

DIGITAL ELEVATION MODEL OF EYJAFJALLAJÖKULL

August 11th 2010

The cover shows a digital elevation model of the Eyjafjallajökull ice cap. The model is based on aerial laser (LiDAR) measurements from an altitude of about 2500 m above the ice surface.

Accurate elevation models of glaciers are important for various glaciological and geophysical research and have practical applications in the planning and operation of hydropower stations. Changes in ice volume can be estimated with repeated measurements, to assess and predict the glacier's contribution to the rivers it feeds. Accurate elevation models also make it possible to delineate watersheds on the ice caps and the paths of subglacial flow of meltwater and jökulhlaups.

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Image: Icelandic Meteorological Office.

Units of measurement

MW = megawatt kW = kilowatt W = watt	1 MW = 1,000 kW = 1,000,000 W Power is measured in watts and describes the ability to perform work. Power describes the capacities of the turbines in a power station.
TWh = terawatt hour GWh = gigawatt hour	1 TWh = 1,000 GWh = 1,000,000 MWh = 1,000,000,000 kWh
MWh= megawatt hour	Electricity is usually measured in kilowatt hours, for example, how much electricity is generated or consumed.
kWh= kilowatt hour	
kV = kilovolt V = volt	1 kV = 1,000 V Transmission voltage is measured in volts. The voltage of the country's most powerful high-voltage lines is 220 kV.
GI = gigalitre I = litre m³ = cubic metre	1 Gl = 1,000,000,000 l = 1,000,000 m ³ The capacity of reservoirs is measured in gigalitres.









ÍST ISO 9001



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Future in harmony with society Bryndís Hlödversdóttir, Chairman of the Board



2011 was a good year for Landsvirkjun. The company's finances improved from 2010, especially regarding increased income, which can be attributed to changes in agreements on the price of electricity and the rising price of aluminium. Decreasing indebtedness and improved cash flow resulted in the company's key figures for financial strength moving in the right direction. The prospects for operations in 2012 are good, and the company's performance, as before, will be determined to a great extent by trends in the price of aluminium, interest rates and currencies. The construction of the Búdarháls Power Project is proceeding according to plan; its start-up is scheduled for the end of 2013, and research efforts on new power station alternatives continue.

Landsvirkjun emphasises working in accordance with responsible management practices. The Board works in accordance with clear rules that are published on the company's homepage; among other things they stipulate the duties of directors, the CEO and managers and their relations with the owner. The importance of responsible management practices is recognised as a prerequisite for results in companies, but such working procedures are even more important in government-owned companies than in private companies.

In private companies the owner's function is delineated under the rules applying to companies. In governmental companies the authority exercising ownership in the company not only serves in a traditional ownership role but also has the power to decide various important matters involving the company, such as licence issuing and planning authority. The integration of these two roles in a single ministry or municipal government can easily cause conflicts of interest and lead to the owner either imposing unacceptable restrictions on the operations of the company or favouring it. Either one is unacceptable for a company working in a civil legal environment and a competitive market like Landsvirkjun. Such a company has nothing in common with governmental institutions providing specified social services even though the owner is the State or a municipality.

Separation of roles in government is necessary when it comes to the operation of companies, and in recent years this demand has been growing at the OECD. However, this does not mean that the owner cannot clearly exercise its power of ownership in respect of the company and provide it with normal constraint. What is important is that the owner distinguishes between these unrelated roles. In neighbouring countries this problem has been addressed by setting out a policy of ownership where the government lays down clear rules on its role as owners of the companies and the handling of owners' power. In this regard, independent boards of directors can set restrictions and lines regarding policies on employment terms, profitability and other pertinent aspects of the company's operations.

Landsvirkjun has continued along the path of providing more information to the public and organising discussion of matters of importance related to the company. About 360 people attended Landsvirkjun's Annual General Meeting in April and the Company's fall meeting in November was attended by about 400 people.

The objectives to increase trust in Landsvirkjun and increase accord in society on the company's operations have been supported by increasing the flow of information to the public and encouraging the exchange of views on the company's matters of importance. According to opinion polls, the public's trust of Landsvirkjun has increased considerably since last year.

The decision to launch a study on the utilisation of wind energy was announced at Landsvirkjun's fall meeting. For this purpose, tenders have been solicited on the delivery and installation of two wind turbines, and plans call for their installation next fall.

Landsvirkjun has also recently worked on assessing the feasibility of laying a submarine interconnector to Europe. The laying of such a power cable has been considered for decades in Iceland and has long been deemed technically possible, but its profitability has been doubted. There are indications that this has changed in recent years. Increased demand for renewable energy, the rising price of electricity in Europe and technical advances have changed the premises for laying a power cable from Iceland. This could become a profitable and interesting future business opportunity for Landsvirkjun and for Iceland. It is important that such a large project be discussed openly and without prejudice, and that things are done carefully so that a decision about whether to lay a submarine interconnector or not can create broad accord.

Landsvirkjun's social responsibility is the basis for it to achieve its goal of becoming a leader in energy production in the field of renewable energy sources. During the year, the company's Board approved a new policy on Landsvirkjun's social responsibility, which is to create profit, treat resources and the environment well and ensure that knowledge and a positive impact from the company's operations reach society.

By placing greater emphasis on social responsibility, responsible management practices and the dissemination of information on Landsvirkjun's operations to the public, Landsvirkjun endeavours to strengthen professional decision making within the company and create a future in harmony with society.

Omndi's Alotendo Hir

Bryndís Hlödversdóttir

ANNUAL REPORT 2011

2011 an Eventful Year Hördur Arnarson, President and CEO



2011 was an eventful year at Landsvirkjun. It can be said that the emphases laid down in 2010 by the company's directors were actualised in 2011. After a great deal of analysis in previous quarters, it is clear that electricity generation from renewable energy sources entails a great many opportunities. It is our role to scrutinise these opportunities and take hold of those that will bring the greatest success to the company and its owners.

The passing of the Electricity Act of 2003 in Iceland determined that the laws of the market would apply to the sale of electricity in Iceland, where the law of supply and demand shall prevail. This act places stringent duties on Landsvirkjun to operate in accordance with market premises since the company is both dominant on the market and has a state guarantee for its obligations. We deem it to be our responsibility to ensure a fertile operational foundation for the company by optimally distributing its risk. Landsvirkjun's management and employees have tried to reduce risk in various ways.

First, by purposefully working towards increasing the number of customers and the branches of industry purchasing power in Iceland. New customers are being added to the group of existing customers that benefit from the good environment found here. Rio Tinto Alcan is expanding its facilities in Straumsvik; in addition, a data center is one of Landsvirkjun's new customers. Landsvirkjun's Marketing and Business Development Division is resolutely building up marketing efforts in other countries, where presentations are made to interesting industries on the opportunities entailed in being a power purchaser in Iceland. ing aluminium-price links in agreements. Too much linkage between the price of aluminium, which fluctuates on the global market, can be risky for the company, and in the last two years, we have managed to reduce linkage with the price of aluminium from 72% to 47% of all the company's electricity sales.

Third, we are working on reducing risk by increasing the company's number of power production possibilities. Last year 96% of energy came from hydropower and 4% from geothermal power. In the next several years we will see the percentage of geothermal power increase substantially in the company's operations with the advent of new power stations in Northeast Iceland, which were undergoing preparations last year. In addition, Landsvirkjun began researching the utilisation of wind energy in Iceland and plans to build one or two experimental wind turbines in the country in 2012.

Our main task at Landsvirkjun is to maximise the profitability of the company's operations. We are going about this in many ways. One of them that we have analysed and focused on is to increase production in the company's current power stations. In some instances such increases can produce considerably more generation of electricity with limited investments.

A second way to increase Landsvirkjun's profitability is to find ways to reduce the costs of building up new energy alternatives. Landsvirkjun can thus be better prepared to compete with new energy alternatives in Europe that are often subsidised by the EU or the relevant governments.

The third way we have examined is new opportunities for power sales. This entails identifying new customers who can afford to pay well, as well as sale of green certificates to markets in Europe and the laying of a submarine interconnector to Europe. All of these are interesting options we will continue examining with the goal of maximising the company's return.

Second, Landsvirkjun has spread its risk by reduc- Landsvirkjun is fully owned by the Icelandic State. We will strive to strengthen ties with our owners and other important stakeholders. We have done this in several ways.

> We have assigned great importance the last two or so years to increasing transparency in the company's operations, and we will continue to do so. We have held four public meetings on matters of importance to the company that close to 1400 people have attended.

> We are greatly increasing our emphasis on environmental affairs, particularly in connection with the build-up lying ahead, with the construction of geothermal power stations in Northeast Iceland.

> We have formulated a policy for the company on social responsibility, and, in connection with it, we have defined the role we deem normal for Landsvirkjun regarding the economy, environment and society. We began implementing the policy late last year, and in the year 2012 we will continue this process and add to it.

> Given what we have emphasised, we are pleased when opinion polls show that the public's trust in the company is increasing, and its attitude toward the company is becoming more positive. With general accord and solidarity on the company's role and plans, we can achieve milestones in its operations. The Icelandic nation will and should enjoy the benefits for the indefinite future.

Town Mun

Hördur Arnarson

LANDSVIRKJUN'S ROLE, OBJECTIVE AND VALUES

The role of Landsvirkjun is to maximise return from the energy sources that have been entrusted to the company in a sustainable manner and with efficiency and creation of value as the focus. Landsvirkjun's objective is to be a leader in the sustainable harnessing of renewable power in Iceland. Landsvirkjun's values are progressiveness, prudence and reliability.

Progressiveness



Landsvirkjun's Board



Bryndís Hlödversdóttir



Sigurbjörg Gísladóttir



Ingimundur Sigurpálsson





Stefán Arnórsson

Arnar Bjarnason

Landsvirkjun, the largest energy company in Iceland, is owned by the Icelandic nation and under the direction of the Ministry of Finance. The Board is appointed by the minister of finance for a period of one year and is responsible for Landsvirkjun's finances and operations.

Landsvirkjun's Board, as appointed at the company's Annual General Meeting on 15 April 2011:

Bryndís Hlödversdóttir, Rector of Bifröst University.

Sigurbjörg Gísladóttir, Chemist at the Environment Agency of Iceland.

Ingimundur Sigurpálsson, CEO of Iceland Post

Stefán Arnórsson, Professor at the University of Iceland.

Arnar Bjarnason Managing Director of Reykjavík Capital. At the first meeting of the Board, Bryndís Hlödversdóttir was elected Chairman of the Board and Sigurbjörg Gísladóttir Vice-chairman.

The reserve members of Landsvirkjun's Board are:

Magnús Árni Magnússon, Docent at Bifröst University.

Baldvin H. Sigurdsson, Restauranteur.

Jóna Jónsdóttir, Business administration graduate at Nordlenska in Akureyri.

Vigdís M. Sveinbjörnsdóttir, Farmer in Egilsstadir.

Anna Dóra Sæthórsdóttir, Docent at the University of Iceland.

Organisational Chart and Executive Board



President and CEO

Hördur Arnarson.

Corporate Office

Executive Vice President: Ragna Árnadóttir.

Role: To see to the company's joint matters of concern and policy formulation, as well as to ensure professional management practices. Support divisions handling Landsvirkjun's joint matters are located in the Corporate Office.

The heads of the support divisions are: Jón Sveinsson, General Counsel. Gudmundur S. Pétursson, Quality Manager. Ragna Sara Jónsdóttir, Director of Corporate Communications.

Sturla Jóhann Hreinsson, Director of Human Resources.

Bergur Jónsson, Director of Information Systems.

Research and Development Division Executive Vice President:

Óli Grétar Blöndal Sveinsson.

Role: To manage the preparation of new power projects and to conduct research and monitoring of the existing power systems. To ensure economic implementation of new power projects, increase flexibility in energy production and manage innovation in new renewable generation. To offer a long term vision of the utilization of energy resources.

Project Planning and Construction Division

Executive Vice President: Pálmar Óli Magnússon. **Role:** To direct Landsvirkjun's power station projects from preparation to finishing of a power station. Monitor the costs, quality and progress of a project and ensure that it is submitted ready for operations in accordance with the company's premises, plans and needs.



Hördur Arnarson



Magnús Bjarnason



Ragna Árnadóttir



Rafnar Lárusson





Pálmar Óli Magnússon

Einar Mathiesen

Energy Division

Executive Vice President: Einar Mathiesen.

Role: To ensure that electricity generation and delivery securely and efficiently fulfil agreements signed with Landsvirkjun's customers.

Marketing and Business Development Division

Executive Vice President: Magnús Bjarnason. Role: To maximise Landsvirkjun's income by analysing new business opportunities, product development, publicity and sales of products and services, agreements and their follow-up.

Finance Division

Executive Vice President: Rafnar Lárusson. Role: To create a foundation for efficient operations and promote maximum results in all units of the Landsvirkjun Group.

Landsvirkjun Power

Role: To provide consultancy services in the international market on the harnessing of hydroelectric power and geothermal energy, the operation of power stations and build-up of public transmission systems.

Landsvirkjun.'s history





Positive developments during the year Landsvirkjun at a glance-

Landsvirkjun 2011

Landsvirkjun is an energy company, owned by the Icelandic nation; it generates electricity from renewable energy sources, hydropower and geothermal power. The company generates 73% of all electricity in Iceland; it is by far Iceland's largest producer of electricity and one of the 10 biggest power companies in Europe in the field of renewable energy. At the same time the company is a leader in the sustainable utilisation of energy sources, promoting increased knowledge, innovation and technical development.

- > 12.5 terawatt hours of electricity generated
- > Income from operations increases by 15.5%
- > Net indebtedness decreases by USD 171 million
- > USD 106 million in profit before unredeemed financial items
- > Cash inflow from operating activities grows 16.4%
- > Investment for USD 108 million

Landsvirkjun operates 15 power stations all over Iceland in five areas of operation. The 16th, Búdarháls Power Station, is being built and will be taken into use in 2013. The power station's installed power will be 95 MW.

Financial highlights Millions USD		
	2011	2010
Operating revenues	436	378
EBITDA	345	298
Profit*	106	90
Cash inflow from operating activities	267	230
Total liquid assets	646	573
Total assets	4622	4837
Net debt	2503	2674
Equity ratio • Before unredeemed financial items	35.9%	34.0%



Role, objective and values

ROLE

The role of Landsvirkjun is to maximise return from the energy sources that have been entrusted to the company in a sustainable manner and with efficiency and creation of value as the focus.

OBJECTIVE

Landsvirkjun's aim is to be a leader in sustainable harnessing of renewable power in Iceland.

VALUES

Progressiveness – Prudence – Reliability





Landsvirkjun's average price of electricity 2010–2011

• 2010 • 2011



Electricity sales and revenue in 2010-2011

- General utilities
- Industry, without aluminium price link
- Industry, with aluminium price link



News highlights of the year

3 February

Fully committed construction begins at Búdarháls

An agreement was signed with Ístak with a proviso on financing. With the agreement, Landsvirkjun ensured that the project would begin on time. Later in the year, loan agreements were signed with the Nordic Investment Bank and European Investment Bank, along with contractor financing on the manufacture and installation of machinery. Plans call for the delivery of power from Búdarháls Power Project at year-end 2013.

9 February

ISK 56 million allocated from the Energy Research Fund

This is the fourth time that allocations have been made from the fund; in 2011, 44 grants were made for graduate studies and research projects. The fund's goal is to strengthen research in the fields of environmental and energy affairs.

17 February

35 MW electricity sales agreement with the Icelandic Silicon Company ehf.

The agreement was signed with traditional provisos. The provisos failed to be lifted during the year, and the agreement was cancelled at the beginning of 2012. Landsvirkjun is still working with the Icelandic Silicon Company on possible electricity sales; the company plans to build a 40,000 t silicon factory in Helguvik in Sudurnes.

22 March

UN Convention on the Elimination of All Forms of Discrimination against Women and UN Global Compact signed

By becoming a signatory, Landsvirkjun undertakes to work towards equality within the company, shows social responsibility and takes initiative in the issue area. Several hundred companies worldwide have signed the convention and more than 10 Icelandic companies.

18 March

Quality Manager for 2011

Landsvirkjun's Quality Control Manager Gudmundur S. Pétursson was named holder of Stjórnvísir's Management Award 2011 in the category of quality control management. The goal of the management award is to draw attention to the professional and outstanding work of general managers.

31 March

Icelandic Web of Science and Landsvirkjun co-operate on disseminating science to the public

A collaborative agreement was signed to promote professional modern instruction on science for the public. The agreement includes Landsvirkjun's dissemination of selected answers of The Web of Science on energy and energy affairs.

14 April

360 people familiarised themselves with Landsvirkjun's future vision at a well-attended Annual General Meeting

The opportunities that the company has before it were explained as well as the results in 2010. Landsvirkjun's vision of Iceland in 2025 builds on a modest utilisation of resources with the build-up of energy structures and industry. In addition, the company will explore selling the green aspects of the electricity and possible connection with Europe via a submarine interconnector.

3 May

Planned increase of energy capability of Fljótsdalur Station of 40 GWh per year by completing the Saudárveita Reservoir

A decision was made to begin work on the reservoir, for its construction will increase the utilisation of the transfer into the Hraunveita and reduce loss from the Kárahnjúkar Power Station's waterways. The project is scheduled to be finished in the fall of 2012.

9 June

New interactive power exhibition opens in Búrfell Station

The exhibition provides guests with insight into the production and use of renewable energy sources, the demand for which is growing worldwide.

LANDSVIRKJUN SUPPORTS RESEARCH

Landsvirkjun's Energy Research Fund supports diverse studies on environmental and energy affairs. Among the projects supported in 2011 were studies on algae blooms in Lake Mývatn, tidal energy, changes in temperature and precipitation, the formation of end moraines, sliding at the glacier bed of Brúarjökull Glacier, a metro-train system, silicon nanowires and the making of threedimensional digital models of Icelandic glaciers. The total amount of allocations in 2011 was ISK 56 million.



28 June

Landsvirkjun's profitability a matter of substantial interest to Iceland's economy.

Gam Management's (GAMMA) report lays out Landsvirkjun's possible status in the period 2025-2035, as well as the economic impact of the company's operations through 2035.

2 July

Increase in wholesale price of electricity

On 1 July, Landsvirkjun raised the wholesale price of electricity by 2.8%. The increase covers wholesale agreements with validity periods of 7 and 12 years, in addition to Landsvirkjun's base power agreements. The agreements stipulate that the contractual price will change once a year in step with the Consumer Price Index.

19 July

Landsvirkjun Power signs consultancy agreements in Greenland and Georgia

Landsvirkjun's subsidiary Landsvirkjun Power signed a five-year agreement with the Greenlandic electric utility Nukissiorfiit on assistance with operations and maintenance of hydroelectric power stations and high-tension lines in Greenland. Landsvirkjun Power and Verkís also signed an agreement with Dariali Energy Ltd. in Georgia on project design, tender design, preparation of tender documents and detailed design for a 109 MW hydroelectric power station there.

19 August

Summer work groups planted over 160,000 trees in a productive summer

In 2011, 197 youths along with 52 university and special school students worked for Landsvirkjun on various projects for both Landsvirkjun and a variety of social organisations, municipalities and institutions throughout Iceland. The young people planted many trees and beautified the environment in many parts of the country.

15 September

Planning and Construction Division established and a new Exectutive Vice President announced

The division is directly under the President and CEO, and its main tasks centre on building up hydroelectric and geothermal power stations in Iceland. A subsidiary of Landsvirkjun, Landsvirkjun Power, which sees to the group's foreign projects, is also under the managing director of the Construction Division. Pálmar Óli Magnússon was hired as managing director of the division.

17 October

New and advantageous 12 month contracts

The agreements are part of the reorganisation of Landsvirkjun's sales system and are announced following the termination of agreements on the sale of unsecured power earlier in the year. The goals of the reorganisation are to equalise buyers' access to electricity and increase the transparency of the sales system.

20 October

Agreement signed on consultancy services for planned geothermal power stations in Northeast Iceland.

An agreement was entered into with the engineering firms Mannvit hf. and Verkís hf. following a tender. The agreements cover the design and preparation of tender offer documents in addition to the final design for planned projects. The planned projects are a power station of up to 90 MW in Bjarnarflag and a 90 MW power station in Theistareykir along with assistance with monitoring the installation of mechanical and electrical equipment. The total amount of the agreements is more than ISK 2.9 billion.

27 October

Trust for Landsvirkjun increases according to MMR poll

According to the findings of a poll conducted by MMR, trust for Landsvirkjun has increased since last year, and the company is also one of five institutions in society that Icelanders trust most. Other institutions scoring high in the survey are the Police, University of Iceland, Icelandic State Broadcasting, and Reykjavik University.

15 November

Profitability of power production discussed at Landsvirkjun's fall meeting

The title of the meeting was "Climbing the mountain – how can Landsvirkjun become a leading company in the field of renewable energy sources?" About 400 people attended the meeting, which is a record for a public meeting hosted by the company.

18 November

Construction of wind turbines for research purposes is planned in 2012

At the company's fall meeting, plans were announced to put up two wind turbines, with a total of 2 MW of installed power, in the construction area of Búrfell Power Station. These plans are part of Landsvirkjun's research and development project on the advantageous of wind power in Iceland.

17 November

Opportunities of geothermal energy discussed during International Entrepreneurial Week in Iceland

A public lunch meeting, entitled "Innovation in the energy sector – opportunities with geothermal energy", was held in collaboration with Reykjavik University and Innovit. The great power reposing in geothermal heat was discussed in terms of future opportunities for Icelanders.

24 November

New policy on social responsibility introduced

The goals of the policy are to increase the company's positive effect on stakeholders and minimise the negative impact on the environment and society. The policy is the foundation for Landsvirkjun to achieve its goal of becoming a leader in power production in the field of renewable energy; the policy aims at the company taking the environment and society into account in its operations.

24 November

Standard & Poor's changes prospects of credit rating from negative to stable

Landsvirkjun's credit rating, BB, remains unchanged; Standard & Poor's announcement follows the same kind of changes that it made for the State Treasury's credit rating. In the opinion of Standard & Poor's, the change reflects generally improved economic prospects in Iceland.

7 December

Data centres in Iceland: Future Opportunities

More than 100 people attended the public symposium of Landsvirkjun and Reykjavik University; its purpose was to organise a discussion amongst stakeholders on the future of the data centre industry in Iceland.

22 December

55 projects awarded grants from Landsvirkjun's Community Fund

The fund's policy is to support projects having broad community relevance and potential positive impact on Icelandic society. The fund makes grants to the arts, charities, sports and environmental and educational affairs. ISK 4 million is allocated from the fund each quarter.

27 December

International multi-bank loan signed in the amount of USD 200 million

This a multi-currency revolving loan with a period of three years and is the first agreement of its kind entered into by a governmental company since October 2008.

30 December

Multibank loan in ISK signed in the amount of ISK 10.5 billion The loan period is three years, and the goal of taking the loan is for Landsvirkjun to always have secure, unconditional access to financing if traditional financing routes are temporarily closed. By taking the loans Landsvirkjun has thus assured itself the equivalent of about ISK 35 billion for up to 5 years.

Reduced debt and increased cash. flow Finances and operating results

In 2011, development of the Company's basic operations continued with the construction of Búdarháls power plant, which will lead to increased productivity at year-end 2013. Despite increased investments, the Company has continued to reduce debt and improve its financial standing.

Operating revenue in the year 2011 amounted to USD 436 million and increased by 15.5% from the previous year. Increase in operating revenue is mainly explained by higher energy prices. Higher energy prices are due to higher aluminium prices and general price development due to indexation provisions in electric power sales agreements.

The average wholesale price to retail sales companies (excluding transmission cost) was 3.6 ISK/kWh in the year 2011 compared to 3.4 ISK/kWh the previous year. The change between years is 5.9%. The average price to industrial users was 28.7 USD/MWh in the year 2011 and increased by 11.7% from the previous year from 25.7 USD/MWh. The average price to industrial users includes transmission cost where appropriate. At year-end 2011, around 50% of the Company's electric power sales was linked to the price of aluminium. The Company hedges part of its aluminium price risk. Recognised income from realised aluminium hedges for the year amounted to USD 16 million, up from USD 6 million in the previous year.

Operating expenses less depreciation and impairment loss amounted to USD 91 million in the year compared to USD 80 million in the previous year. The increase is mainly due to increased cost of energy purchases, research and the appreciation of the Icelandic krona. EBITDA amounted to USD 345 million, which is an all-time high for the Company.

Profit before unrealised financial items amounted to USD 106 million in 2011 compared to USD 90 million in the previous year. Net realised finance expenses according to the management's presentation increased from USD 101 million in the year 2010 to USD 131 million due to higher interest expenses and ISK inflation indexed debt. Average nominal interest on long-term loans was around 3.5% in the year 2011 compared to 2.6% in the previous year, taking into account the state guarantee fee. Around half the parent company's electric power sales agreements are related to aluminium price development. International Financial Reporting Standards require that the aluminium price link be calculated as embedded derivatives. Calculated change in the value of the embedded derivatives is recognised in the income statement and may have a considerable effect on the Company's financial items. Fair value changes are mostly unrealised, which must be kept in mind in the evaluation of the Company's results. Unrealised finance expenses increased between years from USD 7 million to USD 64 million. The Company's profit amounted thus to USD 26 million in the year 2011 compared to USD 73 million in the previous year.

Balance Sheet

Landsvirkjun's total assets according to the balance sheet amounted to USD 4,622 million at yearend 2011. Cash and cash equivalents at year end 2011 amounted to USD 230 million and, furthermore, the Company has access to Revolving Credit Facilities with an undrawn amount of USD 416 million. Liquid assets, therefore, amount to USD 646 million in total. The Company's year-end equity in 2011 was USD 1,661 million and equity ratio increased from 34.0% to 35.9% between years. The Company's Board of Directors will during the Annual General Meeting propose a dividend payment in the amount of USD 14.7 billion (ISK 1.8 billion) for the year 2011. Dividends were was last paid in the year 2008.

The Company's debt amounted to USD 2,961 million at year-end. Landsvirkjun's net long-term liabilities decreased by USD 171 million in the year and amounted to USD 2,503 million at year-end. Current maturities on long-term liabilities amount to USD 129 million. Weighted average maturity time of the loan portfolio was around 7.6 years.



EBITDA and EBITDA margin

• EBITDA – EBITDA margin





Operating revenues









Cash flow

Cash flow from the Group's operations amounted to USD 267 million and has never been higher. Investing activities amounted to USD 108 million compared to USD 54 million in the previous year. The main investments of approximately USD 51 million were due to the construction of the Búdarháls Power Project. New financing in the year amounted to USD 311 million, while maturities and bond repurchases amounted to USD 484 million. The year 2011 was the third year in a row that the Company's amortisation of loans was in excess of borrowings or by the amount of USD 185 million. In total, amortisation of debt in excess of borrowings in the past three years amounts to USD 296 million. The Company's cash and cash equivalents decreased by USD 36 million in the year and amounted to USD 230 million at year end 2011.

Key ratios

The Company has been working systematically on decreasing its debt in the past three years, but the company is leveraged following a long period of investments. By decreasing debt, criteria affecting the Company's credit rating can be improved. The Company's leverage measured against operating revenue before depreciation and amortisation (net liabilities/EBITDA) decreases from 8.97 at year-end 2010 to 7.25 at year-end 2011. Interest spread (EBITDA/Net interest expenses) decreases on the other hand to 3.06 from 3.68 at year-end 2010 due to higher interest expenses. As return on equity is calculated on the profit of the year, fair value changes in embedded derivatives affect the result. Return on equity was 4.7% in the year 2010 compared to 1.6% in the year 2011.

Risk management

Landsvirkjun places emphasis on maintaining continuous control and active financial risk management. The Company is exposed to financial risk due to fluctuation in aluminium prices, interest rates and exchange rates in relation to electric power sales agreements, loan agreements and new projects. Landsvirkjun has established benchmarks for financial risks and manages the risks by means of derivatives, such as forward agreements, interest rate swaps and options.

Operating outlook

In 2012, the Company will continue to decrease leverage and work on improving efficiency and decreasing risk exposure. The Búdarháls Power Project is scheduled to be finalized at year-end 2013 and energy sales from the plant will commence around that time. Around 50% of Landsvirkjun's revenue is still affected by world market aluminium price and the Company will continue to work on reducing its exposure to aluminium price risk. Interest rates in the main financial markets are currently low, which is favourable for Landsvirkjun as the main part of its loans carry floating interest rates. The Company's results will therefore be significantly subject to developments in aluminium prices, interest rates and foreign exchange rates.







Active marketing and new opportunities Marketing and business development

Landsvirkjun has grown continuously since its founding. Globalisation brought power-intensive industry to Iceland, and dynamic international manufacturing companies built up operations here that today create a reliable foundation of income for the company. This trend continued, and in 2011 the Marketing and Business Development Division strove to increase electricity sales to current and new customers. For this purpose discussions have gone on with many dynamic companies with diverse operations that expressed interest in working in Iceland, and during the year documents of understanding on power purchases were signed with two new parties.

During the year Landsvirkjun worked on construction of the Búdarháls Power Project. Electricity generated there is for the expansion of and current increase in the Rio Tinto Alcan Aluminium Smelter in Straumsvik under an agreement entering into force

in 2011. The annual increase in electricity sales to Rio Tinto Alcan in Straumsvik is 658 GWh, while the aluminium smelter's total estimated consumption after the expansion is 3590 GWh. Becromal in Akureyri increased its power purchases during the year in accordance with agreements, and the factory reached full production. Elkem's electricity purchases as well as those of Nordural's aluminium smelter in Grundartangi were in accordance with agreements. Following damage in the Alcoa Aluminium Smelter in Reydarfjördur at the end of 2010, production in the smelter was reduced while repairs were made, and plans call for the aluminium smelter to return to full production in 2012.

Electricity sales to general utilities went according to plan, but during the year Landsvirkjun decided to discontinue the sale of secondary power agreements and offer 12-month contracts instead. The new



THE MIDDLE OF ICELAND

The third largest glacier in Iceland provides both Thjórsá and Blanda Rivers with meltwater. This is Hofsjökull in mid-Iceland. It is remote, difficult travelling and for a long time it was relatively unexplored. At the foot of the glacier on its southern edge lived outlaws; the most famous of them were the couple Mountain-Eyvindur and Halla.



12-month contracts, which are part of Landsvirkjun's reorganisation of wholesale operations, are tailored to equalise customers' access to electricity.

Data centers in Iceland

During the year Landsvirkjun worked purposefully on building up and marketing the Icelandic data center industry, with its future potential as a guide. For example, the company participated in the biggest data center conference of the year, Datacenter Dynamics in London, where Verne Global spoke about its data center in Iceland. Landsvirkjun increased investment in the management and infrastructure of Farice, for a clear policy on the telecommunications company's prices and services is important to the headway of the Icelandic data center industry. During the year there was public discussion on improving the operating environment for data centers in Iceland, and the government is now working on clarifying and updating the Act on value-added tax on products and services in respect of the data center industry. Landsvirkjun will continue supporting the progress of this industry in 2012 and make every effort to bring more operators to Iceland as well as provide further support to those already in the country.

Competitive terms

Landsvirkjun's goal is always to offer the most competitive terms for electricity in Europe with long-term agreements at an advantageous price and security of delivery. Today Landsvirkjun offers longterm agreements on renewable electricity at the most competitive price in Europe. In 2011 the company announced 12-year agreements at \$43/MWh. By comparison the market price of electricity in Scandinavia was \$65/MWh and in Germany \$71/MWh. The World Economic Forum recently ranked the delivery security of electricity in Iceland to be the third most reliable in the world.

Landsvirkjun's opportunities

Landsvirkjun has numerous future opportunities. The demand for electricity has grown considerably in recent years, and the company has profitable alternatives for energy procurement. Also, customer relations are good, and value creation related to their production grows each year.

In addition to domestic sales opportunities, great possibilities can lie in trade with other European countries in direct electricity sales via a potential submarine interconnector. In 2011 Landsvirkjun worked diligently to assess the potential profitability of a submarine interconnector stretching east across the Atlantic Ocean. The results of this evaluation indicated that a connection between Iceland and the European electricity market could provide an attractive alternative that could noticeably increase the profitability of Icelandic electricity production. This work will continue in 2012 with emphasis on confirming the basic assumptions underlying the profitability study.

The EU's emphasis on increasing the share of renewable energy is one factor that has increased the feasibility of a submarine interconnector, for countries in the EU have set themselves mandatory goals regarding the share of renewable energy in 2020. For the purpose of increasing the share of renewable energy, countries in the EU have established various incentive systems; for example, companies producing renewable electricity have the option to sell green certificates that countries can utilise to fulfil their goals for 2020. Electric power plants beginning operations after June 25, 2009 may utilise this program.



Electricity generated from renewable energy sources Power stations, maintenance and construction

Electric energy generated in Iceland comes 99% from renewable energy sources. Landsvirkjun generates three fourths of this energy from hydroelectric power and geothermal energy, and the company is one of the ten largest power companies in Europe in the field of renewable energy. In 2011 Landsvirkjun generated 12,486 GWh into Landsnet's transmission system, a decrease of 1.1% from the previous year. The share of hydroelectric generation in Landsvirkjun's production is 96%, and the share of geothermal energy is 4%.

Good operations of power stations

Landsvirkjun operates 13 hydroelectric power stations and two geothermal power stations all over Iceland in five operations areas. In operating power stations, emphasis is placed on a holistic vision, where prudence, reliability and harmony of the operations with the environment and society are the guidelines.

The operations of Landsvirkjun's power stations went well during the year and without any serious unforeseen events. There were 50 disturbances at Landsvirkjun's power stations during the year, compared with 63 the previous year. Landsvirkjun has set the goal that all units in the company's power stations shall be available 99% of the year, including organised maintenance periods. This goal was achieved this year. The units were available 99.1% of the time, compared with 99.7% in 2010.

One of Landsvirkjun's goals is for there to be no accident-related absences in its operations. At year-end 2011 there were 163 accident-free days, and the H index was 0.4. The H index is an international comparative index specifying the number of work accidents resulting in absences, relative to the total work hours in the company in one year.

Monitoring, maintenance and improvements in operating power stations were according to plan. Landsvirkjun operates an integrated, certified quality, environmental and safety management system, based on ISO 9001, ISO 14001, OHSAS 18001 and an internal electrical safety management system (RÖSK) fulfilling the requirements of the Iceland Construction Authority on electrical safety management. The German Certification Body of TÜV SÜD Management Service GmbH has certified Landsvirkjun's electricity production as green electricity production; in addition, Landsvirkjun's IT Division's safety management system is certified under ISO 27001.

Many maintenance and improvement projects

43 maintenance and improvement projects were worked on during the year. Extensive maintenance projects in the Laxárstöd II Power Station went on throughout the summer, involving the renewal of the headrace pipe, improvements to the pressure equalising tank and repair of a water wheel.

Extensive repairs were also initiated on gates and concrete structures at Steingrímsstöd Power Station; a power transformer was replaced in Búrfell Power Station; pre-selection was launched because of a planned tender on the manufacture of a transformer for Hrauneyjafossstöd Power Station in addition to smaller projects.

Work continued on several projects involving the finishing and maintenance of the Kárahnjúkar Power Station. Jökulsá Tunnel, over 13 km long, that runs from Ufsarlón Reservoir and meets the headrace tunnel from Hálslón Reservoir in Fljótsdalsheidi, was cleaned and fixed. About 78 m³ of material was cleaned out of the tunnel. Sowing continued in disturbed areas, and work continued on erosion prevention at sand pits on the east shore of Hálslón Reservoir.

Construction of Búdarháls Power Project

Following a tender the summer of 2010, a project agreement was signed with Ístak hf. on all construction regarding the Búdarháls Power Project. Construction began at the project site at the start of November 2010, and progress of the project in 2011 was as planned. The biggest parts of the project are in the construction of Spordalda Dam, the powerhouse and the headrace tunnel.

A tender on the turbines and electrical equipment for the Búdarháls Power Project went on at the same time as the tender on the construction work, and following review of the tenders, an agreement was reached with the German company Voith Hydro on the design, manufacture and installation of two 45 MW Kaplan turbines along with associated electrical and control equipment for the power station. Project agreements with Voith Hydro and Ístak were initially signed with provisos on financing, but these provisos were lifted early in 2011 after financing for the project was assured.

Three project agreements were signed in 2011. An agreement was signed with ÍAV on penstocks; an

agreement was signed with the French company Alstom on gates and gate equipment, and an agreement was signed with the engineering firm Hnit hf. on construction supervision. Implementation of these agreements has gone well, and their progress has been in accordance with plans. The signing of all project agreements regarding the Búdarháls Power Project has now been completed except for the construction and manufacturing of transformers for the power station, but a tender on transformers was advertised in December 2011.

Following the tenders, an agreement was signed on all engineering consultancy for the project. All consultancy is provided by Icelandic engineering firms. Efla hf. will provide consultancy regarding civil engineering structures; Verkís hf. will provide consultancy regarding machinery and electrical equipment, and Mannvit hf. will provide consultancy regarding pressure pipes and gates.



At the beginning of the year there were about 50 people at the work site, but the number increased substantially after the weather began warming up, and there have generally been about 250 employees at the project site. The weather favoured construction during the year, but after mid-November difficult weather came that slowed down construction. A powerful volcanic eruption in Lake Grímsvötn at the end of May produced some ash fall at the work site, but it had no effect on construction except for discomfort because of ash in the atmosphere during the summer.

Great emphasis is placed on safety during construction of the Búdarháls Power Project, and contractors must meet stringent requirements. One accident occurred in 2011 causing absence from a work site, and in this instance the person involved was absent for 30 days.

In addition to activities at the work site, work is being done on the design and manufacture of equipment for the power station by foreign contractors in many parts of Europe.

It is estimated that the construction of the Búdarháls Power Project will create about 700 man-years, and the power station is scheduled to begin power production at the end of 2013.

Work at Saudárveita Diversion

Construction at Saudárveita, which had been postponed in 2008, was resumed in 2011. By building Saudárveita, water will be diverted from Ytri and Innri Saudá Rivers (the rivers farthest east in the Kárahnjúkar Power Project area) into Grjótá River; from there the water flows directly through a tunnel into Kelduárlón Reservoir. The total flow from Saudárveita is m³/s, which is 32% of the inflow into Kelduárlón. In the summer of 2011 road construction was completed, work camps set up and excavation of diversion canals commenced. The construction is scheduled to be finished in 2012, and cleanup of the work areas will probably go on in 2013. The increase in the power production capacity of the Fljótsdalur Station from Saudárveita is estimated to be 40 GWh per year.

Nature shows its might Volcanic eruption in Grímsvötn

In the afternoon of 21 May 2011 an eruption began in Grímsvötn. The eruption far surpassed the one occurring there in 2004 and was somewhat more powerful than the eruption in Eyjafjallajökull Glacier in 2010. On the second day of the eruption, its cloud reached a height of 10-11 km. The Grímsvötn eruption was from the same crater and nearly the same place as the eruption in 2004. Despite the fact that a great deal of ash fall accompanied the eruption, there were no power outages and no interruptions in electricity production and delivery from Landsvirkjun's power stations. Landsvirkjun's Emergency Committee declared a state of emergency and took appropriate measures, including measures for ash fall and poorer air quality. Icelandic Met Office announced the end of the eruption in Grímsvötn occurred at 7 a.m. on Saturday, 28 May.

Glacial lake outburst flood (jokulhlaup) in Svedja River

In the early hours of 13 July, a glacial lake outburst flood occurred in Svedja River, which flows from beneath Köldukvíslarjökull Glacier into Hágöngulón Reservoir. The origin of the burst was the hightemperature area beneath the glacier north-east of Hamarinn. The height of the burst increased rapidly, peaking at 2200 m³/s over a period of about three hours. Before the burst the water level in Hágöngulón Reservoir was 816.54 m above sea level and the rate of overflow about 62 m³/s. The highest water level in the reservoir was 817.33 m above sea level, and the rate of overflow was then about 242 m³/s. After the burst subsided, the water level in the reservoir was about 817.1 m above sea level. The total volume of water during the burst was about 35 Gl.

Age of Landsvirkjun's power stations

The average age of Landsvirkjun's power stations is 39 years; the youngest station is 4 years old and the

VOLCANIC ERUPTION IN GRÍMSVÖTN

Vatnajökull Glacier is the origin of the biggest rivers in Iceland, and is Europe's largest energy reservoir, but underneath it also lurks enormous geothermal energy. On 21 May 2011 there was an explosive, volcanic ash eruption in Grímsvötn. Most of the eruption was over on the third day, but it is estimated that on the first two days about 120,000,000 tonnes of ash was spewed to a height of up to 20 km above the Earth.



oldest 74 years. On the other hand, the average age of the power stations does not tell the entire story because the oldest power stations are generally much smaller than the youngest. Thus, the youngest station is by far the biggest (690 MW), and the oldest is one of the smallest (15 MW). Over one third of the company's electricity production occurs in stations that are over 30 years old, and over one third of the total production is in Fljótsdalur Station, which is 4 years old. Even though maintenance is done on a rigorous schedule, the increasing age of stations calls for increased renewal of equipment. It is important to maintain a long-term perspective when considering the renewal of equipment and to set priorities with the company's total interests in mind. Landsvirkjun has therefore decided to establish a separate department that will see to preparing plans for renewal of equipment over the shorter and longer term.

Utilisation of renewable energy sources

Geothermal energy

The power production in 2011 in Landsvirkjun's geothermal steam stations, Krafla and Bjarnarflag, was about 503 GWh. Mass extraction from the geothermal reservoir in Krafla was similar to previous years. 151 kg/s of steam was piped from 18 boreholes into turbines in Krafla Station, and 127 kg/s of water was separated out. This corresponds to 9.2 million m³ of geothermal fluid per year, i.e., 153,717 m³ per megawatt.

Landsvirkjun's policy is to utilise geothermal energy in a sustainable and responsible manner. The separated water not utilised directly for electricity production is injected back down into the geothermal reservoir. In 2011 about 27% of the liquid was reinjected into the earth, but efforts are being made to bring the ratio up to 100% in 2012.

Hydroelectric power

The water reserves of Landsvirkjun's reservoirs were 4008 GL at the end of 2011 and have never been greater. The reservoirs filled up in the latter part of the summer, and because of the great inflow during the fall months, there was no need to draw on them until December. The total reservoir supply was 767 Gl more at the end of 2011 than at year-end 2010.

In 2011 the flow in the Thjórsá River and Tungnaá River areas was above the average since 2002, and glacial melt, possibly because of ash from the Grímsvötn eruption, weighed heavily there. Flow volume in the Tungnaá River was slightly below the average measurements from 2002, but as the water years since 2002 have been heavy ones, the past year is one of the seven best water years since measurements began in 1988. Flow volume in the Thjórsá River was one of the 16 highest recorded since measurements began in 1959.

Flow in Landsvirkjun's other areas at Blanda, in Fljótsdalur, Sog and Laxá, was below average measurements since 2002. The reason was a cold spell at the start of summer and little precipitation.

Utilisation of geothermal energy

- Krafla Station production in 2011
- Average for last 10 years

10 million t of water and steam





LANDSVIRKJUN'S POWER STATIONS AND ELECTRICITY PRODUCTION 2011

Landsvirkjun is the eighth largest company in Europe in the field of renewable energy sources. The company's annual energy generation is about 12,500 GWh, which is 73% of all electricity generated in Iceland. Landsvirkjun has 13 hydroelectric power stations and two geothermal power stations.



1. Fljótsdalur Station 690 MW 2007

4,800 GWh/yr 599 m total head



2. Búrfell Station

270 MW 1969 2,300 GWh/yr **115 m** total head



7. Vatnsfell Station 90 MW 2001 **490** GWh/yr **65 m** total head



8. Írafoss Station 48 MW 1953 **236** GWh/yr 38 m total head



26 MW 1959

122 GWh/yr 20.5 m total head



9. Steingrímstöd Station 10. Ljósafoss Station 15MW 1937 **105** GWh/yr 17 m total head




3. Hrauneyjafoss Station

210 MW 1981 1,300 GWh/yr **88 m** total head 4. Blanda Station 150 MW 1991 910 GWh/γr 287 m total head 5. Sigalda Station 150 MW 1977 920 GWh/yr 74 m total head



6. Sultartangi Station 120 MW 1999 1,020 GWh/yr 44.6 m total head



11. Laxá III Station 14 MW 1973 92 GWh/yr **39 m** total head



12. Laxá II Station 9 MW 1953 78 GWh/yr 29 m total head 13. Laxá I Station
5 MW 1939
3 GWh/yr
39 m total head



14. Krafla Station 60 MW 1977 500 GWh/yr



15. Bjarnarflag Station 3 MW 1969 18 GWh/yr

Future based on knowledge-Research, development and innovation.

Landsvirkjun's goals are to be a leader in the sustainable utilisation of renewable energy sources and promote increased knowledge, innovation and technical development. Landsvirkjun sees great opportunities in fostering innovation within the company and taking non-traditional ways to achieve outstanding performance in energy generation in the field of renewable energy sources.

Submarine Interconnector

The first ideas about connecting the Icelandic electricity grid via a power cable to Scotland were presented more than 60 years ago. The viability of such a connection has been studied every few years over the last three decades. The findings of the previous studies have been that the project is probably technically doable but not profitable. A study done jointly by Landsvirkjun and Landsnet in 2009-2010 indicated that this had changed and that the project is now economically viable. This change can be mostly attributed to changed market conditions and increased emphasis on the utilisation of renewable energy sources in Europe.

Some time will pass before a decision can be made on whether the project will be launched, and considerable further work is needed. Landsvirkjun's current schedule aims at compiling assumptions and completing feasibility studies by 2015. If the decision is to launch the project, it will take approximately five years to manufacture and lay the cable and build converter stations, a transmission grid, etc. Operations can, therefore, start near the end of this decade, at the earliest.

Energy in our storms

In recent quarters, Landsvirkjun has conducted research on the windiness in several places in Iceland. The company is also a member of the Nordic research project IceWind on the utilisation of wind energy in cold climates. Utilisation of wind energy has greatly increased in other countries; technology has progressed rapidly, and costs have dropped. Investigating whether this energy alternative can be of use to Icelanders is of interest. Wind measurements have taken place near the Búrfell Station, east of Thjórsá, west of Thorlákshöfn on the south coast and on Audkúluheidi north of Blanda Reservoir. New research indicates that this could be a desirable option for electricity production.

A decision was made to put up one or two wind turbines to research whether this alternative suits Icelandic conditions before decisions are made regarding investment in a bigger wind farm. These wind power plants will be located in the Búrfell Station area, and the total power will be about 2 MW.

Magma well at Krafla: Temperature World Record

The IDDP-1 well in Krafla is the first well to be drilled in the Iceland Deep Drilling project (IDDP). IDDP is a collaborative project of Landsvirkjun, Reykjavik Energy (OR) and HS Orka, in addition to Statoil (Norway), and Alcoa (US), and domestic and foreign research groups, the National Power Authority (Iceland), National Science Foundation (US) and the International Continental Scientific Drilling Program (ICSDP). The objective of IDDP-1 was to drill a vertical well to a depth of 4500m. However, magma was encountered at a depth of 2100m and after two sidetracks the well was completed at 2100m in 2009. The well is therefore a magma well rather than an actual deep well.

The well has been flow tested intermittently since the spring of 2010. In the initial flow tests, steam well head temperature reached 380°C at 20 bar for a mass flow of 40 kg/s. This corresponds to approx. 25 MWe in electrical production. However, the fluid proved to be both corrosive and abrasive and the wellhead and flow line were redesigned to better handle the difficult fluid and to allow for experiments to be conducted on the steam. The aim of the experiments is to validate methods to clean the steam and make it suitable for direct use in steam turbines. The well has now been operated continuously at a restricted flowrate of 12 kg/s for over 6 months. Wellhead temperature is 450°C at 140 bar, which is the highest wellhead

POSSIBLE ROUTES OF SUBMARINE CABLE

Submarine interconnectors connect the Nordic countries with the power grid of Continental Europe, Ireland with Britain and Britain with the continent. The longest cable currently in the world is the NorNed (580 km) connecting Norway and the Netherlands. A submarine interconnector between Iceland and Scotland would be more than 1,000 km long and a cable connecting the Icelandic power grid directly with the continent of Europe would be closer to 2,000 km.



Experiments to scrub the superheated steam from the well were carried out during the year. Initial results are promising, especially with the wet scrubbing method. In this method brine is injected into the steam flow, in effect washing impurities and acid from the steam. The brine is then separated from the steam which can be used on the power plant steam gathering system. Plans are for full scale production of the well in 2012-2013 based on this method. Other methods under investigation are the dry scrubbing method and indirect utilization with a heat exchanger. Additionally, several experiments have been conducted on corrosion and wear resistance.

20 years' precipitation stored in Iceland's glaciers

Landsvirkjun utilises meltwater from glaciers for electricity production, and the company's glacial research is, therefore, important. For the past 30 years, Landsvirkjun and the University of Iceland's Institute of Earth Sciences have collaborated on glacial research. During this period, glaciers have been mapped, digital maps of the bottoms and surfaces of glaciers have been prepared, for example, for Vatnajökull, Hofsjökull and Langjökull, and the catchment areas of the main streams from them have been demarcated. Systematic measurements of Vatnajökull began in 1992 and of Langjökull in 1997, and measurements of factors causing melting began in 1994. The measurements have explained the connection between weather factors and the performance of glaciers. This knowledge has been utilised along with research on probable climatic change, to predict the development of glaciers over the next decades. For example, a forecast prepared on the development of Langjökull has proved to be mostly accurate. Such forecasts have facilitated decisions on the operations of Landsvirkjun's hydroelectric power stations. In the glacial year 2010-2011 the snow accumulation on Vatnajökull was above average since measurements began, while snow accumulation on Langjökull was closer to the average.

Environmental research ever more important in early stage assessment of new power projects

The Act on Environmental Impact Assessments of Projects was established for the purpose of ensuring that such EIAs would be done and made public before projects are authorised. This involves an assessment of the impact of projects on the environment, natural resources and society. The assessment process ensures the public's right to comment; in addition, it provides governments with the information they require to decide whether a project shall be permitted. An EIA promotes democratic decision making, open discussion and transparency at companies and institutions.

Landsvirkjun aims at making environmental research even more important in the initial observations on potential power projects and in the layout of individual projects. Environmental research will then evolve into research to assess the planned projects' environmental impact. The outcome of an EIA may result in the need for research to prepare mitigating measures. Landsvirkjun's most extensive research of this kind is related to the Kárahnjúkar Power Project, of which the most important studies are:

- > General impact on the hydrobiology and fishing perquisites in Lagarfljót River.
- > Gathering additional knowledge of the living conditions of reindeer to enable better responses to possible jarring effects caused by the power station or other factors.
- Long-term monitoring of possible changes in vegetation.
- Changes in the water level of lakes in Fljótsdalshérad District and possible impact on vegetation and soil erosion.
- > Monitoring of bird stocks deemed vulnerable to the effect of environmental changes.
- > Transport of sediment to the coast.



GLACIER IN RETREAT

Langjökull is the second biggest glacier in Iceland, 925 m² in area and 1450 m high. About half of the glacier's meltwater flows into Hvítá River in Árnes District, but it also supplies Hvítá River in Borgarfjördur with water in addition to Blanda River and Lake Thingvallavatn. In the current climate, only about one tenth of the glacier is above the equilibrium line. Research indicates that the glacier will shrink considerably over the next decades and could even completely disappear in the next 100 years.

Forecast on Langjökull's trend





Mitigation measures to minimise the negative impact of power projects

Mitigation measures are used by an operator to prevent, reduce, or compensate for negative environmental impact. At Landsvirkjun, well-formulated and well-executed mitigation measures are among the most important tasks in the company's operations. Landsvirkjun strives to minimise the negative impact on the environment from its operations wherever the company works.

Erosion prevention at Hálslón Reservoir is a good example of Landsvirkjun's mitigation measures. For several years the company has tried various methods to counter sand drift in collaboration with the Soil Conservation Service of Iceland and specialists in geology and engineering. With research, monitoring and measures regarding Aeolian deposits at Hálslón Reservoir, Landsvirkjun is fulfilling conditions in a ruling by the Environmental Minister in 2001 on the EIA for the Kárahnjúkar Power Project. Landsvirkjun has mainly three ways to prevent Aeolian deposits: sand traps, wind fences and soil conservation.

In the summer of 2011, Landsvirkjun requested governmental authorities to make an inspection tour of Hálslón Reservoir to survey its shoreline and comment on its condition. The trip was made in August by representatives from the Soil Conservation Service of Iceland and the Environment Agency of Iceland, in addition to specialists who have supervised the mitigation measures on behalf of Landsvirkjun. The conclusion of the assessment was that Landsvirkjun, in the opinion of the Environment Agency of Iceland, had fulfilled, to the extent possible, the conditions on soil erosion and Aeolian deposits from shore areas.

Among the conditions set for the Kárahnjúkar Power Station was to reclaim land to offset the vegetated land submerged by the storage reservoir. Land reclamation began in 2003, and now covers about 5000 ha of land at Hálslón Reservoir, on the heaths at Jökuldalur Valley and in demarcated areas in Fljótsdalur Valley and Úthérad District. Since Blönduvirkjun Power Station began operating in 1991, land erosion and Aeolian deposits from Blöndulón Reservoir have been monitored and experiments done to mitigate them, especially by applying fertiliser to Aeolian deposit areas. These experiments were successful, and fertiliser has been applied in these areas since 2010. The results will be assessed in 2014 and a decision will then be made on whether to continue the efforts.

Power Project options under consideration

In 2011, Landsvirkjun analysed about 20 power project options all around the country. Work on the second stage of the "Master Plan on Hydro and Geothermal Energy Resources in Iceland" has gone on for several years and is now awaiting voting in Iceland's Parliament. A more detailed account is made of Landsvirkjun's potential power projects that were in the Utilisation Category in drafts of the parliamentary proposal in 2011. An account is also given of the planned expansion of Búrfell Power Station.

Geothermal power projects in Northeast Iceland

Landsvirkjun's next projects are planned in the geothermal areas in Bjarnarflag and Theistareykir in Northeast Iceland; research indicates that these geothermal areas have great potential. Drilling has verified that it is possible to harness about 100 MW, and research indicates up to 400 MW of power potential of the combined areas, including the Krafla area.

Landsvirkjun has in the past several years worked on preparations for power stations in three to five geothermal areas in Northeast Iceland. Increased weight has been placed this year on the preparations for the Bjarnarflag and Theistareykir Power Projects. The project design was completed for both locations, and agreements were entered into with the engineering firms Mannvit and Verkís on tender solicitation design and preparation of tender documents, following one of the biggest consultancy tenders in the history of Iceland.

Landsvirkjun and outside parties conduct diverse research. These include:

High-temperature research	Dam monitoring
Deep drilling	Monitoring of Landsvirkjun's dams and diversions
High-temperature borehole technology	Sediment formation in reservoirs
Production hole measurements	
Hydrogen sulphide	Lake, weather and glacier measurements
	Flood assessment
Geological research	Monitoring Vatnajökull and Langjökull Glaciers
Quarries	Monitoring run-off modelling
	Monitoring suspended sediment at operating sites
Earthquake measurements	Hydrological measurements at operating and
Tremor measurements in operating areas	preparation sites
Strong ground-motion measurements in	Meteorlogical measurements at operating sites
Landsvirkjun's structures	
	General power station research
Land surveying/Land information	Design specifications
Monitoring changes in elevation	Cost models
Build-up of land-information database	Submarine cable
Maintenance of fixed-point database	Wind power stations
Civil engineering works	Environmental research
Concrete research	Chemical monitoring
	Vegetation research
Energy research	Biosphere in operating and preparation areas
Assessment of the effects of climate change	Erosion and landslip assessment
Simulation of operations and system checks	Joint project on monitoring Lake Thingvallavatn
	Monitoring Kárahnjúkar area
	Water temperature measurements

Research

An agreement was signed with Iceland Drilling Company Ltd. on drilling two deep exploratory wells in Theistareykir that will provide important clues on the area's scope and capacity. Landsvirkjun continued measurements of tremors, underground resistivity and gas emissions. Various systematic measurements were also taken of liquid from the boreholes, their production, the effect of re-injection and the effect of drainage from the geothermal stations on groundwater systems in Krafla and Bjarnarflag.

Krafla

Landsvirkjun operates a 60 MW power station in Krafla, and there are plans to enlarge it by about 150 MW. Extensive and demanding research is going on to find ways to utilise energy-laden, but corrosive, geothermal liquid found below a depth of 2000 m. There is, on the one hand, an EIA for a 40 MW expansion of Krafla Station and, on the other hand, an EIA for a new 150 MW Krafla Station II.

Bjarnarflag

In Bjarnarflag Landsvirkjun operates a 3 MW power station and, in addition, is supplying geothermal energy for a hot water utility in the area, Mývatn Nature Baths and various kinds of light industry. An EIA has been approved for a new 90 MW power station in the area, and most of the steam for the first phase of it has already been secured.

Theistareykir

Landsvirkjun has a 96.7% share in Theistareykir ehf., which explores the high-temperature area in Theistareykir, where a power station of up to 200 MW is planned, according to the existing EIA. Steam has already been secured for the first phase of the power station.

Hydroelectric power stations on lower Thjórsá River

Landsvirkjun has for a number of years studied and planned power stations in the lower Thjórsá River below Búrfell Power Station: Hvammsvirkjun, Holtavirkjun and Urridafossvirkjun. An EIA for the power stations has been completed. Signing agreements with landowners along the Thjórsá is far along, and there is an agreement with the State on takeover of the land and water rights. These power stations have all been included in a confirmed general plan for the relevant municipalities. Hvammsvirkjun is the power station farthest upriver, with a rated discharge of 310 m³ per second, installed power of 82 MW and a total head of 32 m. Below it is Holtavirkjun with a rated discharge of 53 MW and a total head of 18 m. Urridafossvirkjun is the station farthest downriver with a rated discharge of 370 m³ per second, installed power of 130 MW and a total head of 41 m.

Research

Annual research on discharge and sediment transport in the Thjórsá River continued. Various monitoring projects were also pursued on groundwater in the vicinity of the planned reservoir in order to assess their impact and possible mitigation measures. Research continued on fish stocks in the Thjórsá River, and a report was issued on the basis of years of research on the river, including reports on proposed mitigation measures. A hydraulic model was completed on the flood gates and spillway at Hvammsvirkjun, and work was started on making a model of the intake gate of Urridafossvirkjun Power Project. The model also covers the intake of a surface bypass channel for salmonide smolts migrating downstream. The research history of fish stocks in the Thjórsá goes back at least to 1973 although Landsvirkjun became involved with it around 1993. Landsvirkjun's involvement was at first mainly in connection with building a salmon ladder at Búdafoss in 1991 and releasing juvenile salmon above it. The building of the salmon ladder at Búdafoss in 1991 may be viewed as an early mitigation measure against the reduction of habitat areas because of planned power stations in the lower Thjórsá.

Following the environmental impact assessment of harnessing the lower Thjórsá river, which included detailed proposals on research and measures to ensure the river's salmon stock, the main points of the research centered on what mitigation measures would be needed, and how they could be best organised. The Institute of Freshwater Fisheries has seen to the research and provided advice regarding planned mitigation measures. These can be divided into two types:

- Measures to ensure descent of smolts without substantial loss.
- 2. Measures to counteract loss of habitats, submerged under a reservoir, or where substantial change occurs in the flow of a river.

Preparation of power stations

In 2011, work continued on re-examining the existing designs of the power projects in the lower Thjórsá River with the aim of increasing their viability. This work will be completed in the first half of 2012. The preparation of the tender design and tender documents for Hvammsvirkjun Power Project is 90% complete. Preparation of the tenders for the Holta and Urridafoss Power Projects is not as advanced.

Skrokkalda Power Project

The Skrokkalda Power Project is based on diverting water from Hágöngulón Reservoir through a 9 km headrace tunnel to an underground power plant below Skrokkalda Mountain. A 3 km long tailrace tunnel would run from the power plant to a canal that would reach a long way towards Lake Kvíslavatn. The average discharge to the power station would be 22 m³/s, the rated discharge 26 m³/s, the installed capacity 45 MW and the total head about 211 m.

The environmental impact of the power project is primarily deemed to be related to the construction of the tailrace canal and the disturbance during the project.

Power stations on Blönduvirkjun Power Station diversion

In 2010, work began on examining possible power project on Blönduvirkjun's diversion. This involved

the hydraulic head of 67 m between the storage reservoir and the intake reservoir for the Blanda power station. Three alternative configurations are being compared based on harnessing the head, in either three or two stages.

Geothermal power station at Hágöngur

The geothermal area in Köldukvíslarbotnar at Hágöngur in Rangárvallasýsla is thought to be one of the largest in Iceland. A resistivity survey indicates that the area may be up to 40 km², which is comparable to the Krafla area. The potential utilisation capacity of the area is thought to be around 250-400 MW. One deep exploratory borhole has been drilled and flow measurements indicate a capacity of about 4–5 MW for electricity production. Landsvirkjun has recently renewed an exploration licence for the area.

Expansion of Búrfell Power Station

Búrfell Station currently harnesses 270 MW of power in Thjórsá River. Energy simulations show that by expanding Búrfell Station by 70 MW, the generation capacity of the power system can be increased by 208 GWh/year.

PROJECTS UNDER CONSIDERATION

A list of all energy projects under consideration by Landsvirkjun in 2011.

	Hydro power stations	Stream	Municipality	Power MW	Generation capability GWh/year	Status of preparation
1.	Skrokkalda Power Project	Kaldakvísl	Ásahreppur	45	345	Feasibility
2.	Bjalla Power Project	Tungnaá	Rangárthing ytra	46	340	Feasibility
3.	Tungnaárlón Reservoir, 600 Gl	Tungnaá	Rangárthing ytra Skaftárhreppur	_	270	Feasibility
4.	Búrfell Power Project II	Thjórsá	Skeida- og Gnúpverjahreppur	70	210	Feasibility
5.	Hvammur Power Project	Thjórsá	Rangárthing ytra	82	665	Tender design
6.	Holt Power Project	Thjórsá	Rangárthing ytra	53	415	Tender design
7.	Urridafoss Power Project	Thjórsá	Ásahreppur	130	980	Tender design
8.	Hólmsá Atley	Hólmsá	Skaftárhreppur Skaftártungu	65	480	Project design
9.	Skatastad Power Project	Austari- Jökulsá	Akrahreppur Muni. of Skagafjördur	156	1090	Feasibility
10.	Stations at Blönduveita	Blanda	Húnavatnshreppur	28	178	Feasibility
11.	Nordlingaölduveita	Thjórsá	Skeida- og Gnúpverjahreppur, Ásahreppur		605	Project design
			Total	675	5578	
	Geothermal steam stations	5				
12.	Krafla I, expansion		Skútustadahreppur	40	320	Project design
13.	Krafla II, 1st phase		Skútustadahreppur	45	369	Project design and 7 boreholes
14.	Krafla II, 2nd and 3rd phase		Skútustadahreppur	90	738	
15.	Bjarnarflag I, 1st and 2nd phase		Skútustadahreppur	90	738	Tender design and 6 boreholes
16.	Gjástykki		Adaldælahreppur Kelduneshreppur Skútustadahreppur	45	369	Surface study and one basic hole
17.	Hágönguvirkjun 1st phase		Ásahreppur	45	369	Surface study and one borehole
18.	Hágönguvirkjun 2nd and 3rd phase		Ásahreppur	90	738	
			Total	445	3641	



19.	Theistareykir 1st and 2nd phase	Thingeyjarsveit	90	738	Tender design and 7 boreholes
20.	Theistareykir 3rd and 4th phase	Thingeyjarsveit	90	738	
		Total	180	1476	
	Wind energy				
21.	Wind power stations	Construction area of Búrfell Station	2	7	

In harmony with the environment and society Landsvirkjun's social responsibility

Landsvirkjun is owned by the Icelandic nation. Landsvirkjun's role is to maximise return from the energy sources that have been entrusted to the company in a sustainable manner and with efficiency and creation of value as the focus. With efficient generation in harmony with the environment and society, the company can produce profit for society and participate actively in building up a diverse and profitable business community, at the forefront in the international arena.

New policy on social responsibility approved

Landsvirkjun's social responsibility is its basis for achieving its goals and becoming a leader in energy generation in the field of renewable energy sources. During the year Landsvirkjun approved a new policy on social responsibility that was announced at the company's public meeting in November 2011. The policy was prepared by an multidisciplinary group within the company that was appointed in January 2011; the policy is the product of detailed work within Landsvirkjun, starting in 2010; it aimed at analysing how the company can produce the greatest benefit for society from economic, social and environmental perspectives. The goals of the policy are to increase the company's positive effect on stakeholders and to minimise negative impact on the environment and society.

In 2012 purposeful efforts have been made to introduce the policy at the company. Six workgroups were established to forge action plans, one for each of the policy's points of focus. Each group's goal is to map how Landsvirkjun already fulfils its policy goals, and what Landsvirkjun can do in addition, along with formulating proposals on prioritisation, introduction and measurable goals. Over 40 of Landsvirkjun's employees are involved, and a special task force coordinates the groups' work. The goal is for all Landsvirkjun's employees to dedicate themselves to the policy and its content.

Landsvirkjun is a founder of Festa, a centre for socially responsible companies

Festa, a centre for socially responsible companies, was founded in October 2011. The goal in founding the centre is to create a forum for companies wanting to formulate and introduce policies on social responsibility. Other goals are to promote the awakening of consciousness of the matter, encourage research on corporate social responsibility in collaboration with the university community and find the best methods for companies to introduce a policy on social responsibility.

In addition to Landsvirkjun, Festa's founders are Alcan in Iceland, Landsbanki, Islandsbanki, Síminn (telecom) and Ossur Orthopaedic. Representatives from the founders sit on Festa's Board of Directors along with representatives from Reykjavik University.

Support of society

Energy Research Fund

Landsvirkjun's Energy Research Fund awards grants to students, university research projects, institutions, companies and individuals. The fund's goal is to strengthen research in the fields of environmental and energy affairs. In 2011 the Energy Research Fund made allocations totalling ISK 56 million to research projects and students in Master's or PhD programmes. Twelve grants were made for research on nature and the environment, seven for research on energy affairs, two to ecologically sound fuel and technology reducing carbon gas emissions and one for the preservation of relics.

Community Fund

Landsvirkjun's Community Fund was founded in 2010 for the purpose of administering Landsvirkjun's grants. The fund awards grants to projects in the fields of art, charity, culture, sports and education. The fund's policy is to support projects having broad community appeal and potential positive impact on Icelandic society. In 2011 Landsvirkjun's Community Fund made grants totalling ISK 16 million to 55 projects.

Landsvirkjun's policy on social responsibility

Landsvirkjun's social responsibility is to create profit, treat resources and the environment well and promote the dissemination of the company's knowledge and positive influence to society. Landsvirkjun ensures that its policy objective of social responsibility is followed up by setting goals for itself and emphasising the following aspects of the company's operations:

1. Landsvirkjun works in accordance with responsible management practices

Landsvirkjun's operations build on responsible management practices, and its employees follow the company's code of ethics in their work.

2. Landsvirkjun endeavours to influence its value chain

Landsvirkjun requires of its customers and suppliers that they show responsible management practices and take the environment and society into account in their operations.

3. Landsvirkjun strives to be in the forefront of environmental affairs

Landsvirkjun does this by respecting nature in its selection and moulding of power station alternatives, emphasising sustainable utilisation of natural resources, working in accordance with recognised international work practices and minimising the environmental impact of the company's operations.

4. Landsvirkjun makes every effort to always work in harmony with society

Landsvirkjun emphasises harmony with society where the company works by ensuring transparent work procedures and promoting interactive information flow, taking into account society's interests and ensuring that society and nature benefit from Landsvirkjun's operations.

5. Landsvirkjun emphasises being a leader in health, safety and employee affairs

Landsvirkjun works in accordance with a responsible policy on safety and employee affairs aimed at ensuring employees' well-being, safety and equal rights.

6. Landsvirkjun shares knowledge where it can promote innovation and development in the business community and society

Landsvirkjun emphasises professional work procedures and innovative solutions that can be utilised by society, while it takes care that its distribution of knowledge does not damage its competitiveness.

Human Resources

Ecologically sound and viable energy is only part of what is necessary to build up power-intensive business and commercial life. Human resources, which consist of well-educated employees who are prepared to find new ways to a set goal, are one of Landsvirkjun's foundational elements. Landsvirkjun's diverse group of employees enables it to maximise production from the energy resources with which it is entrusted. Human resources' expertise ensures sustainable utilisation, value creation and viability in the handling of energy resources.

In 2011, 232 permanently hired employees worked in 225 full-time equivalent positions at Landsvirkjun. Large groups of youths and university students also worked at the company during the summer in various jobs and as replacements. In the summer of 2011 179 youths and 52 university students were hired to work at Landsvirkjun. In 2011 the total of the company's full-time equivalent positions was therefore 271.

Landsvirkjun heavily emphasises that employees shall have diverse opportunities to acquire expertise. General and specialised training supporting the operational goals of all divisions is equally offered. In 2011 nearly 5700 hours were recorded in the company's job development system, but there is extensive unrecorded training that goes on in each workplace. It is clear from this that Landsvirkjun's employees are continually seeking to improve their position in their jobs and broaden their horizons.

A great deal of renewal of the company's employees is foreseeable over the next several years. At the end of last year/beginning of this year, nearly one quarter of employees were over age 60, and it can be assumed that in the next five years most of them will stop working because of age. This entails both opportunities and challenges since experience and knowledge must be mobilised for future benefit.

Landsvirkjun's human resources policy builds on mutual trust, consideration and respect between the

company and employees and employees' mutual respect for each other. Landsvirkjun emphasises good esprit de corps, and that employees do their work meticulously and conscientiously and exhibit positive attitude and mutual respect in all relationships. Open exchange of views, progressiveness, prudence, trust and good dissemination of information are emphasised.

The backgrounds of Landsvirkjun's employees are diverse; for example, they have backgrounds as mechanics, mechanical engineers, technologists, business administrators, librarians, accountants, agronomists, lawyers, physicists, chemists, graduates in English, tourism, sociology, financial engineering, mass media, industrial engineering, electronics, planning, human resource management, ship building and qualifications as certified electricians and project managers.

Equal Opportunities Policy

Landsvirkjun's policy is to observe complete equality between women and men, and that employees shall enjoy equal opportunities regardless of gender. Landsvirkjun thus not only follows the law but also utilises the company's human resources in the most effective way possible.

For this purpose Landsvirkjun, for example, endeavours to equalise the gender ratios in the company's various jobs. Equal rights are safeguarded regarding responsibility and employees' participation in workgroups, boards and committees; in addition, Landsvirkjun pays equal wages and grants the same terms for the same or equally valuable jobs.

Evaluations are made of wages and employment terms for the purpose of combating gender wage differences at Landsvirkjun, and the findings of the last analysis showed a gender-related wage difference of 4.2% to the disadvantage of women in 2010, while previous analyses show a comparable ratio for 2006 was 6% and 12% for 2003.



Number of men and women by job categories

Job categories





Certifications and official certification

Safety is a key issue in any energy company's operations. To ensure that our operations are secure and management is integrated, our operations are certified in four ways.

ISO 9001: quality management

Landsvirkjun was certified under the ISO 9001 standard in January 2006, and this certification marked the beginning of the introduction of the company's integrated management system. Also falling under quality control is electrical safety, and the documentation system has been used for several years in accordance with the requirements of Iceland Construction Authority's standards for electrical safety management of electricity utilities. After the amended Electricity Act entered into force in 2005, quality control took on greater weight in Landsvirkjun's operations.

Environmental Management in accordance with ISO 14001

A company with certification under ISO 14001 has gone through a process entailing policy formulation in the area of environmental affairs and exhaustive examination of the environmental impact of the company's operations. Landsvirkjun sets goals for itself on how it can reduce important environmental impact of its operations, and there are requirements in the standard that the goals shall be achieved, and that continual improvements shall take place.

Safety management under OHSAS 18001

Companies operating under OHSAS 18001 Standard must always work on improving employees' security, health and well-being. The standard includes ensuring that safety and health affairs are an inseparable part of Landsvirkjun's evaluation and decision-making processes of investment, construction, operations and purchase of goods and services.

Management of information security under ISO 27001

Landsvirkjun's IT Division received certification under ISO 27001 in 2007. The division has set out an information security policy and now assesses the security of data and systems to minimise risks.



Sustainable utilisation of resources

Landsvirkjun's operations emphasise a holistic vision of viability, reliability and harmony of its activities with the environment and society. Special emphasis is placed on identifying and minimising the environmental aspects of the operations. To ensure continuing success the company monitors significant environmental aspects and continual efforts are made to improve them.

Landsvirkjun has a certified environmental management system in accordance with international Standard ISO 14001 and has gone through a process entailing policy formulation in the field of environmental affairs and a detailed examination of what environmental impact the company's operations have. Since 2006 the company has published annual environmental reports discussing in detail the environmental management system, monitoring of environmental factors and the company's goals in environmental affairs. Emphasis is placed on honest and open presentation of information on the company's results in environmental affairs, which promotes open and substantive discussion of the issue category.

Landsvirkjun places great importance on sustainably utilising energy resources with respect to impact on the economy, society and the environment. A sensitive geothermal area must be built up in steps and given time to respond to utilisation. With hydropower stations efforts are made to maximise utilisation of the resource, after taking into account environmental perspectives, based on minimising negative environmental impact. Landsvirkjun emphasises strengthening consultation and collaboration with stakeholders in areas where build-up is planned and ensuring the best reconciliation regarding new projects.

International sustainability standard for utilisation of hydroelectric power

Hydropower is the biggest renewable energy source for electricity production in the world. A great deal of hydropower potential in the world is still unharnessed and can play a very significant role in reducing the use of polluting energy sources, such as coal and oil, for electricity production and in ensuring access to electricity for people in developing countries. It is important that the harnessing of hydropower will be sustainable and the development of an international sustainability assessment protocol is an important step in this direction.

Landsvirkjun has since 2008 worked with International Hydropower Association on developing a Sustainability Assessment Protocol that defines how well operations of hydropower stations harmonise with goals of sustainable development. A broad group of stakeholders has been involved in developing the Sustainability Assessment Protocol, including the associations Oxfam and World Wildlife Fund. The protocol builds on standards in more than 20 categories intended to describe the sustainability of hydroelectric power stations.

Landsvirkjun plans to impliment the Sustainability Assessment Protocol to its power stations from their very first stages of preparation, but also to power stations already operated by the company. The conclusions are expected to lead to both better preparation and construction and increased sustainability of operating power stations.

Professional group on sustainable utilisation of geothermal energy

In April 2010 the National Energy Authority published a report, entitled "*Nature Geothermal Energy and Its Sustainable Utilisation*", which was prepared by a professional group appointed by the Ministry of Industry and the task force for a Master Plan on the Utilisation of Hydro and Geothermal Energy Resources. The professional group set out a proposal in the report of 10 goals for sustainable geothermal energy utilisation, based on the Brundtland definition of sustainable development in the Rio Declaration and Call for Action, in accordance with instructions from the International Institute for Sustainable Development. The first two goals deal with the utiliGreenhouse gas emissions from various kinds of electricity production in grams of CO₂-equivalence/kWh. Average greenhouse gas emissions for various kinds of electricity production along with emissions from Fljótsdalur Station.*





Greenhouse gas emissions from Landsvirkjun's operations 2008-2011

Year	2011	2010	2009	2008
Origin of emissions	tonnes	tonnes	tonnes	tonnes
Geothermal power stations, total emissions	41,173	44,688	45,166	45,973
from power production	40,164	44,121	41,292	41,719
from exploratory drilling	1,009	567	3,874	4,254
Reservoirs of hydroelectric power stations	13,780	12,380	12,880	15,290
Burning of fossil fuel	1,083	1,012	1,377	1,167
Gasoline in machinery and vehicles	55	48	60	56
Diesel oil for machines, equipment and vehicles	702	642	971	734
Air traffic, total emissions	326	322	346	377
Waste	65	81	52	84
Emissions from electrical equipment	0	0	12	0
Total greenhouse gas emissions	56101	58,161	59,487	62,514
Carbon binding with land reclamation	-22,000	-22,000	-22,000	-20,000
Landsvirkjun's carbon footprint	34,101	36,161	37,487	42,514

References: Weisser (2007) and Goldstein et.al (2011)
In 2011 an environmental impact assessment for electricity production in Fljóts-dalur Station was done, using Life Cycle Assessment methodology. This involves the first Life Cycle Assessment done for a hydroelectric power station in Iceland.

sation of the resource and its renewability. The third goal is on environmental management, the fourth on efficiency, the fifth on economic management and the sixth and seventh on profit and security of supply. The eighth goal deals with social impact. The ninth and tenth goals deal with research, innovation and dissemination of knowledge. Landsvirkjun's representatives actively participated in the professional group, and the company takes these 10 goals into account in operating and preparing new geothermal power stations.

Landsvirkjun and Alcoa Fjardaál's sustainability project

In 2004 Landsvirkjun and Alcoa Fjardaál set up a Sustainability Project to monitor the impact of the construction of the Kárahnjúkar Power project and the aluminium smelter in Reydarfjördur on the community, environment and economy of East Iceland. The companies sought representatives of various groups and formed a consultative group that worked on the project. The Sustainability Project and its measurements in East Iceland can be followed at sustainability.is.

Landsvirkjun's carbon footprint

Iceland enjoys special status in energy affairs since over 85% of primary energy consumption in Iceland is from renewable energy sources generated domestically.

On the other hand, Icelandic power companies do emit greenhouse gases having some impact on the atmosphere. The main sources of greenhouse gas emissions from Landsvirkjun's operations are geothermal power stations, reservoirs and the burning of fossil fuel. In addition, there are minor emissions from waste disposal (from landfills and by incineration) and because of emissions of SF_6 gas from electrical equipment.

Landsvirkjun, from the beginning of its operations, has worked on carbon binding by planting vegetation and forests. In 2006 the company joined the international forum, Global Roundtable on Climate Changes (GROCC). As a member of GROCC, one of our obligations is to provide information on greenhouse gas emissions from our operations, and since 2008 Landsvirkjun has supplied information on its carbon footprint.

It is Landsvirkjun's declared policy to become a carbon-neutral company. Landsvirkjun is therefore working toward reducing all carbon dioxide emissions from its operations; in addition, the company wants to do its part to enable Iceland to meet its international obligations.

In 2011 an environmental impact assessment for electricity production in Fljótsdalur Station was done, using Life Cycle Assessment methodology. Life Cycle Assessment is a methodology for assessing the environmental impact of power production throughout a power station's entire life cycle, from its construction through power production and the disposal of substances over a planned 100-year lifespan of the structures. The Life Cycle Assessment of Fljótsdalur Station's electricity production is the first done for a hydropower station in Iceland, and with it an excellent comparison is obtained of the environmental impact of power production with hydropower in Iceland and the environmental impact of other types of power production.

The carbon footprint of electricity production in Fljótsdalur Station, calculated using Life Cycle Assessment methodology, proved to be 2.6 tonnes of CO_2 -equivalence/GWh, which is one of the smallest in the world for power production, including power production with solar and wind energy, and considerably lower than the international average figure for power production with hydropower.



Greenhouse gas emissions from Landsvirkjun's operations 2008–2011 by origin of emission







BÚRFELL STATION

When Landsvirkjun was founded in 1965, the decision was made to begin construction of the Búrfell Power Project, and the station was taken into use in 1972. Its construction took nearly 10 years, and it was the biggest power station in the country until Kárahnjúkar Power Station came online in 2007. During the period 1997–1999 the station's equipment was partially renewed. As a result the installed power of the station increased from 210 to 270 MW.



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ANNUAL REPORT 2011

Consolidated Financial Statements 2011 – Group

Consolidated Financial Statements 2011 Key figures Management's presentation of the operation of Landsvirkjun – unaudited

Operation	2011	2010	2009	2008	2007
Operating revenues	419,708	383,991	299,788	452,027	368,824
Realised aluminium hedges, income (expenses)	16,488	(6,342)	42,526	(54,759)	(59,447)
Total operating revenues	436,196	377,649	342,314	397,268	309,377
Operating expenses	(90,993)	(79,564)	(70,655)	(100,512)	(105,800)
EBITDA	345,203	298,085	271,659	296,756	203,577
Depreciation and impairment loss	(108,200)	(107,258)	(114,321)	(105,532)	(81,960)
EBIT	237,003	190,827	157,338	191,224	121,617
Financial items	(130,891)	(100,856)	(107,295)	(146,552)	(62,408)
Profit before unrealised financial items	106,112	89,971	50,043	44,672	59,209
Unrealized financial items					
Eair value changes in embedded derivatives	(03 107)	(55 583)	253 304	(107 167)	376 835
Fair value changes in other derivatives	6 959	(39,438)	(53 655)	186 284	35 337
Unrealised foreign exchange difference	22 711	87 619	(39,752)	(148 369)	205 321
	(63,527)	(7,402)	159,897	(459,252)	567,493
Profit (loss) before income tax	42 585	82 569	209 940	(414 580)	626 702
Income tax	(16.135)	(9.653)	(16,944)	70.048	(167.444)
Profit (loss)	26,450	72,916	192,996	(344,532)	459,258
					,
Balance sheet					
lotal assets	4,622,424	4,837,486	4,803,522	4,619,220	5,142,303
Equity	1,661,312	1,644,322	1,564,487	1,3/6,/92	1,600,145
Liabilities	2,961,112	3,193,164	3,239,035	3,242,428	3,542,158
Net liabilities *	2,502,873	2,673,966	2,823,872	2,850,276	2,903,504
Cash Flow					
Funds from operation (FFO)	255,592	218,582	202,142	207,297	138,871
Cash flow from operating activities	267,172	229,595	197,023	184,350	138,522
Investing activities	(107,689)	(53,517)	(120,533)	(374,797)	(532,526)
Financing activities	(185,328)	(106,294)	(4,572)	168,586	506,937
Liquidity					
Cash and cash equivalents at year end	229,942	265,532	194,248	124,993	179,578
Undrawn loans	415,767	307,676	281,600	350,000	350,000
Total liquidity	645,709	573,208	475,848	474,993	529,578
Key ratios					
Return on equity	1.6%	4 7%	14 በ%	(21.5%)	40.2%
Equity ratio	25.0%	3/ 0%	27.6%	21.5 /0)	31 1 %
Interest cover (FRITDA/net interest evpenses)	3.06v	3 68v	3 1 / v	1 83v	2 37v
EEO / net liphilities	10.2%	8.7%	7 2%	7.3%	1.8%
FFO / interest expenses	10.2 /0 7 10v) EQV	7.270 710v	1 17	1 51 v
Net liphilities / ERITDA	7 754	2.JOX 0.7v	10 204	1.1/X	11 262
	/.23X	0.9/X	T0.3AX	9.00%	14.20X
Credit rating at year end					
Standard & Poor's	BB	BB+	BB	BBB-	A+
Moody's	Baa3	Baa3	Baa3	Baal	Aaa

* Net liabilities are interest bearing long-term liabilities less cash and restricted deposits

Quarterly statement 2011 Management's presentation of the operation of Landsvirkjun, contd.

Operating revenues	Q1	Q2	Q3	Q4	Total
Power sales	95,922	92,037	89,314	88,776	366,049
Realised aluminium hedges	(504)	4,019	10,701	2,272	16,488
Transmission	12,276	11,952	11,727	10,939	46,894
Other income	884	1,299	1,223	3,359	6,765
	108,578	109,307	112,965	105,346	436,196
Operating expenses					
Energy production costs	7,387	9,068	10,954	9,938	37,347
Transmission costs	3,705	3,238	4,303	8,063	19,309
Cost of general research	1,841	1,687	1,692	2,434	7,654
Other operating expenses	6,416	5,325	5,690	9,252	26,683
Depreciation and impairment loss	26,850	26,927	26,872	27,551	108,200
	46,199	46,245	49,511	57,238	199,193
Operating profit	62,379	63,062	63,454	48,108	237,003
- Financial income and (expenses)					
Interest income	721	978	579	1,849	4,127
Interest expenses	(24,966)	(31,025)	(31,468)	(29,385)	(116,844)
Realised foreign exchange differences	(15,364)	(3,836)	5,573	(523)	(14,150)
Associated companies and other companies	(584)	(883)	(2,340)	(217)	(4,024)
	(40,193)	(34,766)	(27,656)	(28,276)	(130,891)
Profit before income tax and unrealised items	22,186	28,296	35,798	19,832	106,112
Unrealised financial items:					
Fair value changes in embedded derivatives	121,716	(62,716)	(138,798)	(13,399)	(93,197)
Fair value changes in other derivatives	18,422	3,395	(22,929)	8,071	6,959
Unrealised foreign exchange difference	(66,682)	(27,539)	73,733	43,199	22,711
	73,456	(86,860)	(87,994)	37,871	(63,527)
Profit (loss) before income tax	95,642	(58,564)	(52,196)	57,703	42,585
Income tax	(33,338)	19,663	18,605	(21,065)	(16,135)
Profit (loss)	62,304	(38,901)	(33,591)	36,638	26,450
Attributable to:		<u> </u>			
Owners of the parent company	60,536	(36,737)	(36,008)	36,130	23,921
Subsidiaries minority interest	1,768	(2,164)	2,417	508	2,529
	62,304	(38,901)	(33,591)	36,638	26,450
From cash flow					
Cash flow from operating activities	66,235	66,434	73,961	60,542	267,172
Other key metrics for Landsvirkiun (parent company)	2011	2010	2009	2008	2007
Installed power at year end (MW)	1 860	1 860	1 860	1 860	1 860
Average price for industrial users (incl. transm.) USD/MWh		25.7	19 5	30.8	20 0
Average price for retail sales comp. (evcl. transm.) USK/bWh	3.6	<u>کے۔،</u> ۲۵		30.0	20.0
Sales in Gwh	12 778	12 926	12 546	12 746	8 9/13
Research and development	17 203	19 575	23 601	48 363	32 877
Accident frequency: H200*	0.4	1.4	1.1	0.4	0.7

* H200 is the number of absence accidents per each 200,000 working hours

Consolidated Financial Statements 2011 Endorsement by the Board of Directors and CEO

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, six subsidiaries, Landsnet hf., Orkufjarskipti hf. (previously Fjarski ehf.), Hraunaveita ehf., Icelandic Power Insurance Ltd., Theistareykir ehf. and Landsvirkjun Power ehf., in addition to three subsidiaries of Landsvirkjun Power ehf.

The financial statements of Landsvirkjun for the year 2011 are prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU. The functional currency of the Company is USD and amounts in the financial statements are rounded to the nearest thousand USD.

The Group's operating income amounted to USD 436.2 million in the year 2011 compared to USD 377.6 million in the previous year. Income thus increased by USD 58.6 million, which is mainly explained by higher energy price to aluminium smelters due to increase in the world market aluminium price, and inflation. Realised aluminium hedges amounted to USD 16.5 million in the year 2011 compared to USD 6.3 million expensed in the previous year. It must be taken into account that realised aluminium hedges are now recognised among revenue, whereas previously they were recognised among financial items. Changed presentation does not affect the results or the financial standing of the Group. Operating expenses amounted to USD 199.2 million in the year 2011 compared to USD 237 million in the year 2011 compared to USD 190.8 million the previous year.

Financial expenses in excess of financial income amounted to USD 194.4 million in the year 2011, compared to USD 108.3 million the previous year. The change between years amounts to USD 86.1 million. The main reason for this difference between years is less foreign exchange gain and increased interest expenses. Loss on fair value changes of derivatives is for the most part unrealised which must be taken into account in the evaluation of the Company's return for the year. According to the income statement, profit of the year amounted to USD 26.5 million compared to USD 72.9 million in the previous year.

Landsvirkjun has entered into derivative agreements in order to manage risk. Agreements have been made due to interest rate risk and foreign currency risk. In addition, derivative agreements have been made in order to hedge risk due to fluctuations of aluminium prices in the global market as part of revenues is based thereon. Positive fair value of aluminium hedges amounted to USD 23.9 million at year end 2011. Fair value of currency and interest rate swap derivative agreements at year end 2011 was negative by USD 82.4 million. Fair value of embedded derivatives in Landsvirkjun's electric power sales agreements with aluminium companies after deducting the fair value of embedded derivatives in electric power purchase agreements is positive and their fair value is measured at USD 274.2 million at year end 2011.

Equity at year end 2011 amounted to USD 1,661 million compared to USD 1,644 million at year end 2010 according to the balance sheet and the Company's Board of Directors proposes that the profit of the year will be recognised as increase in equity. The Company's Board of Directors will during the Annual General Meeting propose a dividend payment to the owners of the company in the amount of ISK 1.8 billion or the equivalent of USD 14.7 million for the year 2011, but otherwise refers to the notes to the financial statements and statement of equity for further changes in equity. Landsvirkjun is a partnership owned by the State and Eignarhlutir ehf. The State owns 99.9% in the Company and Eignarhlutir ehf. 0.1%.

The financial position of the Company is acceptable and its liquidity position solid due to cash balance and undrawn loans. Cash and cash equivalents at year end amounted to USD 230 million and undrawn Revolving Credit Facilities to USD 286 million. Furthermore, undrawn long-term loans amount to USD 130 million. Liquid assets amounted thus to USD 646 million at year end. Drawn loans and bonds amounted to USD 311 million during the year, the Company paid down debt by USD 484 million and cash and cash equivalents decreased by USD 36 million. It is the evaluation of the management of Landsvirkjun that access to liquid assets is ensured until year end 2013. The project at Budarhals is going according to plan and the financing of the project has been concluded.

Following the purchase by the State of a share in Landsvirkjun held by the city of Reykjavik and the town of Akureyri an agreement was reached stipulating that the city of Reykjavík and the town of Akureyri would provide a guarantee of collection together with the State for all of Landsvirkjun's obligations 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. According to the agreement, the State guarantees the city of Reykjavík and the town of Akureyri indemnity after 1 January 2012 with respect to a guarantee of obligations entered into before 1 January 2007. The Company's payments due to guarantees for long-term loans amounted to USD 7 million in the year 2011.

Corporate governance

The Board of Directors of Landsvirkjun endeavours to maintain good corporate governance. The Board of Directors has established detailed working procedures for the Board wherein its competences and purview with respect to the CEO is defined. The Board of Directors has appointed an Audit Committee. In the year 2011, 13 Board meetings were held and 5 meetings in the Audit Committee. Meetings have been attended by the majority of the Board of Directors and the majority of the Audit Committee. Landsnet hf. has disclosed information on corporate governance in its financial statements. Further information on the parent company's corporate governance is included in notes 47 and 56.

Statement of the Board of Directors and the CEO

According to the best knowledge of the Board of Directors' and the CEO, 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 CEO that the financial statements give a fair view of the Company's assets, liabilities and financial position as at 31 December, 2011 and the Company's results and changes in cash in the year 2011.

Furthermore, it is the opinion of the Board of Directors and the CEO that the financial statements and the Endorsement by the Board of Directors for the year 2011 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 CEO hereby confirm these consolidated financial statements with their signature.

Reykjavik, 16 March 2012.

The Board of Directors: Bryndís Hlödversdóttir Sigurbjörg Gísladóttir Arnar Bjarnason Ingimundur Sigurpálsson Stefán Arnórsson CEO: Hördur Arnarson

Consolidated Financial Statements 2011 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 31 December, 2011, and the income statement, statement of comprehensive income, 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 31 December, 2011, 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.

Confirmation of the Endorsement by the Board of Directors and the CEO

In accordance with provisions of Article 1, Para. 5 of Act no. 3/2006 on Financial Statements, we confirm according to our best knowledge that the Endorsement by the Board of Directors and the CEO accompanying these financial statements include the information that according to the Financial Statements Act shall be provided.

Reykjavik, 16 March 2012 **KPMG ehf.**

> Árni Claessen Audur Thórisdóttir

Income Statement for 2011

Operating revenues No	tes	2011	2010
Power sales		366,049	331,498
Realised aluminium hedges		16,488	(6,342)
Transmission		46,894	47,696
Other income		6,765	4,797
	_	436,196	377,649
Operating expenses			
Energy production costs		122,261	114,625
Transmission costs		39,128	37,448
Cost of general research		7,654	4,062
Other operating expenses		30,150	30,687
	_	199,193	186,822
Operating profit		237,003	190,827
Financial income and (financial expenses)			
Interest income		4,127	3,893
Interest expenses		(116,844)	(84,847)
Foreign exchange difference		8,561	69,627
Fair value changes in embedded derivatives	49	(93,197)	(55,583)
Fair value changes in other derivatives		6,959	(39,438)
Associated companies and other companies		(4,024)	(1,910)
	25	(194,418)	(108,258)
Profit before taxes		42,585	82,569
Income tax	26	(16,135)	(9,653)
Net profit for the year		26,450	72,916
Attributable to:	-		
Owners of the parent company		23,921	62,625
Subsidiaries minority interest		2,529	10,291
		26,450	72,916

Consolidated Financial Statements 2011 Statement of Comprehensive Income for the year 2011

	2011	2010
Profit for the year	26,450	72,916
Operating items moved to equity		
Translation difference due to functional currency	(9,461)	9,518
Revaluation of non-current assets	0	(426)
Change in tax ratio	0	(2,328)
Total operating items moved to equity	(9,461)	6,764
Total Comprehensive Income for the year	16,989	79,680
Profit attributable to:		
Owners of the parent Company	16,831	67,550
Subsidiaries minority interest	158	12,130
	16,989	79,680

Balance Sheet as at 31 December 2011

Assets	Notes	2011	2010
Non-current assets			
Property, plant, and equipment	27	3,585,637	3,709,732
Projects under construction	27	71,883	3,699
Intangible assets	28	207,415	205,819
Derivative financial instruments	30	289,569	363,694
Associated companies	31	22,406	21,860
Other non-current assets	32	106	143
Deferred tax asset	34	87,151	104,141
Total non-current assets		4,264,167	4,409,088
Current assets			
	35	4 096	4 685
Accounts receivables and other receivables	36	75 077	92.086
Derivative financial instruments	30	40.891	66 095
Restricted denosits	37	8 251	0
Cash and cash equivalents	37	2291	265 532
Total current assets		358.257	428.398
T-4-1		4 (22,424	4.027.400
Iotal assets		4,622,424	4,837,486
Equity and liabilities			
Equity			
Owners' contributions	38	586,512	586,512
Revaluation account	39	101,983	105,056
Translation difference	39	(34,919)	(27,829)
Other equity		971,791	944,797
Equity of the owners of the parent company		1,625,367	1,608,536
Minority interest		35,945	35,786
Total equity		1,661,312	1,644,322
Long-term liabilities		2 (12 25 (
Interest bearing liabilities	40	2,612,256	2,569,699
	42	23,238	23,442
	43	5,0/3	0,541
Prepaid income	20	1,051	0(122
		2 7 20 2 26	90,133
		2,720,230	2,095,015
Current liabilities			
Accounts payable and other payables	44	75,388	86,344
Interest bearing liabilities	41	128,810	369,799
Derivative financial instruments	30	28,678	41,206
		232,876	497,349
Total liabilities		2,961,112	3,193,164
Total equity and liabilities		4,622,424	4,837,486

Consolidated Financial Statements 2011 Statement of Equity from 1 January, 2010 to 31 December, 2011

	OWNERS' CONTRIBUTION	REVALUATION ACCOUNT	TRANSLATION DIFFERENCE	OTHER EQUITY	EQUITY ATTRIB- UTABLE TO THE OWNERS OF THE PARENT COMPANY	MINORITY INTEREST	TOTAL EQUITY
Changes in equity year 2010							
Equity at 1 January 2010	586,512	110,556	(34,702)	878,621	1,540,987	23,500	1,564,487
Translation difference			6,874		6,874	2,644	9,518
Change in revaluation		(426)			(426)	0	(426)
Change in tax ratio		(1,523)			(1,523)	(805)	(2,328)
Profit for the year				62,625	62,625	10,291	72,916
Total profit for the year		(1,949)	6,874	62,625	67,550	12,130	79,680
Revaluation transferred to other equity		(3,550)		3,550	0	0	0
Other changes						157	157
Equity at 31 December 2010	586,512	105,056	(27,829)	944,797	1,608,536	35,786	1,644,322
Changes in equity year 2011							
Equity at 1 January 2011	586,512	105,056	(27,829)	944,797	1,608,536	35,786	1,644,322
Translation difference			(7,090)		(7,090)	(2,371)	(9,461)
Profit for the year				23,921	23,921	2,529	26,450
Total profit for the year			(7,090)	23,921	16,831	158	16,989
Revaluation transferred to other equity		(3,072)		3,072	0	0	0
Equity at 31 December 2011	586,512	101,983	(34,919)	971,791	1,625,367	35,945	1,661,312

Statement of Cash Flows for 2011

	Notes	2011	2010
Operating activities			
Operating profit		237,003	190,827
Adjusted for:			
Depreciation and impairment loss		108,200	107,258
Pension obligation, change		1,303	(456)
Obligation due to demolition, change		(486)	1,668
Other changes		915	703
Working capital from operation before financial items		346,935	300,000
Operating assets and liabilities, change		6,797	443
Cash flow from operating activities before financial items		353,732	300,443
Interest income received		4,847	3,611
Interest expenses and foreign exchange difference paid		(91,407)	(74,459)
Cash flow from operating activities	46	267,172	229,595
Investing activities		((01 2)	(12,440)
Hydropower stations in operation		(51.150)	(13,448)
Hydropower stations in construction		(51,158)	0
		(5,793)	(8,319)
Development costs		(25,793)	(13,925)
Purchased shares		(6,965)	(11,324)
Dividend received from associated company		78	100
Other capital expenditure		(7,711)	(8,844)
Assets sold		4,857	180
Unpaid construction cost, change		(5,873)	2,852
Other receivables, change		(3,319)	(789)
Investing activities		(107,689)	(53,517)
Financing activities			
New loans		310,557	167,988
Amortisation of long-term debt		(483,807)	(234,136)
Currency swaps		(13,559)	(34,307)
Short-term loans, change		370	(5,921)
Prepaid income, change		1,111	0
Paid in share capital of minority interest in subsidiary		0	82
Financing activities		(185,328)	(106,294)
Change in cash and cash equivalents		(25,845)	69,784
Effect of exchange difference on cash and cash equivalents		(9,745)	1,500
Cash and cash equivalents at the beginning of the year		265,532	194,248
Cash and cash equivalents at end of year		229,942	265,532
Financing and investing activities not affecting cash flow:			
Purchased shares		0	(21,336)
New loans		0	21,336

Notes
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 Company's main objective is to engage in operations in the energy sector. The financial statements include the consolidated financial statements of the Company and its subsidiaries and share in the return of associated companies.

2. Basis of preparation

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 financial statements on 16 March 2012.

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, trading financial assets and liabilities and shares in other companies.

Fixed operating assets of the subsidiaries, Landsnet hf. and Orkufjarskipti hf. (previously Fjarski ehf.) were revalued in 2008.

Fixed assets and asset groups available for sale are recognised at the lower of the book value and the net fair value.

c. Presentation and functional currency

The financial statements are presented in USD, which is the parent Company's functional currency. 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 that the changes are made and in subsequent periods if the change also affects those periods.

Information on the 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 27 property, plant, and equipment
- > note 28 intangible assets
- > note 30 derivative financial instruments
- > note 34 deferred tax asset
- > note 42 pension fund obligation
- > note 49 aluminium price risk

Significant accounting methods

The accounting policies set out below have been consistently applied to all periods presented in these financial statements, and to all companies within the group. The presentation has been changed to the effect that realised aluminium hedges are now recognised among operating revenue and comparative figures have been changed accordingly. Changed presentation does not affect the return or financial standing of 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 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 other 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 of the period. The exchange rate of the period. 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 per cent 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 the 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, realised 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 the effective interest rate, the Company estimates cash flow taking into account all contractual aspects of the financial instrument.

7. Other financial income and expenses

Other 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

a. 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 in the statement of comprehensive income.

b. 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 sales value 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 at the reporting date, in addition to adjustments made to current tax of previous years.

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 hand. The difference thus arising is due to the fact that the tax assessment is based on premises other than the Group's financial statements and is in main respect a temporary difference as expenses are entered in the financial statement in an another period than in the tax return.

A deferred tax asset is recognised to the extent that it is probable that future taxable profits will be available against the asset. The tax asset is calculated at each reporting date and decreased to the extent that is considered likely that it will be utilised against future taxable profit.

11. Intangible assets

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

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 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 amortisation 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.

Depreciation is calculated on a straight line basis, based on the estimated useful lives of intangible assets from the date that they become applicable. Amortisation and estimated useful life is specified as follows:

	Amortisation ratio	Useful life
Software	25%	4 years

12. Fixed assets

Fixed assets are initially measured at cost.

The cost of renewing single items of fixed asset is capitalised if it is considered likely that the proceeds on the asset will revert to the Company and the cost can be measured reliably. All other cost is expensed in the income statement as it is incurred.

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 the sale, depreciation 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 demolition cost of power lines has been measured at a discounted value based on the useful life and an obligation in relation thereto has been recognised among long-term liabilities. A change in the obligation due to the discounted value is recognised through 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 costs 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.

Interest expense on loans used to finance the cost value of projects are capitalised at the time of construction. Interest is not calculated on development cost.

Profit or loss on the sale of fixed assets is the difference between the sales value and the book value of the asset and is recognised in the income statement among other revenue. When a revalued fixed asset is sold its revaluation among equity is moved to retained earnings.

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 residual value are reassessed at each accounting date.

Depreciation	Useful life
1.67%	60 years
2.5-6.67%	15-40 years
1.67-3.33%	30-60 years
1.67-6.67%	15-60 years
2.5%-5%	20-40 years
2.00%	50 years
5.00%	20 years
7.00%	15 years
6.00%	17 years
14-15%	7 years
2.00%	50 years
10-25%	4-10 years
10-20%	5-10 years
	Depreciation 1.67% 2.5-6.67% 1.67-3.33% 1.67-6.67% 2.5%-5% 2.00% 5.00% 7.00% 6.00% 14-15% 2.00% 10-25% 10-25%

13. Financial instruments

a. Non-derivative financial instruments

Non-derivative financial instruments consist of investments in shares and bonds, accounts receivable, 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 income statement, all direct transaction cost is entered as increase in the fair value at their initial recognition, with the exceptions described here below. Following an initial registration 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 derecognised if the Company's contractual right to cash flow due to the asset expires or the Company transfers the assets to another party without holding back control or almost all the risk and gain 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 derecognised from the consolidated financial statements if the obligations of the Company defined in an agreement are paid, expire, disallowed, or are invalidated.

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 income statement in case of current financial assets or financial liabilities or if it is, at the 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 on their fair value. Financial assets and liabilities at fair value through 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.

b. Derivative financial instruments

The Company enters into derivative financial instruments to hedge its foreign currency, interest rate and aluminium 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 other instruments with the same provisions as the embedded derivative would be defined as a 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

Accounting standards require that the fair value be measured, both for financial assets and liabilities and other assets and liabilities. The fair value has been determined due to assessments and/or notes according to the following methods. Where applicable, further information is made available on the 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 by 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 a 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 the 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. 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.

16. Cash and cash equivalents

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

17. Equity

The Group's equity is divided into owners' contribution, revaluation account, translation difference, other equity and minority interest. The parent company's initial capital amounts to USD 587 million.

18. Employees' benefits

a. Defined contribution plan

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

b. 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.

19. 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 flow, discounted on the basis of interests reflecting market interests and the risk inherent with the obligation.

20. Segment reporting

A segment is a distinguishable component of the Group, which is subject to risks and returns that are different from those of other segments. In determining the distribution of resources to segments and evaluating the results, the return of the segments is reviewed on a regular basis.

Segment operating results, 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.

21. Reporting standards

The Group has adopted all International Financial Reporting Standards, amendments thereto and interpretations confirmed by the EU at year end 2011 and that apply to its operation. The Group has not adopted standards, amendments to standards or interpretations entering into effect after year end 2011, which may be adopted earlier. The effect thereof on the Group's financial statements have not been fully determined but are considered to be insubstantial.

22. 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.

Landsvirkjun Group's operating segments are specified as follows:

Electricity production

The operation of the parent company falls under the segment electricity production but Landsvirkjun's objectives according to law is to operate in the energy sector and operate other business and financial operations according to the decision of the Board of Directors at each time. Landsvirkjun's electricity production is based on hydroelectric power and geothermal heat. Landsvirkjun sells all its electricity production to retail sales companies and in great quantity to industrial users. Furthermore, the operation of Hraunaveita ehf., Icelandic Power Insurance Ltd. and Theistareykir ehf., falls under these segments. The purpose of Icelandic Power Insurance Ltd. is to take care of the insurances of Landsvirkjun's power stations. The purpose of Theistareykir ehf. is the utilisation of geothermal heat at Theistareykir in North-East Iceland and other operation related to procurement and utilisation of energy.

Electricity transmission

The operation of Landsnet hf. falls under the segment electricity transmission, but the company was established in August 2004 on the basis of the Energy Act approved by the Parliament in spring 2003. The purpose of Landsnet hf. is to operate electricity transmission

and system management in Iceland according to provisions of Chapter III of the Energy Act no. 65/2003 and may thus not carry on other operation than that is necessary in order to carry out its obligations according to the Energy Act.

Other segments

Other segments include the operation of the companies Orkufjarskipti hf. and Landsvirkjun Power ehf. together with Landsvirkjun Power ehf.'s subsidiaries. The purpose of Orkufjarskipti hf. is to own and operate a telecommunications system throughout the country and to rent access thereto in addition to other related operation. Landsvirkjun Power ehf. takes care of sale of technical and operational advisory services to third parties and manages general research work, harnessing researches and projects for Landsvirkjun and related companies. At the beginning of the year 2011, the majority of the employees of Landsvirkjun Power ehf. were transferred to Landsvirkjun's research and development division.

Almost all the operation of the Group is based in Iceland.

Operating segments year 2011	ELECTRICITY PRODUCTION	ELECTRICITY TRANSMISSION	OTHER SEGMENTS	ADJUSTMENTS	TOTAL
Income from third party	385,412	47,123	3,662	0	436,196
Income within the Group	10,514	55,477	3,168	(69,159)	0
Segment income	395,926	102,600	6,830	(69,159)	436,196
Segment operating expenses	(121,970)	(33,130)	(5,053)	69,159	(90,993)
EBITDA	273,956	69,470	1,777	0	345,203
Depreciation and impairment loss	(85,883)	(22,112)	(657)	452	(108, 200)
Segment earnings, EBIT	188,073	47,358	1,120	452	237,003
Segment assets 2011	4,489,237	589,963	17,979	(497,160)	4,600,018
Shares in associated companies	21,657	5,515	349	(5,116)	22,406
Total assets 2011	4,510,894	595,478	18,328	(502,276)	4,622,424
Segment liabilities 2011	2,859,760	493,922	3,963	(396,533)	2,961,112
Total liabilities 2011	2,859,760	493,922	3,963	(396,533)	2,961,112
Investments	97,219	8,873	2,384	0	108,476
Operating segments year 2010					
Income from a third party	326,492	47,793	3,364	0	377,649
Income within the Group	13,293	57,513	6,810	(77,616)	0
Segment income	339,785	105,306	10,174	(77,616)	377,649
Segment operating expenses	(114,396)	(34,197)	(8,587)	77,616	(79,564)
EBITDA	225,389	71,109	1,587	0	298,085
Depreciation and impairment loss	(85,939)	(20,823)	(978)	482	(107,258)
Segment earnings, EBIT	139,450	50,286	609	482	190,827
Segment assets 2010	4,681,746	600,294	12,979	(479,392)	4,815,626
Shares in associated companies	21,032	445	382	0	21,860
Total assets 2010	4,702,778	600,739	13,361	(479,392)	4,837,486
Segment liabilities 2010	3,066,327	499,722	5,168	(378,053)	3,193,164
Total liabilities 2010	3,066,327	499,722	5,168	(378,053)	3,193,164
Investments	30,292	11,036	377	0	41,705

	23.	Salaries	and s	alary	related	expenses
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Total number of employees is specified as follows:	2011	2010
Average number of employees during the year, full-time equivalents	396	380
Full-time equivalent units at year-end	334	325

24. Total salaries of employees

Total salaries of employees are specified as follows:	2011	2010
Salaries	29,720	26,420
Pension premium payments	3,524	2,905
Defined pension benefit payments	1,295	1,262
Change in pension obligation	1,303	(456)
Other salary related expenses	3,461	2,998
	39,303	33,129
Salaries are divided as follows in the income statement:		
Energy production costs	12,713	11,911
Transmission costs	10,629	9,104
Other operating expenses	15,961	12,114
	39,303	33,129

Salaries of the Board of Directors, CEO, Deputy and Executive Directors are specified as follows:

Salaries of the Board of Directors of the parent company	82	72
Salaries of Boards of Directors of four subsidiaries	84	105
Salaries and benefits of the CEO of the parent company, Hördur Arnarson	179	175
Salaries and benefits of the former Deputy 2011 and the former CEO 2010	70	48
Salaries of seven Directors and the Deputy (2010: 7)	1,148	894
Salaries and benefits of the CEO (2010: 2) and five Man. Directors of subsid.	750	961

The number of Directors is stated as at year end. During the years 2010 and 2011, divisions of the parent company were increased by three and directors increased, therefore, by three. Directors were 6 in the year 2010 but 8 in the year 2011.

25. Financial income and (expenses)

Financial income and (expenses) are specified as follows:	2011	2010
Interest income	4,127	3,893
Interest expenses	(90,481)	(69,839)
Guarantee fee	(7,014)	(7,089)
Indexation	(21,179)	(8,147)
Capitalised interest costs	1,830	229
Total interest expenses	(116,844)	(84,847)
Realised foreign exchange difference	(14,150)	(17,992)
Unrealised foreign exchange difference	22,711	87,619
Total foreign exchange difference	8,561	69,627
Fair value changes in embedded derivatives	(93,197)	(55,583)
Fair value changes in other derivatives	6,959	(39,438)
Associated companies	(4,014)	(1,581)
Fair value changes of shares	(9)	(337)
Profit on the sale of shares	0	8
Total other financial income and (expenses)	(4,024)	(1,910)
Net financial income and (expenses)	(194,418)	(108,258)

Capitalised finance cost amounted to 3.1% of restricted cash in hydropower stations in construction and 8% of restricted cash in transmission under construction in the year 2011 (2010: 5.3%).

26. Income tax

,990) (207)	(8,331)
(207)	(1.71)
	(121)
0	2,092
L,061	(2,250)
0	(1,043)
,135)	(9,653)
,027)	(10, 948)
0	9,722
,902)	(10,398)
,061)	2,250
0	1,043
,990)	(8,331)
	2010
	72,916
	9,653
	82,569
	0 1,061 ,135) ,027) 0 ,902) ,061) 0 ,990) - - - - - - -

		2011		2010
Income tax acc. to the parent company's curr. tax rate	36.0%	15,331	32.7%	27,000
Effect of different tax rates within the Group	(4.5%)	(1,900)	(6.7%)	(5,516)
Effect of change in tax rate	0.0%	0	(14.4%)	(11,917)
Non-deductible items	3.6%	1,516	(0.9%)	(737)
Other items	2.8%	1,188	1.0%	823
Effective income tax	37.9%	16,135	11.7%	9,653

27. Property, plant, and equipment

Property, plant, and equipment is specified as follows:

Cost value	POWER STATIONS	TRANS- MISSION	COMMUNICAT. EQUIPMENT	OTHER ASSETS	TOTAL
Total value at 1/1/2010	4,827,835	524,865	10,310	68,928	5,431,938
Effect of exchange rate changes	0	46,018	900	1,986	48,904
Additions during the year	16,357	3,622	287	3,099	23,365
Moved to assets available for sale	0	0	(869)	75	(794)
Assets from construction	0	14,172	0	0	14,172
Sold and disposed of	0	0	0	(588)	(588)
Total value at 31/12/2010	4,844,192	588,677	10,628	73,500	5,516,997
Effect of exchange rate changes	0	(36,816)	(956)	(1,689)	(39,461)
Additions during the year	6,012	1,808	8,983	3,981	20,784
Moved to assets available for sale	0	0	0	(5,690)	(5,690)
Moved from other items	0	5,756	0	0	5,756
Sold and disposed of	0	(6,315)	(3,185)	(844)	(10,344)
Total value at 31/12/2011	4,850,204	553,110	15,470	69,258	5,488,042
Depreciation and impairment loss					
Total value at 1/1/2010	1,605,761	61,252	4,020	23,404	1,694,437
Effect of exchange rate changes	0	6,367	400	390	7,157
Depreciation of the year	84,200	18,008	943	2,520	105,671
Change in revaluation	0	0	533	0	533
Sold and disposed of	0	0	0	(534)	(534)
Total value at 31/12/2010	1,689,961	85,627	5,896	25,780	1,807,264
Effect of exchange rate changes	0	(6,372)	(224)	(390)	(6,986)
Depreciation of the year	84,387	19,331	645	2,475	106,838
Sold and disposed of	0	(818)	(3,315)	(579)	(4,712)
Total value at 31/12/2011	1,774,348	97,768	3,002	27,286	1,902,404
Book value					
1/1/2010	3,222,074	463,614	6,291	45,524	3,737,504
31/12/2010	3,154,231	503,050	4,732	47,720	3,709,732
31/12/2011	3,075,856	455,342	12,468	41,972	3,585,637

If subsidiaries had not revalued transmission and telecommunication systems, their book value would have been around USD 125 million lower at year end 2011 (2010: USD 140 million).

At year end, an impairment test was performed on the Company's assets. The result of the test did not show any indication of impairment.

Official assessment of fixed assets and insurance value

The official assessment of the Company's real estates amounted to USD 289 million at year end 2011. Insurance value of the Company's assets amounts to USD 3,948 million and emergency fund amounts to USD 813 million.

Assets in construction

Cost value	2011
Total value at 1/1/2011	3,699
Effect of foreign exchange rate changes	(161)
Moved from development costs	18,473
Additions during the year	55,628
Moved to property, plant and equipment	(5,756)
Total value at 31/12/2011	71,883

28. Intangible assets

Intangible assets are specified as follows:

Cost value	CAPITALISED DEVELOPMENT COST	WATER AND GEOTHERMAL RIGHTS	SOFTWARE	TOTAL
Total value at 1/1/2010	155,254	40,568	6,028	201,850
Effect of foreign exchange rate changes	1,783	0	260	2,043
Additions during the year	28,709	4,259	239	33,207
Addition upon acquisition of subsidiary	34,236	0	0	34,236
Moved to assets in construction during the year	(3,411)	0	0	(3,411)
Total value at 31/12/2010	216,571	44,827	6,527	267,925
Effect of foreign exchange rate changes	(4,705)	0	(209)	(4,914)
Additions during the year	27,079	0	249	27,328
Moved to assets in construction during the year	(18,957)	0	0	(18,957)
Sold and disposed of	(737)	0	0	(737)
Total value at 31/12/2011	219,251	44,827	6,567	270,645
Amortization and impairment loss				
Total value at 1/1/2010	56,988	0	3,341	60,329
Effect of foreign exchange rate changes	72	0	120	192
Amortization during the year	0	0	918	918
Impairment loss during the year	669	0	0	669
Total value at 31/12/2010	57,729	0	4,379	62,108
Effect of foreign exchange rate changes	(109)	0	(129)	(238)
Amortization during the year	0	0	625	625
Impairment loss during the year	736	0	0	736
Total value at 31/12/2011	58,356	0	4,875	63,231
Book value				
1/1/2010	98,266	40,568	2,687	141,523
31/12/2010	158,842	44,827	2,148	205,819
31/12/2011	160,895	44,827	1,692	207,415

29. The Group's depreciation and impairment

The Group's depreciation and impairment is specified as follows:	2011	2010
Power stations	84,387	84,200
Transmission	19,331	18,008
Telecommunication equipment	645	943
Other assets	2,475	2,520
Depreciation of assets in operation	106,838	105,671
Impairment loss on development cost	736	669
Amortisation of software	625	918
	108,200	107,258
The Group's depreciation and impairment is divided as follows by sectors:		
Energy production costs	84,914	84,752
Transmission costs	19,819	18,490
Other operating expenses	3,467	4,016

30. Derivative financial instruments

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

Assets:		
Embedded derivatives in electricity sales agreements	291,156	391,332
Aluminium hedges	36,946	28,752
Currency swaps	0	7,846
Interest rate swaps	0	1,613
Other derivatives	2,358	246
	330,460	429,789
Derivative financial instruments are divided as follows:		
Long-term component of derivative agreements	289,569	363,694
Short-term component of derivative agreements	40,891	66,095
	330,460	429,789
Liabilities:		
Embedded derivatives in electricity sales agreements	16,928	23,908
Aluminium hedges	13,010	13,507
Currency swaps	17,279	28,789
Interest rate swaps	46,292	35,972
Other derivatives	21,187	35,163
	114,696	137,339
Derivative financial instruments are divided as follows:		
Long-term component of derivatives	86,018	96,133
Short-term component of derivatives	28,678	41,206
	114,696	137,339

The accounting policy for embedded derivatives is discussed in note 49.

107,258

108,200

31. Shares in associated companies

		2011	
Shares in associated companies recognised according to the equity method within the Group are specified as follows:	SHARE	SHARE IN RETURN	BOOK VALUE
Farice ehf., Kópavogur, Iceland	28.9%	(4,126)	21,640
Netorka hf., Hafnarfjördur, Iceland	42.5%	47	416
Hecla SAS, France	29.4%	64	350
		(4,014)	22,406

		2010	
	SHARE	SHARE IN RETURN	BOOK VALUE
Farice ehf., Kópavogur, Iceland	26.7%	(1,756)	20,949
Netorka hf., Hafnarfjördur, Iceland	36.5%	73	529
Hecla SAS, France	29.4%	103	382
		(1,581)	21,860

32. Other long-term assets

Other long-term assets in the balance sheet are specified as follows:	2011	2010
Shares in other companies	106	54
Long-term receivables	0	89
	106	143

33. Landsvirkjun's subsidiaries

	2	Share
Landsvirkjun's subsidiaries are specified as follows:	2011	2010
Hraunaveita ehf., Reykjavík, Iceland	100.0%	100.0%
Icelandic Power Insurance Ltd., Bermuda	100.0%	100.0%
Landsnet hf., Reykjavík, Iceland	64.7%	64.7%
Landsvirkjun Power ehf., Reykjavík, Iceland	100.0%	100.0%
Orkufjarskipti hf. (previously Fjarski ehf.), Reykjavík, Iceland	100.0%	100.0%
Theistareykir ehf., Thingeyjarsveit, Iceland	96.7%	96.7%

34. Tax asset

Changes in the tax asset during the year is specified as follows:	2011	2010
Calculated tax asset at the beginning of the year	104,141	112,472
New subsidiary in the Group	0	1,044
Calculated income tax	(16,135)	(9,653)
Current income tax	207	121
Liability due to revaluation of fixed assets transferred to equity	0	(2,222)
Foreign exchange and translation difference due to tax asset	(1,061)	2,379
Deferred tax asset at year-end	87,151	104,141
The Company's deferred tax asset is specified as follows:		
Carry forward taxable loss	37,517	56,500
Non-current assets and intangible assets	133,922	161,050
Derivative financial instruments	(84,254)	(115,299)
Other items	(34)	1,891
Deferred tax asset at year-end	87,151	104,141

The Group's carry forward losses may be utilised for 10 years from when it is incurred.

Carry forward loss of the year 2006, usable until the year 2016	1,981	38,033
Carry forward loss of the year 2008, usable until the year 2018	86,439	110,728
Carry forward loss of the year 2009, usable until the year 2019	42,087	45,461
Carry forward loss of the year 2010, usable until the year 2020	914	598
Carry forward loss of the year 2011, usable until the year 2021	898	0
Carry forward loss at year end	132,319	194,820

Deferred tax asset is calculated on all carry forward loss where it is considered likely that it will be utilised against future taxable profit. Carry forward loss is recognised in Icelandic krona and, therefore, the exchange rate of the USD affects carry forward loss at each year end.

35. Inventories

Inventories are specified as follows:	2011	2010
Oil	38	314
Spareparts and consumables	4,058	4,371
	4,096	4,685

36. Accounts receivables and other receivables

Accounts receivables and other receivables are specified as follows:

Accounts receivables	42,428	51,431
Other short term receivables	27,813	34,871
Assets available for sale	4,836	5,784
	75,077	92,086

At year-end 2011, 97% of accounts receivables were under 30 days old (2010: 96%).

37. Cash and cash equivalents

Cash and cash equivalents are specified as follows:	2011	2010
Bank deposits	161,602	260,340
Market securities	68,340	5,192
	229,942	265,532

Restricted deposits in the amount of USD 8.3 million will be cashed out in September 2012.

38. Equity

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%. Eignarhlutir ehf. are owned by the State. The Company is an independent taxable entity. The Group's equity ratio at year end 2011 was 35.9% but was 34% at year end 2010.

39. 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.

40. Liabilities

Interest bearing long-term debt is specified as follows by currencies:

	2011		2010	
MATURITY DATE	AVERAGE INTERESTS	REMAINING BALANCE	AVERAGE INTERESTS	REMAINING BALANCE
2011-2034	4.1%	444,948	4.0%	444,387
		0	6.9%	66,490
2012-2022	0.5%	64,070	2.8%	108,387
2011-2028	1.5%	1,027,733	1.5%	1,208,957
2014-2016	11.4%	14,202	11.4%	14,334
2011-2033	2.5%	38,137	1.3%	62,213
2011-2026	3.0%	1,151,976	2.4%	1,034,730
		2,741,066		2,939,498
		(128,810)		(369,799)
		2,612,256		2,569,699
	MATURITY 2011-2034 2012-2022 2011-2028 2014-2016 2011-2033 2011-2026	MATURITY DATE AVERAGE INTERESTS 2011-2034 4.1% 2012-2022 0.5% 2011-2028 1.5% 2014-2016 11.4% 2011-2033 2.5% 2011-2026 3.0%	MATURITY DATE AVERAGE INTERESTS REMAINING BALANCE 2011-2034 4.1% 444,948 0 0 2012-2022 0.5% 64,070 2011-2028 1.5% 1,027,733 2014-2016 11.4% 14,202 2011-2033 2.5% 38,137 2011-2026 3.0% 1,151,976 2,741,066 (128,810) 2,612,256	Z011 Z011 Z0 MATURITY DATE AVERAGE INTERESTS RBAINING RBAINING 2011-2034 AVERAGE INTERESTS 2011-2034 4.1% 444,948 4.0% 0 6.9% 0 6.9% 2011-2022 0.5% 64,070 2.8% 2011-2028 1.5% 1,027,733 1.5% 2011-2033 2.5% 38,137 1.3% 2011-2026 3.0% 1,151,976 2.4% 2,741,066 (128,810) 2,612,256 1.28,810

Interest terms on loans are from 0.5-14.5%. Nominal interests for the period were on average approximately 3.48%, compared to approximately 2.57% the previous year.

Following the purchase by the State of shares in Landsvirkjun held by the city of Reykjavik and the town of Akureyri an agreement was reached stipulating that the city of Reykjavík and the town of Akureyri would provide a guarantee of collection together with the State for all of Landsvirkjun's obligations 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. According to the agreement, the State guarantees the city of Reykjavík and the town of Akureyri indemnity after 1 January 2012 with respect to a guarantee of obligations entered into before 1 January 2007. The Company's payments due to guarantees for long-term loans are calculated according to Regulation no. 237/1998.

41. Current maturities of long-term debt

According to loan agreements, the current maturities of long-term debt

are as follows:	2011	2010
2011	-	369,799
2012	128,810	240,900
2013	141,589	154,438
2014	163,324	156,060
2015	187,858	247,522
2016	251,023	-
Later	1,868,462	1,770,779
	2,741,066	2,939,498

42. 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 23.2 million at year end 2011 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 the 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 obligation is specified as follows:					2010
Balance at 1/1				23,442	21,978
Expensed during the year				2,462	581
Payments during the year				(1,159)	(1,037)
Effect of foreign exchange rate differences				(1,507)	1,920
Balance at 31/12				23,238	23,442
Pension fund obligation, 5 year statem:	2011	2010	2009	2008	2007
Present value of the obligation	23,238	23,442	21,978	22,118	38,153

43. Obligation due to demolition

Change in the obligation due to demolition is specified as follows:	2011	2010
Balance at 1/1	6,541	4,663
Recognised in the income statement	(486)	1,668
Decrease in obligation	0	(268)
Effect of foreign exchange rate differences	(382)	478
Balance at 31/12	5,673	6,541

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 the useful life. In return, an obligation has been written up among long-term liabilities. A change in the obligation is recognised in the income statement amounting to the discounted value in addition to depreciation of the demolition cost and foreign exchange rate difference.

44. Accounts payable and other payables

Accounts payable and other payables are specified as follows:

Accounts payable	27,648	30,993
Accrued interest	26,952	27,703
Other short term liabilities	20,788	27,648
	75,388	86,344

45. Related parties

Definition of related parties

Associated companies, Boards of directors, key management and companies owned by them are among the Company's related parties.

Transactions with related parties		
Expenses		
Associated companies	7	6

Related party transactions are an insignificant part of the Group's operation.

46. Cash flow

Cash flow from operation is an indicator for the Company's ability to meet its payment obligations. Following, operating activities are presented according to the direct method:

Operating activities

Cash received from customers	441,595	369,842
Cash expenses	(87,863)	(69,399)
Cash flow from operation excluding interest	353,732	300,443
Interest income received	4,847	3,611
Interest expenses and foreign exchange difference paid	(91,407)	(74,459)
Cash flow from operating activities	267,172	229,595

47. Risk management

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 evaluating 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

Decisions and supervision of how hedging is implemented are entrusted to a risk management committee. The risk management committee consists of the CEO, his deputy and the CFO. The CEO is the chairman of the risk management committee. The Head of Risk Management is responsible for risk management on a daily basis.

The objectives of risk management are to analyse, manage, and monitor Landsvirkjun's risks in order to stabilise operating return by reducing operating fluctuations. Landsvirkjun's risk management strategy defines a benchmark in each risk category with respect to hedging limits. Financial risk is divided into market risk, liquidity risk and counterparty risk. The Company's market risk consists mainly of three risk categories:

- > Risk due to fluctuations in world market price of aluminium
- > Interest rate risk due to the Company's liabilities
- > Foreign exchange risk due to liabilities and cash flow

48. Financial risk

In the year 2011, Landsvirkjun's financial risk was systematically reduced.

During the year, Landsvirkjun entered into agreements in order to hedge against currency and aluminium price risks and its access to derivative transactions has improved. There is currently good balance between assets, liabilities and payment flow and the Company's overall risk is in accordance with its benchmarks.

New long-term borrowings and settlement of short-term loans has extended the loan terms for the company's loan portfolio. Weighted average loan term of the loan portfolio was 7.03 at year end 2010 but 7.6 years at year end 2011.

Positive cash flow and favourable borrowings have ensured continued strong liquidity for the Company. At year end 2011, the Company signed an agreement on a Revolving Credit Facility in the amount of USD 200 million and ISK 10,500 million. Both Revolving Credit Facilities have a three year term with the possibility of extending the term for one year twice. Furthermore, undrawn long-term loans amount to USD 130 million. Relatively low debt burden, strong liquidity, and access to loans secures the Company's liquidity until year end 2013.

49. Aluminium price risk

The Company is exposed to substantial risk due to possible aluminium price fluctuations as about half of its income is linked to the aluminium price. The Company has thus entered into derivative agreements in order to secure its income base and reduce fluctua-

tions. Such agreements consist in most cases of fixing aluminium price at a certain level. The Company, therefore, can lose income if the 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 for next year and proportionally less over the next 10 years but is not limited by minimum hedges. At year end 2011, 60% of 2012 cash flow has been hedged. For the years 2013 and 2014 there are minor hedges. At the end of December 2011, fair value of the hedges in question was positive by USD 23.9 million but the agreements are effective over the next three years.

The accompanying tables show fair value changes of aluminium hedges due to changes in aluminium prices and/or interest rates. The amounts are in USD thousand before taxes.

	Alum	ninum Price			Al	uminum Pric	e
2011	-10%	0%	10%	ទួ 2010	D -10%	0%	
-1%	6,737	136	(7,252)	-1%	16,401	1,996	(
0%	6,553	-	(7,332)	%0 Gres	14,514	-	(
1%	6,372	(134)	(7,410)	1 %	12,639	(1,981)	(

Embedded derivatives

Landsvirkjun has defined the part of electric power sales and purchase agreements related to aluminium price as embedded derivatives, which are recognised in the Company's financial statements. Embedded derivatives in electric power sales agreements are capitalised in the balance sheet at fair value on the reporting date and in a comparable way electric power purchase agreements are charged. Fair value changes of the agreements during the year are recognised in the Company's income statement among financial income and expenses.

The fair value of embedded derivatives is specified as follows:	2011	2010
Fair value of embedded derivatives at the beginning of the year	367,424	423,007
Fair value changes during the year	(93,197)	(55,583)
Fair value of embedded derivatives at year end	274,227	367,424
Division of embedded derivatives is specified as follows:		
Long term components of embedded derivatives	258,107	322,954
Short term component of embedded derivatives	16,120	44,470
Total embedded derivatives	274,227	367,424

The following tables show fair value changes of embedded derivatives in the case of changes in aluminium prices and/or interest rates. The amounts are in USD thousand before taxes.

		Alı	uminum Pric	e
tes	2011	-10%	0%	10%
t rai	-1%	(119,403)	15,770	151,001
eres	0%	(128,037)	-	128,515
l	1%	(136,522)	(14,868)	107,325

	Aluminum Price						
es	2010	- 10%	0%	10%			
t rai	-1%	(122,773)	17,634	156,327			
eres	0%	(133,774)	-	132,060			
ľ	1%	(144,224)	(16,705)	109,105			

The main assumptions that Landsvirkjun uses in the evaluation of embedded derivatives are as follows:

Fair value of the agreements is calculated on the basis of forward price of aluminium, as disclosed in the LME stock exchange, discounted at USD zero-coupon rates according to Bloomberg.

The management's opinion is that aluminium price expectations in ten years will reflect the evaluation of Landsvirkjun's management as when the agreements were made and therefore fair value changes will not arise after active market. Calculations are therefore based on the maximum time length of official information on aluminium prices, or 123 months.

The calculations are limited to the revision time of electric power sales agreements in terms of time. The time length can though never be more than the aforementioned 123 months.

According to provisions on energy buyers' purchase obligation the calculation is based on a secured minimum purchase of 85%.

50. Foreign exchange risk

Foreign currency risk is the risk of loss due to unfavourable changes in foreign exchange rates. Landsvirkjun's foreign exchange risk is due to payment flow, assets and liabilities in addition to all general transactions in other currencies than the functional currency.

The Company's functional currency is the USD and therefore a foreign exchange risk arises from the net cash flow and opening balance in currencies other than the USD. The Company's income flow is mainly in USD. Other income is in ISK and NOK but foreign exchange risk due to those currencies is limited due to netting in the cash flow in ISK and income in NOK is relatively low. Currency risk due to amortisation and interest payments in EUR over the next years has been limited with derivative agreements. Risk management has the authority to hedge foreign currency cash flows against the functional currency for up to three years in advance with forward agreements and options.

The Company's reporting risk related to exchange rate changes arises mainly due to its debts in EUR, which are mainly long-term loans. There is also limited risk related to the JPY, CHF, and GBP due to outstanding loans. The open balance in the loan portfolio against the USD is around 24% of assets. The following table shows Landsvirkjun's open balance in currencies other than the functional currency.

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

2011	EUR	ISK	JPY	OTHER CURRENCIES
Accounts receivables and other receivables	491	14,009	0	2,470
Restricted deposits	0	8,251	0	0
Cash	2,957	93,447	438	6,781
Derivatives	518,361	0	(49,981)	0
Interest bearing liabilities	(1,027,733)	(444,948)	(38,137)	(78,272)
Accounts payable and other payables	(4,979)	(51,842)	(803)	(1,509)
Risk in balance sheet	(510,903)	(381,083)	(88,483)	(70,530)

2010	EUR	ISK	JPY	OTHER CURRENCIES
Accounts receivables and other receivables	200	24,420	0	5,471
Cash	4,785	36,861	380	4,617
Derivatives	672,039	43,459	(25,431)	0
Interest bearing liabilities	(1,208,957)	(510,787)	(62,213)	(122,721)
Accounts payable and other payables	(4,482)	(65,806)	(876)	(1,898)
Risk in balance sheet	(536,415)	(471,853)	(88,140)	(114,531)

Exchange rate of the main currencies against the USD, (USD/currency) for the years 2011 and 2010 is specified as follows:

	Avera	Average rate		Rate at year end	
	2011	2010	2011	2010	
EUR	0.72	0.75	0.77	0.75	
GBP	0.62	0.65	0.65	0.64	
CHF	0.88	1.04	0.94	0.94	
JPY	79.59	87.63	77.40	81.35	
NOK	5.61	6.04	6.01	5.85	
ISK	116.07	122.04	122.71	115.05	

Sensitivity analysis

The strengthening of the USD by 10% against the following currencies, would have increased the Group's profit and equity by the following amounts after 36% income tax. The analysis is based on that all variables, especially interest rates, remain unchanged. Sensitivity to changes in ISK exchange rate has been updated for 2010 to include ISK netting due to subsidiaries with reporting currency ISK.

	Profi	t after tax
	2011	2010
EUR	24,549	41,485
ISK	(1,402)	(922)
JPY	5,663	4,234

The weakening of the USD by 10% against the aforementioned currencies would have the same effect in the opposite direction, provided that all other variables would remain unchanged.

The fair value of currency swaps was negative by USD 17.3 million at the end of December 2011. The underlying principal amount is USD 32.4 million. The fair value of currency options was negative by USD 18.8 million and the underlying principal amount was approx. USD 658,2 million.

51. Interest rate risk

Landsvirkjun faces interest rate risk as the Company has interest bearing assets and liabilities. The Company's liabilities carry both fixed and floating interest rates and interest rate derivatives are used in order to hedge against risk. Interest bearing financial liabilities are higher than interest bearing financial assets and the Company's risk consists, therefore, of possible increase in interests and increased interest expenses.

At year end 2011, the proportion of loans with floating interest rates was 73% compared to 75% at year end 2010. Changes in interest rate by one percent would have led to a change in interest expenses by USD 20 million in the year 2011 (USD 22 million in the year 2010). The Company's financial instruments with fixed interests are not sensitive to interest rate changes. At year end 2011, the estimated market value of the Company's long-term liabilities was USD 122 million higher than their book value (USD 196 million lower in the year 2010). At year end the interest rate profile of the Group's interest-bearing financial instruments was as follows:

Financial instruments with fixed interests	2011	2010
Financial liabilities (75	51,052)	(734,875)
(7!	51,052)	(734,875)
Financial instruments with floating interests		
Financial assets 2	238,193	265,621
Financial liabilities (1,9)	90,014)	(2,204,624)
(1,75	51,821)	(1,939,003)
Derivatives		
Embedded derivatives 2	274,227	367,424
Other derivatives (!	58,463)	(74,973)
2	215,764	292,451

Landsvirkjun has to a limited extent entered into interest rate swaps, which are aimed at fixing interest rates and reducing the Company's risk exposure. The agreements are not specified as hedges but fair value changes of these agreements are recognised in the income statement. At the end of December 2011, the fair value of interest rate swaps was negative by USD 46.3 million and the underlying principle amounted to USD 185 million. The following tables show the effect of changes in interest rates on fair value of the derivatives in USD thousand before tax.

	Interest Rates				Interest Rates				
11	-0.2%	-0.0%	1.0%	2.0%	10	-0.2%	-0.0%	1.0%	2.0%
20	(1,306)	-	5,717	10,171	20	(1,150)	-	4,890	8,480

Interest rate changes in the US have considerable effect on the value of embedded derivatives. Sensitivity analysis of embedded derivatives at year end is included in note 49, which states the effect interest rates and aluminium prices have on embedded derivatives in the Company's electric power agreements.

52. Liquidity risk

Liquidity risk consists of risk of losses should the Company not be able to meet its obligations at maturity date. The company limits liquidity risk with effective liquidity management consisting in ensuring that there is sufficient cash flow at each time in order to be able to meet with the company's obligations. In order to limit such risk, the Company's liquidity balance is monitored and the emphasis is placed on having a sufficient cash position and access to Revolving Credit Facilities. The Company's cash and cash equivalents amounted to USD 230 million at year end 2011 but when taken into account undrawn credit facilities (USD 200 million USD and ISK 10,500 million) and undrawn long-term loans in the amount of USD 130 million the company has access to a total of approx. USD 646 million. Taken into consideration cash flow from operation the Company believes that access to liquid assets is ensured until year end 2013.

In order to ensure access to capital and maintain flexible funding possibilities, Landsvirkjun has used different types of funding. In past years, financing has mostly taken place through a Euro Medium Term Note Programme (EMTN). At year end, the balance of loans under the EMTN was USD 1.86 billion but the total amount that the Company can borrow under the programme is USD 2.5 billion.

The Company's risk related to refinancing is reduced with an even maturity profile of outstanding loans. Weighted average life of the loan portfolio was 7.6 years at year end and the proportion of loans with maturity within 12 months was 4.7%.

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

2011	BOOK VALUE	CONTRACTUAL CASH FLOW	WITHIN ONE YEAR	1 – 2 YEARS	2 – 5 YEARS	MORE THAN 5 YEARS
Non-derivative financial instr	uments					
Cash	229,942	229,942	229,942			
Restricted deposits	8,251	8,251	8,251			
Short-term receivables	75,077	75,077	75,077			
Long-term loans	(2,741,066)	(3,384,434)	(173,087)	(200,559)	(808,248)	(2,202,540)
Short-term payables	(75,388)	(75,388)	(75,388)			
	(2,503,184)	(3,146,552)	64,795	(200,559)	(808,248)	(2,202,540)
Derivative financial instrumer	its					
Currency swaps	(36,107)	(23,946)	(6,348)	(17,598)		
Interest rate swaps	(46,292)	(45,712)	(3,904)	(4,390)	(35,536)	(1,882)
Aluminium derivatives	23,936	28,910	15,801	7,483	5,626	
Embedded derivatives	274,227	300,680	16,187	20,666	83,799	180,028
	215,764	259,932	21,736	6,161	53,889	178,146

2010	BOOK VALUE	CONTRACTUAL CASH FLOW	WITHIN ONE YEAR	1 – 2 YEARS	2 – 5 YEARS	MORE THAN 5 YEARS
Non-derivative financial instruments						
Cash	265,532	265,532	265,532			
Short-term receivables	92,086	92,086	92,086			
Long-term loans	(2,939,498)	(3, 439, 107)	(443,134)	(293,037)	(723,681)	(1,979,256)
Short-term payables	(86,344)	(86,344)	(86,344)			
	(2,668,224)	(3,167,833)	(171,860)	(293,037)	(723,681)	(1,979,256)
Derivative financial instrum	ents					
Currency swaps	(50,338)	(43,640)	(10,908)	(18,711)	(14,021)	
Interest rate swaps	(34,359)	(32,165)	(4,205)	(4,209)	(14,147)	(9,604)
Forward agreements	(5,522)	(4,905)	(4,905)			
Aluminium derivatives	15,246	20,034	14,892	(2,191)	7,333	
Embedded derivatives	367,424	416,613	44,584	43,576	127,710	200,743
	292,451	355,937	39,458	18,465	106,875	191,139

53. 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. 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 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 the credit rating is not available, a special insurance agreement is made between parties limiting Landsvirkjun's risk. Before energy 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:	2011	2010
Derivative financial instruments	330,460	429,789
Restricted deposits	8,251	0
Other long-term receivables	0	89
Accounts receivables and other receivables	75,077	92,086
Cash	229,942	265,532
	643,730	787,496

54. Fair value

Comparison of fair value and book value

	20	11	201	LO
The fair value and book value of financial assets and liabilities in the balance sheet is specified as follows:	BOOK VALUE	FAIR VALUE	BOOK VALUE	FAIR VALUE
Derivative agreements	215,764	215,764	292,451	292,451
Other long-term assets	106	106	143	143
Accounts receivables and other short-term receivables	75,077	75,077	92,086	92,086
Restricted deposits	8,251	8,251	0	0
Cash and cash equivalents	229,942	229,942	265,532	265,532
Interest bearing liabilities	(2,741,066)	(2,863,013)	(2,939,498)	(2,743,713)
Accounts payable and other short term payables	(75,388)	(75,388)	(86,344)	(86,344)
	(2,287,314)	(2,409,261)	(2,375,630)	(2,179,845)

Note 14 includes further information on measurement of fair value.

Interest rates in the evaluation of fair value

Inter bank rates and swap rates were used without premium for the relevant currencies as at the reporting date when discounting the estimated cash flow.

Interest rates are specified as follows:	2011	2010
Embedded derivatives in electric power agreements	0.56-2.09%	0.11-4.00%
Interest bearing long term liabilities	0.09-2.75%	0.30-3.60%

Fair value classification:

The table here below shows financial instruments recognised at fair value according to price evaluation method. The methods are defined as follows:

Level 1: available price in an active market for the same type of assets and liabilities. Level 2: assumptions based on other variables than available price in an active market (level 1) that can be obtained for assets and liabilities, directly (for example price) or indirectly (derived from prices).

Level 3: assumptions for fair value of assets and liabilities are not based on market data.

2011	Level 2	Level 3	Total
Embedded derivatives		274,227	274,227
Other derivatives	(58,463)		(58,463)
Shares in other companies		106	106
	(58,463)	274,333	215,870
2010			
Embedded derivatives		367,424	367,424
Other derivatives	(74,973)		(74,973)
Shares in other companies		54	54
	(74,973)	367,478	292,505

Classification of financial assets between the levels remains unchanged from the previous year. Fair value changes of financial assets at level 3 amounted to USD 93.2 million expensed in the year 2011 (USD 55.9 million in the year 2010) and is recognised among financial income and expenses.

55. Classification of financial instruments

According to the International Financial Reporting Standard IAS 39 Financial instruments: recognition and measurement, financial assets and liabilities are divided into defined groups. The classification affects how the evaluation of the relevant financial instrument is measured. Those groups to which the Company's financial assets and liabilities pertain and their basis for evaluation are specified as follows:

- > Trading assets and liabilities are recognised at fair value through profit and loss.
- > Financial assets and liabilities are denominated at fair value and recognised at fair value through profit and loss.
- > Loans and receivables are recognised at amortised cost.
- > Other financial liabilities are recognised at amortised cost.

Financial assets and liabilities are divided into the following groups of financial instruments:

	TRADING ASSETS AND LIABILITIES	FINANCIAL ASSETS AND LIABILITIES AT FAIR VALUE THROUGH P & L	LOANS AND RECEIVABLES	FINANCIAL LIABILITIES RECOGNISED AT AMOR- TISED COST	BOOK VALUE
2011					
Derivatives	330,460				330,460
Shares in other companies		106			106
Accounts receivables and other receivables			75,077		75,077
Restricted deposits			8,251		8,251
Cash			229,942		229,942
Total assets	330,460	106	313,270	0	643,836
Interest bearing liabilities				2,741,066	2,741,066
Derivatives	114,696				114,696
Accounts payable and other payables			75,388		75,388
Total liabilities	114,696	0	75,388	2,741,066	2,931,150
2010					
Derivatives	429,789				429,789
Shares in other companies		54			54
Long-term receivables			89		89
Accounts receivables and other receivables			92,086		92,086
Cash			265,532		265,532
Total assets	429,789	54	357,707	0	787,550
Interest bearing liabilities				2,939,498	2,939,498
Derivatives	137,339				137,339
Accounts payable and other payables			86,344		86,344
Total liabilities	137,339	0	86,344	2,939,498	3,163,181

56. Corporate governance

Organisation

Landsvirkjun's operation is subject to Act no. 42/1983, with later amendments. The Board of Directors of Landsvirkjun has established working procedures for the Board for further compliance with the law.

Values and social responsibility

Landsvirkjun's employees hold progress, prudence, and trust as their guiding principles. Landsvirkjun's policy on social responsibility was approved and presented in November 2011. The policy aims at increasing the Company's positive effect on stakeholders and minimise the negative effect on the environment and community. The policy sets the basis for the Company to obtain its goal of becoming a leading energy company in the field of renewable energy and aims at Landsvirkjun taking note of the economy, environment, and community in its operation.

The Board of Directors

According to law, the Board of Directors of Landsvirkjun is appointed by the Minister of Finance for a one year term at a time and it is responsible for the financial matters and operation of the Company. The Board of Directors of Landsvirkjun consists of the following Directors: Bryndís Hlödversdóttir, President of the University of Bifröst, who is also the Chairman of the Board, Sigurbjörg Gísladóttir, chemist at the Environment Agency of Iceland and vice Chairman of the Board, Ingimundur Sigurpálsson, CEO of Íslandspóstur, Arnar Bjarnason, Managing Director of Reykjavík Capital and Stefán Arnórsson, Professor at the University of Iceland.

Audit committee

Chapter IX of Act no. 3/2006 on financial statements, cf. Act no. 80/2008 applies to the audit committee of Landsvirkjun. The working procedures for the committee are established by the Company's Board of Directors for further compliance with the law. The audit committee of Landsvirkjun exercises advisory functions for the Board and operates on the basis of the Board's authorisation. The committee has no executive power. The Company's audit committee consists of three individuals; two board members, Ingimundur Sigurpálsson and Sigurbjörg Gísladóttir. Stefán Svavarsson, Professor at the University of Bifröst is the Chairman of the committee.

CEO, Deputy and Executive Directors

The Board of Directors of Landsvirkjun hires a CEO. The CEO of the Company is Hördur Arnarson. The Board of Directors and the CEO exercise executive power in the Company. Landsvirkjun's Deputy is Ragna Árnadóttir. The Deputy's roles is to handle collective matters of the Company in addition to policy development, such as ensuring good corporate governance. At the end of the year the Company's executive directors were seven.

Finance division

The Company's CFO is Rafnar Lárusson. The role of the division is to create basis for profitable operation and contribute to maximum results in all units of the Group.

Project planning division.

The Head of project planning division is Pálmar Óli Magnússon. The role of the division is to manage Landsvirkjun's power plant constructions from development to fully operative power plants. The division monitors costs, quality and work progress and ensures that projects are delivered fully operative in accordance with the Company's presumptions, estimates, and needs.

Marketing and business development division

Head of marketing and business development is Magnús Bjarnason. The role of the division

is to maximise the Company's revenue with the analysis of different business opportunities, product development, promotion, and sales of products and services, and negotiations of new power contracts and follow up on the execution of existing contracts.

Energy division

Director of the energy division is Einar Mathiesen. The role of the division is to guarantee that energy production and distribution is in accordance with agreements with customers in a safe and an efficient way.

Human resource division

Head of human resource is Sigthrúdur Gudmundsdóttir. The role of human resource division is the development of Landsvirkjun's human resources for the benefit of both the employees and the company. The division ensures that the necessary knowledge and skills are available at each time in order for the Company to be able to meet with its role.

Information division

Head of information is Bergur Jónsson. The role of the division is to provide other divisions of the Company with services in gathering, planning, processing, and sharing information so that the relevant division can fulfil its role and to ensure safety in solutions concerning information technology.

Research and development division

Head of research and development is Óli Grétar Blöndal Sveinsson. The role of the division is to manage the preparation of new power projects and to conduct research and monitoring of the existing power system. The division shall ensure the economic implementation of new power projects, increase flexibility and manage innovation, and to have a long-term vision of utilisation of energy resources.

57. Other issues

On 22 August 2007, a special evaluation committee issued a ruling on a settlement amount for water rights due to Kárahnjúkar power station and the division between owners. The total amount amounted to USD 13 million. Most owners of water rights in Jökuldalur and three in Fljótsdalur 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 Austurland on 15 January 2008. The parties involved are owners of one third of the water rights. The District Court of Austurland ruled in the matter on 25 January 2011 and confirmed the conclusion of the evaluation committee, and that the Company shall pay general interests and interests on arrears. Settlement to the holders of water rights has been made on the basis of the ruling, but settlement with the State has not been concluded. The case has now been appealed to the Supreme Court.

The Company has capitalised water rights amounting to USD 44.8 million, whereof water rights related to Kárahnjúkar weigh the most. With law no. 58/2008 on the change of law on the resource and energy sector, which entered into effect on 1 July 2009, restrictions are set for the State, municipalities, and companies owned by them on the endorsement of the ownership of water rights for waters containing harnessable power in excess of 10 MW. The State and municipalities are allowed, however, to give to the companies owned by them the right of use of the resources for up to 65 years at a time. The conclusion of a committee appointed on the basis of the law is now available but the State has yet not decided how these issues will be managed in the future.

58. Subsequent events

Nothing has come forth after the balance sheet date, which would require adjustments or changes to the financial statement for the year 2011.

Landsvirkjun.'s subsidiaries and other companies

Landsvirkjun partly- or wholly-owns six subsidiaries. These companies are related to the core operations of Landsvirkjun and in all cases specialise in sectors which derive from energy production, such as the transmission of electricity and management of electrical systems, participation in foreign energy projects, telecommunications services, energy research, and insurance for power stations.

Orkufjarskipti hf. At the end of 2011, Orkufjarskipti hf. took over the operations of Fjarski ehf., which had been founded in 2000 to operate Landsvirkjun's telecommunications systems. Landsnet hf. is a 50% owner of Orkufjarskipti hf. in a joint partnership with Landsvirkjun, contributing its own telecommunications assets. At the same time, the company was changed from a private limited company to a limited company, its name changed to Orkufjarskipti hf., its capital increased and a new board elected.

Hraunaveita ehf. took on specific tasks in connection with the Kárahnjúkar Project, but now has no operations. It is wholly-owned by Landsvirkjun.

Icelandic Power Insurance Ltd. A captive insurance company, which handles insurance and re-insurance for Landsvirkjun's power stations and, in addition, supervises insurance for construction projects. It is wholly-owned by Landsvirkjun.

Landsnet hf. operates under the Electricity Act, which was passed in Parliament in the spring of 2003. Its role is to operate Iceland's electricity transmission system and administer its system operations. It operates on the basis of a special licence and is subject to surveillance by National Energy Authority, which decides the income framework on which the company's tariff is based. Landsvirkjun has a 64.7% holding in Landsnet.

Landsvirkjun Power ehf. The role of Landsvirkjun Power ehf., which began operating at the beginning of 2008, is to use Landsvirkjun's knowledge to conduct consultancy projects in matters related to energy on the international market. It is wholly-owned by Landsvirkjun.

Theistareykir ehf. was founded in April 1999 for the purpose of carrying out energy research at Theistareykir, and for preparing the harnessing of energy at that location. Landsvirkjun owns a 96.7% holding in Theistareykir.

Other companies

Landsvirkjun is also related to the following companies, either as a minority shareholder or as a collaborator.

Badfélag Mývatnssveitar hf. Landsvirkjun owned 15.1% of the active capital in Badfélag Mývatnssveitar at the end of 2011.

DMM lausnir ehf. is a software and consultancy company which specialises in the production of the information systems, DMM and Inspector.is, and in consultancy in connection with customers' use of the systems. Landsvirkjun owns 16.6% of DMM.

Farice ehf. was founded in September 2002 for the purpose of preparing and operating the FARICE and DAN-ICE submarine cables. Landsvirkjun owns 28.9% of the company.

Íslensk orka ehf. conducts operations related to the harnessing and use of energy. Landsvirkjun has a 27.2% holding in the company.

Netorka hf. is a joint-measurement data and settlement company that serves the Icelandic electricity market. It handles the settlement and processing of sales measurements and keeps track of changes in the transactions of electricity sellers and buyers. Landsvirkjun owns 3.8% of the company.

Neydarlínan ohf. operates the emergency number 112. It also operates Vaktstödvar siglinga and telecommunications station at Gufunes, and owns and operates the telecommunications company, The National Tetra Service. Landsvirkjun owns 8% of the company.

NýOrka hf. is a platform for co-operation between the energy companies and research institutions. NýOrka's aim is to lead projects that test new hydrogen technology and to promote the use of hydrogen in the Icelandic community. Landsvirkjun owns 12% of the company.

Subsidiaries













Orkufjarskipti hf.

Icelandic Power Insurance Ltd.

Landsnet hf.

Landsvirkjun Power ehf.

Theistareykir ehf.

Other companies

Badfélag Mývatnssveitar	15.1%
DMM lausnir	16.6%
Farice	28.9%
Íslensk orka	27.2%
Netorka	3.8%
Neydarlínan	8%
NýOrka	12%

Landsvirkjun's publications 2011

Calls for tender

Bjarnarflagsvirkjun og Þeistareykjavirkjun : NAL-60 : ráðgjafarþjónusta	LV-2011/043
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Búðarháls HEP : BUD-34 : gate equipment : schedules	LV-2011/084
Búðarháls HEP : BUD-34 : gate equipment : drawings	LV-2011/084
Búðarháls HEP : BUD-34 : gate equipment : employer's requirements	LV-2011/084
Búðarháls HEP : BUD-34 : gate equipment : tender procedures	LV-2011/084
Búðarháls HEP : generator step-up transformer	LV-2011/109
Búðarhálsvirkjun : BUD–65 : eftirlit	LV-2011/014
Búðarhálsvirkjun : BUD–08 : rekstur mötuneyta og vinnubúða	LV-2011/002
Cisco búnaður : útboðsgögn	LV-2011/101
Fljótsdalsstöð : OAK–100 : Hálslón : rofvörn við sandgryfjur	LV-2011/040
Hólmsárvirkjun : HMV–01 : jarðfræðirannsóknir	LV-2011/033
Hrauneyjafoss hydro power plant : Prequalifica- tion documents : generator step up transformer	LV-2011/075
Hrauneyjafoss hydro power station : Contract documents : generator step up transformer	LV-2011/051
Kárahnjúkavirkjun : KAR–21a : Jökulsárgöng : hreinsun og viðgerðir 2011	LV-2011/039
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Laxárstöð II : hydropower station : renewal of penstock	LV-2011/021

Reports on environmental issues

Áhrif gruggs á vatnalífríki Glúmsstaðadalsár : niðurstöður vöktunar 2010	LV-2011/066
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Hálslón 2010 : lónströnd og aðgerðir	LV-2011/078
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