 251	11 729
Liabilities to credit institutions	1 107	1 306	1 021	476	818	1 021
Other long-term liabilities	4 868	4 540	4 720	4 836	4 713	4 891
<b>Total</b>	<b>21 681</b>	18 097	17 470	<b>21 018</b>	17 782	17 641

Detailed specification of the above table:

amounts in NOK million	1999	1998	1997
Government loan	2 975	3 400	3 825
Other long-term loans in NOK	8 036	5 893	7 079
Loans in SEK	6 419	4 266	3 388
Loans in Euro	1 686	2 095	2 297
Share of loan in Sira-Kvina Kraftselskap	41	49	175
Prepayments/accrued power sales	1 847	1 804	877
Loans from subsidiaries	14	275	-
<b>Total Statkraft SF</b>	<b>21 018</b>	17 782	17 641
Liabilities to subsidiaries	-	-275	-
Eliminations	-103	-	-275
External debt subsidiaries	766	590	104
<b>Total for the Group</b>	<b>21 681</b>	18 097	17 470

The foreign exchange distribution in the above table takes into account the underlying currency and interest rate swaps with the exception of NOK 340 million in Government loans that has an underlying currency and interest rate swap contract from NOK to SEK.

The increase in other long-term liabilities is mainly due to the financing of further shares in Sydkraft that the company has purchased. Other long-term liabilities in Norwegian kroner comprise nine bond loans amounting to NOK 6,066 million net, and loans in foreign currency for the countervalue of NOK 1,935 million net, where Statkraft has an exposure in NOK as a result of currency and interest rate swaps. The loan denominated in Euro was taken up to hedge future revenues in Euro and is therefore booked at a rate that is equivalent to the rate at the time the loan was disbursed. The weighted average EUR/NOK exchange rate is 8.3156. The loans denominated in SEK were raised in connection with Statkraft's investment in Sydkraft AB and are recorded at the exchange rate on the date the loans were disbursed. The weighted average SEK/NOK exchange rate is 95.64. In connection with the takeover of Finnmark Energiverk AS in 1994, Statkraft SF took over the company's bond loans. These bonds are recorded net i.e. including own portfolio, at NOK 35.3 million. The average current interest rate on Statkraft SF's loans in NOK was 6.32% at the end of the year. The corresponding figures for SEK and Euro were 4.26% and 3.29% respectively.

## Instalment schedule

amounts in NOK million	2000	2001	2002	2003	2004	rest
Instalment schedule Government loans	425	425	425	425	425	850
Instalment schedule other loans	727	3 601	3 215	846	2 058	8 162
<b>Total Statkraft</b>	<b>1 152</b>	<b>4 026</b>	<b>3 640</b>	<b>1 271</b>	<b>2 483</b>	<b>9 012</b>

Statkraft is free to take up loans in the private market, provided that the company's total loans and guarantee obligations do not exceed the value of the company's assets. The value of the assets is fixed on the basis of the latest official balance sheet, corrected for additions and disposals of assets after the balance sheet date. In addition, consideration shall be given to post-balance sheet reductions which are considered not to be of a temporary nature. These constraints do not apply to credits or guarantees on customary terms, and which are related to ordinary commercial transactions. In order to limit the Government's liability for Statkraft's obligations, a limit has been placed on the company's total loans and guarantee obligations. At the Extraordinary Corporate Meeting on 21 December 1999 this was increased from NOK 32.5 billion to NOK 42.5 billion.

### NOTE 22 INTEREST-BEARING LIABILITIES

Interest-bearing liabilities totalling NOK 1,348 million are comprised of certificate loans aggregating NOK 1,150 million and a Euro Commercial Paper Programme of USD 25 million (NOK 198 million).

### NOTE 23 OTHER NON INTEREST-BEARING LIABILITIES

amounts in NOK million	The Group			Statkraft SF		
	1999	1998	1997	1999	1998	1997
Accounts payable	149	163	96	118	138	47
Public duties payable	203	175	164	169	129	154
Accrued costs	651	1 057	825	557	943	774
Other non interest-bearing liabilities	131	244	197	42	201	60
Dividend payable	600	309	-	600	309	-
Short-term liabilities to group companies	-	-	-	11	109	37
<b>Total</b>	<b>1 734</b>	1 948	1 282	<b>1 497</b>	1 829	1 072

### NOTE 24 MORTGAGES, OBLIGATIONS AND GUARANTEES

**Mortgages** County administrations and publicly owned power companies are, in certain cases, entitled to utilise part of the power production from Statkraft SF's power plants, in return for paying part of the construction costs, cf. note 12. As a basis for financing the acquisition of such rights, permission has been given for the county administrations/companies to offer lenders collateral in the power plants in question. At 31 December 1999, such mortgage liabilities amounted to an aggregate NOK 2,105 million, while the book value of the pledged assets amounted to NOK 6,209 million.

**Obligations and guarantee liability** The Statkraft Group has obligations and guarantees for a total of NOK 2,466 million. Of this amount, Statkraft SF has obligations and has issued guarantees related to projects and power exchange contracts for a total of NOK 2,172 million, of which NOK 130 million refers to projects and NOK 2,042 million to power exchange contracts. In addition the subsidiaries have guarantees, mainly referring to projects, for a total of NOK 247 million. Statkraft leases premises for its central administration at Høvik. The lease runs to 30 June 2002, with an annual rent (1999) of NOK 14.11 million. Statkraft has entered into an agreement with Mustad Eiendom AS to lease an office building that Mustad Eiendom is to build at Lilleakerveien 6, Oslo. The agreement has a lease period of 20 years with an option to renew for a further 10 years. Work on the building is on schedule and the office complex should be completed as planned in June 2002.

## NOTE 25 OFF-BALANCE SHEET ITEMS

### Forward contracts, foreign exchange:

Currency:	Amount bought in million:	Amount sold in million:	Market value of contracts in NOK:
SEK	-	1 883	10 mill
EUR	-	334	207 mill
DKK	-	13	-
USD	25	-	2 mill

The forward contracts mature between 2000 and the year 2002. These transactions are linked to agreed sales revenues in the respective currencies, or loans taken up to hedge such revenue. The forward contracts are therefore classified as hedging transactions, and according to the principles for recording such hedging transactions, are not recorded at market value in the accounts. This is countered by the sales revenues that are hedged being recorded at the agreed forward exchange rate for hedging transactions. Forward contracts are recorded gross. At 31 December 1999, the market value of the contracts was NOK 219 million. Realised losses on hedging contracts in foreign currencies totalled NOK 3 million at 31 December 1999.

### Interest swaps:

Currency:	Principal amount in currency:	Market value of contracts in NOK:
NOK	10 099 mill	-5 mill
SEK	5 300 mill	69 mill
EUR	288 mill	34 mill

Interest swaps are used to adjust the interest sensitivity of the company's loans to what the company regards as adequate hedging. In addition, interest swaps are used to extend existing forward contracts. As per 31 December 1999 the market value of the agreements was NOK 98 million.

### Interest and foreign exchange swaps:

Valuta:	Principal amount in currency:	Market value of contracts in NOK:
From currency to NOK	2 339 mill	29 mill
From currency to SEK	4 858 mill	299 mill
From currency to EUR	55 mill	21 mill
From currency to DKK	187 mill	19 mill
From currency to USD	170 mill	-127 mill

Interest and foreign exchange swaps are used to achieve favourable financing in the desired currency when a combination of financing in another currency and a customised interest and foreign exchange swap gives lower interest costs than direct financing in the desired currency. Statkraft has underlying financing in CHF, FRF, DKK and JPY. The market value of the agreements as per 31 December 1999 was NOK 241 million.

### Options on loans and interest swaps:

At year-end, Statkraft had entered into options to extend loans for a total underlying amount of NOK 975 million. Options for interest swaps have been entered into to adjust the duration of interest swaps with conditions for underlying loans for a corresponding underlying amount. The total market value of the agreements as of 31 December 1999 offset each other.

### Interest options:

Interest options are entered into to adjust the interest rate sensitivity on the company's floating rate loans to what the company at any time considers adequate hedging. At year-end Statkraft had entered into interest options in SEK for a total underlying amount of SEK 200 million. The market value of the agreements as per 31.12.1999, including the option premium, was NOK 0.2 million.

### Future interest rate agreements (FRA)

Future interest rate agreements are entered into to adjust the interest rate sensitivity inherent in the company's floating rate loans to what the company at any time considers adequate hedging. At year-end Statkraft had hedged interest rate obligations in NOK for a total underlying amount of NOK 1,100 million. The market value of the agreements as per 31.12.1999 was NOK 0 million.

## Interest rate exposure Statkraft SF:

### Re-pricing table (NOK million)

Re-pricing period	0-3 mths	3-6 mths	6-12 mths	1-3 year	>3 year
Durasjon					
Bank deposits	1 012	-	-	-	-
Funding, investments and derivatives	-2 532	-177	-1 994	-10 931	-4 624

(positive figures = investments, negative figures = funding)

The table shows which parts of Statkraft's investments and funding portfolios that are exposed to interest rate adjustment in the various duration intervals.

### Exposure by currency as per 31.12.99

Currency	NOK	SEK	EUR
Modified duration <sup>1)</sup>	1,95	1,63	2,24

<sup>1)</sup> Statkraft uses modified duration to measure interest rate sensitivity in the funding portfolio. The figures show the percentage change in market value if market rates change by one percentage point.

## NOTE 26 MARKET AND FINANCIAL RISK

In its business, Statkraft is exposed to various types of risk. The most important naturally enough relates to production of and trading in power, but the company is also exposed to other financial and operational risks.

### Market risk

Statkraft's main activities are the production of and trading in hydro power. In a market with a great deal of hydro power where access to water varies a great deal from year to year, prices and production capacity will also vary considerably. This may have a marked impact on Statkraft's results. Since production and prices are often negatively correlated, i.e. a great deal of water and high production brings about lower prices, and vice versa, this means that the outcome of the revenue is naturally dampened. In addition, Statkraft is active in risk management to adjust to the actual market situation. This way, Statkraft endeavours in the long term to achieve maximum earnings from production, taking into account the company's risk criteria.

### Risk management

To a considerable extent, Statkraft makes use of forward contracts and other financial instruments in its hedging of revenue. Contract trading helps stabilise Statkraft's revenues from year to year. This is desirable because of the great uncertainty surrounding the total revenue from power sales. This depends on a volatile spot price and uncertain production capacity. In this connection there is no difference between physical and financial contracts that are traded bilaterally and via brokers or financial contracts in the forward market (NordPool). Price is the prime guiding force when selecting the trading form. Hence, the most important factor is that contracts are good seen in relation to existing power contracts and the scope of the outcome on both own production and spot prices. The company is constantly adjusting the contract portfolio so that expected earnings are maximised without the downside risk increasing.

### Trading in derivatives

Statkraft deals in various instruments, physical and financial, in order to hedge revenue. This hedging, which also takes into consideration the company's present and future production capacity, is intended to ensure an optimal contract position in relation to given risk criteria. At the end of 1999, the company had hedged more than 55 per cent of mean production through to and including the year 2005. In addition to hedging, Statkraft uses financial derivatives to take limited short-term positions in the market. Internal guidelines have been established for both purposes as regards market exposure. The total market risk can be quantified for the scope of net power revenue, after transmission, in relation to expectations. With a probability of 80 per cent, it is estimated that net power revenue will be within +/- NOK 800 million in 2000 and +/- NOK 1,000 million in the years 2001 and 2002. Taxation of power plants will dampen the impact on the company's net income after taxes.



### **Financial risk**

Statkraft's approach to financial risk is laid down in a Board resolution on Statkraft's financial strategy. Compliance with risk management limits is reported quarterly to the Board.

### **Interest rate risk**

The financial strategy sets limits for the duration of placements and funding. Statkraft's funding shall have duration of between 1 and 3 years for each currency and for the portfolio as a whole. The reason for Statkraft's duration target is a desire to limit changes in the value of the company's net liabilities. The duration target has been selected because the company assumes that in the short and medium term there is little correlation between inflation and interest rate levels and operating revenue. In the long term, Statkraft assumes that operating revenue will reflect changes in the inflation and interest rates. Fixed interest rate loans, floating rate loans and interest and currency swaps are used to arrive at the desired degree of hedging.

### **Foreign exchange risk**

The financial strategy sets limits for the degree of hedging of foreign currency revenues and long-term investments in assets denominated in foreign currencies. Foreign currency revenues that are hedged relate to contracts where volumes and timing are known, while investments denominated in foreign currencies are long-term investments in shares. This primarily refers to Statkraft's stake in Sydkraft. The background for Statkraft's principles for foreign exchange risk management is that Statkraft wants to limit the volatility in the present value of the company's receivables, liabilities and future revenue in foreign currencies. Loans in the currencies in question, interest and currency swaps to the desired currency and the sale of currencies forward are the instruments used to arrive at an adequate hedging. The limits for hedging foreign currency revenues apply per currency and amount to 40-70 per cent of revenue three year's ahead and with an increasing degree of hedging for revenue that materialises more rapidly. In the case of long-term investments, 70-100 per cent shall be hedged.

### **Liquidity risk**

Statkraft assumes a liquidity risk because the term of the financial obligations are not matched to the cash flow generated by the assets. The company's credit worthiness is very high, which is confirmed by the long-term credit ratings Aaa and AA+ from the rating agencies Moody's Investor Service and Standard & Poor's respectively. These good ratings are rooted to a great extent in the provision in the Act relating to State-owned Enterprises, which stipulates that winding up proceedings cannot be filed against state enterprises. In the event that the company is bankrupt, the state is responsible for the creditors receiving full cover. Based on the state enterprise corporate form, the good ratings and standardised loan programmes, the company will normally be able to finance, at fairly short notice, the payment obligations that might arise. As an extra security against possible unrest on the financial markets, Statkraft has established a long-term committed credit line for the countervalue of USD 250 million.

### **Credit risk**

Statkraft assumes a credit risk primarily by placing excess liquidity with issuers of securities and because a counterparty risk arises from the use of hedging instruments such as interest rate swaps, currency and interest rate swaps, and forward contracts. The limits for the total credit risk are set by the President and Chief Executive Officer and are reported to the Board quarterly. The limits for each debtor are set on the basis of assumed creditworthiness and possible formal credit ratings. Quantification of the risk in placements is based on the principal amount of Statkraft's receivables. Quantifying the counterparty risk per counterparty is arrived at by adding up possible positive market values of the hedging contracts and an estimate of the potential rise in this market value. This expresses the potential for loss should the counterparty fail to fulfil his obligations under the contract.

### **Insurance risk**

Statkraft has a considerable risk exposure in its operations related to damage/loss of assets (primarily power plants), production losses and damage to third-party lives and property, e.g. from fire, floods or inundation following damage to or fractures in dams. Statkraft has directly, and through its captive insurance company Statkraft Forsikring AS, bought cover in the insurance market under a comprehensive insurance programme.

The maximum deductible arising from individual damage to assets is NOK 8 million and the maximum deductible per year is NOK 12 million. In the case of production losses the maximum deductible is NOK 6 million per insurance event.

In order to reduce the risk of losses arising from a failure on the part of the insurance company to pay compensation, Statkraft has demanded that both the direct insurance company and the reinsurance companies shall have a rating of BBB or better. Furthermore, Statkraft's risk is limited by the Norwegian authorities having established a guarantee scheme that ensures that policyholders receive claim payments even though the insurance cover is with a Norwegian insurance company that goes into liquidation.

# Auditor's report for 1999

(Translation from Norwegian)

## To the Corporate Meeting of Statkraft SF

We have audited the annual financial statements of Statkraft SF as of 31 December 1999, showing a profit of NOK 686 million for the Enterprise and a profit of NOK 946 million for the Group. We have also audited the information in the directors' report concerning the financial statements, the going concern assumption, and the proposal for the appropriation of the profit. The financial statements comprise the balance sheet, the statements of income and cash flows, the accompanying notes and the consolidated accounts. These financial statements are the responsibility of the Board of Directors and Chief Executive Officer. Our responsibility is to express an opinion on these financial statements and on other information according to the requirements of the Norwegian Act on Auditing and Auditors.

We conducted our audit in accordance with the Norwegian Act on Auditing and Auditors and auditing standards and practices generally accepted in Norway. Those standards and practices require that we plan and perform the audit to obtain reasonable assurance about whether 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 significant estimates made by management, as well as evaluating the overall financial statement presentation. To the extent required by law and auditing standards an audit also comprises a review of the management of the Enterprise's financial affairs and its accounting and internal control systems. We believe that our audit provides a reasonable basis for our opinion.

### In our opinion,

- the financial statements have been prepared in accordance with law and regulations and present the financial position of the Enterprise and of the Group as of 31 December 1999, and the results of its operations and its cash flows for the year then ended, in accordance with accounting standards, principles and practices generally accepted in Norway
- the Enterprise's management has fulfilled its obligation in respect of registration and documentation of accounting information as required by law and accounting standards, principles and practices generally accepted in Norway
- the information in the directors' report concerning the financial statements, the going concern assumption, and the proposal for the appropriation of the profit is consistent with the financial statements and comply with law and regulations.

Oslo, 7 March 2000

ARTHUR ANDERSEN & CO.



Finn Berg Jacobsen (sig)

State Authorised Public Accountant (Norway)

# Key figures

## The Group

	Unit	1999	1998	1997	1996	1995
<b>Financial result:</b>						
Gross operating revenues	NOK million	<b>5 601</b>	5 314	5 353	5 562	4 536
Net operating revenues	NOK million	<b>4 912</b>	4 760	4 702	4 698	3 837
Operating income	NOK million	<b>2 174</b>	2 198	1 998	2 354	1 589
Income before taxes	NOK million	<b>1 691</b>	1 631	1 277	1 686	993
Net income for the year <sup>1)</sup>	NOK million	<b>946</b>	887	1 228	455	328
<b>Investments:</b>						
Investments:	NOK million	<b>7 026</b>	944	1 085	6 772	403
<b>Balance sheet at 31.12:</b>						
Cash and cash equivalents	NOK million	<b>1 445</b>	3 311	1 153	1 314	2 061
Equity	NOK million	<b>21 503</b>	17 322	16 669	14 480	11 032
Total assets	NOK million	<b>47 048</b>	42 411	40 075	39 089	32 821
<b>Key ratios:</b>						
Return on total assets <sup>2)</sup>	%	<b>4.7</b>	4.7	6.1	3.8	3.4
Return on equity <sup>3)</sup>	%	<b>4.9</b>	5.2	7.9	3.6	3.0
Gross profit margin <sup>4)</sup>	%	<b>30.2</b>	30.7	23.9	30.3	21.9
Net profit margin <sup>5)</sup>	%	<b>16.9</b>	16.7	22.9	8.2	7.2
Equity ratio <sup>6)</sup>	%	<b>45.7</b>	40.8	41.6	37.0	33.6
Current ratio <sup>7)</sup>		<b>0.8</b>	1.5	1.1	0.8	0.8
Interest coverage <sup>8)</sup>		<b>1.8</b>	1.9	2.0	1.5	1.4
Net cash provided by operations	NOK million	<b>1 849</b>	1 256	1 427	1 814	1 126
<b>Staff:</b>						
Employees 31.12.	Number	<b>1 430</b>	1 535	1 400	1 037	1 143
<b>Production and turnover:</b>						
Production (after pumping and loss)	TWh	<b>32.5</b>	32.4	27.5	32.2	32.0
Purchases	TWh	<b>2.5</b>	2.7	3.4	4.4	2.6
Sales, contract market	TWh	<b>25.6</b>	27.0	25.2	28.5	27.0
Sales, spot market	TWh	<b>7.9</b>	7.2	2.9	3.8	4.6
Export contracts	TWh	<b>1.5</b>	3.5	2.8	4.2	3.0
Installed generator capacity (Statkraft's share)	MW	<b>8 800</b>	8 700	8 700	8 700	8 700
Wholly and partly owned plants	Number	<b>91</b>	91	86	86	86

1) 1997 and 1998 have been revised in accordance with the new Accounting Act.

2)  $\frac{\text{Net income for the year} + \text{financial expenses}}{\text{Average total assets}} \times 100$

3)  $\frac{\text{Net income for the year}}{\text{Average equity}} \times 100$

4)  $\frac{\text{Income before taxes}}{\text{Gross operating revenues}} \times 100$

5)  $\frac{\text{Net income for the year}}{\text{Gross operating revenues}} \times 100$

6)  $\frac{\text{Equity}}{\text{Assets}} \times 100$

7)  $\frac{\text{Current assets}}{\text{Current liabilities}}$

8)  $\frac{\text{Net income for the year} + \text{financial expenses}}{\text{Financial expenses}}$

# Social audit

The Social Audit (Value Added Statement) shows the value added that has taken place through labour input, capital input, expertise and technology input, and how this is distributed to the various stakeholders who have contributed. The employees get their share of valued added in the form of wages and social benefits.

The owners get their share in the form of dividends and retained earnings, while lenders receive their part of the value added in the form of interest. Central and local authorities receive their share in the form of taxation levied on the company and duties/levies paid by the company. Over the last few years, Statkraft's value

added has increased substantially, from NOK 2,039 million in 1994 to NOK 3,004 million in 1999. This represents an annual growth of 9 per cent. In 1999, value added was distributed as follows: 16 per cent to the employees, 31 per cent to lenders, 27 per cent to central and local authorities and 26 per cent to the owner.

Value added in NOK million	1999	1998	1997	1996	1995
Gross operating revenues	5 601	5 314	5 353	5 562	4 536
Consumption of goods and services purchased	1 798	1 495	1 458	1 469	1 248
Gross value added	3 803	3 819	3 895	4 093	3 288
Ordinary depreciation	799	830	824	827	824
Net value added	3 004	2 989	3 071	3 266	2 464
Financial income	210	156	217	235	169
Result from associated companies	443	315	255	-	-
Minority interests	1	3	10	-	-
<b>Value added for distribution</b>	<b>3 655</b>	3 457	3 533	3 501	2 633

Distribution of value added in NOK million	1999	1998	1997	1996	1995
<b>Employees</b>					
Gross wages and social benefits	575	530	396	276	267
<b>Lenders/owners</b>					
Interest	1 135	1 038	1 193	903	765
Dividend	600	309	-	-	-
Taxes and levies	999	1 002	716	1 867	1 273
<b>The company</b>					
Change in equity	346	578	1 228	455	328
<b>Total distributed</b>	<b>3 655</b>	3 457	3 533	3 501	2 633

## Statkraft's 10 largest municipal recipients of tax 1997 - 1999

### Taxes and levies in NOK million

Municipality	1999	1998	1997
1 Vinje	65.3	64.6	61.3
2 Suldal	59.1	60.1	66.9
3 Hemnes	57.4	60.1	35.0
4 Rana	49.5	51.2	35.8
5 Tokke	42.3	42.6	37.3
6 Eidfjord	36.7	37.7	38.1
7 Luster	35.9	35.9	37.4
8 Meløy	33.7	41.7	41.3
9 Narvik	32.0	32.5	31.0
10 Nore og Uvdal	27.4	27.3	20.9
<b>Total</b>	<b>439.5</b>	453.6	405.2

The figures include taxes and licence fees paid directly to the municipalities. The amount refers to tax paid for the individual year. Possible additional payments or refunds from earlier years are not included.

# Statkraft's business areas

Over the last few years, Statkraft has been increasing its activities in established areas and in new fields. The Group has expanded in its core areas of power production and energy trading, among other things by way of acquisitions and co-operation. New areas include trading on the Continent and an indirect involvement in power sales to end-users. The internationalisation of the

business will result in our establishing units in new geographic regions.

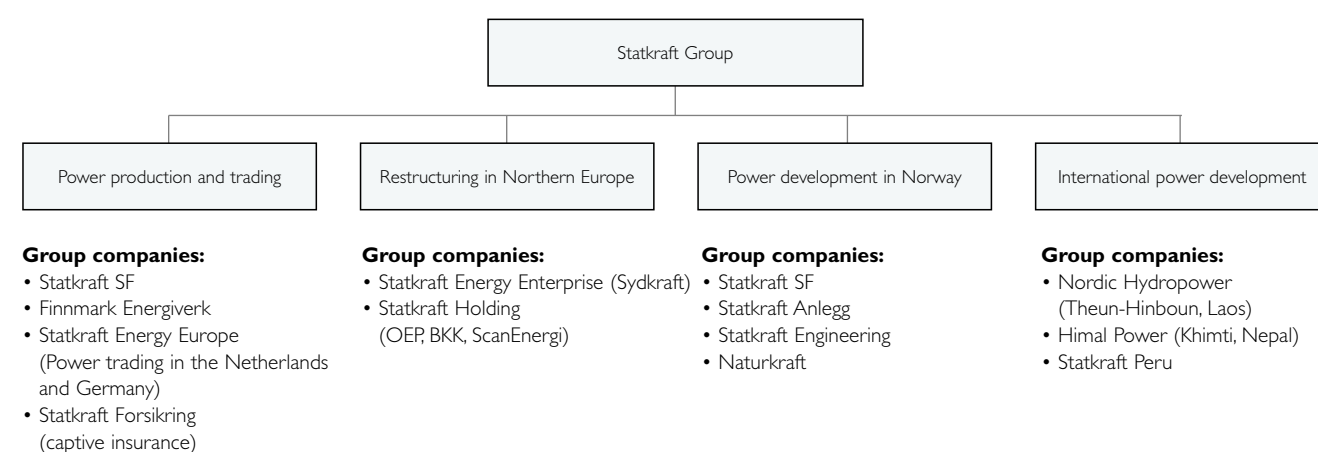
Statkraft's vision to develop into one of the leading Northern European energy companies is based on its existing production capacity. Statkraft has a high quality, low-cost production system, ample water reservoir capacity and a good environmental image. Furthermore, it is important

that the company has eight years' experience from a deregulated market and it has already gone through many of the critical processes that were necessary in the transition to a competitive market. Important prerequisites for fulfilling the vision include competence in the various business areas, a long-term horizon and a sound financial base.

## On the basis of its vision, Statkraft has adopted the following main goals for the four most important business areas:

- To develop and maximise profitability of captive power production and power trading.
- Participate in the restructuring of the energy industry in the Nordic region and in Northern Europe by way of acquisitions and co-operation.
- Realise profitable hydro power development in Norway.
- Develop profitable power projects in other international markets.

Statkraft's activities are organised in a group structure where the business areas are in part organised in the parent company Statkraft SF and in part in operative subsidiaries and holding companies for the administration of interests in other companies. The relationship between the business areas and Group companies is as follows:



## Group companies

	The Group	Statkraft SF	FEAS	Energy Europe	Energy Enterprise	Holding	Anlegg	Engineering	Himal Power	Peru	Forsikring	Eliminations
<b>Income statement</b>												
Gross operating revenues	5 601	4 949	83	-13	-	-	420	335	-	-	24	-197
Operating income	2 174	2 204	44	-33	-1	-	-4	-6	-	-	-8	-22
Result from associated companies	442	-	-	-	325	117	-	-	-	-	-	-
Net financial items	-925	-764	-8	2	-171	13	4	7	-	-	8	-16
Pre-tax income	1 691	1 440	36	-31	154	130	-	1	-	-	-	-39
Net income after tax 1999	946	686	23	-22	177	127	-	-	-	-	-	-45
Net income after tax 1998	887	642	26	-5	89	88	12	8	-	-	-	27
<b>Balance Sheet 31.12.99</b>												
Cash and cash equivalents	1 445	1 018	33	80	67	54	15	37	-	-	1	-
Equity	21 503	20 694	375	73	3 254	4 875	83	45	233	-	30	-8 159
Total assets	46 783	44 969	569	100	9 703	4 879	431	178	984	-	147	-15 177
Equity ratio	46 %	46 %	66 %	73 %	34 %	100 %	19 %	25 %	24 %	99 %	20 %	



# Power production and trading

Statkraft's revenues come first and foremost from power produced from its own water reservoirs. The scope of the outcome for total power revenues is considerable because there is a great deal of risk inherent in both the uncertainty regarding access to water and future energy prices. Power contract trading is an important risk management tool in order to reduce the uncertainty of the revenue outcome and it contributes to securing further revenues. Risk/portfolio management, captive production, power trading and maintenance of the power plants are therefore important elements in Statkraft's core business.

A market analysis of the integrated Nordic energy market, together with hydrological data, forms the basis for Statkraft's expectations of future prices. By simulating the Nordic energy system, including power exchange with the rest of Europe, price forecasts are prepared based on different inflow scenarios. The price forecasts are used as a starting point for Statkraft's power dispositions (production from its own reservoirs) as well as trading in power contracts. In simple terms, Statkraft's power dispositions involve optimising the value of water in the reservoirs against prices in the spot

market for electric energy. Power contracts are used to manage the financial risks linked to revenues from the company's own production. Contracts are traded in the Nordic Power Exchange's (NordPool) futures market, through brokers and bilaterally with other companies.

## Hydrology and market conditions

For Norway and Sweden as a whole experience tells us that inflow can vary by 90 TWh between wet years and dry years. 1999 was yet another wet year that was far from normal. Compared to the statistical mean level, inflow in Norway and Sweden in 1999 was a good 16 TWh higher. 1999 was the third consecutive wet year. This is not particularly abnormal. In the period from 1931 to 1990 there were four instances of three or four consecutive wet years. In the same period there were also four periods with three or four consecutive dry years. Nor is the above-normal inflow in the period 1997 to 1999 particularly high, compared to what has been seen historically over periods with three wet years in a row.

In 1999, inflow in Norway was 13 TWh above normal. Production rose by five per cent to 122 TWh. Production was at the same level as in the wet years earlier in

the 1990s. Inflow was so high that reservoirs in Norway rose by almost 6 TWh during the year, even though production was high.

Total consumption in Norway rose by only 0.2 per cent, mainly because of a considerable decline in electric boiler consumption. The average temperature for the country as a whole was about 0.9 degrees C above normal. 1999 was 0.6 degrees warmer than 1998. General consumption rose by 0.9 per cent, but adjusted for the high temperature it grew by almost 3 per cent. We see much the same picture in Sweden even though the rate at which power consumption is growing is slower. In Finland, the real growth was 1.6 per cent last year. Over a long period, growth in consumption has been stable and high. In other words, there are no signs of any decline in power consumption growth in the Nordic region.

The significant volume-related uncertainty in power supplies, first and foremost in the uncertainty of inflow, as well as variations in consumption, result in a price picture with sharp fluctuations. Last year started with an electric power price of NOK 0.138/kWh in January. The price fell thereafter fairly evenly through to the latter part of April. Compared to 1998, the system price was NOK 0.02 – NOK 0.03 lower in the first four months, reaching rock bottom, namely NOK 0.058 in mid-June. Thereafter, we experienced a period with considerably less inflow than is normal and the price rose rapidly to an average level of more than NOK 0.13/kWh in the remainder of the year. One contributory factor to the increase in price was the comprehensive maintenance carried out on Swedish nuclear power plants, resulting in lower production in the summer months.

## The power situation

December was characterised by cold weather and a high load in Norway and

Sweden. We saw the system price reach a level of about NOK 0.20/kWh several weekdays in week 50. There were some high-load hours when the price exceeded NOK 0.50/kWh. The power shortage situation materialised even more on 24 January 2000 when Sweden experienced a significant power shortage. The area price in the 9th hour exceeded NOK 3.80/kWh. The system price for the whole day was NOK 0.388/kWh. Following several years with a relatively high consumption growth rate, which has been veiled by high temperatures, the chance of a power shortage increases. Over the last few years, such situations have been short-lived, but situations with long-lasting severe cold periods in the Nordic region will certainly occur again. Closing down power production facilities in Norway and Sweden is therefore incomprehensible. In Sweden, the closure of oil condensation plants has been going on for some time, and on 1 December last year Barsebäck I was stopped resulting in a further decline of 600 MW. In the course of 1999 hydro power facilities in Norway were also taken out of production. Turbine 3 (100 MW) at Vinje Power Plant was disconnected from the grid because market conditions and

System price in the spot market 1997-1999

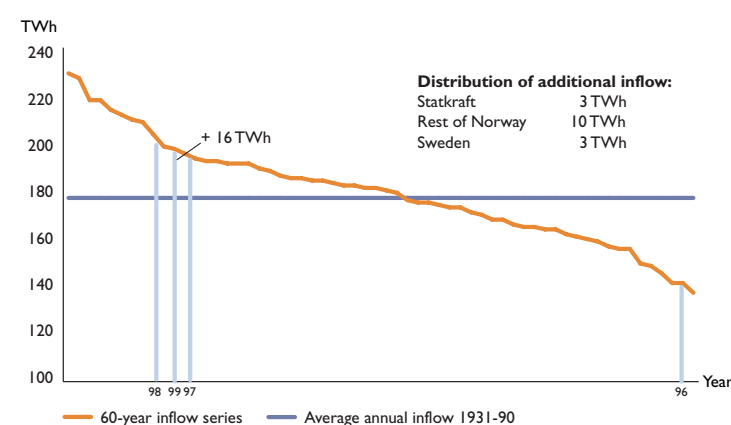


framework conditions made it unprofitable to continue operations. The two remaining turbines can use inflow to Vinje Power Plant. The third turbine has allowed for higher daytime production with a correspondingly lower night-time production. However, transmission costs for Turbine 3 have been higher than the increase in revenue from this production capacity. It looks as though this will be the situation for some time to come. If the framework conditions and/or market conditions

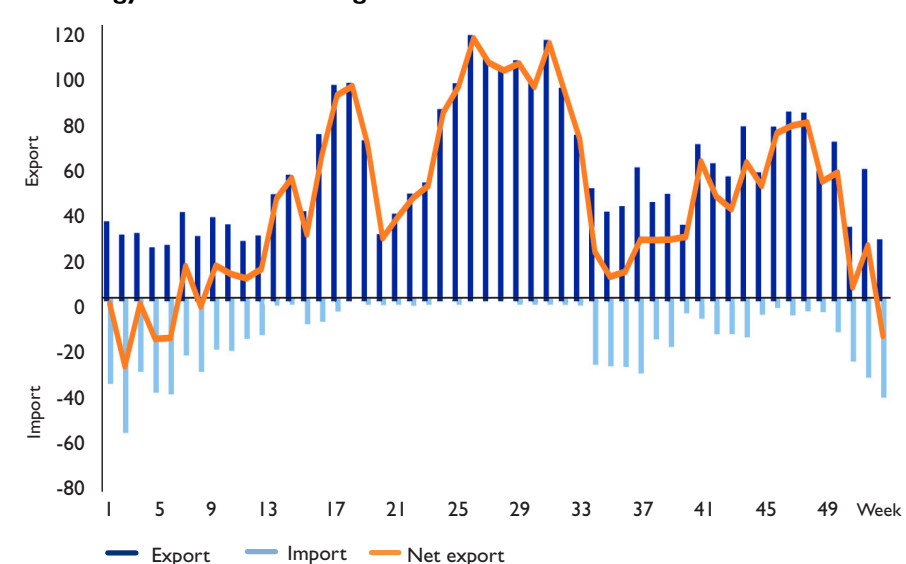
change the turbine might be rehabilitated and reconnected to the grid.

Energy-wise, Norway is now in a situation where she is a net importer also in normal years. 1996 was the first year that Norway became a net importer of some considerable scope. The year was one of the driest years on record, and we imported 9 TWh more than we exported. At the end of 1996, reservoir levels were extremely low and even though the three following years were considerably wetter than normal, net imports continued in 1997 and 1998. Last year, Norway was again a net exporter. On aggregate, we were about in balance with the Swedes. We imported just under 6 TWh from Sweden in the first six months of the year and exported the same volume in the second half of the year. Net exports to Denmark reached approximately 2 TWh, and there was some exchange with Finland and Russia. All in all, Norway exported 2 TWh net.

Statistics relating to exploitable inflow in Norway and Sweden



Energy flow over the Skagerrak connection 1999



## The Nordic Power Exchange and cables

Liberalisation of the Nordic power market in the first half of the 1990s resulted in the establishment of the Nordic Power

Exchange (NordPool), with a physical 24-hour day hour-by-hour market and a financial market for future contracts. Activity on the exchange is growing apace and in 1999 75 TWh were traded on the physical spot market, while financial trading reached 216 TWh. In addition, NordPool cleared bilateral contracts for the equivalent of 684 TWh. This amounts to almost 1,000 TWh with a contract value of NOK 126 billion.

Jutland and Funen in Denmark were included in NordPool from 1 July 1999 and there has been strong growth in trading in this area. However, the establishment of this exchange area in Western Denmark created challenges linked to the implementation of short-term power exchanges with Denmark over the Skagerrak connection. An agreement was therefore entered into with NordPool on how unused capacity in the cables could be exploited for profitable power exchange between the exchange areas in southern Norway and Jutland/Funen.

In addition to power exchange with Denmark, about 400 of the 1,000 MW capacity over the Skagerrak connection is used for power exchange with PreussenElektra, the German energy company. This power exchange agreement began in 1998 and the power is transmitted via a transit channel through Jutland. Trading will increase when a new

cable connection to Germany is in operation. This is scheduled for 2004.

### **Technical operations and maintenance**

In order to exploit the possibilities to be found in major price variations in the energy market, flexible and reliable production plants are an absolute necessity. Maintenance of the production plants is adapted to the power production situation by changing the dates for overhauls according to current market conditions and the water situation. The expressed goal is to minimise total maintenance while maintaining the highest possible degree of availability when prices are high. Emphasis is placed on further developing maintenance management and on the use of status analyses of the plants. There were no major stoppages or breakdowns in 1999.

Statkraft is increasingly seeking to build up competence as regards to differentiating the degree of maintenance. The goal is to shift maintenance efforts to plants and functions which, if they fail or breakdown, have serious consequences. Statkraft also wants to achieve more efficient electric power production by improving production management and planning availability. The company is also increasing its efforts to develop better methods for defining the right projects. In its R&D, Statkraft

emphasises joint projects with the Norwegian Electricity Association (EnFo). The potential for increasing energy efficiency has been reassessed and incorporated into a review that defines the starting point for prioritising further concrete measures. The foundation has been laid for the start of pre-engineering projects corresponding to approximately 100 GWh and realising about 23 GWh in the year 2000.

Statkraft rehabilitates dams, focusing on safety, based on a plan from 1994. All scheduled measures are to be completed by the end of 2002, and 24 of 32 projects have now been completed. At the end of 1999 regulating plants had been rehabilitated for a total of NOK 230 million, while the remaining projects are estimated to cost approximately NOK 115 million. Subsequent to the rehabilitation plan being prepared and approved the first time, several older power plants have reverted to the State and been transferred to Statkraft. This, together with the general ageing of the production facilities and new public safety and security requirements has resulted in the plans being constantly extended, in scope and in cost. Today, the rehabilitation plan contains 20 dams in addition to the original list from 1994 and these are all to be rehabilitated by the end of 2006.

# Restructuring of the energy industry in the the Nordic region and on the Continent

The development in the European energy market in direction of deregulation and cross-border trading continued in 1999. The liberalisation of the energy market in the EU reached a new milestone early in the year with the introduction of free market access for the largest consumers. Some countries have also introduced free market access to smaller customers, while other countries are more reluctant even to open their markets to large customers. The process of deregulation makes new demands on the power companies in Europe and the energy companies must deal with a market that is exposed to competition. Instead of sure supplies and an obligation to deliver, focus will be on competitiveness through low costs and flexible products.

Trading is expected to increase and to shift from physical trading toward financial trading as we have seen in the Nordic region and in other commodity markets. Financial trading is expected to rapidly outgrow physical trading. A number of exchanges are being planned in Northern Europe to deal with the trading.

Liberalisation of the energy market will mean extra risk for the participants. Risk management will be increasingly important. It is expected that both producers and customers will show more interest in products that can help adapt the individual's risk exposure.

The power balance and price formation in the Nordic market is increasingly affected

by what is happening in the rest of Europe. An in-depth understanding of what is happening on the Continent will therefore be important if one is to make favourable dispositions in the Nordic region.

Over the last year there have been a number of take-overs, mergers and alliances between energy companies with a view to adapting to market forces. This development is expected to continue with increased concentration in the industry in the years to come. Statkraft believes that the ongoing restructuring process is still in its infancy and that we will therefore see an increasing tendency toward the establishment of large entities through mergers and acquisitions in the future, across borders set by energy forms. What is certain is that expertise, financial strength, drive and an early positioning are important success factors in this restructuring.

Statkraft will continue to develop the advantages the company has in its high quality, low-cost production systems, large reservoir capacity, good environmental image, and experience from a deregulated market. Statkraft has built up a strong, commercially-orientated corporate culture and today engages a staff that is highly qualified. Our position in the Nordic region and in Northern Europe has been strengthened over the last few years by entering into long-term power exchange agreements, purchasing ownership interests in companies and by establishing trading operations on the Continent.

Statkraft has signed long-term power exchange agreements with Germany's PresussenElektra, Denmark's Elsam, and Netherlands' Sep. The agreement with Elsam has been in operation since 1995 and from the end of 1998 power has been exchanged with PresussenElektra using the Danish transmission network. Furthermore the agreements call for investments in new cable connections to Germany and the Netherlands. An agreement has been signed for the delivery of the cable to Germany, but certain elements still need clarifying before the cable to the Netherlands can be ordered.

The largest single investment in the last few years was the acquisition of ownership interests in Sydkraft AB, Sweden. In 1999, Statkraft bought 7.2 million A-shares and 14.4 million C-shares. Statkraft now owns just over 30 per cent of the company's capital and somewhat more than 28 per cent of the voting rights. Sydkraft is the second largest energy company in Sweden, the largest being Vattenfall. The company has a mean annual production of about 28 TWh, mainly in the form of nuclear power and hydro electric power. In addition, Sydkraft has a considerable activity in distribution network operations, consultancy services, and gas distribution and thermal energy production. It has also a great deal of competence in the field of alternative energy. The company is located in southern Sweden and is well placed in relation to the upcoming common



Northern European energy market. In February 1998, the Swedish Government decided that the phase-out of the country's nuclear power should start with one of the reactors at the Barsebäck Power Plant that is owned by Sydkraft. The reactor was closed down on 1 December 1999 and a voluntary agreement was reached with the Government that compensates Sydkraft for the loss of the capacity by way of an ownership interest in Ringhals AB, which owns nuclear power production facilities.

In the Nordic region, Statkraft has strengthened its position over the last few years inter alia by buying 20 per cent of the shares in Oslo Energi Produksjon AS and 26 per cent in BKK AS. The stake in BKK AS makes Statkraft a co-owner in a large

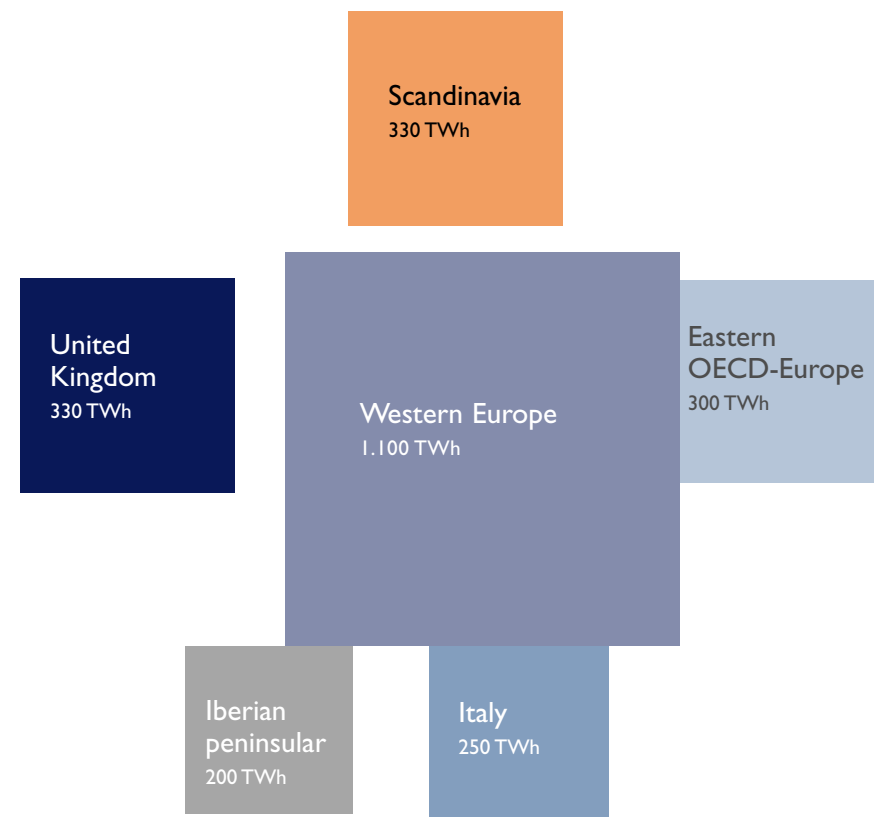
regional energy company in the west of Norway. BKK is also a professional and important participant in the Nordic market. The acquisition will allow the two companies to exploit each other's competence. In addition to the stake in BKK AS, Statkraft has purchased 49.5 per cent of the shares in BKK Kraftsalg AS. With an ownership interest in BKK AS, Statkraft has become co-owner in a Norwegian end-user company. The BKK AS and BKK Kraftsalg AS shares were purchased with effect from the beginning of 1999.

In 1999, together with BKK Kraftsalg, Statkraft became co-owner of the Danish trading and end-user company ScanEnergi. ScanEnergi was established in the autumn of 1998 by 9 Danish distribution companies on Jutland with the object of

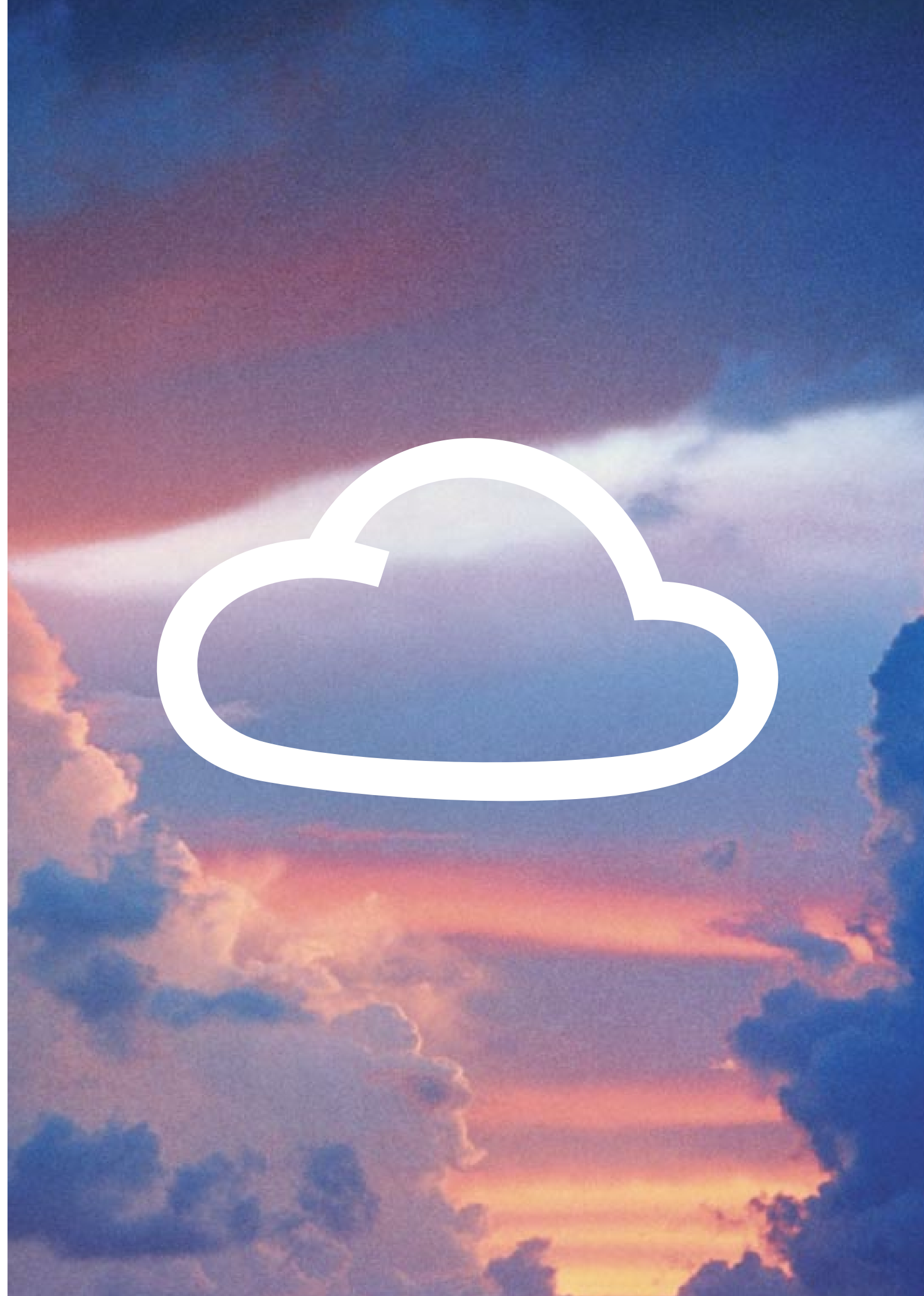
actively participating in the deregulated Danish energy market.

The extension of trading activity in Europe continued with the establishment of Statkraft Energy Deutschland GmbH, which will engage in active power trading on the German market. The company is in an initial build-up stage and by the end of the first quarter of 2000 will have a staff of eight. The Norwegian holding company, Statkraft Energy Europe AS owns both Statkraft Energy Deutschland GmbH and Statkraft Energy Nederland B.V. which was established in 1998 to engage in power trading initially in the Netherlands. In the time to come, Statkraft will consider further extension of trading operations in Europe.

**Illustration of end-user consumption in the European markets**



Sources: IEA statistics



# H

## Power plant development projects in Norway

When realising new production capacity, Statkraft focuses on hydro power, other renewable energy and gas-generated power, all of which are energy sources with low greenhouse gas emissions. In 1999, we continued to develop our portfolio of hydro power projects, and several projects have been submitted to the authorities for approval. We have also prepared applications for licences for three windmill parks. These were submitted in January 2000. We are working on new energy sources and energy carriers such as salt gradients and hydrogen and are preparing a gas-fired power plant through our stake in Naturkraft.

### Hydro power

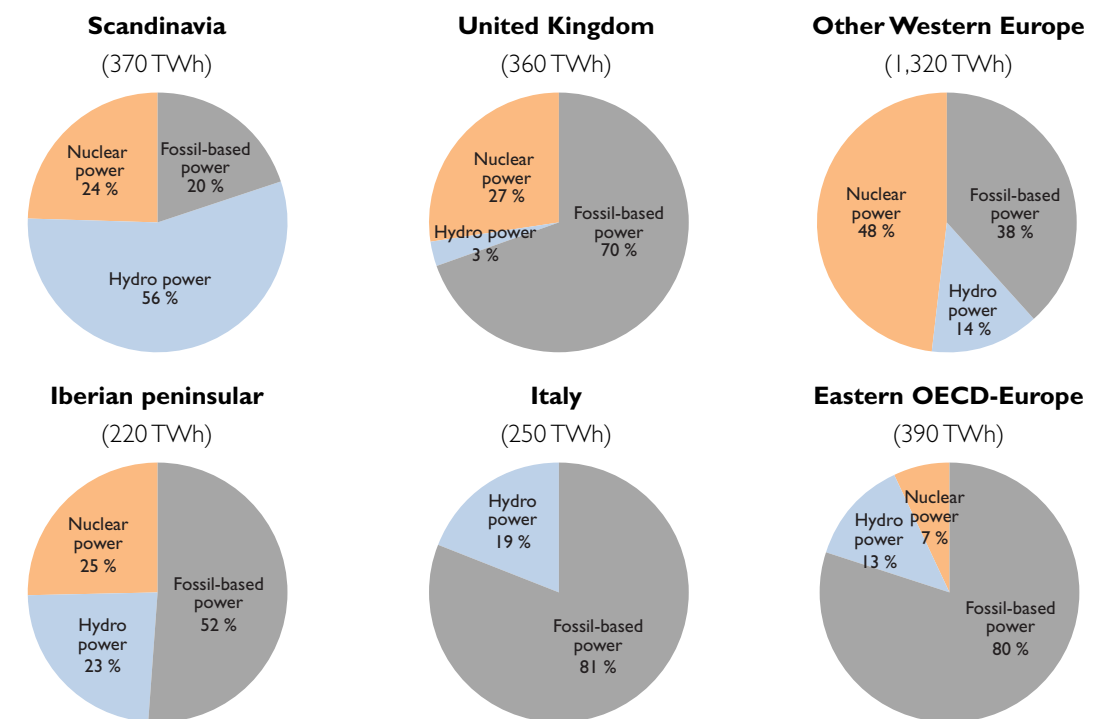
Today, Statkraft has identified profitable

projects in Norway corresponding to about 4-5 TWh that are not being exploited. This covers new watercourses and improvements in the existing production facilities. Developing this potential so that it can be realised in the light of both environmental issues and other social interests, while at the same time giving consideration to technical and financial issues, represents a major challenge.

The authorities are currently processing our application for a licence to develop a new Bjølvo Power Plant. The original power plant was taken over by Statkraft in 1997 and it is in poor technical shape. We expect a decision on the application some time in the 2nd quarter of 2000. We will be able to start building as soon as the licence is issued.

Statkraft has been granted a licence to develop three power plant projects at Beiarn, Bjellånes and Melfjord. Subsequent to the licences being issued, the projects have been reviewed anew, and solutions have been arrived at that improve the result, both technically and financially, while reducing encroachment on nature compared to the plans under which the licences were granted. Together, the projects will contribute about 1 TWh new power, or the equivalent of the consumption of about 40,000 households. Applications for approval of the amendments to plans for all three projects have been submitted to the authorities. The Beiarn project has progressed furthest, but no decision has yet been taken. Further work on the Bjellånes and Melfjord projects has been put off

Illustration of gross production in European markets



Sources: IEA statistics

pending the authorities' decision on the Beirn development.

When dealing with Proposition to the Storting no. 52, Parliament gave Elkem the right of first refusal to further develop the Sauda watercourse, based on a lease contract with Statkraft that runs through to 2029. This development project has therefore been removed from Statkraft's portfolio.

### New renewable energy

Statkraft currently produces energy from pure renewable hydro power. If the growth in electricity consumption continues, the remaining unexploited hydro power potential will not be sufficient to satisfy future market demands. We believe, therefore, that other renewable energy sources will play an important role in the future. For this reason, it is important that Statkraft continues to increase its concentration on such energy sources.

### Wind power

In 1999, Statkraft further developed and concretised its development plans for wind power at Smøla, Stadt and Hitra. Applications for licences with impact assessments have been prepared and

submitted to the authorities. The application for investment and operating support, under the authorities' support programme for the development of new alternative energy, will be submitted in the 1st quarter of 2000. On approval of both the application for a licence and the application for financial support, we will be able to start work on the first windmill park in 2000.

### Salt gradients

Statkraft's work on the possibility of producing electricity with the help of salt gradients continued in 1999. This is based on the pressure difference between salt water and fresh water being the equivalent of a 270 metre fall that can be used for power production. A two-year study has now been completed and the theoretical potential has been verified. The intention is to test the theory in practical experiments in 2000.

### Hydrogen

When energy has a form that makes it suitable for distribution and use, it is referred to as an energy carrier. Electricity, for example hydro and wind power, is a form of energy carrier. In the energy system of

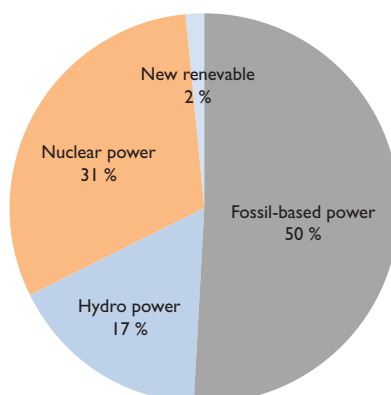
the future, there will be an increasing need for renewable energy carriers. Statkraft has initiated a project to look at hydrogen as an energy carrier in the future. This project is expected to provide considerable insight into the production, storage, transportation and application of hydrogen, with ancillary technologies, and the potential that these technologies will represent in the future.

### Gas-fired power plants

Norsk Hydro, Statoil and Statkraft each own one-third of Naturkraft. In January 1999, this company was granted an emission permit for two plants at Kårstø and Kollsnes. The terms of the emission permits as regards CO<sub>2</sub> and NO<sub>x</sub> are so stringent that they cannot be fulfilled with the best technology available today. The resolution also excludes the purchase of CO<sub>2</sub> quotas before an international scheme has been established. The decision has therefore been appealed, but the authorities have by and large upheld their decision. In connection with the Storting's (Parliament) debate on the Energy Report in the spring of 2000, a clarification of the political steering parameters for gas-fired power plants in Norway is expected.

## Total production in Europe

(3,320 TWh)



# International power development

Energy development, market liberalisation and the privatisation of energy markets also outside of Europe present good business opportunities for companies with hydro power competence and experience. Statkraft wants, therefore, to be an energy company that develops, owns and operates electricity production facilities also outside of Europe in markets with long-term potential for economic growth and a need for access to more energy. However, Statkraft does not involve itself in projects that are considered to be controversial from an environmental point of view.

Currently, Statkraft has ownership interests in two international hydro power companies, one in Laos and one in Nepal.

## Laos

Statkraft has an indirect 10 per cent ownership interest in the Laotian company Theun-Hinboun Power Company, which has built, owns and operates a 210 MW run-of-the-river plant in Laos. The power plant was opened in 1998 and 1999 was the first full year of operation. 1.5 TWh were produced in 1999 and the company returned a profit of USD 30 million. Virtually all of the power is sold to Thailand on a 25-year power sales agreement with EGAT, the state-owned energy company. In 1999, Statkraft received approximately USD 2.5 million as its return on the investment in Theun-Hinboun.

## Nepal

Statkraft owns 74 per cent of Himal Power Ltd., which is responsible for building Khimti I, a 60 MW run-of-the-river power plant in Nepal. Since construction started in 1996, areas with poor rock qualities have created problems and delayed the project's technical progress, but construction work is now almost

completed. Operation is scheduled to start in July 2000 as originally planned. In 1999, a sale of 23 per cent of the shares to BKKAS was negotiated as part of a long planned reduction in the ownership stake. The transaction has not been completed, pending necessary approval.

Himal Power Ltd. originally had the rights to consider developing Khimti II, a power plant upstream of Khimti I. These time-limited rights expired in 1999 and in December 1999 Statkraft applied for a licence when the Nepalese authorities again requested applications.

## Peru

For a couple of years, Statkraft has been studying the possibility of developing hydro power projects in Latin America, where the electricity markets are to a great extent hydro power-based, deregulated and about to be privatised. Peru is considered to be an interesting market, and in 1998 Statkraft applied to the Peruvian authorities for a licence to develop Cheves, a 525 MW run-of-the-river power plant to the north of Lima. The application was rejected in July 1999. The reason appears to be the competition between new hydro power projects and the development of the Camisea gas field in Peru, which has been given high political priority. The rejection of the application was appealed in August 1999. No clarification of the appeal is expected before the outcome of the tender competition for the development of Camisea is known and Peru's next presidential election has been held, and at the earliest in the first half of 2000.

## Prospects

In addition to active project work in Peru, Statkraft has studied market and project opportunities in Brazil. The Brazilian energy market is about to be deregula-

ted and privatised. State-owned power companies are being sold and licences for new hydro power plants are being auctioned to private sector participants. Brazil has therefore developed into an interesting market for international energy companies.

India is also considered to be an interesting market for hydro power development. The country has considerable resources that can be developed and demand for electricity is growing rapidly. Statkraft has applied to the Indian authorities for pre-qualification for the development of hydro power projects in association with NHPC, the federal state-owned Indian hydro power company.

In the 1990s, the global energy market was dominated by thermal power developments and the scope of competitive hydro power developments in the private sector is limited. Hydro power development appears to be losing ground to thermal capacity, especially gas-fired facilities, which have lower capital costs and a shorter development period. In 1999, this caused Statkraft to work on how the company should focus its international strategy outside of Europe.

# Statkraft and the environment

Energy and the environment are inextricably joined. As Norway's leading energy company, Statkraft assumes active environmental responsibilities every single day. Long-term environmental considerations are guiding principles for our activities.

Consumption of electric power is rising in step with the growth in consumption in general in society. Ever newer technical aids make our everyday easier and they need electricity to function. Our consumption of electricity is constantly growing. The last few years, Norway has been a net importer of power from abroad. Much of this comes from Danish fossil-fired power plants and results in considerable emissions of the greenhouse gas CO<sub>2</sub>.

There are good environmental grounds for exploiting the potential to be found in profitable energy conservation in Norway. But that will not be sufficient to cover the power deficit.

As we are approaching a common Northern European power system, the main challenge is not that Norway should be self sufficient with hydro power. In future the goal must be to harvest the environmental gains that lie in exploiting total energy resources in the international

system. Hydro power has great advantages as a "swing producer". "Sluggish" thermal power systems can bear the even load, while hydro power deals with consumption peaks, through the day and night and throughout the year. In this way, Norwegian hydro power can, among other things, reduce emissions of greenhouse gases also in other European countries.

## "Think global, act local"

The environment buzzword "think global, act local" is well suited to Statkraft's activities. Norwegian hydro power gives us clean, renewable energy, thus making a unique contribution to the global environment issue. In Norway, hydro power takes the place of other more polluting energy carriers. Almost all electricity production is based on hydro power and this puts Norway in a very special position as emission of CO<sub>2</sub> amount to only 7.9 ton per inhabitant, which is less than most countries in Europe.

Statkraft is also engaged internationally. We are among the world's leaders in planning, building and operating hydro power plants. We are engaged in South East Asia and Latin America and we apply the same strict environmental achievement measures that we have in Norway. Statkraft is therefore mainly involved in

small and medium-sized run-of-the-river power plants.

Some of the most intense environmental debates in Norway have dealt with the development of hydro power. The conservation organisations have played a major role in getting the authorities – and Statkraft – to put environmental issues higher up on the agenda. But the debates have also placed hydro power in an unreasonably poor environmental light. After all, we manage an important environmental resource. As far as hydro power goes, the conservation organisations have acted locally but not thought particularly globally. Those who oppose hydro power development have focused on local environmental consequences, but have not necessarily considered these in the light of national and global impacts – less hydro power means an increase in the consumption of far more polluting energy.

## Hydro power development

A total of 325 watercourses are wholly or partly protected by the four protection plans adopted by the Storting (Parliament). The plans protect a representative selection of Norwegian watercourses. These watercourses are not to be developed, but licences can be issued for upgrading existing power plants.





The Collective Plan (Samlet plan) for watercourses is the national framework plan for watercourses that are not included in the protection plans. Here we find development projects where applications for licences can be processed quickly and continually in order to help cover the need for energy in the years to come (Category I) and projects where applications for licences can be dealt with in a longer term. All in all the potential is about 30 TWh.

The production of more clean, renewable energy is important for the global environment. Statkraft will actively contribute to an acceptable exploitation of the remaining Norwegian hydro power potential. Modern hydro power development is far gentler on nature and the environment than before. Environmental consideration is guaranteed through very thorough processing of licences prior to development. Environmental aspects and other issues are reviewed in detail in comprehensive impact assessments. During the construction period, environmental demands are stricter than before and modern structural engineering techniques make encroachment on nature much less visible than was the case just a few years ago.

#### **Environmental operation of hydro power plants**

We have high environmental ambitions also for the operation of hydro power plants. Society has stringent environmental demands, as demonstrated in the terms of the licences. So environmental considerations are central in the day-to-day operation. Statkraft has built up unique environmental expertise over the decades and this ensures that important demands such as water flow and water levels in reservoirs are complied with. Statkraft bears responsibility for the watercourses from which we generate

power. For example, we are actively engaged in efforts to improve fish stocks. Every year 500,000 – 600,000 smolt, young fish and fry of salmon, trout and char are released. Statkraft has built several fish hatcheries, we operate fish ladders, and at the request of the Directorate for Nature Management we have assumed operative responsibility for two of the country's three gene banks for fish.

The salmon improvement project in Suldalslågen has received international acclaim. It will provide information on this west of Norway river that is so abundant in water, so that it can remain an important hatching ground for Atlantic salmon. But it will also play a part in developing new and better methods of improving salmon stocks in general.

#### **Alternatives to hydro power**

Comprehensive research and development forms the basis for Statkraft's high environmental ambitions also in the new century. Fresh knowledge and new technological solutions make development and operation of hydro power plants more environmentally friendly. As a future-orientated energy company we are continually considering other energy sources.

Other renewable energy sources account for a very small part of the world's power production today. Following up the Kyoto Protocol may make these more profitable compared to fossil energy sources. Statkraft considers wind power potential as very interesting in Norway. The Institute for Energy Technology has estimated Norwegian wind power potential at 12 TWh. The cost of wind power has fallen, and will probably continue to fall. Wind measurements have been taken in several places, and Statkraft has started to plan wind power plants at Stadlandet, Hitra and Smøla. Applications for licences

for the three power plants were submitted in January 2000. As is the case with hydro power, wind power does not pollute. But wind power development has an impact on the environment, resulting in encroachment on the landscape and a change in its visual character.

As a co-owner of Naturkraft, Statkraft wants to exploit some of our natural gas resources for domestic power production. If we "think global", and bear in mind that we have a Nordic energy market and will soon have a Northern European energy market, there are good environmental arguments for this. Emissions from natural gas are far lower than emissions from other fossil fuels. In particular, CO<sub>2</sub> from gas-fired power plants is only half of what is emitted from coal-fired plants. Norwegian gas-fired power plants will replace the more polluting power generated by coal-fired plants that we are currently importing from Denmark.

#### **The way ahead**

In 1999, Statkraft distributed an environmental report for the first time. The next goal is an ISO 14000 certification. Important steps in this process include a thorough professionalisation of environmental reporting throughout the Group and the implementation of a programme for environmental management.

# Statkraft takes wind power seriously

Wind power is one of mankind's oldest energy sources. Sailing boats and windmills have tamed wind power since times immemorial. But windmills that produce electricity first had their commercial breakthrough only a few decades ago. On the other hand, the world's wind-based electricity production has grown by 25 per cent a year over the last few years. Denmark has been a pioneer in this respect, with more than 5,000 windmills in operation at present. But on average the Danish windmills have a capacity of less than 200 kW while the largest commercial windmills today have up to 2-3 MW. By way of comparison, the planned gas power plants in the west of Norway will produce up to about 350 MW each and have a lifespan that is twice as long as that of a windmill.

Norway is probably the country in Europe best suited for wind power production. Wind power is a natural supplement and complement to the clean renewable hydro power that Statkraft and Norway have so far based their energy production on. Complementary because the Norwegian storable hydro power production means that wind power can be stored and sold when the price is highest. Demand for energy is growing in Norway and the Nordic region but the supply side is not growing at the same pace. In Sweden, nuclear power plants are being phased out and old oil-fired plants are not being maintained. Denmark, which has been the most important supplier to Norway and Sweden, is phasing out its oldest coal-fired plants in line with the country's political goals. Of the renewable energy sources, it appears that wind power is closest to being applied commercially.

Over the last couple of years Statkraft has systematically recorded wind resources in Norway. Based on information from wind charts we identified six potential sites with

satisfactory wind conditions that are simultaneously close enough to the regional grid and have the infrastructure needed for transportation and physical installation. We established close contact with local authorities.

Metering towers were erected at the six sites to monitor wind strength and direction. The average wind speed is an important measurement. The energy content in wind increases with speed to the power of 3. One benefit of the wind at these sites is that it mainly blows in the autumn and winter when the demand for electricity is highest. After evaluating results recorded over a period of a year we selected Stadtlandet in Selje Municipality, Smøla and Hitra for more detailed measurements and have been in a dialogue with the landowners. Throughout the year independent consultants have made impact assessments. They have considered landscape and aesthetics, flora and fauna, cultural heritage sites, noise, agriculture, outdoor life and other social consequences. It is true that wind power is a renewable energy source, but equally true that a windmill park is a very visible encroachment that will rouse opposition. The Norwegian Society for the Conservation of Nature, which is in principle in favour of wind power, has been critical to Statkraft's localisation plans. They would have preferred them to be placed in proximity to existing industrial areas. So far, Statkraft has not found any such alternative sites where wind conditions are satisfactory. But contrary to many hydro power plants, wind power development is reversible. It is likely that windmill parks, at the end of the licence period of 25 years will either be replaced as a result of technological development, or simply dismantled. Lesions on nature will be small and will heal in the course of a few years.

Toward the end of 1999, Statkraft comple-

ted the applications for licences for the three alternatives and these were submitted to the Norwegian Water Resources and Energy Administration (NVE) at the beginning of 2000.

For Statkraft, a prerequisite for this development is that it is profitable. Wind power production prices at the most favourable sites are today in the NOK 0.25 - 0.30/kWh range. This is twice the average market price for electric power on the exchange last year. A tighter power balance in the European market in the years to come is expected to result in higher prices. The Kyoto mechanism and the requirement that emissions be reduced will strengthen this trend and favour renewable emission-free energy sources. But in countries such as Denmark and Germany, wind power producers have guaranteed prices today in the NOK 0.60 - 0.70/kWh range for their supplies thanks to generous and large-scale efforts by the authorities.

In Report to the Storting no. 29 (The Energy Report), the Government describes plans and desires for new production capacity. By the year 2010, 7 TWh new production is to have been established based on new renewable energy sources. 3 TW of this is to be wind power. The Parliamentary Report outlines various support schemes for stimulating wind power development: Up to 25 per cent in investment grants, exemption from investment tax and a 50 per cent reduction in electricity duties.

Most of the production price for wind power is a direct result of the cost of the investment. This implies a high risk for the investor and demands predictable and long-term incentives. Operational support over each year's National Budget does not give adequate predictability and it is doubtful if it will be taken into consideration when making an investment decision. At the end of 1999, plans and licence applications had been submitted for investment support for more than 3 TWh new wind power in Norway. This represents investment grants in the range of NOK 1.5 - 2 billion. The available funds in 2000 cannot provide more than 10 per cent of this.

- Wind power can never be more than a supplement to Norwegian power production. NVE estimates Norway's total wind power potential at 12 - 14 TWh. By way of comparison the potential for unexploited hydro power in the Collective Plan is approximately 25 TWh.
- Wind power is an environmentally friendly renewable energy source. It results in no emissions and calls for only limited and reversible encroachment on nature.
- Norway is probably the country in Europe with the best natural conditions for exploiting wind power.
- Profitable wind power development necessitates governmental support in the foreseeable future. Framework conditions outlined in Report to the Storting no. 29 make wind power a financially competitive alternative.

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