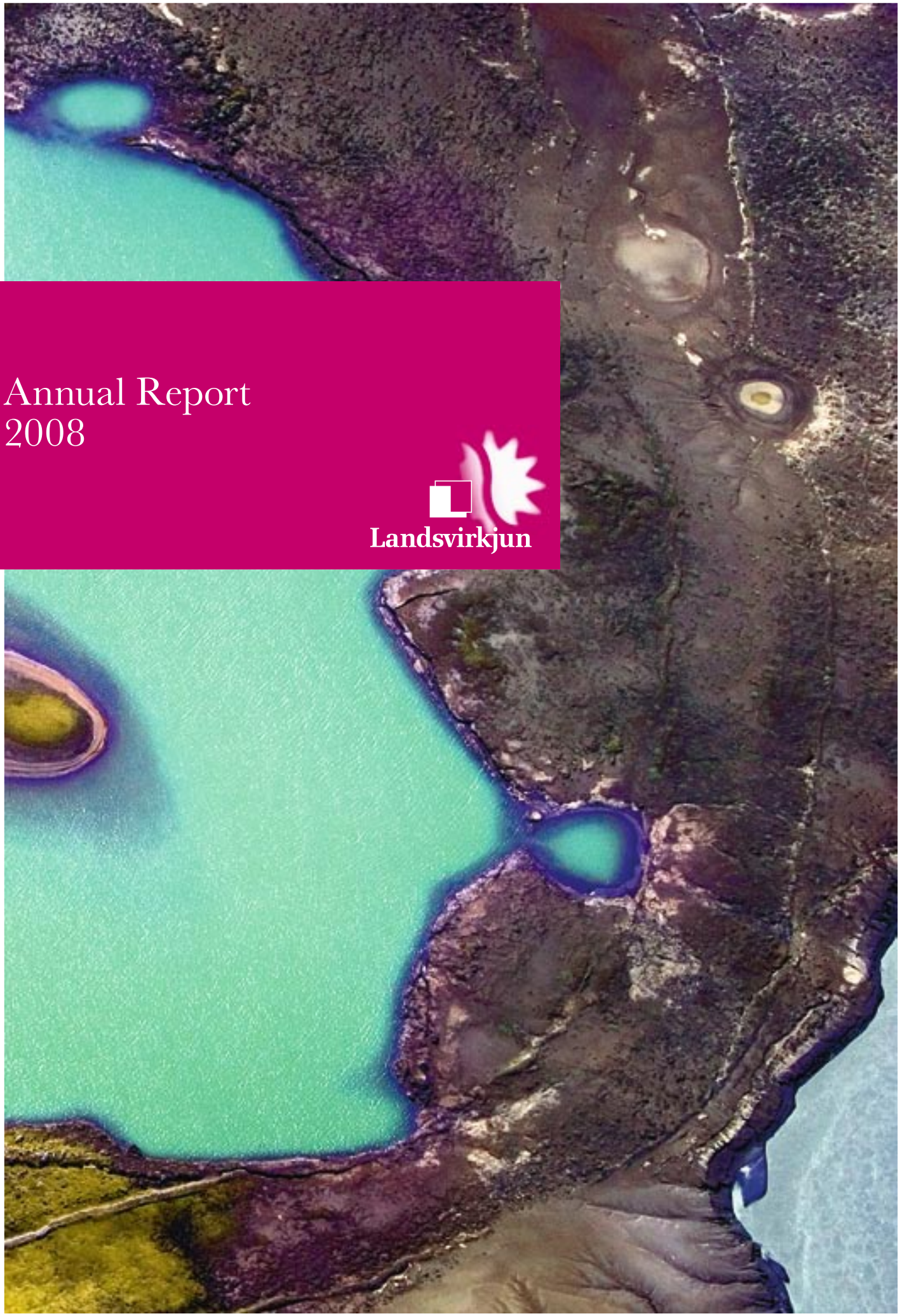
# Annual Report 2008



Landsvirkjun

**The photographs in this report are by Thorvaldur Örn Kristmundsson.**

| | |
|---|---|
| *Cover* | Hnausaver, central highlands |
| *Page. 1* | Hekluhraun lava field, south Iceland |
| *Page. 4–5* | Eystri Rangá river, south Iceland |
| *Page. 19* | Hveravellir, central highlands |
| *Page. 20–21* | Grænavatn lake, central highlands |
| *Page. 52–53* | Thjórsá river, south Iceland |


| | |
|---|---|
| **DESIGN** | Pipar |
| **PRINTING** | Svansprent |
| **SUPERVISION** | Thorsteinn Hilmarsson |
| | Hanna Marinósdóttir |


ISO 27001

ÍST ISO 14001

ÍST ISO 9001

**Content**


The year at a glance . . . . . 2
Board of Directors . . . . . 3
From the Chairman of the Board and Managing Director 6
Operation of power stations . . . . . 8
Power production and sales . . . . . 9
Marketing . . . . . 10
Research . . . . . 11
Preparations for construction . . . . . 12
Kárahnjúkar Hydropower Project . . . . . 13
Finance . . . . . 15
Risk management . . . . . 17
Financial statement 2008 . . . . . 22


## HIGHLIGHTS OF THE ANNUAL ACCOUNTS

| | 2008 | 2007 |
|---|---|---|
| Profit (loss) | (344.5) millj. USD | 459.3 millj. USD |
| Cash gen. by operating activities | 184.4 millj. USD | 138.5 millj. USD |
| Liabilities | 3,242 millj. USD | 3,542 millj. USD |
| Owners' equity | 1,377 millj. USD | 1,600 millj. USD |
| Equity ratio | 29.8% | 31.1% |

## ELECTRICITY PRODUCTION, PURCHASES AND SALES

| | 2008 | 2007 |
|---|---|---|
| Total production | 12,345 GWh | 8,481 GWh |
| With hydropower | 11,866 GWh | 7,963 GWh |
| With geothermal power | 479 GWh | 518 GWh |
| Electricity purchases | 402 GWh | 422 GWh |
| Sales to general market | 2,418 GWh | 2,645 GWh |
| Sales to power-intensive industries | 10,330 GWh | 6,258 GWh |
| Sales increase | 43.2% | 12.8% |

# The year at a glance

A power contract, for a data centre to be built at Keflavík Airport, was concluded with Verne Holdings at the end of February. According to the contract the data centre will buy 25 MW (210 GWh annually), with energy use increasing in phases to 2012.

In March, Landsvirkjun's IT division was certified according to the ISO 27001 standard on information security management. Landsvirkjun is the tenth undertaking in Iceland to receive ISO 27001 certification and the first company outside the field of information technology and finance.

In April, a Memorandum of Understanding (MoU) was signed by Landsvirkjun and Greenstone ehf. on the purchase of electricity for a server farm in Thorlákshöfn, south Iceland. Power requirement will be up to 50 MW.

At the end of June, Alcoa and Landsvirkjun signed an agreement wherein Alcoa agreed to support the Icelandic Deep Drilling Project at Krafla. According to the agreement, Alcoa will contribute USD 3.5m to the drilling of Landsvirkjun's first pilot hole at Krafla to a depth of 4.5 km.

At the beginning of August, the decision was made to continue work on the Búdarháls Hydropower Plant which had been postponed in 2002. Invitations to tender for machinery and electrical equipment were issued, and tender documents for construction work were prepared. Due to the present uncertainty in international financial markets and difficulties in the Icelandic financial market, bids for machinery and electrical equipment will not be opened until July 2009.

The Jökulsárveita diversion, an important part of the Kárahnjúkar project, was taken into use in October. From then on, water from the rivers Jökulsá in Fljótsdalur and Kelduá flowed through the machines of Fljótsdalur station.

The end of October saw the expiry of the MoU between Landsvirkjun, Alcoa and Theistareykir on co-operation with respect to preparatory work for geothermal plants in Thingeyjarsýsla (north Iceland) and the construction of an aluminium smelter at Bakki near Húsavík. The option of renewing the MoU will be examined next year. Landsvirkjun and Theistareykir ehf. are now free of any obligations to Alcoa as regards energy sales in this area.

There were several serious malfunctions at short intervals in the power transformers of Sultartangi Station at the end of 2007. Repairs went on throughout 2008, with mixed results due to persistent malfunctions. The purchase of new transformers has been finalised, and it is anticipated that they will be brought on-line in October 2009 and February 2010. Temporary repairs to the old transformers are expected to ensure the operation of the station until then.

**Full-time positions in 2008**

In 2008, Landsvirkjun's permanent staff worked for a total of 180 man-years, a reduction of 32 man-years from the previous year. It must be kept in mind, however, that 33 Landsvirkjun employees transferred over to Landsvirkjun Power on 1 January 2008. Man-years worked by temporary staff were approximately 30, a reduction of approximately 6 man-years from the previous year.

A total of 195 young students were hired by Landsvirkjun in the summer of 2008. Of these, 179 performed conventional summer tasks, while 16 were university students involved in various other types of work.

# Board of Directors

**A new Board of Directors, appointed by the Minister of Finance, took office at the 2008 Annual General Meeting.**

Mr. Ingimundur Sigurpálsson, Chairman
Ms. Bryndís Hlödversdóttir, Vice-Chairman
Mr. Gylfi Árnason
Mr. Páll Magnússon
Ms. Jóna Jónsdóttir

**ALTERNATES:**

Ms. Katrín Ólafsdóttir
Mr. Valdimar Hafsteinsson
Ms. Vigdís M. Sveinbjörnsdóttir
Mr. Thórdur Sverrisson

**Executive Committee**

Managing Director : Mr. Fridrik Sophusson
Office Manager and Deputy Managing Director : Mr. Agnar Olsen

Heads of Division:
Finance : Mr. Kristján Gunnarsson (Mr. Stefán Pétursson from 1 Dec.)
Energy : Mr. Einar Mathiesen
Human Resources : Ms. Sigthrúdur Gudmundsdóttir
Information Technology : Mr. Bergur Jónsson

Corporate Communications : Mr. Thorsteinn Hilmarsson

# From the Chairman of the Board and the Managing Director

Landsvirkjun has inevitably been affected by the international credit crisis and the current difficulties in the Icelandic economy. Nevertheless, the company's financial position is sound. Landsvirkjun is the largest electricity producer in Iceland with quality clients. Moreover, Landsvirkjun is no longer exposed to the construction risks posed by the Kárahnjúkar Power Project, as it has been fully completed, with production capacity exceeding expectations.

At the beginning of 2008, Landsvirkjun adopted the US dollar as the company's functional currency on the basis of the International Financial Reporting Standards (IFRS), as approximately 70% of the company's income, and a large proportion of its debts, is denominated in that currency. As a result, Landsvirkjun has not been as adversely affected by the enormous negative exchange rate effects that Icelandic companies have generally suffered after the collapse of the króna. Since Landsvirkjun's domestic income and expenditures are well balanced, Landsvirkjun's currency exchange risk vis-à-vis the Icelandic króna is minimal.

Landsvirkjun's liquidity position is good given the circumstances, and efforts are made in all the company's operations to ensure that this remains the case. Fortunately, the company was well prepared for the present conditions. Since construction on the Kárahnjúkar Project began, Landsvirkjun has laid emphasis on ensuring access to liquid assets from operations and through revolving credit facilities for the precise reason of avoiding exposure to liquidity difficulties if markets closed temporarily as has often been the case. To begin with, this was due to considerable commitments relating to the huge construction project underway, while currently, access to liquid funds is that much more important due to the global economic crisis. The company has access to liquid funds and funds from operations which enables it to meet all commitments throughout 2010. There will be some borrowing requirements for the years 2011 to 2013 that will need to be covered, although after this period, it is anticipated that the flow of funds from Landsvirkjun's activities will be largely sufficient to meet all commitments, provided that no new large investment projects are entered into.

It is important to point out that despite the operating losses in 2008, Landsvirkjun's cash generation has been improving in recent years. This best describes Landsvirkjun's ability to pay its debts.

The operating losses of the Landsvirkjun group may be attributed to two main causes. The first is Landsnet's operating environment. The fundamental reason for this is the income mechanism to which the authorities have restricted Landsnet, the national grid operator and Landsvirkjun's subsidiary. It is clear that the authorities must re-examine the framework, and in particular the income framework for electricity transmission and distribution.

The other cause of the operating losses is that the embedded derivatives related to Landsvirkjun's sales agreements have decreased substantially between years. The price of aluminium drives the price of electricity in Landsvirkjun's agreements with aluminium plants. The agreements were valued much higher at the end of 2007 when aluminium prices were high, than at year-end 2008, following a sharp downturn in global aluminium prices. These changes are attributed to the profit and loss account and from there into Landsvirkjun's balance sheet but have no effect on cash flows. The operating performance in any one year does not reveal the full picture, while the performance over several years gives a better view.

The construction of the Kárahnjúkar Project, often referred to as the largest construction project in Icelandic history, has been completed, and it is therefore appropriate to examine whether and how the project had an effect on the Icelandic economy. Landsvirkjun's investments as regards the project had, in fact, only a minimal effect on the Icelandic economy. The investment in Kárahnjúkar involved, for the most part, purchases of equipment from overseas and considerably more foreign manpower and contractors than originally anticipated. As a result, it is completely incorrect to say that the Kárahnjúkar project caused the economic overheating which in the end led to the Icelandic economic difficulties.

Since it was established, Landsvirkjun has been a driving force behind progress in the Icelandic economy. The past fourteen years have been a unique development period for the company. The company has almost continuously been involved in investments, and its electricity output has tripled. The company has been able to finance the development with cash from operations and extensive borrowings on excellent terms. Landsvirkjun has not received any equity injection from its owners who provide the company with indirect guarantees of collection.

The company's construction projects and related power-intensive industrial projects have often led to increased economic growth during economic downturns. Landsvirkjun's ability to undertake new

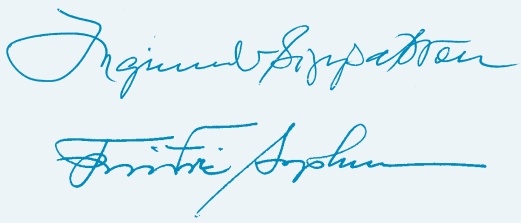
projects is much reduced at present, not least due to Iceland's poor position. Foreign financial institutions and ratings companies are following the company's investment plans closely, and due to current conditions, it is deemed inadvisable to undertake new commitments. However, Landsvirkjun still has the ability to embark on developments in the present economic downswing provided that new long-term funding can be obtained.

These days, we are all feeling the crunch, and economic activities in the world seem to be in a downward spiral. The ability of companies to invest is at an all-time low, as loan markets are very difficult and various types of operations are being discontinued in many places. It is interesting to note that the aluminium smelters in Iceland continue to operate at full capacity even though their owners are downsizing all over the globe and laying off thousands of employees. On the one hand, this is due to the economic operations of the aluminium smelters' in Iceland, and on the other, due to their electricity purchase obligation, or "take or pay" clauses in the long-term contracts Landsvirkjun and others have with them.

Landsvirkjun competes in the sale of electricity in international markets and seeks investors to develop power-intensive industries in Iceland. The aluminium industry has created solid foundations for the operation of Landsvirkjun. It is vital that we use these foundations to diversity into innovation and advanced technologies. This is why Landsvirkjun has focused on agreements and negotiations with companies such as data centres and silicon refineries that have shown an interest in starting up such operations in Iceland. By the middle of 2009, a plant manufacturing foil for capacitators will begin operations in Akureyri, thus creating approximately 100 new jobs and using six times the electricity that the Eyjafjördur area, north Iceland, has been using. Agreements have been reached with the first data centre, which will hopefully begin operating in southwest Iceland in the near future.

Landsvirkjun's employees have, in recent years, spent a great deal of effort on strengthening the company's infrastructure by developing targeted and disciplined working practices. As a result, the company has received certification in accordance with the ISO 9001, ISO 14001 and ISO 27001 standards for quality management, environmental management and information security respectively. Moreover, the company produces internationally certified green electricity. Account is taken of measurable goal setting in all operations, and Landsvirkjun has over the past few years been given several awards for outstanding work practices. There is no doubt that this work will sustain the company in the prevailing difficult circumstances and make it better prepared to take on challenges.

The focus in Landsvirkjun's internal activities is currently on the development of safety, health and working environment management together with improved provision of information and clearer requirements in environmental matters as well as strengthening the company's relationship with society. Mention may be made that Landsvirkjun has adopted carbon accounting and has set itself the goal of becoming carbon neutral. Defined requirements have been established for contractors as regards environmental issues. These are stated in all the company's published tender documents. This includes requiring contractors to keep green accounts in their work for Landsvirkjun. The company has developed and distributes free software to keep such accounts. Success at Landsvirkjun is measured on the basis of economical, environmental and social yardsticks, since we strive to operate in the spirit of sustainable development.



# Operation of power stations

The year was a record year in power production and sales at Landsvirkjun. Installed capacity in Landsvirkjun's stations increased by more than 50% during the course of the year when the Fljótsdalur station was brought online at the beginning of the year. The station completed its first whole year of operation without any significant start-up troubles and produced over 4,700 GWh as anticipated.

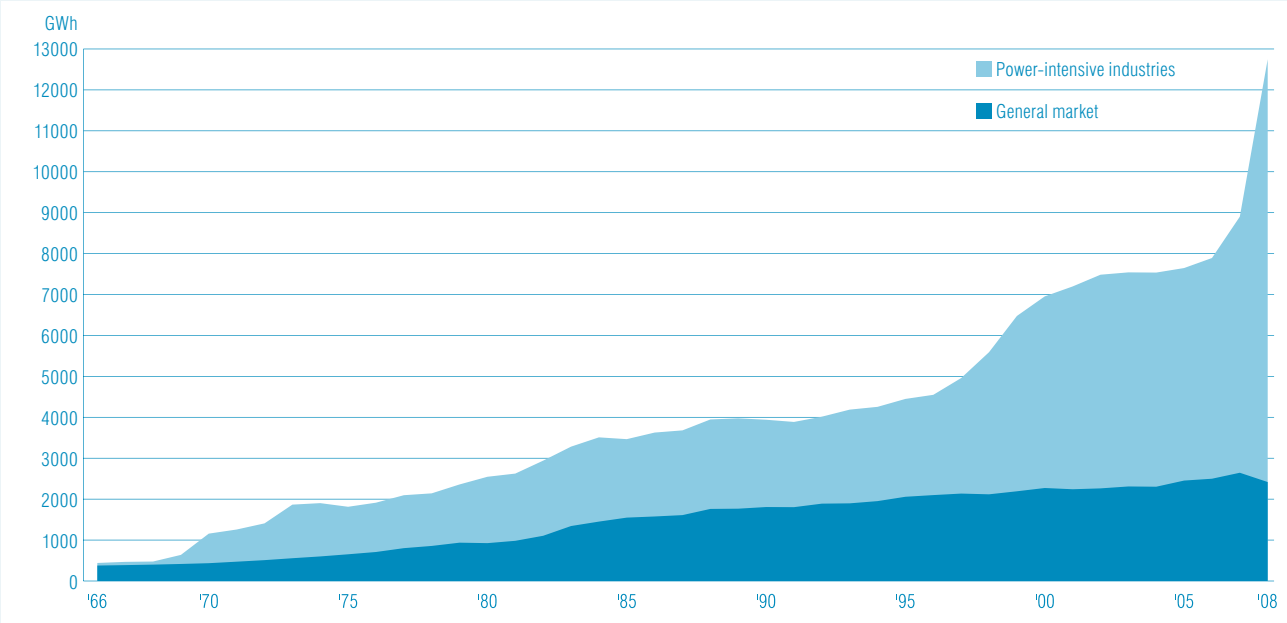
Monitoring and maintenance in the operation of the stations went according to implemented plans. In order to ensure successful and effective operations, all of Landsvirkjun's stations operate according to the national electricity security management system (RÖSK) and Landsvirkjun's integrated certified quality and environmental management system, which is based on ISO 9001 and ISO 14001.

The operation of Landsvirkjun's power stations was successful during the year despite continued malfunctions in the Sultartangi Station. Unanticipated disturbances in Landsvirkjun's power stations were 71, as compared to 70 the previous year. There were serious malfunctions at short intervals in the power transformers of Sultartangi Station at the end of 2007. The malfunctions were so serious that the Station's energy production was severely curtailed during the year. The Station's energy production was 310 GWh during the year, as compared to 903 GWh in 2007. The basic cause of the malfunctions has been traced to transformer oil used for insulation in the transformers. It has been discovered that certain substances in the oil have caused corrosion in the transformers' insulation. Due to uncertainties regarding the lifetime of the transformers after repair, a decision was made to purchase new transformers to replace the old ones. The purchase has been finalised, and the new transformers are expected to be brought on-line in October 2009 and February 2010.

Landsvirkjun has set the goal that all units in the company's power stations should be available for operation 99% of the year, not including scheduled maintenance periods. This goal was not achieved in 2008 due to the above malfunctions. However, the machines were available for 94.5% of the time.

Landsvirkjun currently operates eleven hydropower plants, two geothermal plants and one fossil fuel plant for back-up.

LANDSVIRKJUN'S ENERGY SALES IN 1966–2008



# Power production and sales

Landsvirkjun's electricity production distributed through the Landsnet national grid was 12,346 GWh during 2008. This is an increase by 46% from 2007. The share of hydropower in energy produced by Landsvirkjun is just over 96%, while geothermal power contributes some 4%.

Furthermore, Landsvirkjun purchased 402 GWh of electricity from Reykjavík Energy and Hitaveita Sudurnesja for resale to power-intensive industries. Landsvirkjun's total energy acquisition in 2008 was 12,748 GWh, or 43.2% more than in 2007.

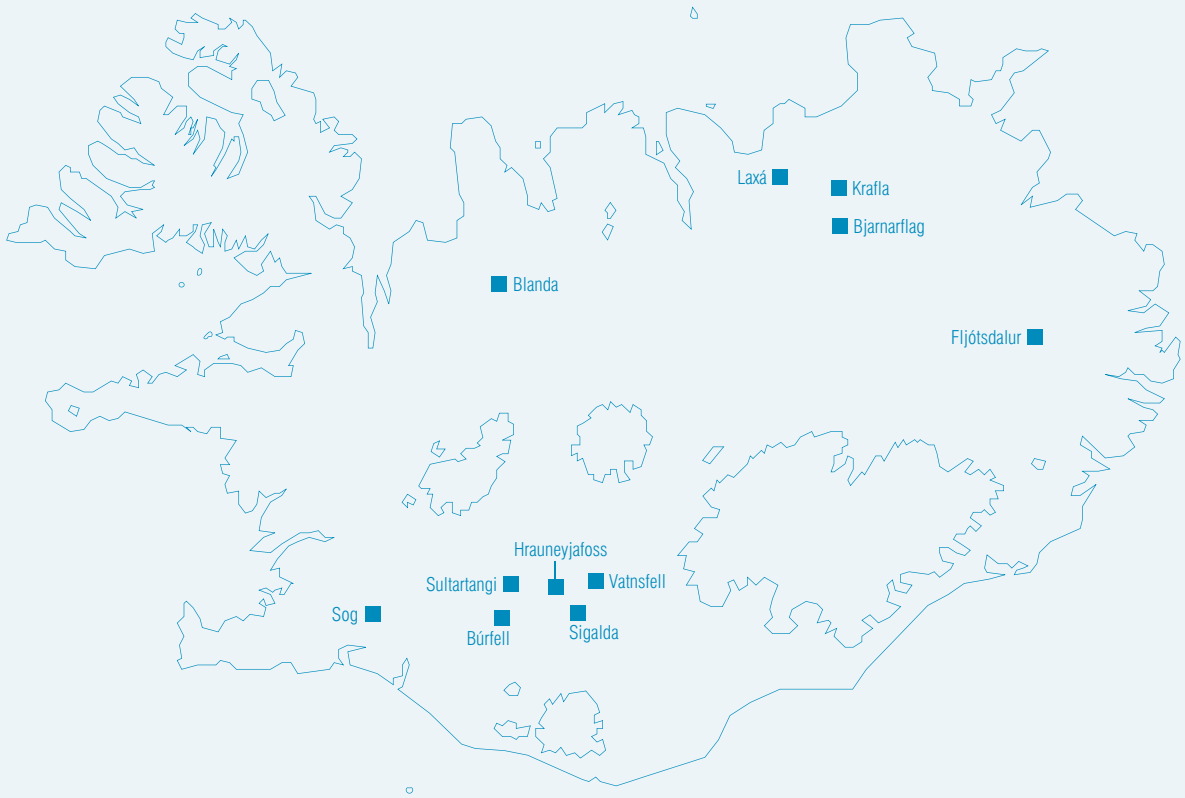
Landsvirkjun's electricity sales in 2007 amounted to 12,748 GWh. Sales of primary electricity to public utilities decreased by approximately 14.4%, while increasing by 65.1% to power-intensive industries. Full delivery of electricity to Fjardaál was achieved during the year, and this accounts for most of the increase.

Iceland's total electricity production was 16,467 GWh, of which Landsvirkjun's share is approximately 75%, an increase of 3% from the previous year. Landsvirkjun's share of hydropower electricity production was 96.3%, and its share of geothermal electricity production was 12.5%. In Iceland, 75.5% of electricity is produced using hydropower and 24.5% using geothermal power.

LANDSVIRKJUN'S POWER STATIONS

| | |
|---|---|
| **Hydropower stations** | **1,797 MW** |
| Fljótsdalur | 690 MW |
| Búrfell | 270 MW |
| Hrauneyjafoss | 210 MW |
| Blanda | 150 MW |
| Sigalda | 150 MW |
| Sultartangi | 120 MW |
| Vatnsfell | 90 MW |
| Írafoss (Sog) | 48 MW |
| Laxá | 28 MW |
| Steingrímsstöd (Sog) | 26 MW |
| Ljósafoss (Sog) | 15 MW |
| **Geothermal stations** | **63 MW** |
| Krafla | 60 MW |
| Bjarnarflag | 3 MW |
| **Fossil fuel station** | **35 MW** |
| Straumsvík | 35 MW |
| **Total installed capacity** | **1,895 MW** |

LANDSVIRKJUN'S POWER STATIONS



# Marketing

**The wholesale market**
Landsvirkjun has six customers in the general electricity market. Increased competition in the retail market is beginning to manifest itself, and other entities than Landsvirkjun are beginning to offer electricity on a wholesale basis.

Landsnet planned to establish a spot market for electricity during the year, but this was delayed due to economic unrest. Landsvirkjun is involved in an advisory group which was established to prepare and develop the spot market.

All of Landsvirkjun's stations underwent re-certification by the German company TÜV SÜD to the effect that Landsvirkjun's energy production is produced from renewable energy sources. The certification has been used, among other things, for the sale of green certificates. Green certificates are a sales product within the EU and are intended to stimulate energy production using renewable energy resources.

**Power-intensive industries**
The start-up of the aluminium plant of Alcoa Fjardaál in Reydarfjördur was completed at the beginning of the year. Despite delays, the start-up was a complete success and in accordance with expectations. In mid 2008, an agreement was reached with Alcoa Fjardaál for increased energy delivery to the tune of 340 GWh per year. This power will be used to increase the flow of power through the pots and will be affected in 2008 and 2009.

In February, a power contract was concluded with the company Verne Holdings, which intends to operate a data centre at Keflavík airport. Delivery of this electricity will commence in 2009 and will amount to 212 GWh per year once in full operation, with an option for twice that amount. It is anticipated that the first part of this electricity will be supplied from Búdarháls Station and the second from new power stations on the River Thjórsá.

By the autumn of 2008, it was revealed that there would be considerable delays in start-up of Becromal's plant for manufacturing aluminium foil for capacitators in Akureyri, due to delays in construction. The plant is expected to begin operations by the middle of 2009.

Negotiations with Rio Tinto Alcan were conducted throughout the year for the delivery of electricity for an expansion of the Straumsvík smelter. The production will be increased by increasing the electric current through the plant's pots. This will be done from 2011 to 2014. Landsvirkjun intends to construct the Búdarháls Hydro Station to ensure this delivery. This increased sale of electricity to the aluminium plant will be approximately 650 GWh per year. Moreover, negotiations with Norðurál were conducted throughout the year for the delivery of an additional 50 MW to the aluminium plant at Grundartangi. Discussions were also conducted with various parties planning to construct a silicon-refining plant, a data centre and silicon metal factories in the south of Iceland.

The MoU with Alcoa for the sale of electricity to an aluminium plant at Bakki near Húsavík from geothermal stations in Thingeyjarsýsla district in north Iceland was renewed in June 2008. The MoU provides for the participation of Alcoa in the costs incurred in research into the relevant geothermal fields and that the parties will complete negotiations for electricity purchase by the end of 2009. The parties planned to reach an agreement on the cost sharing for geothermal prospecting before 1 November 2008. No agreement was reached before this date, and as a result, the MoU lapsed. Nevertheless, the parties decided to continue to work together on the investigations relating to environmental issues and licensing, while postponing further discussions on a power contract to the second half of 2009. Following these changed circumstances, Landsvirkjun and Theistareykir decided to join forces in exploratory talks with other parties who had voiced an interest in purchasing electricity in the north of Iceland. These talks began at the end of the year.

# Research

Landsvirkjun is involved in a range of research projects every year, the goal of which is to lay solid foundations for the company's future development and to secure operation of its power system. In 2008, Landsvirkjun provided information about potential power projects to be evaluated in the second stage of the Masterplan for Hydro and Geothermal Energy Resources in Iceland. Representatives of the company participated in the work on the Masterplan, which once completed will provide a comprehensive overview of potential future power development options in Iceland.

**Iceland Deep Drilling Project**

For several years, Landsvirkjun, Reykjavík Energy and Hitaveita Sudurnesja have been engaged in research into whether it would be possible to find supercritical geothermal fluid in the companies' current production areas, as well as investigating the practicality of utilising such fluids for energy generation. The National Energy Authority, Alcoa and most recently Statoil-Hydro of Norway have now become parties to the Iceland Deep Drilling Project. The Project, moreover, has received grants from international research funds. In 2007, it was decided that the first well of the project should be drilled at Landsvirkjun's Krafla area. The drilling began in 2008, initially as a 90 m deep hole, 90 cm in diameter, and then a narrower hole down to 800 m. Plans have been made to use the largest and most powerful drill rig in Iceland to continue in March 2009 and drill the hole to a depth of up to 4,500 m by the end of June 2009. After investigations of the chemical composition of the geothermal fluid and the thermal properties of the well, a pilot plant is to be designed and set up for a few years of experimental generation.

**Energy and climate change**

Since 2002, Landsvirkjun has participated in joint Nordic research into changes in river discharges attributable to climate change. Based on current forecasts of rising temperatures, the run-off from glaciers will increase substantially in the future. The current phase of the research programme "Climate and Energy Systems", which will last from 2008 to 2011, involves a number of institutions and experts with diverse backgrounds. The current phase focuses on possible climate changes in Iceland and the Nordic countries in the coming decades and their impact on water resources and energy production. As part of this work, Landsvirkjun is estimating the increase in run-off to the company's power plants from 2010 to 2050. If these forecasts are realised, extensive changes may be expected and the energy in run-off could increase on average about 25% until 2050. It is vital that Landsvirkjun is prepared for these changes, will be able to protect itself from risks and has the capacity to take advantage of the possibilities of increased run-off. For this reason, operation and simulation models of Landsvirkjun's power system are used to take into account such increased run-off scenarios.

**Job creation resulting from research and preparations**

In recent years, Landsvirkjun has paid an annual average of ISK 2,400 millions (2008 price levels), to consultants and research institutions for research, design, preparations and supervision of new power projects, renewal of older facilities and monitoring of operating areas. Landsvirkjun has thus encouraged the development of knowledge in mostly Icelandic engineering firms and in the institutions involved in research relating to the environment and water systems.

# Preparations for construction

**Hydropower projects in the south of Iceland**

Four power projects are planned in southern Iceland in the near future: The Búdarháls project on the River Tungnaá and three projects on the lower stretch of the River Thjórsá – the Hvammur, Holt and Urridafoss projects.

PLANNED INSTALLED CAPACITY OF NEW POWER PROJECTS IN SOUTHERN ICELAND

| | MW | GWh/year |
|---|---|---|
| Búdarháls | 80 | 585 |
| Hvammur | 82 | 665 |
| Holt | 53 | 415 |
| Urridafoss | 130 | 980 |
| **Total** | **345** | **2,645** |

All four projects have undergone environmental impact assessment and been approved. Other licensing is still ongoing except for Búdarháls where all permits for construction have been obtained.

Preparatory construction work on the Búdarháls project was begun in 2002 but was subsequently postponed. Invitations to tenders for electro-mechanical equipment for Búdarháls project and the three other projects in the lower stretch of the River Thjórsá were advertised in 2008. The resulting bids are scheduled to be opened in mid-2009. In 2008, work was carried out on preparing tender documents for civil construction work. The documents are almost complete, and the invitation to tender may be advertised as soon as a decision to go ahead with the project has been made.

The largest single preparatory project carried out during the year was the tender design of new power plants on the River Thjórsá. A large number of diverse tasks were carried out in connection thereto. These included optimization of type and arrangement of dams and equipment, layout of waterways and development of cost estimates as well as issues relating to ice and silt in the River Thjórsá.

**Geothermal power plants in north-east Iceland**

Landsvirkjun and Theistareykir ehf. continued work on research, environmental impact assessments and other preparations relating to power plants in geothermal areas in the Thingeyjarsýsla district. Preparations continued in accordance with the MoU between Alcoa, Landsvirkjun and Theistareykir ehf. from 2006, anticipating energy sales to Alcoa's planned aluminium plant at Bakki. The plant at Bakki is assumed to have an annual production capacity of 250,000 tonnes and will need an installed power capacity of approximately 400 MW. The MoU was renewed in July subject to an agreement being reached later in the year on Alcoa's cost participation in exploratory drilling in 2009 and 2010. By the end of October, it was clear that no such agreement would be reached. Nevertheless, the companies decided to continue preparations while reducing planned cost of exploratory drilling.

Three geothermal pilot holes were drilled in the Krafla area during the year. Drilling results indicate that a great deal of heat is in the entire area and that energy can be found below the depth of 2000 m. However, the fluid at that depth is difficult to utilise due to unfavourable chemical composition. One new pilot hole was drilled at Theistareykir, and in addition, an older hole was side-tracked and re-drilled with great success. The Theistareykir area appears to be extremely favourable for energy production.

Around the middle of summer, the Minister for the Environment ruled that a joint environmental impact assessment should be performed for the power projects, the planned transmission installations and the aluminium plant at Bakki. Landsvirkjun and Theistareykir withdrew the scoping document for the power projects and instead began work on assessing the environmental impact of research drilling. The Icelandic National Planning Agency ruled, during the latter part of the year, that research drilling did not need to be included in the joint assessment. At the same time, work on assessing the environmental impact of up to three exploratory holes in Gjástykki was initiated. The aim is to begin work on the environmental impact assessment of a new Krafla Power Station and the Theistareykir Power Station in 2009.

STATUS OF POWER STATIONS AND PREPARATIONS FOR CONSTRUCTION

- Landsvirkjun operates a 60 MW power station at Krafla. Proposals have been made to increase its capacity up to 150 MW.
- Landsvirkjun operates a 3 MW power station at Bjarnarflag. Environmental impact assessment for a new 90 MW power plant on this site is completed with a positive result and steam has already been acquired for its first stage.
- Landsvirkjun owns approximately one-third of the shares in Theistareykir ehf. The company is investigating the geothermal area at Theistareykir, the proposed site of a 200 MW power project. Steam has already been acquired for the first stage of the project.
- Investigations into the geothermal area at Gjástykki are under way.

# Kárahnjúkar Hydropower Project

**Summary**
Construction of the Kárahnjúkar hydroelectric project has, for the most part, been completed. Nevertheless, there were 400-500 workers employed on the project site for the greater part of 2008. As a result, a short account should be given of the project as a whole.

The idea of harnessing the river Jökulsá in Dal (Jökla) is more than 50 years old. Moreover, considerable efforts were spent on research into the area in the 1990s. At year-end 2001, the Minister for the Environment ruled in the environmental impact assessment that the project should be approved subject to a number of conditions. In the same year, a contract was made with a group of consultants on the project design.

Construction at Kárahnjúkar began in 2002 with the improvement of roads in the highland areas. During the same year, the largest project components were put out to tender, i.e. the construction of the Kárahnjúkar dam and headrace tunnels (40 km) from the dam to the powerhouse, the construction and installation of electromechanical equipment and the construction of an underground powerhouse in Fljótsdalur (the Fljótsdalur station).

Work at the project site began in the spring of 2003 following the signing of the power contract with Alcoa and the contract with the Italian company Impregilo for the construction of the Kárahnjúkar dam and the headrace tunnels.

The filling of the Hálslón reservoir began in September 2006, and by autumn 2007, the reservoir had reached its full height (625 m above sea level). The first generating unit in Fljótsdalur station was taken into operation in October 2007, four and a half years after construction began at Kárahnjúkar and seven months behind the initial schedule. By the end of November 2007, 5 of 6 units were in full operation, only seven weeks behind the original schedule. The initial delay in energy delivery from the power station was caused by delays that occurred when one of the fullface tunnel boring machines used to bore the headrace tunnels was stopped for six months in an area heavily fissured and permeable. Despite these difficulties, power was delivered on time to the aluminium plant of Alcoa in Reydarfjördur from the national grid, on 1 April 2007, and the aluminium plant was in full operation by early 2008.

The total cost of the Kárahnjúkar Hydropower Project exceeded the budget by 7%. Additional costs were caused mainly by adverse geological conditions at the Kárahnjúkar dam site and in part of the headrace tunnel. Moreover, several changes were made to the design of the installations during construction. However, the output of the power plant is now estimated about 10% more than originally planned due to lower headlosses in the headrace tunnel and better efficiency of the turbine units.

Despite various construction difficulties, the project as a whole can be considered a success. The construction time was short, particularly when taking into account the remoteness and high elevation of the area and total lack of infrastructure at the beginning of construction.

**Communications and public relations efforts**
On one hand, the Kárahnjúkar Hydropower Project attracted intense attention as a technologically important and challenging project that both Icelanders and foreigners followed closely. On the other hand, there was considerable public debate on the project for environmental and political reasons.

The project began with the approval by an overwhelming majority in parliament and with the corresponding approval of the municipalities in question. Moreover, surveys showed that the majority of the nation approved of the project. Those who opposed of the project, however, were prominent in the debate throughout the project period.

In addition to the environmental aspects, a great deal of attention was brought to the camp facilities and wages of foreign workers, the return on investment, geological conditions and research, fissures, possible leaks and impact on the earth's crust, and some discussion even came up on whether the filling of the reservoir could lead to a volcanic eruption. During the summer of 2005 and 2006, there were protests in the area, work was halted a few times and equipment was damaged. Political debaters suggested, among other things, that the filling of the Hálslón reservoir should be delayed while geological conditions were investigated further. Others proposed that the height of the dams should be lowered considerably. All of the above had to be responded to by providing information, substantiate decisions and correcting a wide variety of misunderstandings. Landsvirkjun made the decision, at the very beginning, to inform the public as fully as possible about all aspects of the project. This was considered to lead to informed discussions and opinions based on facts and on personal experience of the project area. An information centre was established in Végardur in Fljótsdalur valley,

and viewing platforms were installed near work areas. Registered visits to Végardur during the project were over 70 thousand, and many more visited the area to personally familiarise themselves with the project. A spokesperson was employed, and the Icelandic media covered the progress of the project extensively. Overseas, media and technical magazines also followed the progress with great interest. Information on progress was provided in real-time on a website that received between 100 and 200 thousand visits per year. Documentaries were produced and shown twice a year on the National Broadcasting Service (RUV), and foreign channels such as Discovery Channel and National Geographic made their own documentaries which received considerable interest worldwide. Employees of Landsvirkjun and consultants gave several presentations on the Kárahnjúkar project at international conferences. Moreover, an international technical seminar was held on the project in September 2007.

Communications and public relations efforts for the Kárahnjúkar project were more extensive than for any other project in Iceland. Landsvirkjun is convinced that this was invaluable and in line with best practice for open discussion on such large undertakings. Criticism was answered with information and objective, well-balanced reasoning, and every effort was made to avoid disputes.

## Construction work in 2008

### Hálslón reservoir area

Work was carried out on creating a plunge pool downstream of the Kárahnjúkar dam to neutralise the power of the spillway waterfall. A concrete threshold will be constructed across the riverbed downstream of the pool. This work will be completed in the summer of 2009.

The dams at Kárahnjúkar have successfully met all criteria established in their design. Leakage under the dams are only a fraction of that expected, and subsidence of fills and movements in concrete joints are well within design limits. Subsidence and horizontal displacements in the reservoir area have been very small.

### The Jökulsárveita and Hraunaveita diversion

In 2008, work on the Kárahnjúkar project consisted, for the most part, of work at the Jökulsárveita and Hraunaveita diversion which contributes about 25% of the flow to the power station. Landsvirkjun took most of the work there over at the beginning of the year due to financial difficulties of the contractor. The project was thus kept going for a few months until a new contractor took over in the spring.

The boring of the Jökulsá tunnel with a full face tunnel boring machine was completed on 9 April. The intake pond in Jökulsá in Fljótsdalur, Ufsarlón pond, was filled in September. The Jökulsá diversion tunnel is 13.5 km long from Ufsarlón pond to the intersection with the headrace tunnel from Hálslón reservoir, 8.5 km of which are excavated with a full face boring machine. After completion of the tunnel excavation in April, various finishing work in the tunnels continued as well as work on gate structures at the tunnel intersection and work on the Ufsarstífla dam and the intake installations at Ufsarlón pond. This work was completed in the autumn, so Ufsarlón pond was filled in September and the Jökulsá tunnel was taken into operation in October. Work was carried out at the Hraunaveita diversion until Christmas, while finishing work in that area will wait until the summer of 2009.

To the east of Jökulsá in Fljótsdalur, the rivers Kelduá and Grjótá will be harnessed by means of the Hraunaveita diversion and diverted to Ufsarlón pond by canals and tunnels. The River Kelduá has a 7 $km^2$ reservoir. This work was completed for the most part at the end of the year, while final finishing work, removal of camps and temporary site installations will wait until the summer of 2009.

### Fljótsdalur powerhouse

Various finishing work was carried out both inside and outside the Fljótsdalur Powerhouse. Demand on the power station steadily increased during the first few weeks of the year until the Alcoa Fjardaál aluminium plant reached full operational capacity.

Testing of the electro-mechanical equipment in the Fljótsdalur Powerhouse was completed during the year. At the end of the year, minor improvements were made by the manufacturer to the runner of all six turbines. These now stand up to testing well beyond the rated power in each turbine, which is 115 MW.

Landsvirkjun has always taken good care of the environment in the vicinity of its power stations. At the beginning of the project Landsvirkjun asked for proposals for works of art to be installed at the Fljótsdalur station and at Kárahnjúkar. The first winning proposal was installed in 2008. This is the work Eilífdardraumur (Eternal Dream) by Ólafur Thórdarson, an Icelandic artist and architect working in New York. The Eilífdardraumur is a floating work of art on the power plant's tailrace canal. It is highly visible from the access road to the station.

# Finance

The financial statements of Landsvirkjun are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU in accordance with law. According to IFRS, the company shall determine its functional currency and the result is that the USD became the prevailing currency in the company's operation as of the beginning of year 2008.

The loss for the year 2008 amounted to USD 344.5 while there was a profit amounting to USD 459.3 million the previous year. Foreign exchange difference in the year 2008 was negative by USD 128.6 million and negative fair value changes in derivative agreements amounted to USD 310.9 million. In the year 2007, foreign exchange difference was positive by USD 224.1 million and positive fair value changes in derivative agreements amounted to USD 362.2 million. Return on equity was negative by 21.5% in the year 2008 while positive by 40.2% in the year 2007. Foreign exchange difference and fair value changes are for the most part unrealised, which should be taken into consideration in the evaluation of the company's return.

**Income statement**

The group's operating income amounted to USD 452 million in the year 2008, which is an increase by 22.6% from the previous year. Increase in operating income is mainly a result of sales to Alcoa Fjardaál in east Iceland.

The group's operating expenses amounted to USD 206 million in the year 2008 compared to USD 187.8 million the previous year. Among operating expenses, depreciation of fixed assets weighs the most and amounted to USD 105.5 million compared to USD 82 million in 2007. They have thus increased by 28.7% from the previous year. Other operating expenses decreased by 5% between years.

According to this, the group's EBIT in the year 2008 increased by USD 64.9 million compared to the previous year. EBITDA increased by USD 88.5 million between years and amounted to USD 351.5 million for 2008. This amount is significant as it reveals much about the company's ability to cover interest payments and installments on long-term loans. The following table shows EBITDA as a percentage of long-term loans including the following year's installment on long-term loans (in USD million):

| Year | (EBITDA) | Long-term Liabilities | Percentage |
|---|---|---|---|
| 2008 | 351.5 | 2,975.3 | 11.8% |
| 2007 | 263.0 | 3,083.1 | 8.5% |
| 2006 | 240.7 | 2,765.0 | 8.7% |
| 2005 | 155.5 | 1,828.8 | 8.5% |
| 2004 | 145.3 | 1,563.4 | 9.3% |

Interest expenses during the year 2008 amounted to USD 177.8 million compared to USD 92.2 million in the year 2007. Average nominal interest on long-term loans was 4.51% compared to 4.69% the previous year. Interests on capital relating to projects under construction are capitalised until the assets in question are ready for use. During the year 2008, capitalised interest expenses amounted to USD 7.3 million compared to USD 69.4 million the previous year.

Financial expenses in excess of financial income amounted to USD 660.6 million in the year 2008, while in the year 2007, financial income in excess of financial expenses amounted to USD 445.6 million. The change between years amounts to a total of USD 1.1 billion and is mainly explained by foreign exchange difference and fair value changes in embedded derivatives related to the company's electric power sales contracts, which are related to world market price of aluminium. During the year 2008, foreign exchange difference was negative by USD 128.6 million but was positive by USD 224.1 million in the year 2007. Fair value changes of derivatives were, as previously stated, negative by USD 310.9 million while positive by USD 362.2 in the year 2007.

In the year 2008, tax income amounted to USD 70 million, while in the year 2007 income tax expense amounted to USD 167.4 million.

**Balance sheet**

The group's assets amounted to a total of USD 4,619.2 million at year-end 2008 and are divided into non-current assets to the amount of USD 4,374.1 million and current assets to the amount of USD 245.1 million. Total assets amounted to USD 5,142.3 million in the previous year. In the year 2008, the company's embedded derivatives decreased by USD 482 million.

At year-end 2008, Landsvirkjun's equity amounted to USD 1,376.8 million. The

RATIOS

| Ratios | 2004 | 2005 | 2006 | 2007 | 2008 |
|---|---|---|---|---|---|
| Interest coverage (EBITDA/interest expense) | 1.10 | 2.18 | 1.72 | 1.96 | 1.41 |
| RCF / Net debt | 4.56% | 5.02% | 5.20% | 4.49% | 6.19% |
| Debt / EBITDA | 25.5 | 23.3 | 17.0 | 16.0 | 8.1 |

company's equity ratio was 29.8% compared to 31.1% the previous year. Equity decreased by USD 223.4 million from the previous year. The difference is, on the one hand, mainly due to a loss to the amount of USD 344.5 in 2008 million and on the other hand revaluation of subsidiaries' fixed assets to the amount of USD 116.3 million.

The company's long-term liabilities, including next year's installments, amounted to a total of USD 2,975.3 million at year-end 2008 compared to USD 3,083.1 million the previous year. The liability component of derivative agreements amounted to USD 145.6 million at year-end 2008 compared to USD 166.4 million at year-end 2007.

**Statement of cash flows**

During the year 2008, cash flow from operating activities that can be used for investments and for repayment of dept amounted to USD 184.4 million. Cash income amounted to USD 456 million compared to USD 348.3 million the previous year. Operating expenses paid amounted to USD 112.5 million in the year 2008 compared to USD 89.6 million the previous year. Cash from operation excluding interests increased therefore by USD 84.8 million between years. Net cash outflow due to financial expenses amounted to USD 159.1 million in the year 2008 compared to USD 120.2 million in the year 2007, taking also into account outflow due to hedges to the amount of USD 60.4 million, which remains the same amount from the previous year.

Capital expenditure paid in the year 2008 related to non-current assets amounted to USD 374.8 million compared to USD 532.5 million the previous year. Investment during both years is for the most part due to the Kárahnjúkar Project. Investment in non-current assets is mostly financed with loans with borrowings in the year 2008 amounting to USD 449.9 million compared to USD 517.3 million the previous year. Dividend paid to owners amounted to USD 7.8 million in the year 2008 compared to USD 8.1 million the previous year.

**Financing**

Landsvirkjun's liquidity position at the beginning of year 2008 was good and the company benefitted from good conditions in capital markets for the main part of 2007. Borrowings in the year 2008 amounted to USD 450 million compared to USD 517 million in the year 2007. In total, ten private placements were issued, the first on 15 February and the last 25 September, or right before the fall of the big Icelandic commercial banks. Of these placements, four were in USD, four in EUR and two in JPY. The tenor of the loans were from one up to fifteen years and the average loan term was six years. The loan terms were favourable and by far better than the credit spread of the Icelandic State at the same time. All were issued under the company's EMTN programme and the terms were on average 65 basis points over Libor or Euribor swap rates.

In fact, the worldwide financial crisis started mid year 2007 when access to loan capital reduced considerably compared to the previous years. The effect thereof was limited on Landsvirkjun's financing, however, which was quite good during the year 2007. Conditions on loan capital markets deteriorated greatly in the year 2008 and Landsvirkjun experienced difficulties in obtaining access to loan capital and loan margins increased as the year passed. Upon the fall of the Icelandic banks the company's access to new foreign loan capital was effectively cut off. At the same time, demand for loan capital has decreased as current projects are small, cash from operation has increased and liquidity is sufficient.

In 2003, Landsvirkjun syndicated a USD 200 million Revolving Credit Facility with its relationship banks. The loan was intended to be available if international bond markets would close down temporarily, as has happened often in the past. In the year 2005, the loan was refinanced and increased to USD 400 million and loan duration was extended to the year 2012. Landsvirkjun now benefits from the revolver and at year-end the undrawn and accessible amount was USD 350 million.

Landsvirkjun has always been aware of its refinancing risk and strives to distribute loans maturities evenly over a longer period. Landsvirkjun acted according to this policy in the financing of the Kárahnjúkar Project. The company is therefore well prepared to meet temporary loan capital crises. Indications show that available capital at year-end, cash from operation and the aforementioned revolver will enable Landsvirkjun to meet all current liabilities through the year 2010, provided that no new major investment projects will be undertaken. It seems as though the loan capital crisis will remain for some time. The situation can be expected to start improving in the first half of 2010 and conventional sources of finance will become available again. It is unlikely, however, that loan terms will be similar to what they were before the financial crisis, but Landsvirkjun now benefits from having issued long-term bonds on very favourable terms.

# Risk management

Landsvirkjun lays great emphasis on continuous control and effective financial risk management and plans its risk management accordingly. The risk management policy is set out by the Board of Directors of Landsvirkjun where the benchmark in each risk category is defined. Decisions and the supervision regarding operation of risk management are entrusted to a risk management committee. The risk management committee consists of the Managing Director, his deputy and the Financial Director. The Managing Director is chairman of the risk management committee.

Daily operation of risk management is in the hands of the Head of Risk Management. The main objectives of risk management are to analyse, manage and monitor Landsvirkjun's risks in order to stabilise operating income by reducing the impact of fluctuations due to exchange rate, interest and aluminium price changes. Risk management reports to the risk management committee and Landsvirkjun's Board of Directors on a regular basis, in which the company's risks and results of risk management are evaluated.

**Landsvirkjun's financial risk**

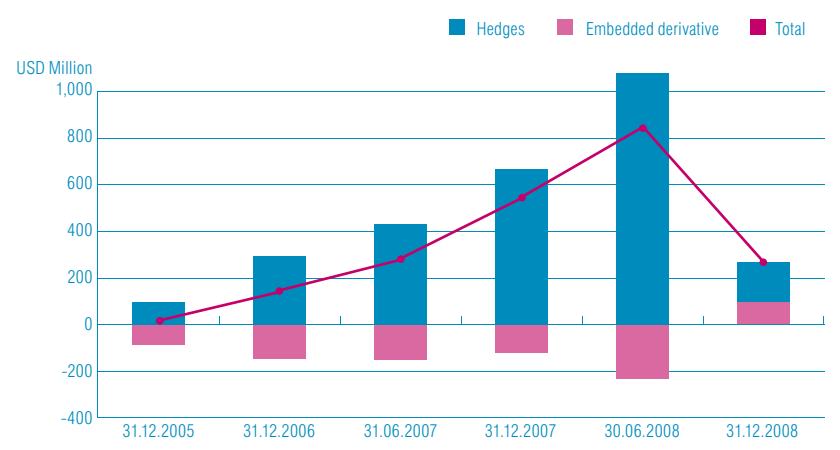
With active risk management, the Company strives to reduce uncertainty regarding cash flows risk and financial standing and monitors that operating targets are met. The main financial risks are related to fluctuations in the world market price of aluminium, interest rate risk, currency risk and liquidity risk. Furthermore, Landsvirkjun's financial risks involve counterparty risk. Counterparty risk in contracts has been limited by the company's quality requirements for counterparties.

**Aluminium price risk**

Landsvirkjun's income is to a great part dependent on world market price of aluminium and there is considerable risk inherent with a possible decrease in the price of aluminium. In order to reinforce the income base related to aluminium price, the risk management may hedge up to 100% of next year's aluminium price risk and proportionally less for the following ten years. This has partly been done with derivative contacts, which are aimed at reducing effects of aluminium price downturns on operating income. Such contracts consist, in most cases, in fixing aluminium price at a certain level. It is thus obvious that the company missed out on income during the first six months of the year when aluminium price increased rapidly. During the second half of the year, aluminium price has on the other hand decreased considerably and now the same contracts have begun to provide net cash inflow and the company's realised price is thus higher than the market price of aluminium. Due to those contracts, among others, the company's expected cash flows over the next years is acceptable despite unfavourable external conditions. At the end of December, the fair value of the aforementioned hedge contracts was positive by USD 98 million, the contracts being effective over the next six years.

According to International Financial Reporting Standards, the part of electric power sales contracts related to the price of aluminium is defined as embedded derivatives. Therefore, the fair value of embedded derivatives is sensitive to changes in the price of aluminium. Fair value changes of embedded derivatives are recognised in the company's income statement and affect its return and equity. Fair value determination of embedded derivatives allows for uncertainty in future price of aluminium in relation to the duration of the contracts. With this approach, and the aforementioned derivative contracts, Landsvirkjun reduces fluctuations in the company's return due to changes in the forward price of aluminium. Aluminium price hedges are thus, on the one hand, aimed at contributing to a more stable and secure cash flow, and on the other, to create a counterbalance to embedded derivatives.

MARK TO MARKET VALUE OF HEDGES AND EMBEDDED DERIVATIVE IN ALUMINIUM



However, the hedges are only a part of the extent of embedded derivatives, so the hedge is therefore not perfect. A decrease in the price of aluminium will, based on unchanged presumptions, negatively affect the company's operating results due to changes in price evaluations of embedded derivatives.

At the end of December, the fair value of embedded derivatives in electric power sales contracts was positive by USD 170 million, the contracts being effective for up to 40 years. This entails a decrease by USD 497 million from the previous year. Taking into account the effect of hedging, the negative effect of aluminium prices on the operating income was approximately USD 268 million before taxes.

Further information on embedded derivatives and derivative contracts related to aluminium can be found in note 51 to the company's financial statements.

**Interest rate risk**

Landsvirkjun is exposed to interest rate risk due to interest bearing assets and liabilities with fixed or variable interests for various length of time. Interest bearing liabilities are significantly higher than interest bearing assets and the company's benefit lies in minimising interest expense.

At year-end, the proportion of loans with variable interests was around 80% compared to 76% at year-end 2007. This is quite favourable for the company as interests have decreased considerably during the last months reducing Landsvirkjun's finance expenses. Based on historical correlation of aluminium price and interest rates and how these factors affect cash flow, this hedge can be identified as a natural hedge.

Landsvirkjun has entered into interest rate swaps aimed at reducing the company's interest expenses and risk over a longer period. The fair value of the contracts is recognised in the company's income statement as a hedge relationship between the agreements and the underlying loans has not been defined. At the end of December 2008, the fair value of interest rate swaps was negative by USD 10.7 million.

Further breakdown of the company's interest rate risk can be found in note 53 to the company's financial statements.

**Currency risk**

Landsvirkjun faces currency risk due to a difference in cash inflow and outflow by currencies and loan portfolio combination. Risk in cash flow is mainly related to income on electric power sale to industrial users, installments and interest payments on foreign loans, and foreign purchases. Risk in the balance sheet is mostly related to possible value fluctuations in the company's loan portfolio against the USD between reporting periods, as 30% of the loan portfolio is unhedged. However, risk in relation to changes in the loan portfolio is limited based on the benchmark set by the Board of Directors at each time, but for that purpose the company uses currency swaps and options. Risk management may also ensure a fixed rate of cash flow against the functional currency for up to three years with forward agreements and options.

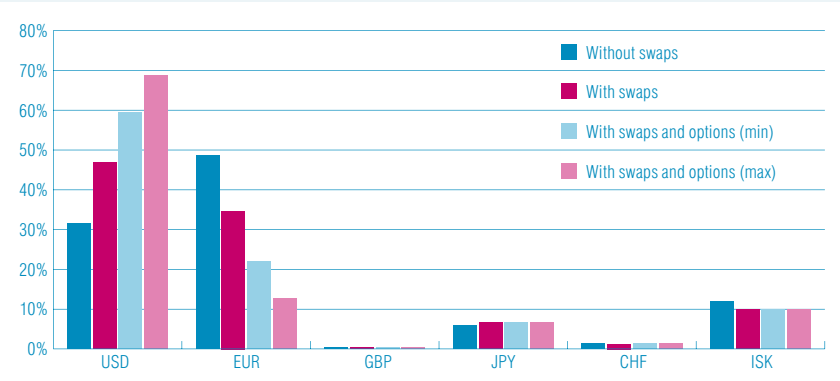
Further information on the company's currency risk can be found in note 52 to the company's financial statements.

**Liquidity risk**

Access to liquid resources for companies has rarely, if ever, been as important as now. In a changed environment, access to financial resources has become limited and costly. It is of no matter that the company's loans are guaranteed by its owner and its equity ratio and cash balance is good.

Landsvirkjun has for a long time aimed at having secure access to liquid assets corresponding to the average of the Company's net liquidity need for six months. In order to ensure continuing access, the company has carefully reviewed all operating factors concerning liquid resources, in addition to reducing investments. Landsvirkjun's

CURRENCY COMPOSITION IN LOAN PORTFOLIO



financing has always been handled in such a way that dates of maturity are reasonably distributed and in accordance with underlying investments. The company's refinancing and liquidity risk has therefore been limited with even distribution of useful lives of loans.

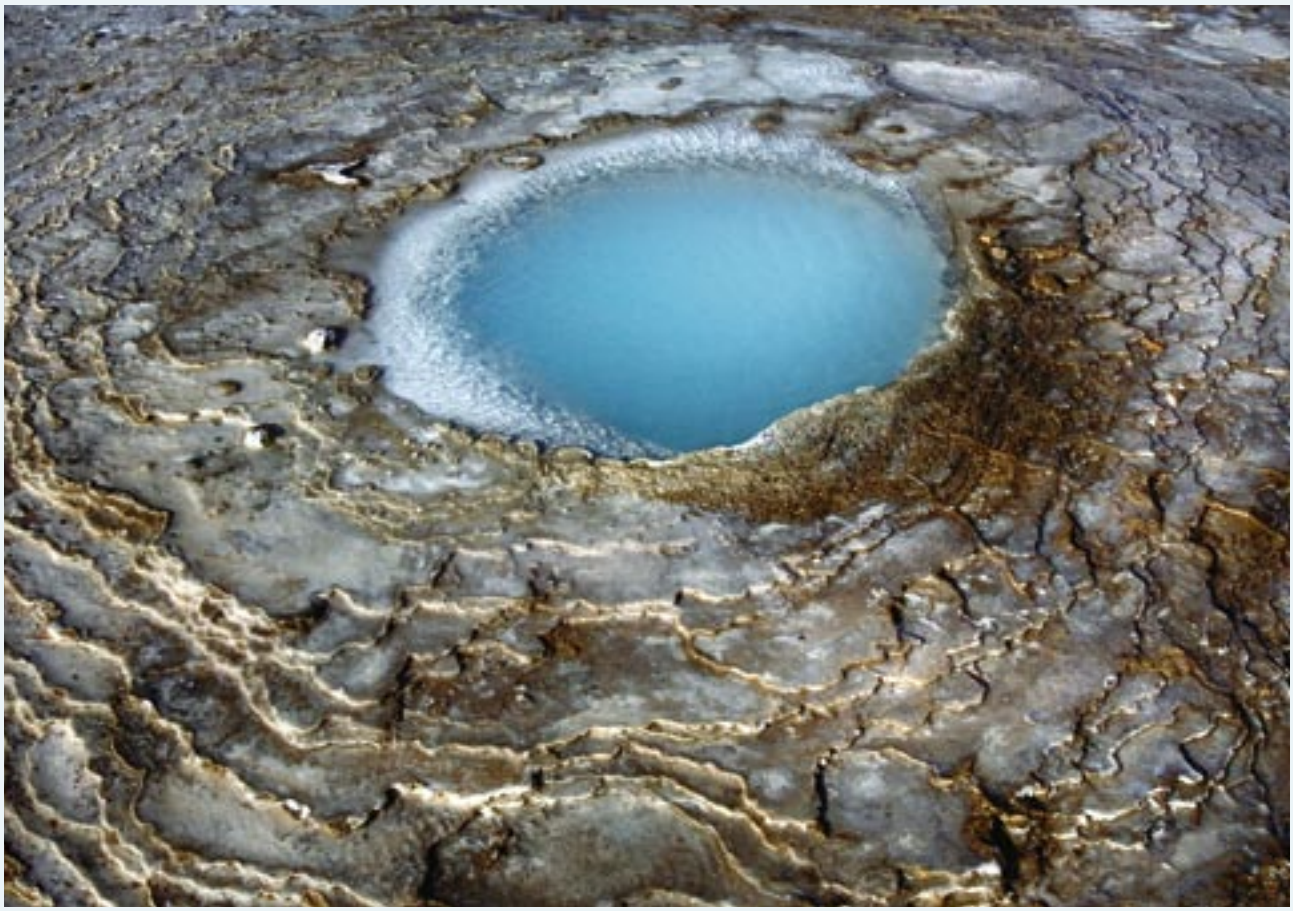
At year-end 2008, Landsvirkjun's cash and cash equivalents amounted to around USD 125 million but the company also had access to a revolving credit facility of USD 350 million. In total, the company has guaranteed access to liquid resources to the amount of USD 475 million. These resources along with cash flow from operation over the next two years secures the Company sufficient liquidity until the end of year 2010.

Further breakdown of the company's liquidity standing can be found in note 54 to the company's financial statements.

**Counterparty risk**

Landsvirkjun's counterparty risk arises first and foremost due to the company's energy contracts with industrial users and derivatives entered into for hedging purposes. Such contracts are only entered into with financial companies. Though the amounts involved are considerably high, the risk is limited with the company's requirements for counterparty quality. Landsvirkjun has set a benchmark for derivatives so that no derivative agreements are made with financial companies that have a lower rating than A- from Standard and Poor's or a comparable rating from other recognised credit rating agencies. Before energy contracts are made on massive energy sales, the financial standing of the relevant companies and their parent companies are thoroughly reviewed, if applicable.

A breakdown of counterparty risk can be found in note 55 to the company's financial statements.



# Endorsement by the Board of Directors and Managing Director

Landsvirkjun's objective is to operate in the energy sector and to engage in other business and financial operations according to the decision of the Board of Directors at each time. The Company's consolidated financial statements include, in addition to the parent company, five subsidiaries, Landsnet hf., Landsvirkjun Power ehf., Fjarski ehf., Hraunaveita ehf. and Icelandic Power Insurance Ltd. In addition, the parent company has one sub-subsidiary, Íslensk jardhitatækni ehf.

The financial statements of Landsvirkjun for the year 2008 are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU. According to IFRS, the Company shall determine its functional currency and the conclusion is that the USD is defined as the functional currency in the Company's operation as of the beginning of year 2008.

The Group's operating income amounted to USD 452 million in the year 2008 compared to USD 368.8 million the previous year. Operating expenses amounted to USD 206 million in the year 2008 but amounted to USD 187.8 million in the year 2007. Accordingly, the Company's operating profit amounted to USD 246 million in the year 2008 compared to USD 181 million the previous year. The operating recovery is explained by increased sales of electricity due to the commissioning of the Kárahnjúkar power plant and higher energy prices.

Financial expenses in excess of financial income amounted to USD 660.6 million in the year 2008, while in the year 2007, financial income in excess of financial expenses amounted to USD 445.6 million. The change between years amounts to a total of USD 1.1 billion. The difference between years is mainly explained by a change in net income on financial assets and liabilities in addition to increased interest expenses. Recognised change in net income on financial assets and liabilities is negative by USD 494.1 million but was positive in the year 2007 by USD 531.6 million. This is mainly explained by fair value changes in embedded derivaties related to sales agreements with power intensive industries caused by a decrease in world market price of aluminium during the latter half of the year. Furthermore, a decrease in positive foreign exchange difference due to long-term loans and foreign exchange loss on long-term receivables is caused by the decrease in the exchange rate of the ISK against the USD.

Interest expenses increased due to an increase in long-term loans related to Kárahnjúkar power plant, which is now in operation, and capitalised interest expenses are therefore lower than in the previous years. According to the income statement, the loss of the year amounted to USD 344.5 million while the previous year returned a profit on operation to the amount of USD 459.3 million.

Landsvirkjun has entered into derivative agreements in order to manage risk in the Company's operation. Agreements have been made to hedge interest rate risk and foreign currency risk. In addition, derivative agreements have been made in order to hedge risk due to fluctuations in world market price of aluminium as a part of operating income is based thereon. The Company has also made agreements in order to benefit from short-term fluctuations in the currency market. Positive fair value of hedge agreements in order to ensure the Company's revenue amounted to USD 98 million at year end 2008. The fair value of other derivative agreements at year end 2008 was negative by USD 108.3 million. The fair value of embedded derivatives in energy sales agreements with aluminium plants, less fair value of embedded derivatives in energy purchase agreements, is positive and their fair value is assessed at the total of USD 169.7 million at year end 2008.

Equity at year end 2008 amounted to USD 1,376.8 million according to the balance sheet and the Company's Board of Directors will propose to the Company's Annual General Meeting that the loss of the year shall be recognised as decrease in equity. The Company's Board of Directors proposes that no dividends shall be paid for the year 2008 but otherwise refers to the notes to the financial statements for further changes in equity.

Landsvirkjun was in many ways well prepared for the financial crisis which has been prevailing in both international markets and mainly the Icelandic market from September 2008. The Company's financial position is satisfactory as is liquidity due to good cash balance and access to a revolving credit facility, which the Company syndicated in the international markets in 2005. Landsvirkjun is no longer exposed to construction risk after the Kárahnjúkar power plant was taken into operation and the Company has not made any committments regarding new large projects. The Directors of Landsvirkjun believe that the Company will be able to meet its obligations over the next 24 months, despite no access to new loan capital during that time. The parent company will not undertake further large scale projects unless financing is guaranteed with new long-term loans.

From the beginning of year 2007, the Company is a partnership owned by the State and Eignarhlutir ehf. Eignarhlutir ehf. is entirely owned by the State. The State owns a 99.9% share in the Company and Eignarhlutir ehf. 0.1%.

The city of Reykjavik and the town of Akureyri provide, together with the state, a guarantee of collection for all obligations of Landsvirkjun, entered into before the end of year 2006. From the beginning of year 2007, the State and Eignarhlutir ehf. provide a guarantee of collection for all of Landsvirkjun's obligations entered into after that date. The Company's payments due to guarantees for long-term loans amounted to USD 7 million in the year 2008.

**Statement of the Board of Directors and the Managing Director**

According to the best knowledge of the Board of Directors and the Managing Director, the financial statements are in accordance with International Financial Reporting Standards as adopted by the EU and it is the opinion of the Board of Directors and the Managing Director that the financial statements give a fair view of the Company's assets, liabilities and financial position as at December 31, 2008 and the Company's results and changes in cash in the year 2008.

Furthermore, it is the opinion of the Board of Directors and the Managing Director that the financial statements and the Endorsement by the Board of Directors for the year 2008 give a fair view of the Company's results, financial position and development and describe the main risk factors faced by the Company.

The Board of Directors and the Managing Director hereby confirm these consolidated financial statements with their signature.

*Reykjavík, 20 March 2009.*

**The Board of Directors:**
Ingimundur Sigurpálsson
Bryndís Hlödversdóttir
Gylfi Árnason
Jóna Jónsdóttir
Páll Magnússon

**Managing Director:**
Fridrik Sophusson

# Independent Auditor's Report

*To the Board of Directors and owners of Landsvirkjun*

We have audited the accompanying financial statements of Landsvirkjun, which comprise the balance sheet as at December 31, 2008, and the income statement, statement of changes in equity and cash flow statement for the year then ended, and a summary of significant accounting policies and other explanatory notes.

**Management's Responsibility for the Financial Statements**

Management is responsible for the preparation and fair presentation of these financial statements in accordance with International Financial Reporting Standards as adopted by the EU. This responsibility includes: designing, implementing and maintaining internal control relevant to the preparation and fair presentation of financial statements that are free from material misstatements, whether due to fraud or error; selecting and applying appropriate accounting policies; and making accounting estimates that are reasonable in the circumstances.

**Auditor's Responsibility**

Our responsibility is to express an opinion on these financial statements based on our audit. We conducted our audit in accordance with International Standards on Auditing. Those standards require that we comply with relevant ethical requirements and plan and perform the audit to obtain reasonable assurance whether the financial statements are free of material misstatement.

An audit involves performing procedures to obtain audit evidence about the amounts and disclosures in the financial statements. The procedures selected depend on the auditor's judgement, including the assessment of the risks of material misstatement of the financial statements, whether due to fraud or error. In making those risk assessments, the auditor considers internal control relevant to the entity's preparation and fair presentation of the financial statements in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the entity's internal control. An audit also includes evaluating the appropriateness of accounting principles used and the reasonableness of accounting estimates made by management, as well as evaluating the overall presentation of the financial statements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our audit opinion.

**Opinion**

In our opinion, the financial statements give a true and fair view of the financial position of Landsvirkjun as at December 31, 2008, and of its financial performance and its cash flows for the year then ended in accordance with International Financial Reporting Standards as adopted by the EU.

*Reykjavik, 20 March 2009.*

**KPMG hf.**
Jón Eiríksson
Reynir Stefán Gylfason

# Income Statement for 2008

| | Notes | 2008 | 2007 |
|---|---|---|---|
| **Operating revenues** | | | |
| Power sales | | 388,368 | 298,445 |
| Transmission | | 53,268 | 63,601 |
| Other income | 25 | 10,391 | 6,777 |
| | 5 | 452,027 | 368,824 |
| **Operating expenses** | | | |
| Energy production costs | | 120,710 | 94,324 |
| Transmission costs | | 36,435 | 41,775 |
| Cost of general research | | 8,073 | 19,657 |
| Other operating expenses | 28 | 40,826 | 32,003 |
| | | 206,044 | 187,760 |
| *Operating profit* | | 245,983 | 181,064 |
| **Financial income and (financial expenses)** | | | |
| Interest income | 6 | 15,390 | 6,279 |
| Interest expenses | 6 | ( 177,742 ) | ( 92,197 ) |
| Net income (expenses) on financial assets and liabilities | 7 | ( 494,111 ) | 531,625 |
| Associated companies | 35 | ( 4,100 ) | ( 69 ) |
| | 29 | ( 660,563 ) | 445,638 |
| *(Loss) profit before taxes* | | ( 414,580 ) | 626,702 |
| Income tax | 10,30 | 70,048 | ( 167,444 ) |
| **Net (loss) profit for the year** | | ( 344,532 ) | 459,258 |
| **Attributable to:** | | | |
| Owners of the parent company | | ( 293,384 ) | 463,756 |
| Subsidiaries minority interest | | ( 51,148 ) | ( 4,498 ) |
| | | ( 344,532 ) | 459,258 |



Amounts in USD thousands.

# Balance Sheet December 31, 2008

| Assets | Notes | 2008 | 2007 |
|---|---|---|---|
| **Non-current assets** | | | |
| Property, plant and equipment | 12,31 | 3,789,129 | 3,651,660 |
| Projects under construction | | 12,243 | 234,650 |
| Intangible assets | 11,32 | 138,077 | 94,113 |
| Derivative financial instruments | 13,34 | 287,513 | 659,516 |
| Associated companies | 4,35 | 13,342 | 6,918 |
| Shares in other companies | 36 | 127 | 2,313 |
| Long-term notes receivable | | 246 | 494 |
| Deferred tax asset | 10,38 | 133,409 | 106,797 |
| Total non-current assets | | 4,374,086 | 4,756,460 |
| **Current assets** | | | |
| Inventories | 39 | 4,269 | 5,437 |
| Accounts receivables and other receivables | 40 | 98,374 | 73,337 |
| Derivative financial instruments | 13,34 | 17,498 | 127,491 |
| Cash and cash equivalents | 41 | 124,993 | 179,578 |
| Total current assets | | 245,134 | 385,843 |
| **Total assets** | | 4,619,220 | 5,142,303 |

| Equity and liabilities | | | |
|---|---|---|---|
| **Equity** | | | |
| Owners' contributions | 42 | 586,512 | 586,512 |
| Revaluation account | 43 | 116,268 | 0 |
| Translation difference | 43 | ( 33,670 ) | ( 687 ) |
| Other equity | | 686,384 | 985,861 |
| Equity of the owners of the parent company | | 1,355,494 | 1,571,686 |
| Minority interest | | 21,298 | 28,459 |
| Total equity | | 1,376,792 | 1,600,145 |
| **Long-term liabilities** | | | |
| Long-term debt | 44 | 2,789,261 | 2,735,753 |
| Accrued pension liabilities | 46 | 22,118 | 38,153 |
| Obligation due to demolition | 12,47 | 3,936 | 7,212 |
| Derivative financial instruments | 13,34 | 123,971 | 105,191 |
| | | 2,939,286 | 2,886,310 |
| **Current liabilities** | | | |
| Accounts payable and other short-term liabilities | 48 | 95,537 | 247,277 |
| Current maturities of long-term debt | 45 | 186,008 | 347,329 |
| Derivative financial instruments | 13,34 | 21,597 | 61,242 |
| | | 303,142 | 655,848 |
| Total liabilities | | 3,242,428 | 3,542,158 |
| **Total equity and liabilities** | | 4,619,220 | 5,142,303 |



Amounts in USD thousands.

# Statement of Equity from January 1, 2007 to December 31, 2008

| Changes in equity year 2007 | Owners' contribution | Revaluation account | Translation difference | Other equity | **Total** | Minority interest | **Total equity** |
|---|---|---|---|---|---|---|---|
| Equity at 1 January 2007 | 586,512 | 0 | 0 | 530,169 | 1,116,681 | 26,591 | 1,143,272 |
| For. exch. diff. due to subsidiaries | | | (687) | | (687) | | (687) |
| Profit (loss) for the year 2007 | | | | 463,756 | 463,756 | (4,498) | 459,258 |
| Total profit (loss) for the year 2007 | | | (687) | 463,756 | 463,069 | (4,498) | 458,571 |
| Subsidiaries share capital increase | | | | | | 6,366 | 6,366 |
| Dividends paid | | | | (8,065) | (8,065) | | (8,065) |
| Equity at 31 December 2007 | 586,512 | 0 | (687) | 985,861 | 1,571,686 | 28,459 | 1,600,145 |

| Changes in equity year 2008 | | | | | | | |
|---|---|---|---|---|---|---|---|
| Equity at 1 January 2008 | 586,512 | 0 | (687) | 985,861 | 1,571,686 | 28,459 | 1,600,145 |
| For. exch. diff. due to subsidiaries | | | (32,982) | | (32,982) | (19,055) | (52,037) |
| Revaluation of fixed assets | | 138,831 | | | 138,831 | 74,167 | 212,998 |
| Income tax effect of revaluation | | (20,825) | | | (20,825) | (11,125) | (31,950) |
| Loss for the year 2008 | | | | (293,384) | (293,384) | (51,148) | (344,532) |
| Total profit (loss) for the year 2008 | | 118,006 | (32,982) | (293,384) | (208,360) | (7,161) | (215,521) |
| Depreciation transferred | | (1,738) | | 1,738 | 0 | | 0 |
| Dividends paid | | | | (7,831) | (7,831) | | (7,831) |
| Equity at 31 December 2008 | 586,512 | 116,268 | (33,670) | 686,384 | 1,355,494 | 21,298 | 1,376,792 |



Amounts in USD thousands.

# Statement of Cash Flows for 2008

| | 2008 | 2007 |
|---|---|---|
| **Operating activities** | | |
| Cash received from customers | 455,977 | 348,319 |
| Cash expenses | ( 112,499 ) | ( 89,600 ) |
| From operation excluding interest | 343,478 | 258,719 |
| Interest income received | 17,049 | 5,906 |
| Interest expenses and foreign exchange difference paid | ( 115,800 ) | ( 65,340 ) |
| Hedge disbursements | ( 60,377 ) | ( 60,762 ) |
| Cash flow from operating activities | 184,350 | 138,522 |
| **Investment activities** | | |
| Kárahnjúkar project - hydropower station | ( 189,457 ) | ( 514,731 ) |
| Transmission | ( 12,084 ) | ( 81,060 ) |
| Development costs | ( 55,134 ) | ( 24,447 ) |
| Purchased shares | ( 11,334 ) | ( 12,528 ) |
| Other capital expenditure | ( 15,220 ) | ( 22,543 ) |
| Assets sold | 8,119 | 8,288 |
| Increase (decrease) in unpaid construction cost | ( 70,646 ) | 81,210 |
| | ( 345,756 ) | ( 565,812 ) |
| Other receivables, change | ( 29,041 ) | 33,286 |
| Investment activities | ( 374,797 ) | ( 532,526 ) |
| **Financing activities** | | |
| Cash dividends | ( 7,831 ) | ( 8,065 ) |
| New loans | 449,882 | 517,257 |
| Currency swaps | 54,425 | 25,200 |
| Amortization of long-term debt | ( 288,535 ) | ( 27,456 ) |
| Short-term loans, change | ( 39,355 ) | 0 |
| Financing activities | 168,586 | 506,937 |
| **(Decrease) increase in cash** | ( 21,861 ) | 112,933 |
| **Effect of exch. diff. on cash and cash equivalents** | ( 32,724 ) | ( 8,319 ) |
| **Cash and cash equivalents at the beginning of the year** | 179,578 | 74,963 |
| **Cash and cash equivalents at end of year** | 124,993 | 179,578 |
| **Financing and investment activities not affecting cash flow:** | | |
| Assets available for sale | ( 12,560 ) | 0 |
| Finance lease agreements | 12,560 | 0 |



Amounts in USD thousands.

# Notes to the Financial Statements


1. Landsvirkjun . . . . . 29
2. Basis of preparation . . . . . 29
3. Basis of consolidation . . . . . 30
4. Associated companies . . . . . 30
5. Operating revenues . . . . . 30
6. Interest income and expenses . . . . . 30
7. Net income (exp.) on fin. assets/liabilities . . . . . 31
8. Foreign currency transactions . . . . . 31
9. Impairment . . . . . 31
10. Income tax . . . . . 31
11. Intangible assets . . . . . 32
12. Fixed assets . . . . . 32
13. Financial instruments . . . . . 33
14. Fair value measurement . . . . . 34
15. Fixed assets . . . . . 34
16. Inventories . . . . . 35
17. Cash and cash equivalents . . . . . 35
18. Equity . . . . . 35
19. Employees' benefits . . . . . 35
20. Obligations . . . . . 35
21. Segment reporting . . . . . 35
22. Reporting standards . . . . . 35
23. Management evaluation . . . . . 37
24. Statement of segments . . . . . 37
25. Other income . . . . . 38
26. Total number of employees . . . . . 38
27. Total salaries . . . . . 38
28. Other operating expenses . . . . . 39
29. Financial income and (expenses) . . . . . 39
30. Income tax . . . . . 40
31. Property, plant and equipment . . . . . 40
32. Intangible assets . . . . . 41
33. Depreciation . . . . . 42
34. Derivative financial instruments . . . . . 42
35. Shares in associated companies . . . . . 43
36. Shares in other companies . . . . . 43
37. Subsidiaries . . . . . 43
38. Deferred tax asset . . . . . 44
39. Inventories . . . . . 44
40. Accounts receivable and other receivables . . . . . 44
41. Cash and cash equivalents . . . . . 44
42. Equity . . . . . 44
43. Revaluation account . . . . . 44
44. Long-term liabilities . . . . . 45
45. Current maturities of long-term debt . . . . . 45
46. Pension fund obligation . . . . . 45
47. Obligation due to demolition . . . . . 46
48. Accounts payable and other payables . . . . . 46
49. Related parties . . . . . 46
50. Risk management . . . . . 47
51. Aluminium price risk . . . . . 47
52. Foreign exchange risk . . . . . 48
53. Interest rate risk . . . . . 49
54. Liquidity risk . . . . . 50
55. Counterparty risk . . . . . 51
56. Other issues . . . . . 51
57. Subsequent events . . . . . 51

# Notes

## Reporting entity

### 1. Landsvirkjun

Landsvirkjun is a partnership having its place of business in Iceland and its headquarters at Háaleitisbraut 68, Reykjavik. Landsvirkjun operates on the basis of the Act on Landsvirkjun no. 42/1983. The financial statements include the Company's consolidated financial statements and its subsidiaries. The Company's main objective is to engage in operations in the energy sector.

### 2. Basis of preparation

Significant accounting policies used in the preparation of these financial statements are identified below.

*a. Statement of compliance*

The consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the EU.

The Company's Board of Directors approved the presentation of the Financial Statements on 20 March 2009.

*b. Basis of measurement*

The financial statements have been prepared on the historical cost basis except for the following assets and liabilities, which have been measured at fair value: derivative financial instruments, long-term receivables, transmission, telecommunications system, trading financial assets and liabilities and shares in other companies.

Fixed operating assets of the subsidiaries, Landsnet hf. and Fjarski ehf., were revalued during the year.

Fixed assets and asset groups available for sale are recognised at book value or net fair value depending which is lower.

*c. Presentation and functional currency*

The financial statements are presented in USD, which is the parent's functional currency as of 1 January 2008. Comparative figures for the year 2007 have been translated on the end rate of the USD against the ISK at year end 2007. All financial information presented in USD has been rounded to the nearest thousand, unless otherwise stated.

*d. Use of estimates and judgements*

The preparation of financial statements in conformity with the IFRS requires management to make judgements, estimates and assumptions that affect the application of accounting policies and the reported amounts of assets, liabilities, income and expenses. Actual results may differ from these estimates.

Estimates and underlying assumptions are reviewed on an ongoing basis. Revisions to accounting estimates are recognised and the effect of the changes are entered in the periods when the changes are made and in subsequent periods if the change also affects those periods.

Information on management's estimates and decisions made in relation to the application of accounting methods that significantly affect the financial statements are presented in the following notes:

- note 31 property, plant and equipment
- note 32 intangible assets
- note 34 derivative financial instruments
- note 46 accrued pension liabilities

## Significant accounting policies

Accounting policies set out below have been consistently applied to all periods presented in these financial statements, and to all companies within the group.

### 3. Basis of consolidation

*a) Subsidiaries*

Subsidiaries are entities controlled by the Company. Control exists when the Company has the power to govern the financial and operating policies of an entity so as to obtain benefits from its activities. In assessing control, potential voting rights that currently are exercisable are taken into account. The consolidated financial statements of subsidiaries are included in the consolidated financial statements from the date that control commences until the date that control ceases. Financial statements of subsidiaries have been taken into account. When the Company's share of losses exceeds its interest in a subsidiary, the carrying amount of that interest is reduced to nil and the recognition of further losses is discontinued except to the extent that the Company has an obligation or has made payments on behalf of the subsidiary. In case of a profit on the operation of a subsidiary in a subsequent period, a share in their profit is not recognised until a share in a loss has been fully set off.

*b) Transactions eliminated on consolidation*

Intra-group balances and transactions, and any unrealised income and expenses arising from intra-group transactions, are eliminated in preparing the consolidated financial statements. Unrealised gains arising from transactions with equity accounted investees are eliminated against the investment to the extent of the Company's interest in the investee. Unrealised losses are eliminated in the same way as unrealised gains, but only to the extent that there is no evidence of impairment.

*c) Subsidiaries with other functional currency*

Assets and liabilities of a subsidiary with other functional currency than the parent company are translated to USD at the exchange rate ruling at the accounting date. Income and expenses of that operation are translated to USD at the average exchange rate of the period. The exchange rate difference arising from the translation is entered as a specific item under equity. Amounts in the statement of cash flows are translated to USD at the average exchange rate of the period. The exchange rate difference arising from the translation to USD is entered as a specific item in the statement of cash flows.

### 4. Associated companies

Associated companies are those companies in which the Company has significant influence, but not control, over the financial and operating policies. Significant influence is presumed to exist when the Company holds between 20 and 50 percent of the voting power of another entity, including any other possible voting power.

The financial statements include the Group's share in the income and expenses of associated companies according to the method of association, from the date that significant influence commences until the date that significant influence ceases. When the Group's share of losses exceeds the book value of an associated company the book value is reduced to nil and the recognition of further losses is discontinued except to the extent that the Group has an obligation or has made payments on behalf of the associated company. If in subsequent periods there is a profit on the operation of associated companies, the share in the profit is not recognised until previous share in losses has been balanced.

### 5. Operating revenues

Revenues from sales and transmission of electricity consists of sales supplied to power intensive industries and public utilities based on delivery during the period. Other service income is also recognised when earned or upon delivery.

### 6. Interest income and expenses

Interest income and expenses are recognised in the income statement as they accrue using the effective interest method. Interest income and expenses include bank rates, premium, realized interest rate swaps and other difference arising on initial book value of financial instruments and amounts on the date of maturity using the effective interest method.

Effective interest is the imputed rate of interest used in determining the current value of estimated cash flow over the estimated useful life of a financial instrument or a shorter period if applicable, so that it equals the book value of the financial asset or liability in the balance sheet. When calculating effective interest rate the Company estimates cash flow taking into account all contractual aspects of the financial instrument.

## 7. Net income (expenses) on financial assets and liabilities

Net income (expenses) on financial assets and liabilities include profit and loss on current assets and liabilities and all redeemed and unredeemed fair value changes, dividends and changes in foreign exchange difference. Dividend income is recognised in the income statement when distribution of dividends has been approved.

## 8. Foreign currency transactions

Transactions in foreign currencies are recognised at the exchange rate ruling at the dates of the transactions. Monetary assets and liabilities denominated in foreign currencies are recognised at the exchange rate ruling at the end of the period. The foreign currency gain or loss thereon is recognised in the income statement. Non-monetary assets and liabilities measured at cost value in a foreign currency are translated to USD at the exchange rate ruling at the date of the transactions. Tangible assets and liabilities recognised in foreign currencies at fair value are translated to USD at the exchange rate ruling at the date of determination of fair value.

## 9. Impairment

*i) Financial assets*

A financial asset is assessed at each reporting date to determine whether there is any objective evidence that it is impaired. A financial asset is considered to be impaired if objective evidence indicates that one or more events have had a negative effect on the estimated future cash flows of that asset.

An impairment loss in respect of a financial asset measured at amortised cost is calculated as the difference between its carrying amount, and the present value of the estimated future cash flows discounted at the original effective interest rate. An impairment loss in respect of an available-for-sale financial asset is calculated by reference to its fair value.

Impairment loss on financial assets is recognised in the income statement. Accumulated loss on available-for-sale financial assets, previously recognised among equity, is recognised in the income statement when the impairment loss has been incurred.

An impairment loss is reversed if the reversal can be related objectively to an event occurring after the impairment loss was recognised. For financial assets measured at amortised cost and available-for-sale financial assets that are debt securities, the reversal is recognised in the income statement. For available-for-sale financial assets that are equity securities, the reversal is recognised directly in equity.

*ii) Non-financial assets*

The carrying amounts of the Company's non-financial assets, other than inventories and deferred tax assets, are reviewed at each reporting date to determine whether there is any indication of impairment. If any such indication exists, then the asset's recoverable amount is estimated. Impairment tests are carried out at least once a year on intangible assets with undetermined useful life.

Impairment loss is recognised when the book value of the asset or its cash generating unit exceeds its recoverable amount. A cash generating unit is the smallest distinguishable asset group that generates cash, which is mostly independent from other units or unit groups. Impairment loss is expensed in the income statement and later proportionally as reduction in the book value of other assets pertaining to the unit.

The recoverable amount of non-financial assets or its cash generating unit is the greater of its fair value less cost to sell or its value in use. In assessing value in use, the estimated future cash flows are discounted to their present value using a pre-tax discount rate that reflects current market assessments of the time value of money and the risks specific to the asset.

An impairment loss in respect of non-financial assets is reversed if there has been a change in the estimates used to determine the recoverable amount. An impairment loss is reversed only to the extent that the asset's carrying amount does not exceed the carrying amount that would have been determined, net of depreciation or amortisation, if no impairment loss had been recognised.

## 10. Income tax

Income tax on the results for the year consists of current tax and deferred tax. Income tax is recognised in the income statement except to the extent that it relates to items recognised directly in equity, in which case it is recognised in equity.

Current tax is the expected tax payable on the taxable income for the year, using tax rates enacted or substantively enacted at the reporting date.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against the asset.

A deferred tax asset is recognised in the financial statements. Its calculation is based on the difference in balance sheet items, according to the tax return, on the one hand, and the consolidated financial statements on the other. The difference thus arising is due to the fact that the tax assessment is based on other premises than the Group's financial statements and is in main respect a temporary difference as expenses are entered in the financial statements in an another period than in the tax return.

## 11. Intangible assets

Intangible assets are recognised at cost value, less impairment loss and depreciation.

Expenditure for general research cost is expensed in the period it incurs. Development cost for future power projects is capitalised among fixed assets. The development cost is only capitalised if there is probability of future economic benefit and the Company intends and is able to conclude, use or sell it. The cost is not depreciated at this stage but account is taken for possible impairment loss if a project plan changes.

Water and geothermal rights are capitalised in the balance sheet at cost value as intangible assets with unlimited useful life.

Other intangible assets are stated at cost less accumulated depreciation and impairment loss.

Subsequent cost is only capitalised if it increases the estimated future economic benefit of the asset it relates to. All other cost is expensed in the income statement when incurred.

Amortization is calculated on a straight line basis, based on the estimated useful lives of intangible assets from the date that they become ready for use. Estimated amortization and useful life is specified as follows:

| | | |
|---|---|---|
| Software | 25% | 4 years |

## 12. Fixed assets

*Property, plant and equipment*

Fixed assets are initially measured at cost.

The Group's transmission and telecommunication systems are recognised at a revalued cost in the balance sheet, which is their fair value, less depreciation from the date of revaluation. The revaluation of those assets will be carried out on a regular basis. All value increase due to the revaluation is recognised in the revaluation account among equity after income tax effect. Depreciation of the revalued cost is recognised in the income statement. Upon sale or disposal of an asset, the part of the revaluation account pertaining to the asset is transferred to retained earnings.

Other operating assets are capitalised at cost, less accumulated depreciation and impairment.

Initial value of fixed assets includes the estimated cost of demolition following their use. Estimated demoliton cost of power lines has been measured at discounted value based on the useful life and an obligation in relation thereto has been recognised among long-term liabilities. An increase in the obligation due to the reversal of disccounting is expensed in the income statement in addition to depreciation of demolition cost.

Cost value consists of all cost incurred due to the acquisition of the asset. Cost value of fixed assets constructed in own account is the aggregate cost of construction, such as cost of material and salaries in addition to all other cost the Company incurs in making the asset operative.

If single items of fixed assets have different estimated useful lives they are divided in accordance with their different useful lives.

Profit or loss on the sale of an operating asset is the difference between the sales value and the book value of the asset and is recognised in the income statement.

Renewal cost of parts of fixed assets is capitalised if it is considered likely that the cost involves future economic benefit for the Company and furthermore, if the cost is measureable. Operating cost of fixed assets is recognised in the income statement.

Interest expense on loans used to finance the cost value of projects is capitalised at the time of construction. Interest is not calculated on development cost. After the assets have been taken into use, interest expense is recognised in the income statement.

*Depreciation*

Depreciation is calculated as a fixed annual percentage based on the estimated useful lives of the operating assets.

Depreciation method, estimated useful life and scrap value are reassessed at each accounting date.

Depreciation ratios and useful life are specified as follows:

| | *Depreciation* | *Useful life* |
|---|---|---|
| Power stations: | | |
| Powerhouses and other structures | 1.67% | 60 years |
| Machinery | 2.5-6.67% | 15-40 years |
| Dams and waterways | 1.67-3.33% | 30-60 years |
| Thermal stations | 1.67-6.67% | 15-60 years |
| Substations | 2.5%-5% | 20-40 years |
| Power lines | 2.00% | 50 years |
| Office building | 2.00% | 50 years |
| Equipment | 10-25% | 4-10 years |
| Vehicles | 10-20% | 5-10 years |
| Optical fibre | 5.00% | 20 years |
| Masts | 7.00% | 15 years |
| Telecommunication buildings | 6.00% | 17 years |
| Other telecommunication equipment | 14-15% | 7 years |

## 13. Financial instruments

*i) Non-derivative financial instruments*

Non-derivative financial instruments consist of investments in shares and bonds, accounts receivables, other receivables, cash and cash equivalents, borrowings, accounts payable and other short-term liabilities.

Non-derivative financial instruments are recognised at fair value at initial recognition. In case of financial instruments, not measured at fair value through the income statement, all direct transaction cost is entered as increase in fair value at their initial recognition, with the exceptions described below. Following an initial recognition non-derivative financial instruments are recognised as follows.

Financial instruments are entered in the consolidated financial statements when the Company becomes a part of contractual provisions of the relevant financial instrument. Financial assets are derecognized if the Company's contractual right to cash flows due to the asset expires or the Company transfers the assets to another party without holding back control or almost all the risk and reward involved in the ownership. Conventional purchase and sale of financial assets are recognised at the transaction date, i.e. the date the Company enters into obligation to purchase or sell the asset. Financial obligations are derecognized from the consolidated financial statements if the obligations of the Company defined in an agreement are paid, expire, are disallowed or invalidated.

Cash and cash equivalents consist of cash, short-term market securities and demand deposits.

Note no. 6 includes information on accounting methods used for financial income and expenses.

*Financial assets and liabilities at fair value through income statement*

A financial instrument is recognised at fair value and fair value changes through the income statement in case of current financial assets or if it is, at initial registration, determined as a financial instrument at fair value through the income statement. A financial instrument is denominated at fair value through the income statement if the Company manages such investments and decisions of purchase and sale are based on their fair value. Financial assets and liabilities at fair value through the income statement are recognised at fair value in the balance sheet and fair value changes are recognised in the income statement. Direct transaction cost is entered in the income statement as it incurs.

*Other financial instruments*
Other non-derivative financial instruments are recognised at amortised cost value using the effective interest method, less impairment loss, if any.

*Off-setting of financial assets and liabilities*
Financial assets and liabilities are set off and the net amount is recognised in the balance sheet when the legal right exists on off-setting and the Company intends to account for financial assets and liabilities by off-setting.

*ii) Derivative financial instruments*
The Company enters into derivative financial instruments to hedge its foreign currency, interest rate and aluminum price risk exposures. Embedded derivatives are separated from the host contract and accounted for separately if the economic characteristics and risks of the host contract and the embedded derivative are not closely related and another instrument with the same provisions as the embedded derivative would be defined as derivative and the hybrid contract is not stated at fair value in the income statement.

Derivative financial instruments are recognised initially at fair value. Attributable transaction costs are recognised in the income statement when incurred. Subsequent to initial recognition, derivatives are measured at fair value, and changes therein are accounted for as described below.

*Economic hedges*
Hedge accounting is not applied to derivative instruments that economically hedge monetary assets and liabilities denominated in foreign currencies. Changes in the fair value of such derivatives are recognised in the income statement as part of net income (expenses) on financial assets and liabilities.

*Separable embedded derivatives*
Fair value changes of embedded derivatives separable from the host contract are recognised when the fair value change takes place, see notes on risk management.

## 14. Fair value measurement

Some of the Company's accounting standards and notes require that fair value be measured, both for financial assets and liabilities and other assets and liabilities. Fair value has been determined due to assessments and/or notes according to the following methods. Where applicable, further information is made available on methods used to find the fair value of assets and liabilities in the note relevant to the asset or the liability in question.

The fair value of financial assets and liabilities listed in an active market is the same as their listed value. Evaluation methods are applied to all other financial instruments in calculating their fair value. A financial asset or liability is considered to be listed on an active market if the official price can be obtained from a stock exchange or another independent party and the price reflects real and regular market transactions between unrelated parties.

Evaluation methods can involve the use of recent transaction prices between unrelated parties. The methods take note of the value of other financial instruments similar to the instrument in question, and methods are used to determine the discounted cash flow or other evaluation methods that can be applied in order to measure in a reliable way the real market value. When applying evaluation methods, all factors that market parties would use in price assessment are used and the methods are in accordance with generally accepted methods for rating financing instruments. The Company verifies its evaluation methods on an ongoing basis and tests them by using prices obtained from transactions in an active market with the same instrument, without adjustments or changes, or based on information from an active market.

The most reliable verification of the initial fair value of derivative financial instruments is the purchase value, unless the fair value of the instrument can be verified by comparison with other recent listed market transactions with the same instrument, or based on an evaluation method where variables are exclusively based on market data. When such market data can be obtained, the Company recognises profit and loss at the initial recognition date of the instruments.

## 15. Fixed assets

Fair value of revalued property, plant and equipment has been determined on the basis of the discounted cash flow of the asset in question.

## 16. Inventories

Inventories are stated at the lower of the cost value or the net sales value. Cost value of inventories is based on the "First In First Out" method and includes cost incurred upon the purchase of the inventories and in bringing them to the sales location and in a saleable state.

## 17. Cash and cash equivalents

Cash and cash equivalents consist of cash, short-term market securities and demand deposits.

## 18. Equity

The Group's equity is divided into owners' contribution, revaluation account, translation difference, other equity and minority interest. The parent company's contributed capital amounts to USD 586.5 million (ISK 36,364 million).

## 19. Employees' benefits

*i) Defined contribution plan*

Cost due to contribution to defined benefit plans is expensed in the income statement when incurred.

*ii) Defined benefit plan*

The Company's obligation due to defined benefit plans is calculated by estimating the future value of defined pension benefits accrued by current and former employees in current or previous periods. The benefits are discounted in order to determine their present value. An actuary has calculated the obligation on the basis of a method, which is based on accrued benefits. Changes in the obligation are recognised in the income statement when incurred.

## 20. Obligations

Obligations are recognised when the Company has entered into obligations due to past events, it is likely that they will be settled and they can be reliably measured. The obligation can be assessed on the basis of estimated cash flows, discounted on the basis of interests reflecting market interests and the risk inherent with the obligation.

## 21. Segment reporting

A segment is a distinguishable component of the Group that is engaged either in providing related products or services (operating segment), or in providing products or services within a particular economic environment (geographical segment), which is subject to risks and returns that are different from those of other segments. The Group's main segment is based on operating segments. Geographical segments are not disclosed as almost the entire operation of the group is carried out in Iceland.

Inter-segment pricing is determined on an arm's length basis.

Segment operating return, assets and liabilities consist of items that can be directly linked to each segment, in addition to the items that can be reasonably divided into segments. Items not classified with single segments are mainly investments and related income, borrowings and related cost, collective assets and related cost, in addition to deferred income tax.

## 22. Reporting standards

The following new standards, amendments to standards and interpretations are not yet effective and do thus not affect the preparation of these financial statements.

New standards and interpretations that have not been implemented by the Group.

IFRS 8 Operating Segments introduces the "management approach" to segment reporting. IFRS 8, which becomes mandatory for the Group's 2009 consolidated financial statements, will require a change in the presentation and disclosure of segment information based on the internal reports regularly reviewed by the Company's Chief Operating Decision Maker in order to assess each segment's performance and to allocate resources to them. The standard is not expected to have effect on the Company's financial statements.

Revised IAS 1 Presentation of Financial Statements (2007) introduces the term "total comprehensive income", which represents changes in equity during a period other than those changes resulting from transactions with owners in their capacity as owners. Total comprehensive income may be presented in either a single statement of comprehensive income, or in an income statement and a separate statement of comprehensive income. Revised IAS 1, will become mandatory for the Company's 2009 consolidated financial statements.

Revised IAS 23 Borrowing Costs removes the option to expense borrowing costs and requires that an entity capitalise borrowing costs directly attributable to the acquisition, construction or production of a qualifying asset as part of the cost of that asset. The revised IAS 23 will become mandatory for the Company's 2009 consolidated financial statements and is not expected to have effect on the Company's financial standing.

Revised IFRS 3 Business Combinations (2008) incorporates the following changes that are likely to be relevant to the Company's operations:

- The definition of a business has been broadened, which is likely to result in more acquisitions being treated as business combinations.
- Contingent consideration will be measured at fair value, with subsequent changes therein recognised in profit or loss.
- Transaction costs, other than share and debt issue costs, will be expensed as incurred.
- Any pre-existing interest in the acquiree will be measured at fair value with the gain or loss recognised in profit or loss.
- Any non-controlling (minority) interest will be measured at either fair value, or at its proportionate interest in the identifiable assets and liabilities of the acquiree, on a transaction-by-transaction basis.

Revised IFRS 3, will become mandatory for the Company's 2010 consolidated financial statements, if endorsed by the EU.

Amended IAS 27 Consolidated and Separate Financial Statements (2008) requires accounting for changes in ownership interests by the Company in a subsidiary, while maintaining control, to be recognised as an equity transaction. When the Company loses control of a subsidiary, any interest retained in the former subsidiary will be measured at fair value with the gain or loss recognised in profit or loss. The amendments to IAS 27, which become mandatory for the Company's 2010 consolidated financial statements if endorsed by the EU, are not expected to have a significant impact on the consolidated financial statements.

Amendment to IFRS 2 Share-based Payment – Vesting Conditions and Cancellations (2008) clarifies the definition of vesting conditions, introduces the concept on non-vesting conditions, requires non-vesting conditions to be reflected in grant-date fair value and provides the accounting treatment for non-vesting conditions and cancellations. If the amendments to IFRS 2 will become mandatory for the Company's 2009 consolidated financial statements, it will be with retrospective application. The effect of the introduction of the standard on the Company's financial statements has not yet been estimated.

Amendments to IAS 32 Financial Instruments: Presentation and IAS 1 Presentation of Financial Statements – Puttable Financial Instruments and Obligations Arising on Liquidation requires puttable instruments, and instruments that impose on the entity an obligation to deliver to another party a pro rata share of the net assets of the entity only on liquidation, to be classified as equity if certain conditions are met. If the amendments will become mandatory for the Company's 2009 consolidated financial statements with retrospective application required, they are not expected to have any impact on the consolidated financial statements.

Amendments to IAS 39 Financial Instruments: Recognition and Measurement – Eligible Hedged Items clarifies the application of existing principles that determine whether specific risks or portions of cash flows are eligible for designation in a hedging relationship. The amendments will become mandatory for the Company's 2010 consolidated financial statements if endorsed by the EU, with retrospective application required. The amendments are not expected to have any impact on the consolidated financial statements.

IFRIC 13 Customer Loyalty Programmes addresses the accounting by entities that operate, or otherwise participate in, customer loyalty programmes under which the customer can redeem credits for awards such as free or discounted goods or services. IFRIC 13, which becomes mandatory for the Company's 2009 consolidated financial statements, is not expected to have any impact on the consolidated financial statements.

IFRIC 15 Agreements for the Construction of Real Estate applies to the accounting for revenue and associated expenses by entities that undertake the construction of real estate directly or through subcontractors. IFRIC 15, which becomes mandatory for the Company's 2009 consolidated financial statements if endorsed by the EU, is not expected to have any impact on the consolidated financial statements.

IFRIC 17 Distributions of Non-cash Assets to Owners provides guidance on when and how a liability for certain distributions of non-cash assets to owners acting in their capacity as owners is recognised and measured, and how to account for settlement of that liability. IFRIC 17, which becomes mandatory for the Company's 2010 consolidated financial statements if endorsed by the EU, is not expected to have any impact on the consolidated financial statements.

One interpretation, IFRIC 12 Service Concession Arrangements, is effective for the year 2008 but it has not been applied in preparing these consolidated financial statements because it has not yet been endorsed by the EU.

### 23. Management's evaluation and assumption in relation to the application of accounting methods

The Group's management makes judgements, estimates and assumptions that may affect items in the Group's balance sheet for the next period. The management evaluates on an ongoing basis its judgements and estimates based on previous experience and other relevant factors, such as estimated future events when decisions on judgements and estimates are made.

*Fair value of derivative agreements*

The fair value of derivative agreements not listed in effective markets is determined by using evaluation methods, which are reviewed on an ongoing basis by independent parties. All evaluation models used must be approved and tested in order to ensure that the results reflect the documents used.

## Segment reporting

### 24. Statement of segments

Segment information is presented by sectors. The primary segment statement is presented according to the nature of the operation and is based on the Group's organisation and internal disclosure.

Inter-segment pricing is determined on an arm's length basis.

Segment operating income includes the segments pertaining directly to specific segments and the items that can be logically divided between the segments. Assets and liabilities of the Group are in the same manner divided between segments based on the beforementioned premises.

***Operating segments***

| Year 2008 | *Electricity production* | *Electricity transmission* | *Adjustments* | *Total* |
|---|---|---|---|---|
| Income from third party | 398,544 | 53,483 | | 452,027 |
| Income within the Group | 25,821 | 69,745 | ( 95,566 ) | 0 |
| Segment income | 424,365 | 123,228 | ( 95,566 ) | 452,027 |
| Segment operating expenses | ( 154,076 ) | ( 42,002 ) | 95,566 | ( 100,512 ) |
| EBITDA | 270,289 | 81,226 | | 351,515 |
| Depreciation and amortization | ( 83,280 ) | ( 22,563 ) | 311 | ( 105,532 ) |
| Segment earnings, EBIT | 187,009 | 58,663 | 311 | 245,983 |
| | | | | |
| Segment assets | 4,522,542 | 571,818 | ( 488,482 ) | 4,605,878 |
| Shares in associated companies | 12,942 | 400 | | 13,342 |
| Total assets | 4,535,484 | 572,218 | ( 488,482 ) | 4,619,220 |
| | | | | |
| Segment liabilities | 3,150,038 | 512,032 | ( 419,642 ) | 3,242,428 |
| Total liabilities | 3,150,038 | 512,032 | ( 419,642 ) | 3,242,428 |
| | | | | |
| Investments | 313,942 | 30,129 | ( 1,530 ) | 342,541 |
| Depreciation of operating assets | ( 78,795 ) | ( 22,116 ) | 311 | ( 100,600 ) |
| Depreciation of intangible assets | ( 377 ) | ( 447 ) | | ( 824 ) |
| Impairment loss on intangible assets | ( 4,108 ) | | | ( 4,108 ) |

| Year 2007 | *Electricity production* | *Electricity transmission* | *Adjustments* | *Total* |
|---|---|---|---|---|
| Income from third party | 304,624 | 64,199 | | 368,824 |
| Income within the Group | 29,434 | 48,111 | ( 77,545 ) | 0 |
| Segment income | 334,058 | 112,310 | ( 77,545 ) | 368,824 |
| Segment operating expenses | ( 127,215 ) | ( 56,130 ) | 77,545 | ( 105,800 ) |
| EBITDA | 206,844 | 56,180 | | 263,025 |
| Depreciation and amortization | ( 62,625 ) | ( 19,461 ) | 126 | ( 81,960 ) |
| Segment earnings, EBIT | 144,219 | 36,719 | 126 | 181,064 |
| | | | | |
| Segment assets | 5,071,626 | 794,516 | ( 730,758 ) | 5,135,385 |
| Shares in associated companies | 6,258 | 661 | | 6,918 |
| Total assets | 5,077,884 | 795,177 | ( 730,758 ) | 5,142,303 |
| | | | | |
| Segment liabilities | 3,435,449 | 714,742 | ( 608,032 ) | 3,542,158 |
| Total liabilities | 3,435,449 | 714,742 | ( 608,032 ) | 3,542,158 |
| | | | | |
| Investments | 469,475 | 107,747 | ( 15,651 ) | 561,571 |
| Depreciation of operating assets | ( 50,963 ) | ( 19,155 ) | 126 | ( 69,992 ) |
| Depreciation of intangible assets | ( 435 ) | ( 290 ) | | ( 726 ) |
| Impairment loss on intangible assets | ( 11,226 ) | ( 16 ) | | ( 11,242 ) |

## Other income

| | 2008 | 2007 |
|---|---|---|
| **25. Other income is specified as follows:** | | |
| Service sale, rent and other income | 10,315 | 6,743 |
| Sales profit on operating assets | 76 | 34 |
| | 10,391 | 6,777 |

## Salaries and salary related expenses

| | | |
|---|---|---|
| **26. Total number of employees is specified as follows:** | | |
| Average number of employees during the year calculated to full-time equivalents | 352 | 347 |
| Full-time equivalent units at year-end | 317 | 301 |

| | | |
|---|---|---|
| **27. Total salaries of employees are specified as follows:** | | |
| Salaries | 32,775 | 40,565 |
| Pension premium payments | 3,736 | 4,699 |
| Defined pension benefit payments | 1,662 | 1,850 |
| Increase in pension obligation | 3,876 | 2,985 |
| Other salary related expenses | 2,623 | 3,746 |
| | 44,672 | 53,845 |
| | | |
| *Salaries of the Board of Directors, Managing Director, Deputy and Executive Directors are specified as follows:* | | |
| Salaries of the Board of Directors of the parent company | 115 | 153 |
| Salaries of Boards of Directors of three subsidiaries | 131 | 94 |
| Salaries and benefits of the Managing Director of the parent company | 244 | 326 |
| Salaries of the Deputy Managing Director and Directors of the parent company | 950 | 1,367 |
| Salaries and benefits of the Managing Director and Directors of subsidiaries | 1,070 | 892 |

| | 2008 | 2007 |
|---|---|---|
| *Salaries are divided as follows in the income statement:* | | |
| Energy production costs | 14,490 | 17,431 |
| Transmission costs | 11,276 | 14,675 |
| Cost of general research | 201 | 1,539 |
| Other operating expenses | 18,705 | 20,200 |
| | 44,672 | 53,845 |

## Other operating expenses

**28. Other operating expenses are specified as follows:**

| | | |
|---|---|---|
| Corporate office | 3,627 | 4,593 |
| Finance | 4,051 | 3,906 |
| Human resources | 1,171 | 1,360 |
| Information technology | 2,903 | 3,118 |
| Engineering and construction | 516 | 2,173 |
| Pension | 5,255 | 4,650 |
| Other shared costs | 2,284 | 902 |
| | 19,807 | 20,703 |
| Other costs - relating to subsidiaries | 13,978 | 8,356 |
| Assets available for sale, impairment | 4,148 | 0 |
| Depreciation | 2,893 | 2,944 |
| | 40,826 | 32,003 |
| | | |
| *Auditors' fees are specified as follows:* | | |
| Auditing of financial statements | 266 | 243 |
| Reviewing of interim financial statements | 100 | 88 |
| Other services | 58 | 109 |
| | 424 | 440 |

## Financial income and (expenses)

**29. Financial income and (expenses) are specified as follows:**

| | | |
|---|---|---|
| Interest income | 15,390 | 6,279 |
| | | |
| Interest expenses | ( 178,060 ) | ( 154,872 ) |
| Guarantee-fee paid to owners | ( 6,970 ) | ( 6,759 ) |
| Capitalised interest costs | 7,288 | 69,434 |
| Total interest expenses | ( 177,742 ) | ( 92,197 ) |
| | | |
| Exchange rate difference | ( 128,612 ) | 224,064 |
| Fair value changes of derivatives | ( 310,883 ) | 362,172 |
| Expensed aluminium hedges | ( 54,759 ) | ( 59,447 ) |
| Fair value changes of shares | ( 13 ) | ( 920 ) |
| Sales profit on shares in an associated company | 156 | 5,757 |
| Net income (expenses) on financial assets and liabilities | ( 494,111 ) | 531,625 |
| Effects through associated companies | ( 4,100 ) | ( 69 ) |
| Financial income and (expenses) | ( 660,563 ) | 445,638 |

The borrowing costs on new long-term debt used for financing construction expenditure was 3.75%. The interest cost capitalized, including the guarantee fee, was 4% on funds invested in assets under construction.

## Income Tax

**30.** In May 2008, the Icelandic Parliament, Althingi, approved a decrease in the income tax rate from 26% to 23.5% with partnership companies and 18% to 15% with limited liability companies as of 1 January 2008 and the change will become effective in the tax assessment of the year 2009. Due to this, the deferred tax asset has decreased by USD 10.3 million compared to 31 December 2007. The decrease is recognised in the group's income statement.

| *Income tax recognised in the income statement is specified as follows:* | 2008 | 2007 |
|---|---|---|
| Change in income tax asset | 26,612 | ( 167,193 ) |
| Current tax | ( 361 ) | ( 251 ) |
| Liability due to revaluation recognised in equity | 30,751 | 0 |
| Foreign exchange difference | 12,941 | 0 |
| Reversal of a subsidiary's current tax related to prior year | 105 | 0 |
| Recognised as income (expense) in the income statement | 70,048 | ( 167,444 ) |

| *Change in income tax asset is specified as follows:* | | |
|---|---|---|
| Change in temporary difference | 14,483 | ( 140,252 ) |
| Decrease in tax ratio | ( 10,345 ) | 0 |
| Carry forward loss utilised | 35,415 | ( 26,942 ) |
| Foreign exchange difference | ( 12,941 ) | 0 |
| Change in deferred tax asset | 26,612 | ( 167,193 ) |

| *Effective tax rate:* | | 2008 | | 2007 |
|---|---|---|---|---|
| (Loss) profit for the year | | ( 344,532 ) | | 459,258 |
| Income tax for the year | | ( 70,048 ) | | 167,444 |
| (Loss) profit before income tax | | ( 414,580 ) | | 626,702 |
| Income tax acc. to the parent company's curr. tax rate | 23.5% | ( 97,426 ) | 26.0% | 162,943 |
| Effect of different tax rates within the Group | -3.5% | 14,435 | 0.1% | 774 |
| Decrease due to change in tax rate | -2.5% | 10,345 | | 0 |
| Non-deductible cost | -0.7% | 3,074 | 0.2% | 1,145 |
| Other items | 0.1% | ( 476 ) | 0.4% | 2,582 |
| Effective income tax | 16.9% | ( 70,048 ) | 26.7% | 167,444 |

## Non-current assets

**31. Property, plant and equipment, their initial value and depreciation is specified as follows:**

| | *Power stations* | *Transmission* | *Communicat, equipment* | *Other assets* | *Total* |
|---|---|---|---|---|---|
| Total value at 1.1.2007 | 2,697,778 | 474,287 | 11,856 | 70,698 | 3,254,619 |
| Additions during the year | 7,509 | 49,253 | 878 | 8,015 | 65,654 |
| Transferred from assets in construction | 1,708,553 | 163,184 | 0 | ( 147 ) | 1,871,590 |
| Sold and disposed of | 0 | 0 | 0 | ( 1,509 ) | ( 1,509 ) |
| Total value at 31.12.2007 | 4,413,840 | 686,724 | 12,734 | 77,057 | 5,190,355 |
| Effect of foreign exchange rate changes | | ( 406,714 ) | ( 6,546 ) | ( 19,411 ) | ( 432,671 ) |
| Additions during the year | 143,159 | 10,484 | 1,210 | 5,771 | 160,624 |
| Revaluation of fixed assets | 0 | 229,394 | 2,715 | 0 | 232,109 |
| Transferred from assets in construction | 264,421 | 0 | 0 | 0 | 264,421 |
| Sold and disposed of | 0 | 0 | 0 | ( 607 ) | ( 607 ) |
| Total value at 31.12.2008 | 4,821,420 | 519,888 | 10,112 | 62,810 | 5,414,230 |

| | Power stations | Transmission | Communicat. equipment | Other assets | Total |
|---|---|---|---|---|---|
| *Depreciation and impairment loss* | | | | | |
| Total value at 1.1.2007 | 1,428,413 | 17,258 | 4,746 | 19,590 | 1,470,006 |
| Depreciation of the year | 48,677 | 17,217 | 834 | 3,251 | 69,978 |
| Sold and disposed of | 0 | 0 | 0 | ( 1,291 ) | ( 1,291 ) |
| Total value at 31.12.2007 | 1,477,090 | 34,474 | 5,579 | 21,550 | 1,538,693 |
| Depreciation of the year | 77,697 | 19,422 | 700 | 2,780 | 100,600 |
| Revaluation of depreciation | 0 | 18,995 | 0 | 0 | 18,995 |
| Effect of foreign exchange rate changes | 0 | ( 27,806 ) | ( 2,923 ) | ( 1,935 ) | ( 32,664 ) |
| Sold and disposed of | 0 | 0 | 0 | ( 524 ) | ( 524 ) |
| Total value at 31.12.2008 | 1,554,787 | 45,086 | 3,357 | 21,871 | 1,625,100 |
| | | | | | |
| *Non-current assets are specified as follows:* | | | | | |
| Book value | | | | | |
| 1.1.2007 | 1,269,365 | 457,030 | 7,110 | 51,108 | 1,784,613 |
| 31.12.2007 and 1.1.2008 | 2,936,750 | 652,250 | 7,154 | 55,507 | 3,651,660 |
| 31.12.2008 | 3,266,633 | 474,802 | 6,755 | 40,939 | 3,789,129 |

*Official assessment of fixed assets and insurance value*

The official assessment of the Company's real estates amounted to USD 275 million at year end 2008. Insurance value of the Company's assets amounts to USD 3,822 million.

## 32. Intangible assets are specified as follows:

| | Capitalised development cost | Water and geothermal rights | Software | Total |
|---|---|---|---|---|
| *Cost value* | | | | |
| Total value at 1.1.2007 | 65,347 | 14,207 | 3,516 | 83,070 |
| Additions during the year | 28,413 | 26,361 | 2,175 | 56,949 |
| Total value at 31.12.2007 | 93,760 | 40,568 | 5,691 | 140,019 |
| Effect of foreign exchange rate changes | ( 6,599 ) | 0 | ( 1,650 ) | ( 8,249 ) |
| Additions during the year | 55,134 | 0 | 1,685 | 56,819 |
| Total value at 31.12.2008 | 142,295 | 40,568 | 5,726 | 188,589 |
| | | | | |
| *Depreciation and impairment loss* | | | | |
| Total value at 1.1.2007 | 32,268 | 0 | 1,654 | 33,922 |
| Depreciation and impairment loss during the year | 11,247 | 0 | 735 | 11,982 |
| Total value at 31.12.2007 | 43,515 | 0 | 2,389 | 45,904 |
| Depreciation and impairment loss during the year | 4,108 | 0 | 824 | 4,932 |
| Effect of foreign exchange rate changes | ( 10 ) | 0 | ( 315 ) | ( 325 ) |
| Total value at 31.12.2008 | 47,613 | 0 | 2,898 | 50,511 |
| | | | | |
| *Book value* | | | | |
| 1.1.2007 | 33,079 | 14,207 | 1,862 | 49,148 |
| 31.12.2007 and 1.1.2008 | 50,245 | 40,568 | 3,302 | 94,113 |
| 31.12.2008 | 94,682 | 40,568 | 2,828 | 138,077 |

## 33. The Group's depreciation and impairment is divided as follows:

| | 2008 | 2007 |
|---|---|---|
| Power stations | 77,697 | 48,677 |
| Transmission | 19,422 | 17,217 |
| Telecommunication equipment | 700 | 834 |
| Other assets | 2,780 | 3,251 |
| Depreciation of assets in operation | 100,600 | 69,978 |
| Impairment loss on development cost | 4,108 | 11,247 |
| Amortization of software | 824 | 735 |
| | 105,532 | 81,960 |
| *The Group's depreciation is divided as follows by sector:* | | |
| Energy production costs | 78,258 | 49,401 |
| Transmission costs | 20,273 | 18,388 |
| Cost of general research | 4,108 | 11,227 |
| Other operating expenses | 2,893 | 2,944 |
| | 105,532 | 81,960 |

## 34. Derivative financial instruments in the balance sheet are specified as follows:

| | | |
|---|---|---|
| *Assets:* | | |
| Embedded derivatives in electricity sales agreements | 195,944 | 685,551 |
| Aluminium hedges | 98,032 | 0 |
| Currency swaps | 11,035 | 93,871 |
| Interest rate swaps | 0 | 4,854 |
| Other derivatives | 0 | 2,731 |
| | 305,011 | 787,007 |
| *Derivative financial instruments are divided as follows:* | | |
| Long-term component of derivative agreements | 287,513 | 659,516 |
| Short-term component of derivative agreements | 17,498 | 127,491 |
| | 305,011 | 787,007 |
| *Liabilities:* | | |
| Embedded derivatives in electricity sales agreements | 26,242 | 20,393 |
| Aluminium hedges | 0 | 121,457 |
| Currency swaps | 63,396 | 501 |
| Interest rate swaps | 10,754 | 21,352 |
| Other derivatives | 45,176 | 2,730 |
| | 145,568 | 166,433 |
| *Derivative financial intruments are divided as follows:* | | |
| Long-term component of derivatives | 123,971 | 105,191 |
| Short-term component of derivatives | 21,597 | 61,242 |
| | 145,568 | 166,433 |

## Shares

### 35. Shares in associated companies recognised according to the equity method within the Group are specified as follows:

| | 2008 | | |
|---|---|---|---|
| | *Share* | *Share in return* | *Book value* |
| Eignarhaldsfélagid Farice ehf. | 29.5% | ( 1,668 ) | 10,986 |
| Theistareykir ehf. | 32.0% | ( 2,074 ) | 1,251 |
| Netorka hf. | 40.8% | 83 | 436 |
| Hecla SAS | 30.0% | 81 | 209 |
| Sipenco Gmbh | 25.0% | ( 38 ) | 0 |
| Isturk | 30.0% | ( 44 ) | 0 |
| HydroKraft Invest hf. | 50.0% | ( 440 ) | 460 |
| | | ( 4,100 ) | 13,342 |

| | 2007 | | |
|---|---|---|---|
| | *Share* | *Share in return* | *Book value* |
| Theistareykir ehf. | 32.0% | 24 | 4,663 |
| Netorka hf. | 40.8% | ( 3 ) | 1,522 |
| HydroKraft Invest hf. | 50.0% | ( 90 ) | 733 |
| | | ( 69 ) | 6,918 |

### 36. Shares in other companies are specified as follows:

| | 2008 | | 2007 | |
|---|---|---|---|---|
| | *Share* | *Book value* | *Share* | *Book value* |
| Eignarhaldsfélagid Farice ehf, | | | 9.4% | 1,997 |
| Neydarlínan hf. | 7.9% | 414 | 7.9% | 806 |
| Orkuvördur ehf. | 9.0% | 165 | 9.0% | 323 |
| DMM Lausnir ehf. | 17.8% | 295 | 17.8% | 576 |
| Vistorka hf. | 13.2% | 292 | 14.8% | 570 |
| Other companies (4/5) | | 162 | | 493 |
| Total shares in other companies | | 1,328 | | 4,765 |
| Impairment loss on share asset | | ( 1,201 ) | | ( 2,452 ) |
| | | 127 | | 2,313 |

Shareholding has been decreased by impairment loss, or by USD 1.2 million, due to an uncertainty on the future standing of individual companies. Some of the companies are established around high-risk innovative projects.

### 37. Landsvirkjun's subsidiaries are specified as follows:

| | *Share* |
|---|---|
| Fjarski ehf. | 100.0% |
| Hraunaveita ehf. | 100.0% |
| Icelandic Power Insurance Ltd. | 100.0% |
| Landsnet hf. | 64.7% |
| Landsvirkjun Power ehf. | 100.0% |

## Tax asset

| **38. Changes in tax asset during the year is specified as follows:** | 2008 | 2007 |
|---|---|---|
| Calculated tax asset at the beginning of the year | 106,797 | 273,990 |
| Calculated income tax | 70,048 | ( 167,444 ) |
| Current income tax | 258 | 251 |
| Liability due to revaluation of fixed assets transferred to equity | ( 31,950 ) | 0 |
| Exchange rate loss and translation difference due to tax asset | ( 11,744 ) | 0 |
| Deferred tax asset at year-end | 133,409 | 106,797 |
| | | |
| *The Company's deferred tax asset is specified as follows:* | | |
| Carry forward taxable loss | 50,550 | 34,002 |
| Non-current assets and intangible assets | 140,516 | 201,792 |
| Derivative financial instruments | ( 52,423 ) | ( 140,224 ) |
| Other items | 7,460 | 11,227 |
| Exchange rate loss due to tax asset | ( 12,694 ) | 0 |
| Deferred tax asset at year-end | 133,409 | 106,797 |

## Current assets

### 39. Inventories

*Inventories are specified as follows:*

| | | |
|---|---|---|
| Oil | 294 | 561 |
| Spare-parts and consumables | 3,975 | 4,876 |
| | 4,269 | 5,437 |

### 40. Accounts receivables and other short-term receivables

*Accounts receivables and other short term receivables are specified as follows:*

| | | |
|---|---|---|
| Nominal value of accounts receivables | 52,949 | 60,433 |
| Assets available for sale | 8,412 | 0 |
| Other short-term receivables | 37,013 | 12,903 |
| | 98,374 | 73,337 |

At year-end 2008, 70% of accounts receivable were under 30 days old and almost no receivable was older than 60 days.

### 41. Cash and cash equivalents

*Cash and cash equivalents are specified as follows:*

| | | |
|---|---|---|
| Bank deposits | 113,940 | 91,417 |
| Market securities | 11,053 | 88,160 |
| | 124,993 | 179,578 |

## Equity

**42.** The parent company is a partnership owned by the State and Eignarhlutir ehf. The State owns a 99.9% share in the Company and Eignarhlutir ehf. holds 0.1%. The Company is an independent taxable entity.

**43.** The revaluation account consists of revaluation of fixed assets of subsidiaries after income tax effect. Translation difference is the foreign exchange difference arising due to Landsvirkjun's subsidiaries with other functional currencies.

## Liabilities

### 44. Long-term debt is specified as follows by currencies:

| | | 2008 | | 2007 | |
|---|---|---|---|---|---|
| | *Maturity date* | *Average interests* | *Remaining bal.* | *Average interests* | *Remaining bal.* |
| Liabilities in ISK, indexed | 2009-2020 | 3.9% | 333,592 | 3.8% | 563,548 |
| Liabilities in ISK, unindexed | 2009 | 6.8% | 3,902 | 13.3% | 7,613 |
| Liabilities in CHF | 2012-2022 | 2.5% | 93,487 | 2.5% | 88,452 |
| Liabilities in EUR | 2009-2028 | 2.7% | 1,431,944 | 4.2% | 1,576,711 |
| Liabilities in GBP | 2014-2016 | 11.4% | 13,433 | 11.4% | 18,984 |
| Liabilities in JPY | 2009-2013 | 1.1% | 175,483 | 1.6% | 43,871 |
| Liabilities in USD | 2009-2026 | 2.2% | 923,428 | 4.8% | 783,903 |
| | | | 2,975,269 | | 3,083,082 |
| Current maturities of long-term debt | | | ( 186,008 ) | | ( 347,329 ) |
| Total long-term debt | | | 2,789,261 | | 2,735,753 |

Interest terms on the parent company's loans are from 1.0-14.5%. On average, nominal interests for the period were approximately 4.51% but they were approximately 4.69% the previous year.

The city of Reykjavik and the town of Akureyri provide, together with the State, a guarantee of collection for all obligations of Landsvirkjun, entered into within the end of year 2006. From the beginning of year 2007 the State and Eignarhlutir ehf. provide such a guarantee for all of Landsvirkjun's obligations entered into after that date.

### 45. According to loan agreements, current maturities of long-term debt are as follows:

| | 2008 | 2007 |
|---|---|---|
| 2008 | - | 347.329 |
| 2009 | 186,008 | 26,565 |
| 2010 | 197,618 | 171,323 |
| 2011 | 285,758 | 228,242 |
| 2012 | 197,725 | 189,790 |
| 2013 | 146,759 | - |
| Later | 1,961,401 | 2,119,833 |
| | 2,975,269 | 3,083,082 |

### 46. Pension fund obligation

The Company's obligation to refund the indexation charges on retirement payments to current and former employees, which hold pension rights with state and communal pension funds amounted to USD 22.1 million at year end 2008 according to an actuary's evaluation, which is based on estimated future changes in salaries and prices. Interest in excess of price increase are assessed at 3.5% and salary increase in excess of price increase is assessed at 1.5% per year on average. Premises on life expectancy and death rate are in accordance with provisions of Regulation no 391/1998 on obligatory pension benefits and operation of pension funds. The retirement age is 68 years for current employees and 65 years for non-employees with vested benefits and this is consistent with the relevant pension funds' regulation.

| *Change in the pension fund obligation is specified as follows:* | 2008 | 2007 |
|---|---|---|
| Balance at 1.1. | 38,153 | 35,168 |
| Expensed during the period | 5,255 | 4,650 |
| Payments during the period | ( 1,379 ) | ( 1,665 ) |
| Effect of foreign exchange rate differences | ( 19,911 ) | 0 |
| Balance at 31.12. | 22,118 | 38,153 |

| *Pension fund obligation, 5 year statement:* | 2008 | 2007 | 2006 | 2005 | 2004 |
|---|---|---|---|---|---|
| Present value of the obligation | 22,118 | 38,153 | 35,168 | 31,419 | 28,664 |

## 47. Obligation due to demolition

*Change in the obligation due to demolition is specified as follows:*

| | 2008 | 2007 |
|---|---|---|
| Balance at 1.1. | 7,212 | 6,781 |
| Expensed during the period | 324 | 431 |
| Effect of foreign exchange rate differences | ( 3,601 ) | 0 |
| Balance at 31.12. | 3,936 | 7,212 |

In accordance with IFRS, the initial value of fixed operating assets shall include estimated cost of their demolition after their use. Estimated demolition cost of power lines has been assessed and discounted on the basis of useful life. In return, an obligation has been written up among long-term liabilities. An increase in the obligation is expensed in the income statement amounting to the discounted value in addition to depreciation of the demolition cost.

## 48. Accounts payable and other short-term payables

*Accounts payable and other short-term payables are specified as follows:*

| | 2008 | 2007 |
|---|---|---|
| Accounts payable | 41,095 | 128,776 |
| Bill of exchange | 0 | 55,904 |
| Accrued interest | 35,874 | 44,597 |
| Other short-term liabilities | 18,567 | 18,000 |
| | 95,537 | 247,277 |

## 49. Related parties

*Definition of related parties*

Associated companies and key management are among the Company's related parties.

| Transactions with related parties | 2008 | 2007 |
|---|---|---|
| *Sale of goods and services* | | |
| Associated companies | 596 | 984 |
| *Cost* | | |
| Associated companies | 41 | 48 |
| *Interest income* | | |
| Associated companies | 676 | 0 |
| *Accounts receivable and other short-term receivables* | | |
| Associated companies | 21,928 | 339 |
| *Accounts payable* | | |
| Associated companies | 9 | 0 |

Loans to related parties are granted on market terms.

## 50. Risk management

One of the most important factors in effective risk management is the analysis of risk factors, risk measurement, response in order to limit the risk and monitoring. The Company's Board of Directors has approved a risk management policy, which is based on the following factors:

- That risk is defined and its origin is known
- That generally accepted methods are used in assessing the risk
- That effective management is applied in accordance with authorisations
- That effective monitoring on risk factors is ensured
- That information provided to the risk committee and the Board of Directors is accurate and provided on a regular basis

Landsvirkjun's risk management strategy defines a benchmark in each risk category with respect to hedging limits. The Company's Board of Directors receives on an ongoing basis an overview of the Company's risks and results of risk management.

Decisions and the supervision of how hegding is implemented are entrusted to a risk management committee. The risk management committee consists of the Managing Director, his deputy and the Financial Director. The Managing Director is the chairman of the risk management committee. Daily risk management is in the hands of the Head of Risk Management.

The objectives of risk management are to analyse, manage and monitor Landsvirkjun's risks in order to stabilise operating results by reducing operating fluctuations due to exchange rate, interest and aliminium price changes. Financial risk is divided into market risk, liquidity risk and counterparty risk.

The Company's market risk consists mainly in three risk categories:

- Risk due to fluctuations in world market price of aluminium
- Interest rate risk due to the Company's liabilities
- Exchange rate risk due to liabilities and income in foreign currencies

## 51. Aluminium price risk

The Company is exposed to substantial risk due to future aluminium price fluctuations. The Company has thus entered into derivative agreements in order to secure its income base and reduce fluctuations. Such agreements consist in most cases of fixing aluminium price at a certain level. The Company therefore loses income if aluminium price increases considerably, but at the same time guarantees better cash flow should the price of aluminium decrease in the markets. Risk management may hedge up to 100% of aluminium price risk and proportionally less over the next 10 years. The duration is based on an effective market with aluminium and official price changes with the LME (London Metal Exchange). At the end of December, fair value of the hedges in question was positive by USD 98 million while the agreements are effective over the next six years.

According to the IFRSs, embedded derivatives are derivative agreements that are a part of other agreements but are not treated as separate derivative agreements when their economic character and inherent risk are not closely linked to the original agreement. The Company has defined the part of the electric power sales agreements related to aluminium price as embedded derivative. Therefore, the fair value of the Company's embedded derivatives in electric power sales agreements changes parallel to changes in the price of aluminium. Fair value changes of the agreements is recognised in the Company's income statement.

In evaluating the value of embedded derivatives, generally accepted evaluation methods are used as the market value is not available. Fair value of the agreements is calculated on the basis of the forward price of aluminium, discounted at zero-coupon in the USA allowing for fluctuations. Effective market with aluminium extends over the next 10 years and the price of aluminium must therefore be estimated from that time until the end of the underlying energy agreements. This has been done by extending forward aluminium process with unchanged prices from the last effective price in the process. Fair value calculations of embedded derivatives have allowed for uncertainty on forward aluminium prices in relation to the long duration of the agreements.

The Company has in previous accounts calculated the fair value of embedded derivatives based on forward price over 7 years as disclosed by the LME. Forward prices with the same Exchange are now for 10 years, which has been taken into account in the calculations. In evaluating the value of embedded derivatives forward prices for 10 years are therefore used, instead of 7 years, while unchanged prices are still allowed for from the last known price of the forward process.

The Company uses standard methods in the evaluation of the value of embedded derivatives with a longer duration than 10 years and levies a charge on interests for the discounting of payment flow for a longer period than 10 years.

Landsvirkjun has entered into agreements on the purchase of energy for resale to power intensive industries. Those agreements are related to aluminium price development and do thus have embedded derivatives. The fair value of the agreements is calculated in the same way and on the basis of the same conditions as the Company's power sales contracts.

| *The fair value of embedded derivatives is specified as follows:* | 2008 | 2007 |
|---|---|---|
| Fair value of embedded derivatives at the beginning of the year | 665,158 | 338,323 |
| Exchange rate effect | 1,712 | 0 |
| Fair value changes during the year | ( 497,168 ) | 326,835 |
| Fair value of embedded derivatives at year end | 169,702 | 665,158 |
| | | |
| *Division of embedded derivatives is specified as follows:* | | |
| Long-term components of embedded derivatives | 183,667 | 587,075 |
| Short-term component of embedded derivatives | ( 13,965 ) | 78,083 |
| Total embedded derivatives | 169,702 | 665,158 |

Fair value of embedded derivatives, taking into account derivative agreements entered into in order to hedge, amounted to USD 268 million at the end of December (2007: USD 544 million). The accompanying table shows fair value changes of agreements related to aluminium price and interest changes, but effects due to volatility are insubstantial.

| *Amounts in the table are before taxes.* | | Aluminium price | | |
|---|---|---|---|---|
| | | -10% | 0% | 10% |
| | +100bp | ( 190,539 ) | 24,089 | 239,708 |
| **Interest** | 0 | ( 193,650 ) | 0 | 194,634 |
| | -100bp | ( 196,806 ) | ( 20,880 ) | 156,022 |

## 52. Foreign exchange risk

The year 2008 is the first year that the USD is used as the functional currency in the financial statements of Landvirkjun. Foreign exchange risk consists therefore from now on in foreign exchange rate changes against the USD and risk management and benchmarks have been adjusted to this change.

There can be considerable fluctuations in the Company's loan portfolio against the USD over the accounting period, as about 30% of the loan portfolio is unhedged against the currency. The risk from changes in the loan portfolio is limited compared to risk benchmarks determined by the Board at each time. For that purpose, the Company uses foreign exchange swaps and options. The Company also ensures the fixed rate of cash flows against the functional currency for up to three years with forward agreements and options.

*The Group's foreign exchange risk is specified as follows in nominal value (USD thousand):*

| 2008 | *EUR* | *ISK* | *JPY* | *Other currencies* |
|---|---|---|---|---|
| Accounts receivables and short-term receivables | 30,717 | 20,023 | 0 | 2,295 |
| Cash | 4,912 | 36,544 | 3 | 409 |
| Derivatives | 1,010,550 | 107,190 | ( 22,931 ) | ( 3,864 ) |
| Bonds | ( 1,431,944 ) | ( 337,494 ) | ( 175,483 ) | ( 106,920 ) |
| Accounts payable and other short-term payables | ( 30,802 ) | ( 45,269 ) | ( 2,859 ) | ( 3,993 ) |
| Risk in balance sheet | ( 416,567 ) | ( 219,006 ) | ( 201,270 ) | ( 112,073 ) |
| | | | | |
| 2007 | | | | |
| Accounts receivables and short-term receivables | 297 | 44,670 | 0 | 2,603 |
| Cash | 51,786 | 57,043 | 344 | 2,705 |
| Derivatives | 1,034,500 | ( 1,131,226 ) | 8,935 | 0 |
| Bonds | ( 1,576,705 ) | ( 571,155 ) | ( 43,877 ) | ( 107,435 ) |
| Accounts payable and other short-term payables | ( 68,840 ) | ( 153,836 ) | ( 465 ) | ( 2,550 ) |
| Risk in balance sheet | ( 558,962 ) | ( 1,754,504 ) | ( 35,063 ) | ( 104,677 ) |

Exchange rate of the main currencies against the USD, (usd/currency) for the years 2008 and 2007 is specified as follows:

| | *Average rate* | | *Rate at year end* | |
|---|---|---|---|---|
| | 2008 | 2007 | 2008 | 2007 |
| EUR | 0.69 | 0.73 | 0.71 | 0.68 |
| GBP | 0.55 | 0.50 | 0.69 | 0.50 |
| CHF | 1.09 | 1.20 | 1.06 | 1.12 |
| JPY | 102.03 | 117.68 | 90.22 | 112.08 |
| NOK | 5.71 | 5.85 | 6.99 | 5.42 |
| ISK | 88.07 | 64.02 | 120.87 | 62.00 |

The rates are based on the mid rate of the Central Bank of Iceland.

*Sensitivity analysis*

An increase in the USD by 10% against the following currencies at December 31, would have increased the Group's profit by the following amounts after taxes. The analysis assumes that all other variables, especially interest rates, remain unchanged. The analysis was made in the same way for the year 2007.

| | *Profit* | |
|---|---|---|
| | 2008 | 2007 |
| EUR | 95,600 | 133,839 |
| JPY | 18,000 | 49,065 |
| ISK | 23,168 | 15,323 |

A decrease in the USD by 10% against the beforementioned currencies would have the same effect in the opposite direction, provided that all other variables remain unchanged.

The proportion of Landsvirkjun's income in USD has increased in the past years with new electricity sales agreements with power intensive industries related to aluminium price. The proportion was around 70% in the year 2008, which is a considerable increase from the years 2006 and 2007 when the proportional rate was around 50%. It is estimated that the share of income in USD will remain high, or around 60-70%, but the share changes in accordance with changes in the price of aluminium.

The fair value of currency swaps was negative by USD 52 million at the end of December 2008. The underlying principal amount is USD 520 million. The fair value of forwards currency agreements was negative by USD 500 thousand, the underlying principal amount being USD 4 million. The fair value of forwards currency agreements was negative by USD 45 million with the underlying principal amount being approx. USD 631 million.

## 53. Interest rate risk

Landsvirkjun faces interest rate risk as the Company has interest bearing assets and liabilities. Interest bearing financial liabilities are much higher than interest bearing financial assets. In the case of fixed interest rate of financial liabilities the market risk consists in that interest rate decreases in the future and the Company therefore carries a higher financing cost than otherwise. In the case of financial instruments with variable interest rate the risk consists in interest increase.

At year end 2008, the proportion of loans with variable interest rate was approx. 80% compared to 76% at year end 2007. A change in interest rate by 1% would have led to a change in interest expenses by USD 26 million in the year 2008 and by USD 22 million in the year 2007. The Company's financial instruments with fixed interest rate are not sensitive to interest rate changes. At year-end 2008, the estimated market value of the Company's long-term liabilities was approximately USD 149 million lower than their book value.

The fair value of interest rate swaps, not denominated in a hedging purpose as fair value hedges, is recognised in the income statement. Landsvirkjun has entered into agreements on interest rate swaps, which aim at reducing the Company's interest expenses and risk exposure. At the end of December 2008, the fair value of interest rate swaps was negative by USD 11 million. The underlying amount is approx. USD 189 million. An increase in interest rate by 1% would have led to positive fair value changes in the agreements by USD 5.6 million. A decrease in interest rate by 1% would have led to negative fair value changes in the agreements by USD 7.5 million.

## 54. Liquidity risk

Liquidity risk consists of the risk of losses should the Company not be able to keep its obligations at maturity date. In order to react to such risk, the Company's liquidity balance is monitored by analysing the flow of revenues and expenses and the maturity dates of financial assets and liabilities. Effective control on liquidity ensures sufficient access to cash flow at each time. In order to ensure access to cash and maintain flexible financing possibilities Landsvirkjun has used varying loan types. In the past years, financing has mostly taken place through a framework agreement with EMTN (Euro Medium Term Note). The total amount that the Company can borrow through the EMTN agreement is USD 2.5 billion.

Landsvirkjun aims at having unreserved access to liquid assets corresponding to the average of the Company's net liquidity need for six months. Falling under liquid assets are cash, short-term securities and open loan access with financial companies. At year-end 2008, this amount was USD 125 million but Landsvirkjun also has access to a Revolving Credit Facility of USD 350 million, or a total of USD 475 million. Taken into account cash flow from operation over the next two years, the Company believes that it has guaranteed sufficient liquidity until the end of year 2010.

The Company's risk related to refinancing of the Company is reduced with even spread of amortization and interests in long-term outstanding loans.

Contractual payments due to financial instruments, including interest, are specified as follows:

| 2008 | *Book value* | *Contractual cash flow* | *Within one year* | *1–2 years* | *2–5 years* | *More than 5 years* |
|---|---|---|---|---|---|---|
| *Non-derivative financial instruments* | | | | | | |
| Long-term loans | ( 2,975,269 ) | ( 3,766,341 ) | ( 267,387 ) | ( 275,446 ) | ( 831,726 ) | (2,391,782) |
| Accounts receivables | 98,374 | 98,374 | 98,374 | | | |
| Accounts payable | ( 95,537 ) | ( 95,537 ) | ( 95,537 ) | | | |
| | ( 2,972,432 ) | ( 3,763,504 ) | ( 264,550 ) | ( 275,446 ) | ( 831,726 ) | ( 2,391,782 ) |
| *Derivative financial instruments* | | | | | | |
| Currency swaps | ( 97,105 ) | ( 64,537 ) | 1,049 | ( 10,635 ) | ( 67,596 ) | 12,645 |
| Interest rate swaps | ( 10,754 ) | ( 12,598 ) | ( 1,309 ) | ( 1,246 ) | ( 3,738 ) | ( 6,305 ) |
| Forward agreements | ( 432 ) | ( 447 ) | ( 447 ) | | | |
| Aluminium derivatives | 98,032 | 125,638 | 18,669 | 23,712 | 60,478 | 22,779 |
| Embedded deriv. in electricity sales agreem. | 169,702 | 438,670 | ( 14,061 ) | ( 2,233 ) | 75,642 | 379,321 |
| | 159,443 | 486,726 | 3,901 | 9,598 | 64,786 | 408,440 |
| 2007 | | | | | | |
| *Non-derivative financial instruments* | | | | | | |
| Long-term loans | ( 3,083,082 ) | ( 4,458,464 ) | ( 452,252 ) | ( 154,889 ) | ( 950,247 ) | ( 2,901,076 ) |
| Accounts receivables | 73,337 | 73,337 | 73,337 | | | |
| Accounts payable | ( 247,277 ) | ( 247,277 ) | ( 247,277 ) | | | |
| | ( 3,257,022 ) | ( 4,632,404 ) | ( 626,192 ) | ( 154,889 ) | ( 950,247 ) | ( 2,901,076 ) |
| *Derivative financial instruments* | | | | | | |
| Currency swaps | 80,515 | 103,313 | 21,742 | 3,740 | 14,682 | 63,149 |
| Interest rate swaps | ( 16,498 ) | ( 22,129 ) | ( 823 ) | ( 1,306 ) | ( 4,774 ) | ( 15,226 ) |
| Forward agreements | 12,855 | 12,903 | 12,903 | | | |
| Aluminium derivatives | ( 121,457 ) | ( 140,774 ) | ( 64,516 ) | ( 42,790 ) | ( 32,871 ) | ( 597 ) |
| Embedded deriv. in electricity sales agreem. | 665,158 | 936,903 | 87,403 | 95,919 | 316,113 | 437,468 |
| | 620,573 | 890,216 | 56,710 | 55,563 | 293,150 | 484,794 |

## 55. Counterparty risk

Counterparty risk is the risk that a counterparty to an agreement does not comply with provisions of the agreement. Landsvirkjun's counterparty risk arises first and foremost due to the Company's energy contracts and derivatives entered into for hedging purposes, but such contracts are only entered into with financial companies. Though the amounts involved are considerably high, the risk is limited by the Company s requirements for counterparty quality. Landsvirkjun has set a benchmark for derivatives which involves that no derivative agreements are made with financial companies that have a lower rating than A- from Standard and Poor's or a comparable rating from other recognised credit rating agencies. If credit rating is not available, a special insurance agreement is made between parties limiting Landsvirkjun's risk. Before power sales contracts are made, the financial standing of the relevant companies and their parent companies are thoroughly reviewed, if applicable.

| *The Company's counterparty risk is specified as follows at year end:* | 2008 | 2007 |
|---|---|---|
| Derivative financial instruments | 305,011 | 787,007 |
| Other long-term receivables | 246 | 494 |
| Accounts receivables and other short-term receivables | 98,374 | 73,337 |
| Cash and cash equivalents | 124,993 | 179,578 |
| | 528,624 | 1,040,416 |

*The fair value and book value of financial assets and liabilities in the balance sheet is specified as follows:*

| | 2008 | | 2007 | |
|---|---|---|---|---|
| | *Book value* | *Fair value* | *Book value* | *Fair value* |
| Shares in other companies | 127 | 127 | 2,313 | 2,313 |
| Derivative agreements | 159,443 | 159,443 | 620,574 | 620,574 |
| Accounts receivables and other short-term receivables | 98,374 | 98,374 | 73,337 | 73,337 |
| Cash and cash equivalents | 124,993 | 124,993 | 179,578 | 179,578 |
| Interest bearing long-term liabilities | ( 2,975,269 ) | ( 2,826,473 ) | ( 3,083,082 ) | ( 3,048,572 ) |
| Accounts payable and other short-term payables | ( 95,537 ) | ( 95,537 ) | ( 247,277 ) | ( 247,277 ) |

# Other issues

**56.** On 22 August 2007, a special evaluation committee issued a ruling on a settlement amount for water rights in connection with Kárahnjúkar power project and its distribution between owners. The total amount amounted to approx. USD 13.2 million. Most owners of water rights in the Jökuldalur valley and three in Fljótsdalur valley announced that they would not accept the ruling of the committee and filed a case in court on 22 February 2008. Forty cases were confirmed in the District Court of East Iceland on January 15, 2008. The parties involved own one third of the water rights.

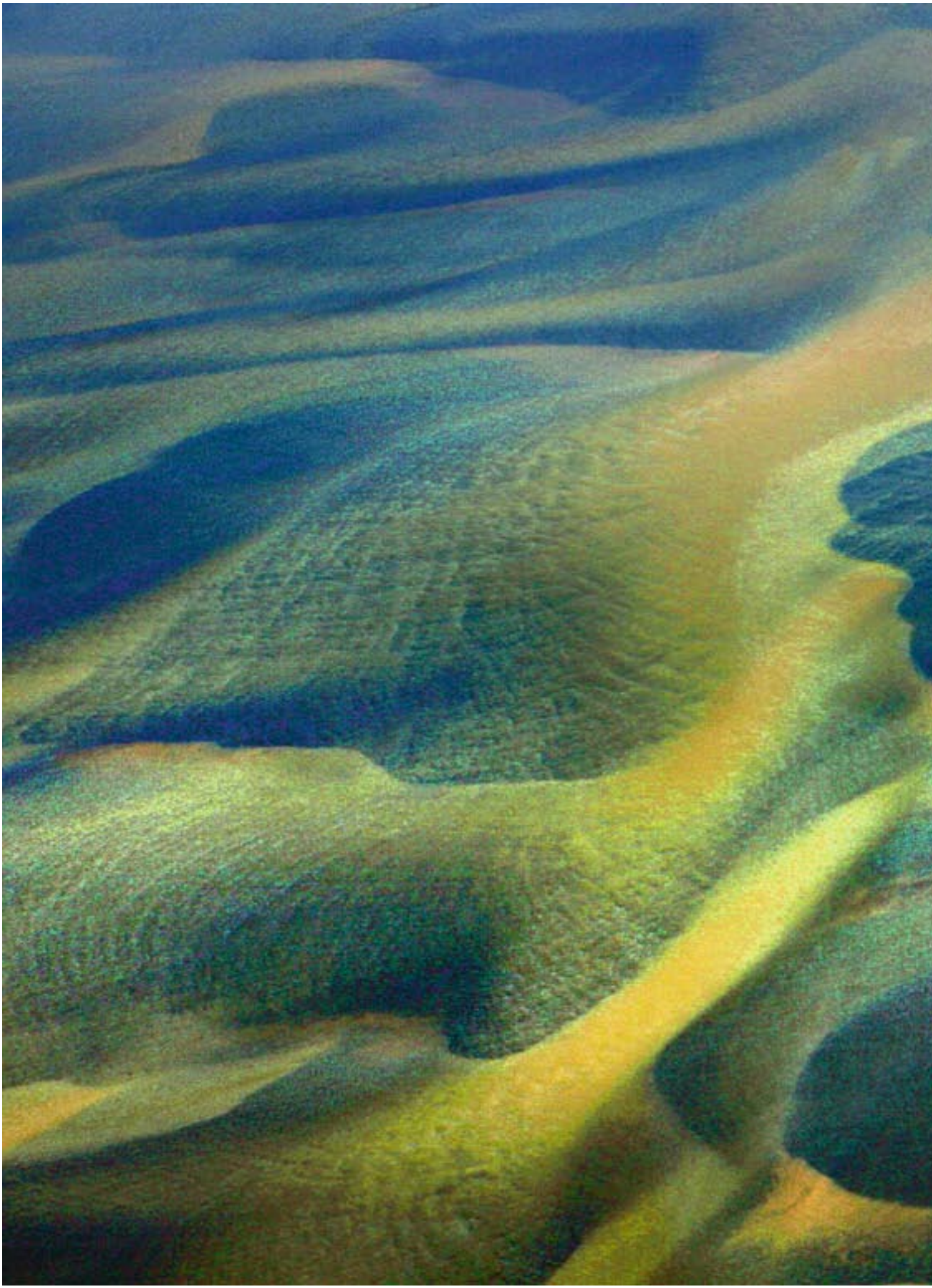
Settlement payments for land rights related to Hálslón in the land of Brú in Jökuldalur has been put on hold subsequent to the ruling of the Committee for the Interior, which deemed the land as public land. Landowners will challenge that ruling in courts of law.

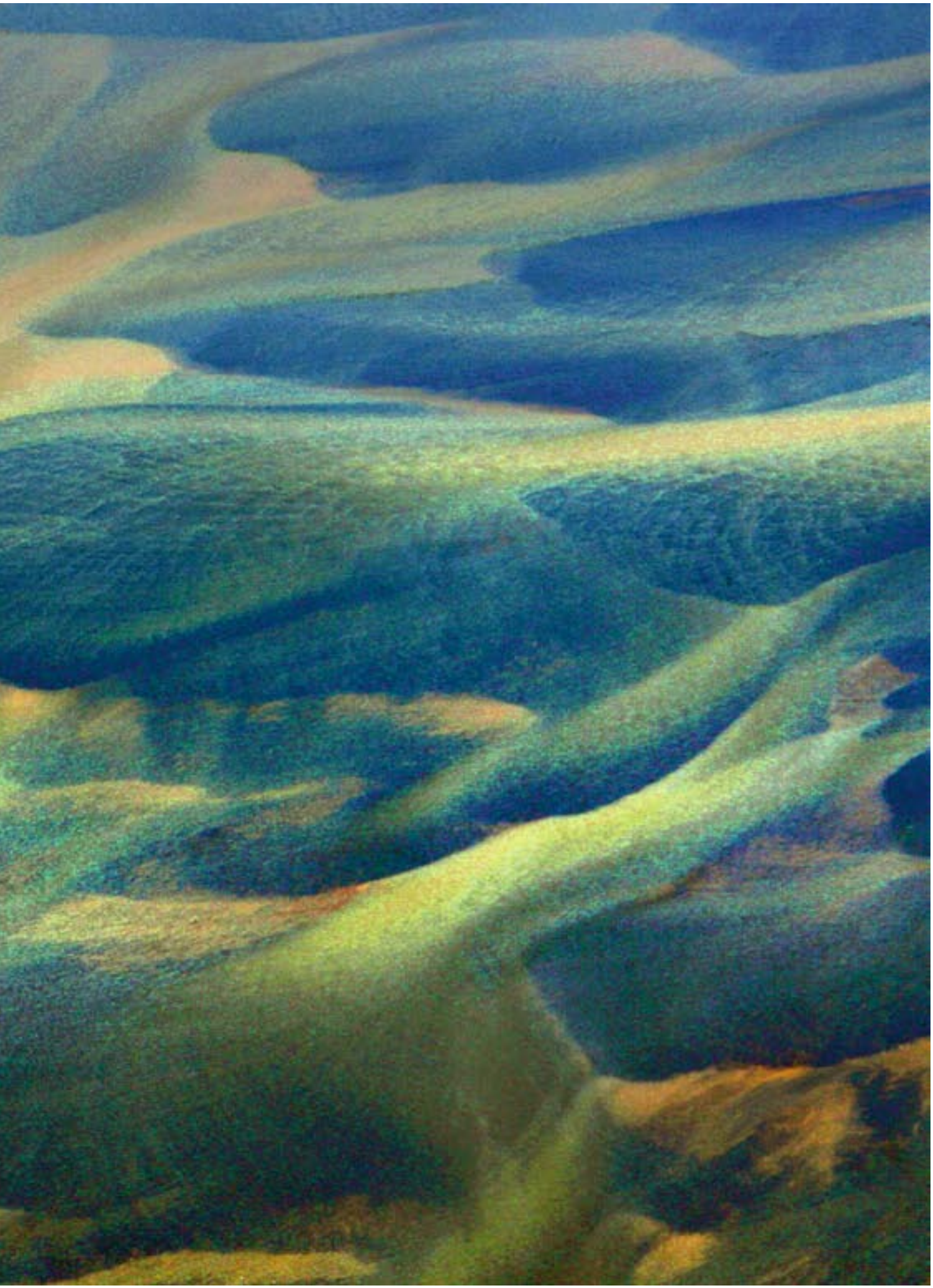
In the year 2007, the Company entered into two ISK/USD currency swaps with domestic financial institutions. Due to the weakening of the ISK against the USD in the year 2008, unrealised foreign exchange loss arose, which has been recognised as negative fair value in the amount of USD 45 million in the Group's financial statements. It is considered likely that those agreements must be terminated before maturity in year 2012 at the request of the financial institutions in question and the Company does not accept the aforementioned evaluation under such conditions.

The Company has capitalised water rights to the total amount of USD 40.6 million, whereof water rights related to Kárahnjúkar weigh the most. With law no. 58/2008 on the change of law on natural resources and the energy sector, which enters into effect on 1 July 2009, restrictions are set for the State, municipalities and companies owned by them on the endorsement of ownership of water rights for waters containing harnessable power in excess of 10 MW. However the State and municipalities are allowed to give to companies owned by them the right of use of the resources for up to 65 years at a time. Upon the adoption of this law, the Prime Minister shall nominate a comittee to discuss the arrangement of leasing of water and geothermal energy rights owned by the State. The comittee shall in its work discuss on lease amount, lease term, renewal of lease agreements and other issues related to parties' rights and obligations. The comittee shall submit proposals before 1 June 2009.

## 57. Subsequent events

Nothing has come forth after the balance sheet date which would require adjustments or changes to the financial statements for the year 2008.





Landsvirkjun
Háaleitisbraut 68
103 Reykjavík
Iceland

Tel: + (354) 515 9000
Fax: + (354) 515 9007

landsvirkjun@lv.is
www.landsvirkjun.com