

Embrace the Future





Annual Report 2021

Summary of Activities

About the Annual Report 2021

Landsvirkjun's Annual Report has been published electronically since 2013 and has only been available on the Company's website since 2014. The Climate Account and the Sustainability Report, which have been published separately in the last years, are included in the Annual Report 2021 for the first time. The objective is to highlight these core issues and provide a more convenient access to information about Landsvirkjun's operations, for stakeholders.

The Annual Report 2021 is published in accordance with the international standard GRI, Global Reporting Initiative (Core option). A special reference table for GRI indicators provides information on where each indicator can be found in the Annual Report. The reference table is on the Annual Report overview page: landsvirkjun.is/annualreport2021.

Release Date

April 1, 2022

In general, the Annual Report addresses matters concerning Landsvirkjun, the parent company, and is based on information which is readily available. However, the financial disclosure covers the Group and its subsidiaries (Landsnet (TSO), Landsvirkjun Power, Landsvirkjun Power Insurance, and the telecommunications company Orkufjarskipti).

In addition to the main document, which you are currently reading, separate documents for the Financial Statement and data from the Climate Account are available. These documents can be accessed at landsvirkjun.is/annualreport2021, where highlights from the Annual Report are posted.

The content of Landsvirkjun's Annual Report corresponds with the Company's policy. Landsvirkjun's role is to maximise the value of the renewable energy resources it has been entrusted with, in a sustainable and efficient manner. Landsvirkjun's vision is a sustainable world, powered by renewable energy.

The Annual Report is based on Landsvirkjun's five policies:

- › Leadership in a sustainable development
- › Efficient electricity generation and development
- › Excellent customer service
- › Progressive and sought-after workplace
- › Exemplary in open communication and collaboration

Table of Contents

Key Figures	5
Landsvirkjun in a Nutshell	6
Chairman's Statement	7
CEO's Statement	8
Landsvirkjun's Policy and Governance	9
Landsvirkjun's Policy	9
Sustainability Principles	11
Procedures – Governance Methodology	13
_____ Risk Management in an Ever-Changing Environment	16
Operating Performance 2021	17
Income Statement	17
Balance Sheet and Financial Ratio	19
Cash Flow Statement	21
Áhersla á tryggt aðgengi fjármagns og sjálfbærni	22
Economic Impact from Landsvirkjun's Operations in Iceland	23
_____ Economic Impact	23
Leadership in Sustainable Development	24
Climate Issues are Energy Issues	24
_____ Climate- and Energy Policy	25
_____ Climate- and Environment Policy Key Figures	25
_____ Avoided Emissions Increase by 15% Year on Year	26
Electricity Generation with Negligible Carbon Footprint	27
Climate Account 2021	28
Carbon Footprint	29
GHG Emissions	31
Carbon Sequestration	33
Carbon Neutral by 2025	35
Landsvirkjun's Climate Action Plan	36
Landsvirkjun at the Forefront Against Climate Change	38
Inteplay Between Nature and Utilisation	39
Conservation Areas	39
Species on Red Lists	39
Protected and Reclaimed Habitat	40
Aeolian Deposition Defense	40
Riverbank Erosion Control and Repairs	40
Vegetation Reclamation	40
Environmental Incidents	41

Green Operations	42
Efficient Energy Generation and Development	44
Electricity Generation 2021	45
Power Stations Utilisation and Overview	45
Sustainable Use of Natural Resources	48
Monitoring and Research of Natural Resources	48
The Water Year 2020–2021	48
Geothermal Reservoirs 2021	48
Power Stations Operations	49
How to power a sustainable Future?	51
Excellent Customer Service	53
The Electricity Market	54
Large Industrial End-Users	55
Competitive Advantage Strengthened	57
General Market	57
Business Development and Innovation Focus	60
Hydrogen and Electric Fuel – Strong Position for the Energy Transition	60
Data centres – Suberb Conditions for Clever Solutions	61
Food Production – Energy, Technology, and a Dash of Genius	62
Batteries – Electrifying Value Creation	63
Progressive and Sought-After Workplace	64
Landsvirkjun's Board of Directors	65
Landsvirkjun's Executive Board of Directors	66
The People	68
Mental and Physical Health	69
Safety at the Workplace	69
Information Dissemination from Day One	69
Rights and Benefits	70
Equal Opportunity	70
Exemplary in Open Communication and Collaboration	71
Increased Importance on Environmental- and Social Issues	72
Projects in local Communities	72
Social Collaboration Projects on Energy Innovation	72
Grants for research and Social Issues	76
Cooperation and Dialogue	77
Collaboration and Partnerships with Associations and Organisations	78
Comments on changes in the Law and Regulation Environment	78
Communications Plans	78
Meetings and Speeches	79
The Annual Meeting	79
Open Meetings	80
The Greencast	83
Informative Video Presentations	83
Newspaper Articles	84

Key Figures

Avoided emissions from
energy generation

3,155,696 tonnes CO₂e ↑15%

Earnings before unrealised
financial items

227 m. USD ↑64%

Net carbon intensity

1.2 g CO₂e kWh ↓8%

Percentage of women in
managerial positions

33 % ↓3%

TRIFR*

0.33 ↑3%

Net debt

1,501 m. USD ↓10.4%

Carbon footprint

16,644 tonnes CO₂e ↓3%

Operating income

558,8 m. USD ↑23%

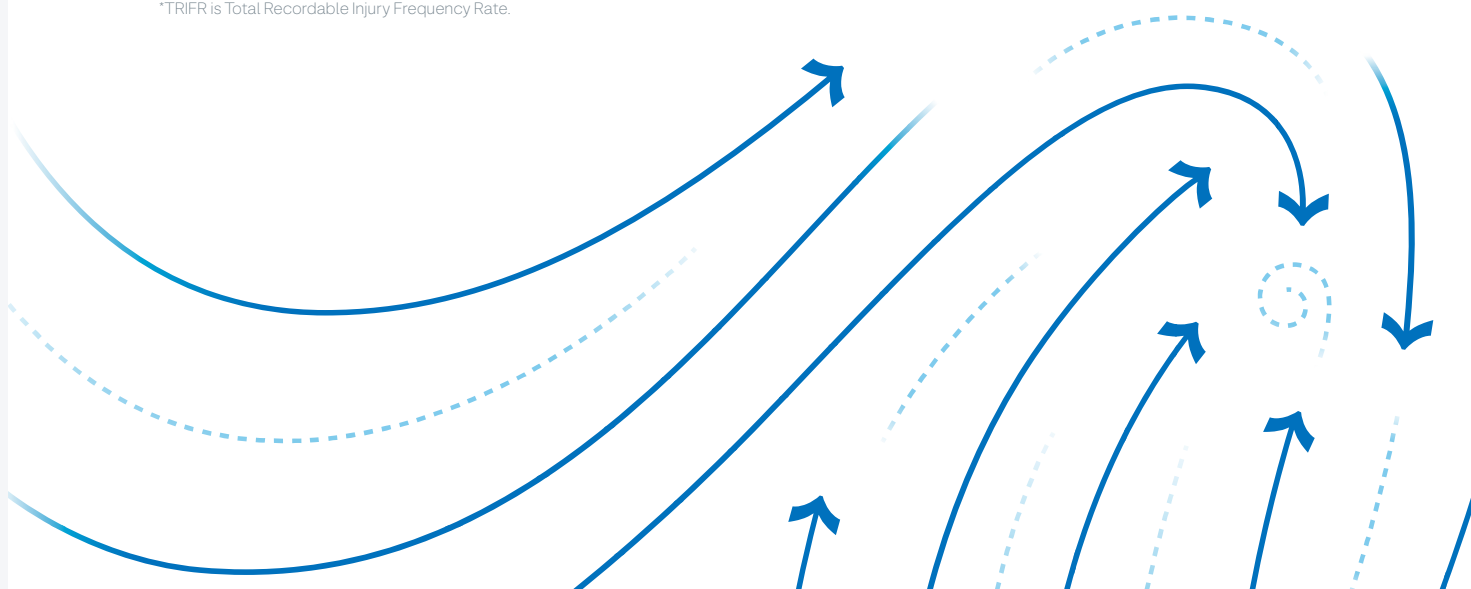
Percentage of women in
executive positions

44 % ↑76%

Equity ratio

53.3 % ↑3.7%

*TRIFR is Total Recordable Injury Frequency Rate.



Landsvirkjun in a Nutshell

Landsvirkjun is an energy company owned by the people of Iceland. The Company generates electricity from renewable energy sources: hydropower, geothermal energy, and wind power. Landsvirkjun produces the bulk of electricity generated in Iceland, or over 70%, which is delivered to industries, the service sector, and households. Approximately 85% of the energy is sold to large end-users in the industrial market and 15% on the wholesale market.

Landsvirkjun operates fifteen hydropower stations, three geothermal power stations and two wind turbines for research purposes, distributed in five operating areas around the country. The Company's headquarters are in Reykjavík.

Electricity generation was 14,130 GWh in 2021.

Landsvirkjun is a public partnership, owned by the Icelandic State and Eignarhluti ehf., the Treasury's holding company.

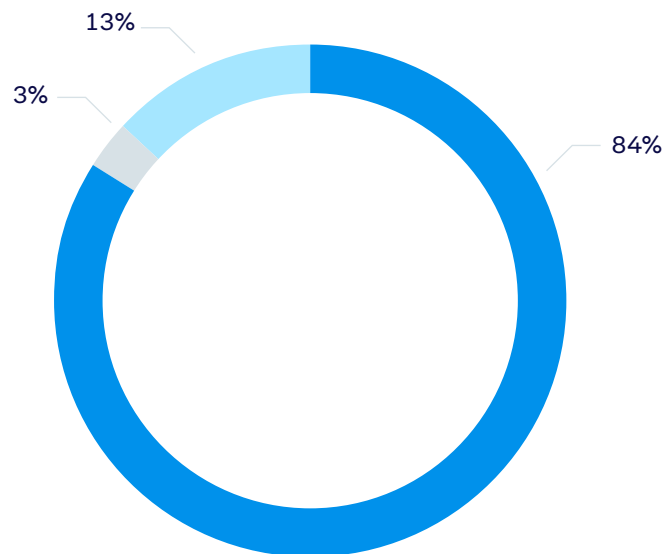
The economic advantage from the energy utilisation is distributed throughout the country, e.g., by generating jobs and revenues in various industries, duties to the Treasury and municipalities, dividends to owners, as well as procurement of goods and services.

Landsvirkjun's vision is a sustainable world, powered by renewable energy, and its role is to maximise the utilisation of the renewable energy resources the Company is entrusted with, in a sustainable and efficient manner.

↓ Customers Groups

Landsvirkjun's customers are mainly international companies in power intensive industries and wholesalers on the domestic electricity market.

- Industries
- Data centres
- Wholesalers and Landsnet



Increased Dividend Payments to the People of Iceland

Chairman's Statement

A definite breakthrough in Landsvirkjun's operations occurred when the debt ratio became comparable to the indicators used at the sister companies in the Nordic countries. This means that it is no longer necessary to place main emphasis on reducing the debt, thus, creating more flexibility to pay higher dividends to the owner of Landsvirkjun, the people of Iceland.

This milestone is worth celebrating, especially when considering the uncertainty in the operational environment at the beginning of the pandemic in 2020. The operations took a very favourable turn in 2021. Earnings before financial items, which is our frame of reference for the operations performance, increased by 64% year on year. Operating income increased by 23% year on year, and has never been higher.

The improved performance can be traced to vastly improved operational environment for Landsvirkjun and its large industrial end-users. Average prices in the wholesale market for households and smaller companies remained unchanged from 2020, but average prices to large industrial end-users increased by 55%. The price increase is primarily based on favourable external conditions in aluminium- and energy markets and renegotiated agreements with most of the companies. The large industrial end-users now pay prices comparable to that in the countries we like to compare ourselves with. Thus, Landsvirkjun's improved performance is wholly due to increased revenues from large industrial end-users.

Although economic advantage is important, it is only one factor in sustainable development. Climate- and environmental issues are also important, and finally Landsvirkjun's operations must benefit the community. Apropos, in 2021 Landsvirkjun established a new Community and Environment Division and commenced work on a new Community Policy. Landsvirkjun is part of the community, and every endeavour is made to ensure that the Company's operations are in harmony with stakeholders.

Jónas Þór Guðmundsson



Success That Matters

CEO's Statement

Hörður Arnarson



Renewable energy is key to fighting climate change. A good example of that is Landsvirkjun's success in minimising greenhouse gas emissions from its operations. The Company's carbon footprint was only 1.2 gramme of carbon dioxide equivalents per kilowatt hour, which is exceptionally low, even when compared to emissions from renewable energy generation elsewhere in the world.

Thus, avoided emissions were approximately 3.2 million tonnes of CO₂ equivalents in 2021. Avoided emissions are emissions that are averted when the customer chooses electricity generated by Landsvirkjun's rather than electricity generated in mainland Europe, this number would double if the frame of reference were the whole world.

And this makes a difference. Landsvirkjun's electricity generation is an especially valuable contribution to the fight against climate change. And we intend to do even better, as Landsvirkjun's operations will be carbon neutral in 2025, in accordance with our Climate Action Plan. The target will be reached by avoiding new emissions, reducing the current level of emissions, and implementing countermeasures.

Climate issues are energy issues. The international goal to keep global warming within the 1.5°C compared to the beginning of the industrial revolution, invariably entails increasing environmentally safe and renewable energy generation, instead of using fossil fuels. And we Icelanders must do our share.

Climate issues are an inseparable part of sustainable development. Our vision is "a sustainable world, powered by renewable energy", and our role is to "maximise the utilisation of the renewable energy resources the Company is entrusted with". Therefore, we want to participate in accelerating the world forward to increased sustainability and we want to it done correctly and with utmost care. Hopefully, our efforts will be successful.

Landsvirkjun's Policy and Governance

Landsvirkjun's Policy

Landsvirkjun's marketing environment has changed considerably in the last few years, resulting in demanding challenges as well as compelling opportunities. As a response to a changed environment, Landsvirkjun commenced an extensive policy development in 2020, continuing in 2021, with emphasis on sustainability as one of the Company's core issues. On April 21, 2021, Landsvirkjun's Board of Directors approved ten policy emphasis for the Company, two for each of the Company's five policy targets.

↓ Landsvirkjun's Five Policy Targets

Policy targets	Policy emphasis
Effective electricity generation and development	<ul style="list-style-type: none"> – Lower electricity cost price – Taking the next step in wind power
Leadership in sustainable development	<ul style="list-style-type: none"> – Support the energy transition in Iceland and abroad – Become carbon neutral
Excellent customer service	<ul style="list-style-type: none"> – Collaborate with customers – Increase business diversity
Progressive and sought-after workplace	<ul style="list-style-type: none"> – Strengthen the team unity – Achieve gender parity
Exemplary in open communication	<ul style="list-style-type: none"> – Cooperate with local communities – Active communication with stakeholders

Landsvirkjun's policy targets and key emphasis support its vision and role. The structure of the Annual Report is based on the Company's policy targets, which form the Report's chapter breaks.

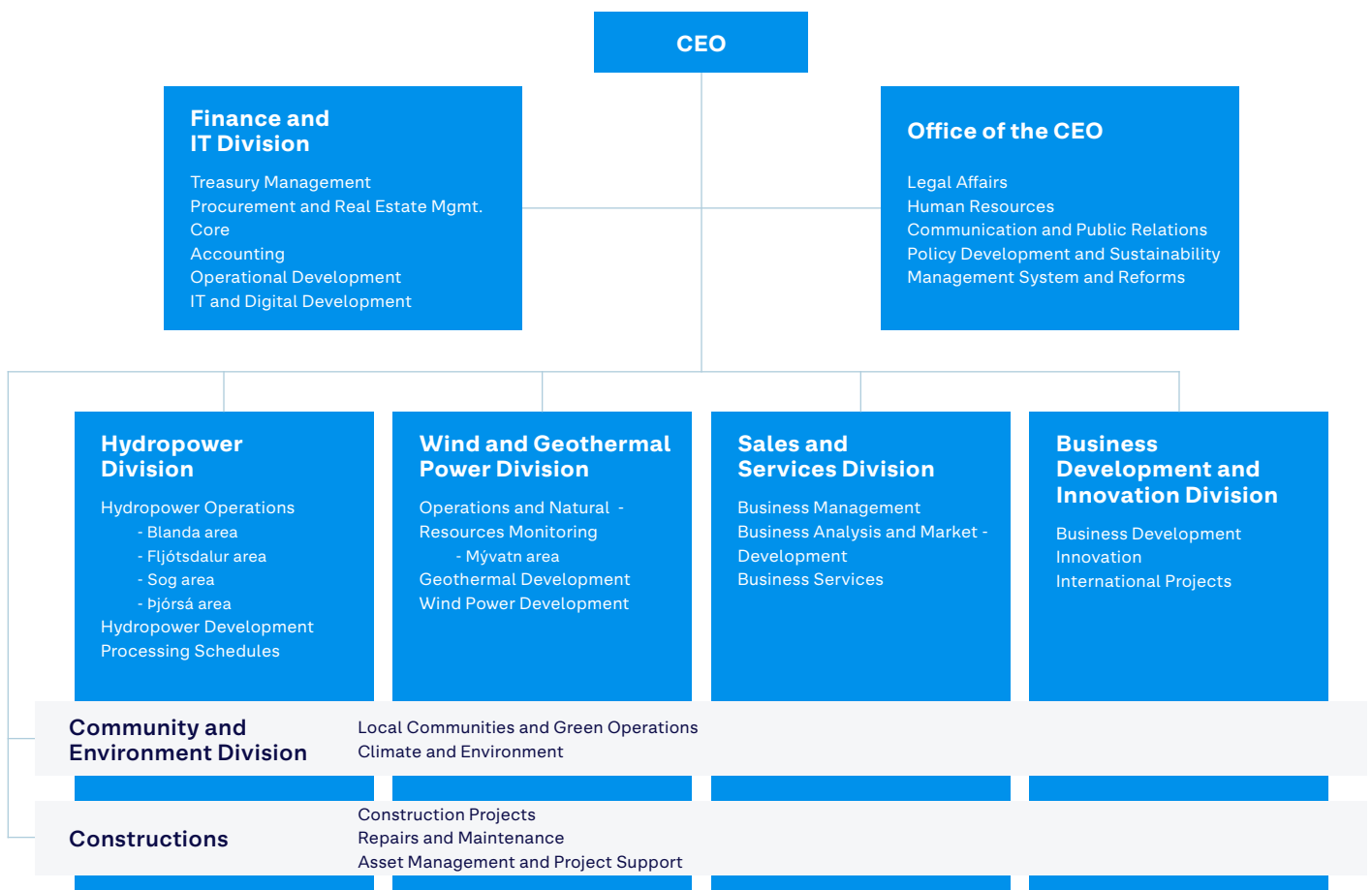
Landsvirkjun's vision is a sustainable world, powered by renewable energy.

Landsvirkjun's role is to maximise the utilisation of the renewable energy resources the Company is entrusted with, in a sustainable and efficient manner.

Landsvirkjun's values are progressiveness, prudence, and reliability.

Organisational changes have been made to make the Company better fit to pursue a new policy. The first step towards a new organisational structure was taken in 2020, when the Marketing and Business Development Division was decommissioned, and two new divisions were established, the Business Development and Innovation Division and the Sales and Services Division. The Company continued along this path in 2021 and established three new divisions. Emphasis on sustainability is continually becoming an integral part of Landsvirkjun's operations in every division, especially in developing new business opportunities, and to reflect this the Company established the new Community and Environment Division. At the same time, the divisions that supervised preparations for power stations' construction projects and its operations, the Development Division and the Energy Division were decommissioned and instead two divisions were established which represent the Company's sources of energy, hydropower, and wind and geothermal energy.

↓ Organisational Chart



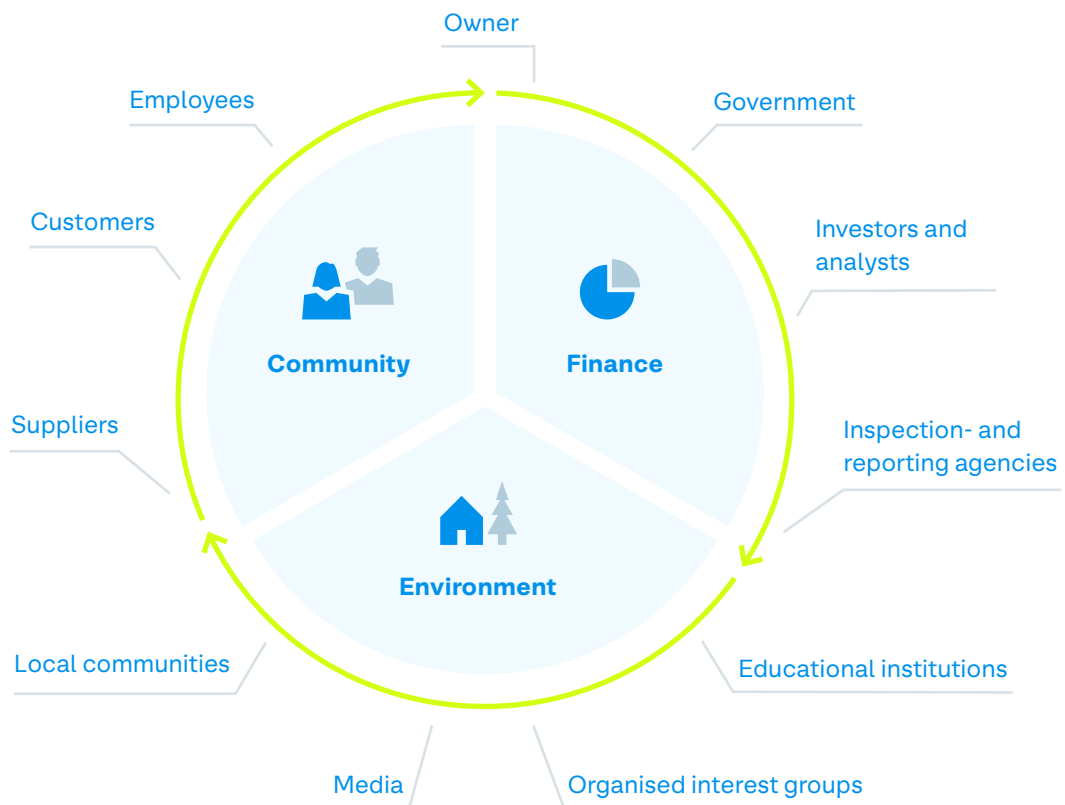
Sustainability Principles

Landsvirkjun has followed the policy on Corporate Social Responsibility from 2012 and published sustainability reports in accordance with GRI from 2019. The publication of these reports is part of a comprehensive approach to growing sustainability in the Company's operations. Furthermore, Landsvirkjun has supported the UN Global Compact from 2013 and mapped the progress in meeting the UN's Sustainable Development Goals (SDGs) in the field of environmental issues, employee rights, human rights, and corruption prevention. Landsvirkjun also supports UN's SDGs for sustainable development and has put specific emphasis on Goal 13: Climate Action Goals, Goal 7: Affordable and Clean Energy, and Goal 5: Gender Equality.



A materiality assessment was conducted in 2018-2020. This type of assessment calls for consultation with all major stakeholders, as well as internal analysis, to further the Company's understanding of stakeholders' expectations (or interests) regarding main emphasis, policy development and disclosure considering sustainability.

↓ Groups of stakeholders



The analysis categorised nine sustainability factors which Landsvirkjun uses as focal points:

Finance and Governance	Environment	Community
Responsible practices and code of ethics	Measures to control climate change	Employee safety and wellbeing and professional training
Economic value and dividends creation	Electricity generation in harmony with nature	Equal rights
Innovation in energy generation	Improve natural resources utilisation and minimise waste	Cooperation with local communities

Landsvirkjun's Sustainability Report 2020 emphasised specifically these nine factors. The Report was awarded the Community Report 2020 by Festa, a centre for sustainability, Stjórnvísí, the largest management company in Iceland, and the Iceland Chamber of Commerce.

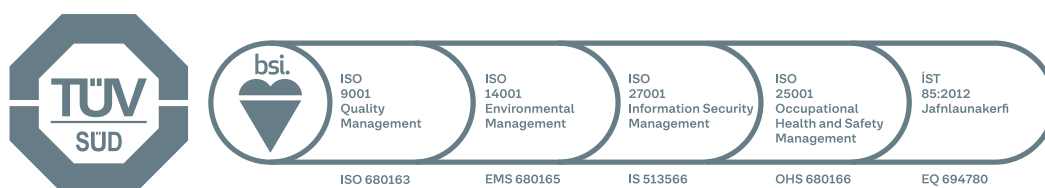
Procedures – Governance Methodology

Management System and Certifications

Landsvirkjun's management system supports obligations towards its customers, its employees, and other stakeholders. The management system also supports the Company's plans for further development based on the values of sustainability.

Landsvirkjun's management system is certified by international management standards. These standards apply to quality control, environmental control, occupational health and safety, equal pay, and information security. Landsvirkjun's internal Electricity Safety Management System (RÖSK) fulfils the Iceland Construction Authority standard for electricity safety management.

↓ Certifications



Landsvirkjun's electricity generation was certified as 100% renewable by the German certification body TÜV SÜD, in accordance with the TÜV SÜD Standards CMS 83: Generation EE. The certification confirms that Landsvirkjun supports the development of renewable electricity generation, and the production supervision adheres to strictest requirements.

In 2021, further policy reviews and updates were made in certain topics and matters, or the Internal Policy. However, in 2020 Landsvirkjun's Board of Directors approved standardised instructions for the Company's Internal Policy, the instructions state that the Company is to set Internal Policy for at least the following subjects:

- | | |
|---|--|
| › Dividend payments | › Competition issues |
| › Risk management | › Communication with local communities |
| › Financial Structure | › Terms of employment |
| › Procurement | › Environmental issues |
| › Human resources and equal rights issues | › Information safety |
| › Personal data protection | › Disclosure and publishing |
| › Corporate social responsibility | › Occupational health and safety |

Code of Ethics and Corruption Prevention

Landsvirkjun's Code of Ethics are defined and published in the Company's documents on quality standards, as part of standard procedure, and in information material for employees. These are the following documents: *Landsvirkjun's Code of Ethics*, *Landsvirkjun's Suppliers' Code of Ethics*, and *A Contingency Plan on Inappropriate Behaviour*. *Landsvirkjun's Code of Ethics* and *Landsvirkjun's Suppliers' Code of Ethics* are also published on the Company's external website.

If employees become aware of inappropriate behaviour within the Company, information thereof should be reported in accordance with procedures listed in the contingency plan. The purpose of The Contingency Plan on Inappropriate Behaviour is to have possible instances of infringement of the law or other possible misconduct solved as soon as possible, as well as serving as a preventive strategy. Prevention from corruption and bribes is also documented. In 2021, no incident of corruption was reported, and no incidents of corruption were being processed at Landsvirkjun.

Human Rights and Personal Data Protection

Landsvirkjun's Board of Directors approved regulations on the corporate supply chain in 2016, intended to ensure various rights of Landsvirkjun's workforce, i.e., contractors-, subcontractors'-, or temporary work agencies' employees. The regulation identifies, e.g., wages, terms of employment, and health- and accident insurance. It has not been deemed necessary to publish separate human rights regulation in addition to the regulations already in place and are intended to ensure human rights of all parties involved in Landsvirkjun's operations. These are regulations on Corporate Supply Chain, Landsvirkjun's Code of Ethics, Landsvirkjun's Suppliers' Code of Ethics, and A Contingency Plan on Inappropriate Behaviour, as mentioned before.

Landsvirkjun adheres to personal data protection policy, dated October 7, 2020. The policy is intended to ensure reliability, confidentiality, and personal data security. Specific emphasis is put on personal data handled by the Company, i.e., regarding its employees and job applicants.

No complaints from customers or employees regarding personal data breach were recorded in 2021. Landsvirkjun's employees are informed of the Company's regulation on Code of Ethics, law on protection of informants, Landsvirkjun's contingency plan and prevention from inappropriate behaviour.



Active Competition

Landsvirkjun Competition Policy, which is included in the Company's management system, took effect in 2017. The policy outlines how the Company will support active competition in the markets it operates, and how the provisions of the Competition Act are followed in its operations. The policy aids professional decisions when disputes are dealt with. Electronic courses on Competition Policy became available for employees in 2021. Landsvirkjun's Competition Policy is regularly updated.

In 2020 and 2021 the Competition Authority received four complaints from customers regarding Landsvirkjun's alleged infringement on the Competition Act, two of the cases are pending. The third case has not been taken under consideration and the fourth was withdrawn on behalf of the applicant.

The Value Chain

Landsvirkjun's business activities reach far and wide, but the Company ensures that the value chain is always in accordance with its standards. This means that collaborators and suppliers follow the same standards as Landsvirkjun has set in environmental issues, as well as for occupational health and safety, and ensure that these standards and requirements are in accordance with the Company's objectives on corporate social responsibility.

Landsvirkjun is obligated to comply with tender specification in the European Economic Area (EEA). The Company has Code of Ethics for suppliers and service providers, which are based on Landsvirkjun's employee Code of Ethics, as well as UN's Global Compact on responsible procedures. Landsvirkjun sets the precondition that suppliers follow these standards when doing business with the Company.

All procurement contracts have a provision on the chain of responsibility. The objective of the provision is to ensure that everyone that indirectly work for Landsvirkjun, i.e., at contractors, subcontractors, or temporary work agencies, enjoy rights and terms of employment which are in accordance with the law and the current collective pay agreement.

Landsvirkjun's Board of Directors approved a reviewed Procurement Policy in December 2021. According to the policy, procurement in the Company's supply chain shall be conducted in a responsible manner, it must be uniform, transparent, traceable, and completely cost-efficient.

Main emphasis:

- » Procurement is in accordance with law and regulations which apply to Landsvirkjun
- » Procurement and procurement agreements shall adhere to the Company's other standards and objectives, mainly;
 - Climate- and environmental issues
 - Occupational health and safety issues
 - Social issues
- » Sound business ethical standards, adherence to Supplier Code of Ethics during collaboration, and provisions on chain responsibility in procurement agreements are to be applied.

Disclosure on implementation, supervision of the Procurement Policy and execution of procurement is regularly provided in status meetings with management, where objectives and indicators are reviewed. An assessment of suppliers is conducted during the managers' annual review of the management system.

Information on tenders, the outcome of tenders, and suppliers' and service providers' code of ethics is published on Landsvirkjun's website. No significant changes in the Company's value chain occurred in 2021.

Risk Management in an Ever-Changing Environment

Risk management is an integral part of Landsvirkjun's operations and value creation, as risk is interwoven in the Company's operations.

Landsvirkjun has developed a formal risk management procedure, to identify the most important factors. Management and employees identify the Company's financial and non-financial risk and evaluate the importance.

The procedure is intended to map the Company's main risk factors and take appropriate measures to reduce the probability of undesirable incidents and the possible effect on the Company's image, finances, health and safety, and environment. A specific IT system is used in risk management, where defined risk factors and countermeasures are calculated weighed.

Landsvirkjun's Board of Directors sets a comprehensive Risk Management Policy, based on the following factors:

- Risk is defined and its sources known
- Approved methods are used to measure risk
- Active monitoring of risk factors is ensured
- Risk factors are responsibly controlled
- Disclosure to risk management and the Board of Directors is thorough and regular

Landsvirkjun regards climate change a serious matter and is aware of its impact and effect of countermeasures on the Company's operations. Risk management involving the impact of climate change on Landsvirkjun's operations is integral in all risk analysis throughout the Company. Climate change is monitored, market fluctuations are analysed, changes in the legal and regulatory environment are closely followed, technological developments are assessed, and the Company is an active participant in general dialogue on the subject. These analyses provide Landsvirkjun the necessary predictability to securely continue its operations, in an ever-changing world.



Performance in 2021

Income Statement

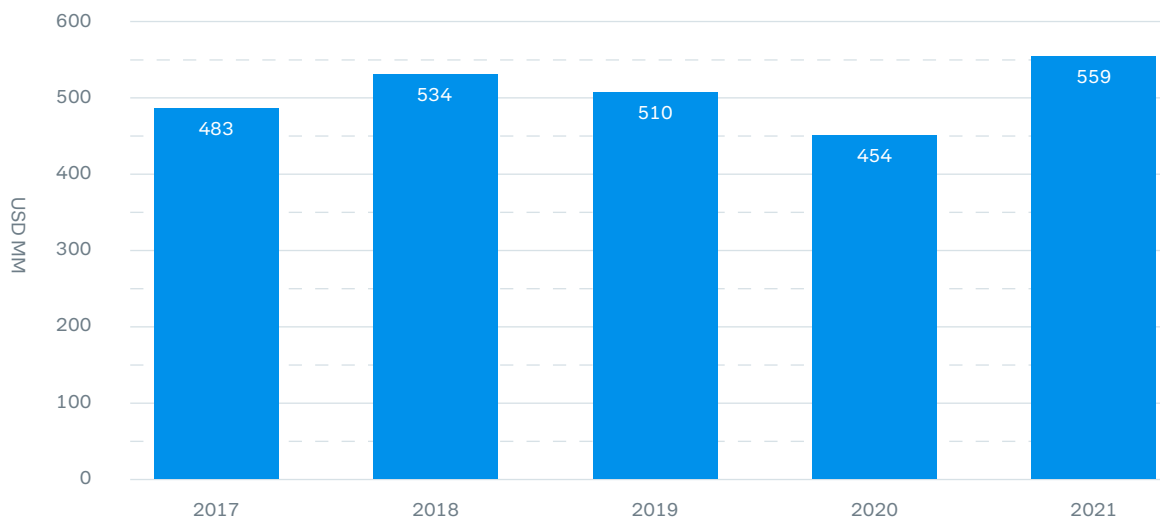
High Demand and Electricity Generation Records Repeatedly Broken

Landsvirkjun's operational environment was reversed in 2021, after a serious dip in 2020 when the pandemic hit. Prices increased considerably in the international energy- and commodity markets, after a low in the middle of 2020. The same can be said for demand for the customers' products. Demand for electricity increased rapidly in Iceland in 2021, resulting in new electricity generating records being repeatedly broken in the Company's electricity generating system.

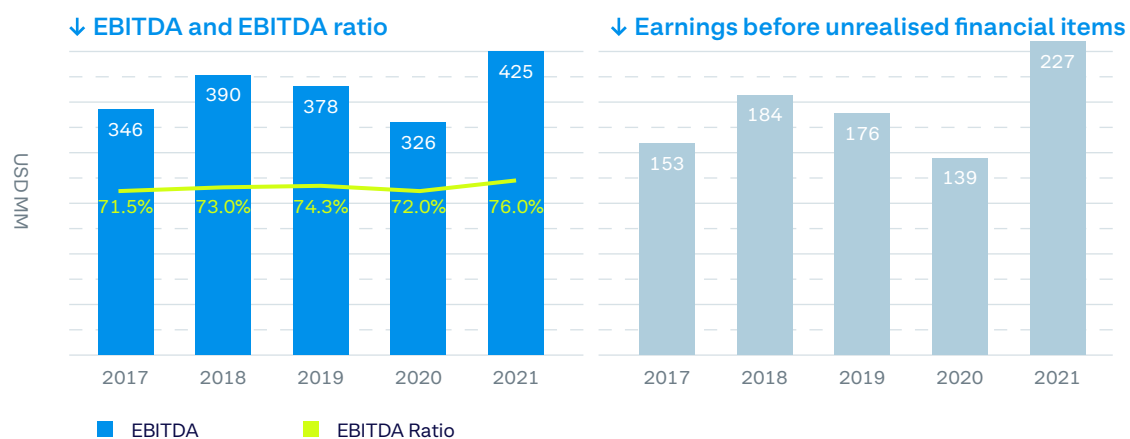
Operating Summary

Landsvirkjun's operational environment improved considerably, resulting in record operating revenues in 2021. The increase is mainly due to favourable external conditions in aluminium- and energy markets, and the fact that in recent years Landsvirkjun has renegotiated agreements with most of its large industrial end-users, which now pay comparable rates to that in the countries the Company compares itself with. Improved revenues in 2021 can wholly be attributed to higher revenues from large industrial end-users. Irrespective of the various challenges following COVID-19, Landsvirkjun's power stations thrive.

↓ Development of operating revenues

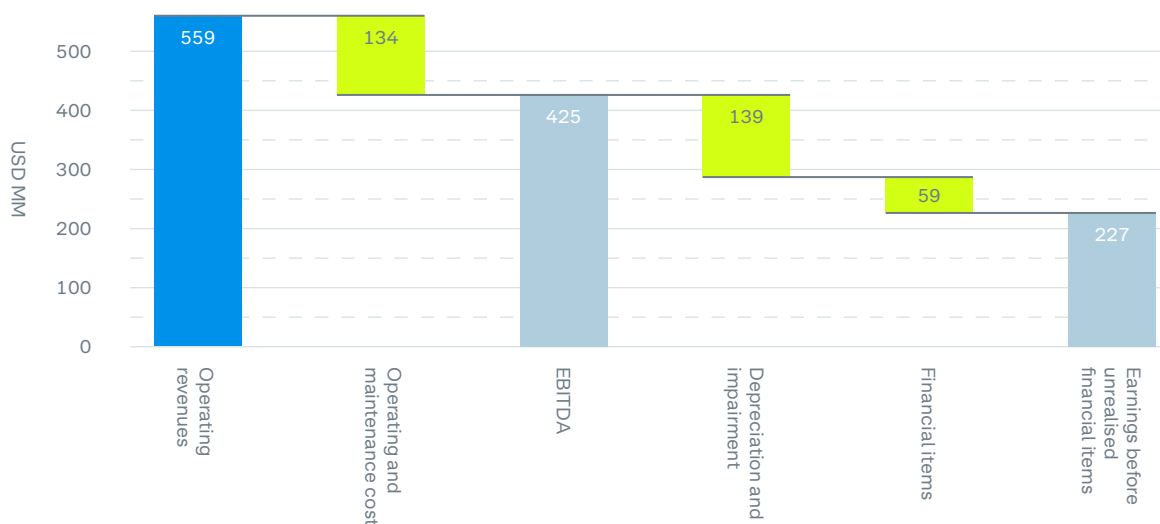


The Group's operating profit, before depreciation, EBITDA, was USD 425 MM in 2021, which is a historical record for Landsvirkjun. The growth in EBITDA year on year is in line with Landsvirkjun's record high revenues.



The significant financial recovery is also reflected in the Landsvirkjun's core operations performance, as profits before unrealised financial items increased by USD 88 MM year on year and has never been higher in Landsvirkjun's history.

Strong operating revenues directly impact Landsvirkjun's cash generation.



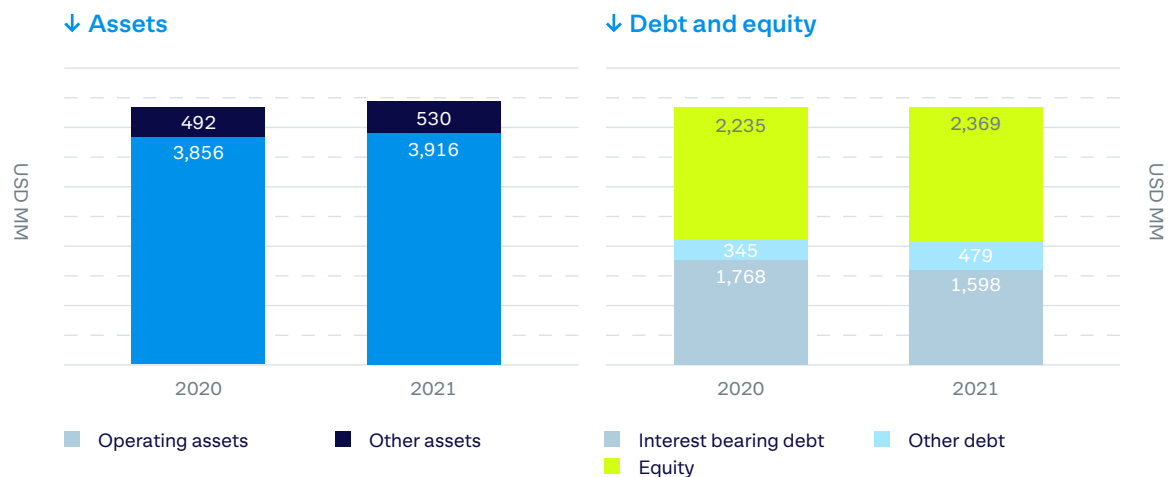
Operating Prospects

Landsvirkjun's operating prospects continue to be positive.

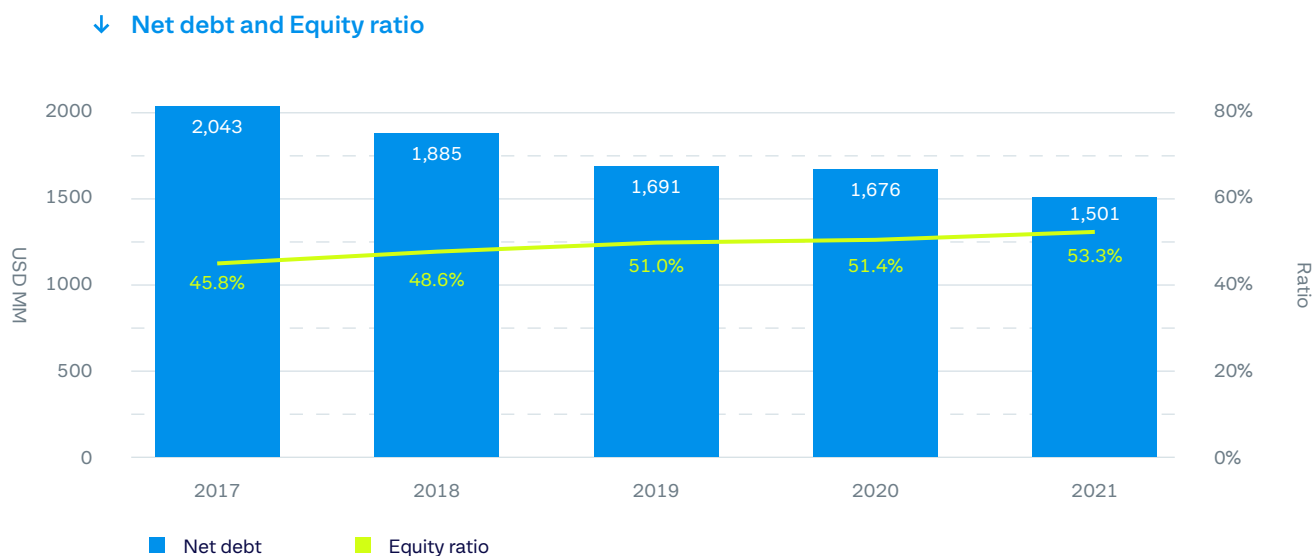
Balance Sheet and Financial Ratio

Balance Sheet

Landsvirkjun's total assets were USD 4,446 MM at year-end 2021 and cash was USD 98 MM.

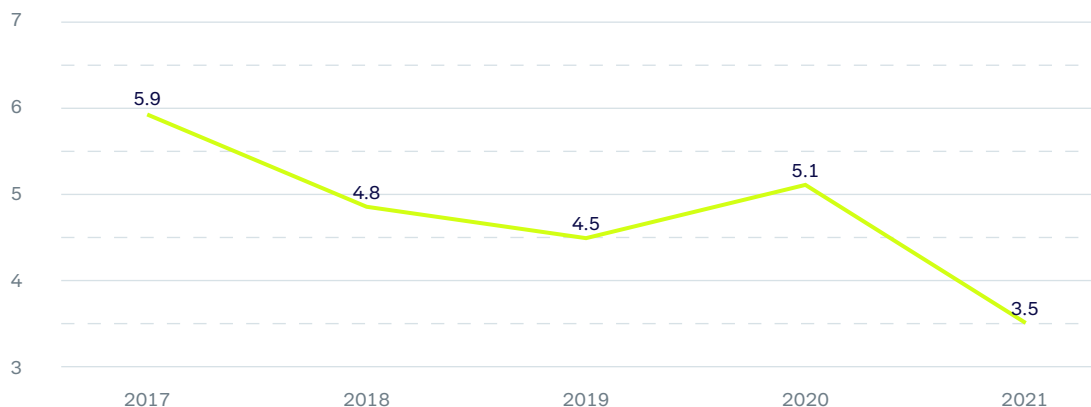


Interest-bearing debt was USD 1,598 MM at year-end 2021, a decrease of USD 170 MM from year-end 2020. Equity increased by USD 134 MM during this period and the equity ratio is currently 53.3%, up from 51.4% at year-end 2020.



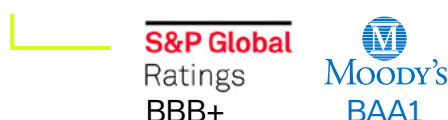
Net debt was reduced by USD 175 MM from year-end 2020 (net debt is interest-bearing debt minus cash). The improved debt level is one of the key premises for higher dividend payments to the owner, the people of Iceland.

↓ Net debt/EBITDA



The Group's total obligations, measured against operating profits before depreciation (net debt/EBITDA), show the net interest-bearing debt Landsvirkjun must service and compares with earnings, at a given time. The ratio reduced from 5.1x at year-end 2020 to 3.5x at year-end 2021. The ratio has become considerably lower in recent years, as a decade ago it was 9x.

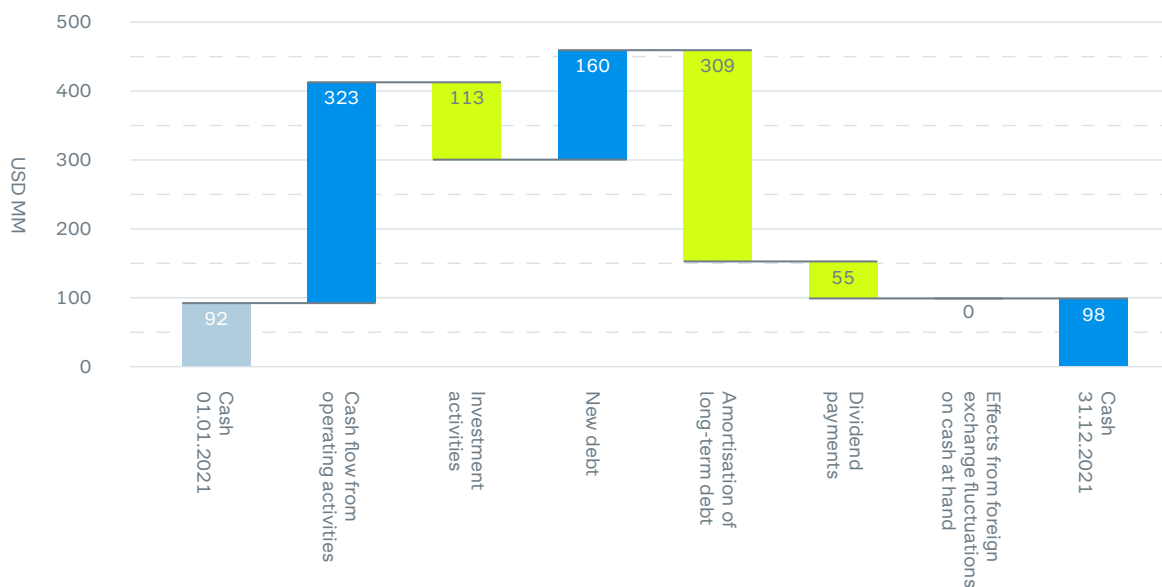
Landsvirkjun's continued business recovery is reflected in upgraded credit rating at S&P Global Ratings. The rating was upgraded by one notch in 2021, due to strong financial standing and the Company's resilience in tackling a challenging and demanding situation following the pandemic in 2020. Currently, Landsvirkjun has the same credit rating as other major energy generating companies in the Nordic Region, which the Company compares itself with. This is a benchmark which has been systematically worked towards for a long time. Over the last decade major emphasis has been placed on strengthening Landsvirkjun's financial standing and improve the credit rating. Renegotiations with long term customers have been ongoing. The Company's customer group has become larger and more diverse. Meanwhile, Landsvirkjun has constructed three power stations and increased electricity generation. Debts and financial risk have been considerably reduced during this period.



Cash Flow Statement

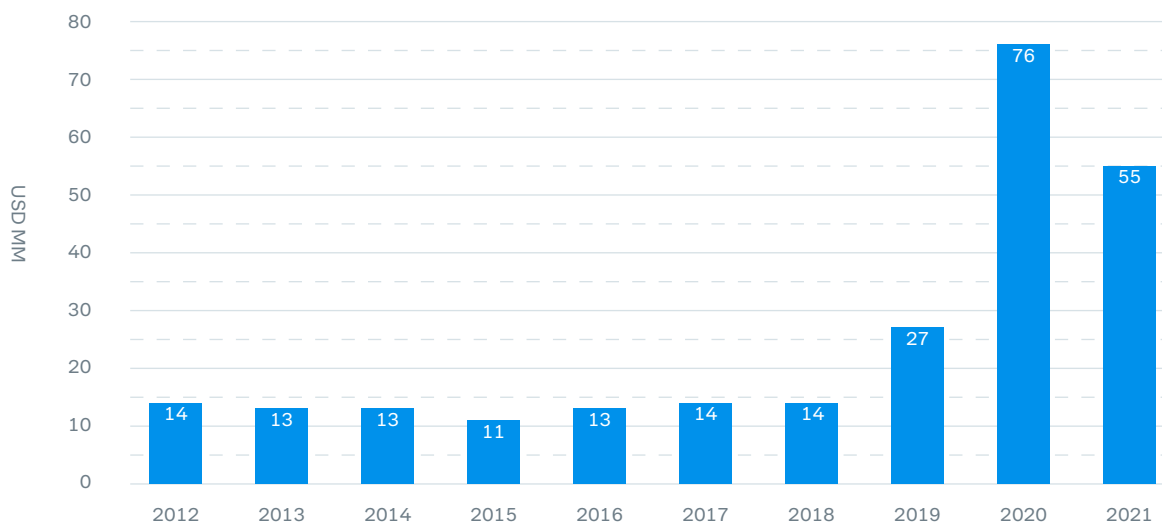
Following capricious times in Landsvirkjun market environment, e.g., due to COVID-19, cash generation has regained its former strength and is even stronger than ever before in the history of the Company. Cash flow from operating activities was USD 323 MM, which is an increase of USD 89 MM from 2020.

↓ Cash flow



Stronger financial position has made it possible to increase dividends. E.g., in 2018 the Company paid USD 14 MM (ISK 1.5 MM) in dividends to its owner, the Icelandic State, but in 2020 dividend payments were USD 76 MM (ISK 10 MM), and in 2021 dividend payments were USD 55 MM (ISK 6 MM), for the operating year 2020. Landsvirkjun's Board of Directors intends to propose to the Annual Meeting a dividend payment of USD 120 MM (approximately ISK 15 MM), for the operating year 2021.

↓ Dividend Payments



Emphasis on Secure Access to Capital and Sustainability

Landsvirkjun places importance on secure and diverse access to capital. Since 2018, financing has been green or sustainability linked. Landsvirkjun was the first company in Iceland to issue green bonds, and one of the first issuers of green bonds on the US Private Placement (USPP) market. Importance placed on green and sustainable financing supports Landsvirkjun's policy and vision of a sustainable world, powered by renewable energy.

Green financing is traditional financing but must be used to finance assets or projects which impact the environment and climate issues in a positive way. Green bonds give investors a green channel for their investments. Landsvirkjun's green financing is used to finance or re-finance assets which support sustainable, responsible, and effective use of natural resources in Iceland to generate renewable energy.



Incentive for Sustainability

Sustainable financing provides incentive to achieve ambitious and defined objectives in the field of sustainability. Landsvirkjun's sustainable financing is tied to performance indicators in equal rights, climate change, and safety issues, and it reflects the importance Landsvirkjun puts on UN's SDGs and sustainability. The financial incentive to achieve the SDGs that the Company has set for itself is in place, as if the SDGs are not reached, the interest rate on the loans goes up.

Landsvirkjun's green and sustainable financing key points:

- » Six green bonds in the amount of USD 350 MM.
- » Sustainability-linked bonds with interest terms tied to Landsvirkjun's target of carbon neutrality in 2025 and carbon sequestration. The amount is USD 80 MM.
- » Sustainability-linked revolving credit facility with interest terms tied to Landsvirkjun's success in achieving certain sustainability objectives. The objectives are connected to six performance indicators in the field of equal rights, climate change, and safety issues, and reflect the importance Landsvirkjun puts on UN's SDGs and sustainability. The amount is USD 150 MM.

Emphasis on Reducing Debt, Suspending State Guarantee, and Green Financing

In the last few years, great importance has been put on reducing debt, with good results. Furthermore, emphasis has been placed on all new financing to be green or sustainability-linked, and this type of financing is now approximately 27% of Landsvirkjun's total financing.

In recent years, Landsvirkjun has worked systematically at suspending State guarantee on debt, where possible. Thus, the principal of debt with State guarantee is continually being reduced and the last loan with State guarantee is due in 2026. At year-end 2021, 14% of Landsvirkjun's debt had State guarantee, which is a vast reduction from 2020, when the ratio was 29% at year-end. Landsvirkjun pays a Guarantee Fee to the Treasury for debt carrying State guarantee.

Landsvirkjun has credit ratings issued by the credit rating companies Moody's and S&P Global Ratings.

Financial Impact from Landsvirkjun's Operations in Iceland

Various industries use Landsvirkjun's electricity in their value creation. Economic impact from the Company's operations manifests itself, e.g., in jobs and revenues throughout the country. The impact from the Company's operations is detectable in export earnings, wages, payments to suppliers, taxes, and council tax.

Landsvirkjun pays annual dividends to the owner of the Company, the people of Iceland. The dividends are paid to the Treasury.

Economic Impact from the Parent Company (USD MM)

↓ Revenues 2021

Operating income	484.7
------------------	-------

↓ Financial Contribution

To suppliers	Operating costs w/o electricity transportation cost	94.1 *
To employees	Wages and wage-related expenses	45.2
Investment	Total investment	20.5 **
To owners and creditors	Dividends	50
	Net cost of capital	42.7
	Instalment payments net of new loans	187.6
To the public sector	Income tax	18.5
Total financial contribution		458.6

*Thereof general operating expenses USD 89.9 MM

**Thereof other investment in social infrastructure USD 3.6 MM

Transactions with domestic suppliers were over 80% of the Company's total procurement in 2021, including procurement for goods and services and work buying. Landsvirkjun has business transactions with 950 domestic suppliers. The Company places importance on regular maintenance and upgrading at the power stations, as well as investing in the power stations' local community's infrastructure.

Landsvirkjun supports and participates in various innovation-, research-, and community projects, which further energy issues development, new climate issues solutions and social return.

Leadership for Sustainable Development

The fight against climate change is one of mankind's largest challenge. Corresponding with Landsvirkjun's vision, which is a sustainable world powered by renewable energy, the Company has set the course to be a leader in environmental- and climate issues. If energy use in the world is to become sustainable, the use of fossil fuels must stop, and energy demand must be met with renewable energy resources.

Sustainability is part of the Company's core operations, as it revolves around electricity generation from renewable energy resources: water, geothermal energy, and wind power. Landsvirkjun intends to play a leading role in the energy transition in Iceland; use its professional expertise for constructive projects abroad, and lead by example by becoming carbon neutral. There is no doubt that when renewable natural resources, i.e., water, geothermal energy, and wind power, are harnessed, nature is disturbed. On the other hand, Landsvirkjun goes to great lengths to minimise any negative impact that harnessing might have on nature.

Climate Issues are Energy Issues

Renewable energy plays a major role in global mitigation against climate change, as more than two thirds of greenhouse gas emissions in the world stem from burning fossil fuels for energy generation. Therefore, climate issues are energy issues. The path to reaching the goal to limit the rise of global average temperature below 1.5°C compared to pre-industrial levels, inevitably translates into ending the use of fossil fuels, increased renewable energy generation, as well as generally reducing the growth of energy use.

Iceland has a realistic chance to become the first fossil fuel free country in the world. Electricity will play a significant role in the energy transition and industries that are powered by green, renewable energy can bring a major climate benefit. Better utilisation of natural resources can also support competitiveness, new green jobs, and increased value creation.

Diverse use of renewable, domestic energy resources instead of fossil fuels can greatly advance the country towards carbon neutrality.

Climate- and Environment Policy

At the core of Landsvirkjun's climate- and environment issues is the Company's Climate- and Environment Policy, which was revised in 2021.

Landsvirkjun is a leader in the field of environmental and climate issues.

Landsvirkjun respects Iceland's nature and its appearance and the Company works tirelessly at maximising the utilisation of natural resources and avoiding waste. The Company places importance on having professional expertise in environmental impact from its operations, reducing the impact, and preventing environmental incidents.

Landsvirkjun aims at being a carbon neutral company and participates in the international action against climate change. The Company works systematically towards reducing greenhouse gas emissions and increasing carbon sequestration, it rises to the challenge and seizes opportunities that may derive from climate change.

Climate- and Environmental Policy Key Figures

- › Landsvirkjun will maximise the utilisation of the natural resources that have already been harnessed.
- › Landsvirkjun's operations will be carbon neutral by 2025.
- › Greenhouse gas emissions from Landsvirkjun's operations will be kept below 4 gCO₂e/kWh.
- › Landsvirkjun will stop procurement of fossil fuels in 2030.
- › Landsvirkjun will stop sending active waste from regular operations to landfills in 2024.
- › Landsvirkjun will prevent environmental incidents in its operations.

↓ Key Figures

Carbon footprint

16,644 tonnes CO₂e ↓3%

Net carbon intensity

1.2 CO₂e/kWh ↓8%

Greenhouse gas emissions

51,044 tonnes CO₂e ↑2%

Carbon intensity

3.6 CO₂e/kWh ↓3%

Avoided emissions from
electricity generation

3,155,696 tonnes CO₂e ↑15%

Carbon sequestration

34,400 tonnes CO₂e ↑4%



Avoided Emissions Increase by 15% Year on Year

Landsvirkjun's contribution to measures against climate change is diverse, as renewable energy is key in the fight against climate change. Electricity, which is generated with a low carbon footprint, is in great demand by customers who want to minimise the carbon footprint of their production. Renewable energy does not have the effect of reducing the carbon footprint unless it is used for a production that would otherwise use electricity with a higher carbon footprint. This is called avoided emissions.

Avoided emissions from Landsvirkjun's operations were almost 3.2 million tonnes CO₂e in 2021, an increase of 15% year on year. Avoided emissions are assessed conservatively and included in the Company's green financing disclosure.

Further discussion on avoided emissions and the methodology behind the calculations can be found in the report *Green Finance Impact Report*, which is included in the Company's disclosure of green financing.

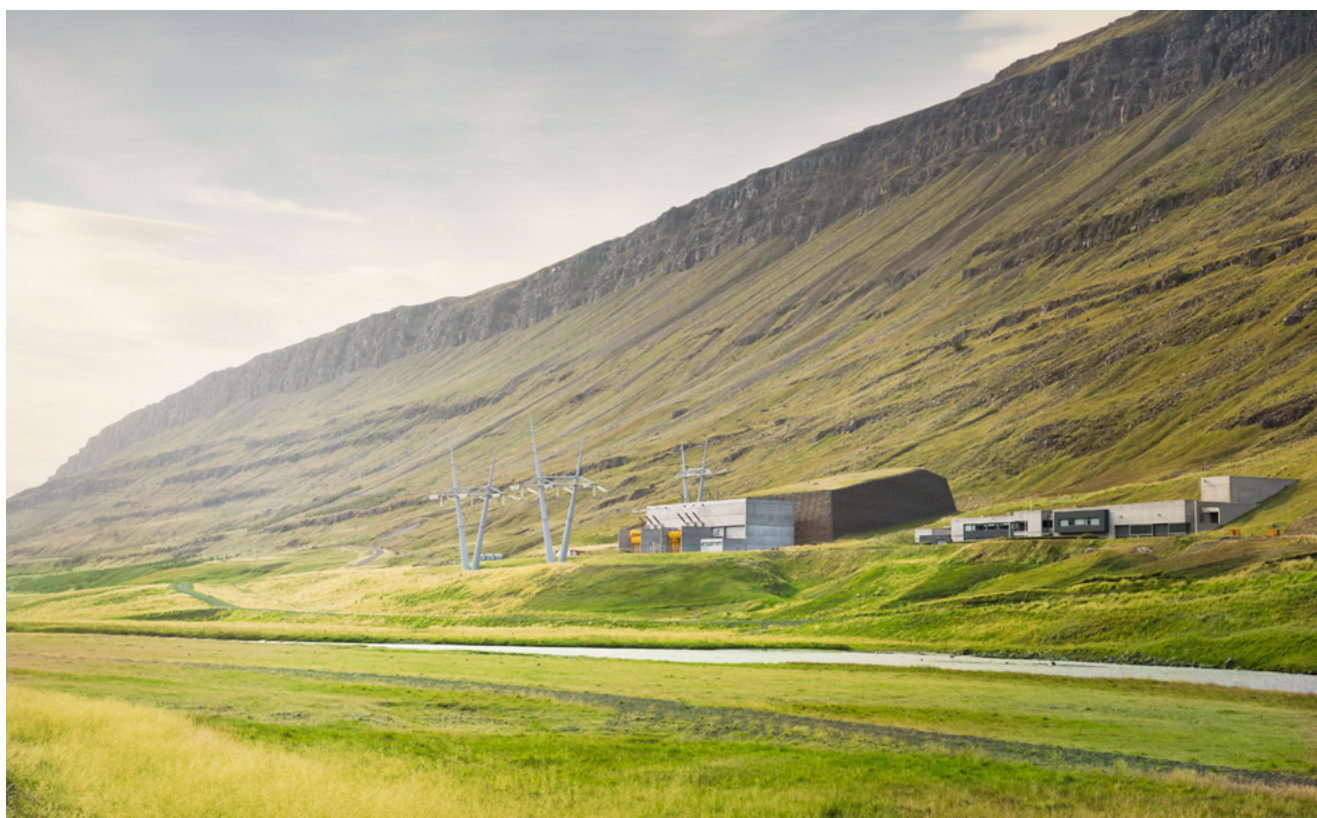


Electricity Generation with Negligible Carbon Footprint

Landsvirkjun's carbon footprint from electricity generation was 1.2 gCO₂e/kWh in 2021, a reduction of 80% from 2005. The Company's carbon footprint is particularly low, even when compared to regular renewable energy generation around the world. The Company's carbon intensity was only 3.6 g/kWh, and the bar has been set at keeping emissions below 4 g/kWh in a year. To put Landsvirkjun's low carbon footprint in perspective, the norm is to define green electricity, or electricity which is part of measures against climate change, at 100 g/kWh.

The low carbon footprint of Landsvirkjun's electricity generation means its customers' products and services have a low carbon footprint.

Landsvirkjun's carbon footprint is calculated annually and published in the Company's Climate Account. Carbon accounting is based on stringent quality standards and certified by independent certification bodies. Furthermore, Landsvirkjun's low carbon footprint from electricity generation has also been confirmed with life cycle analysis of the Company's power stations.



Climate Account 2021

Landsvirkjun's Climate Account provides quantitative information on the Company's carbon footprint, greenhouse gas emissions, and carbon sequestration for 2021, in addition to information on the status of climate targets. Landsvirkjun emphasises fair and transparent disclosure. The Company's Climate Account is based on the Greenhouse Gas Protocol's (GHGP) methodology and has been inspected and verified by Bureau Veritas, one of the world's leading certification bodies, using the international standard ISO-14064-3, with limited assurance.

Certification from external entities ensures that Landsvirkjun's findings are consistent with emissions from its operations and target carbon sequestration. Detailed information on Landsvirkjun's methodology for calculating carbon footprint can be found in the file *Landsvirkjun's Climate Account's Methodology*.



Carbon Footprint

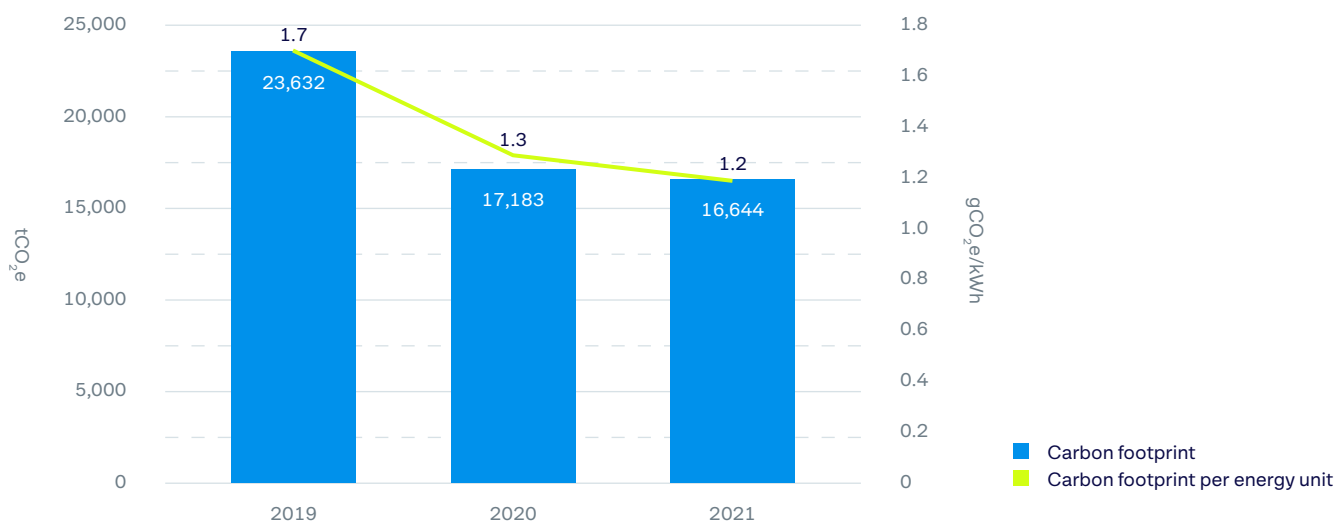
Landsvirkjun's carbon footprint was approximately 16.6 thousand tCO₂e in 2021 but was approximately 17.2 thousand tCO₂e in 2020. The carbon footprint has been reduced by 2% from 2020. Total emissions increased by 860 tCO₂e from the year before. However, carbon sequestration in soil and vegetation increased by 1,400 tCO₂e in 2021.

Landsvirkjun's carbon footprint accounts for annual emissions from the Company's operations, using the GHGP methodology, net of carbon sequestration.

A carbon footprint = greenhouse gas emissions – sequestered carbon

Landsvirkjun's carbon footprint accounts for emissions from its operations, resulting either from direct emissions (scope 1), or indirect emissions (scope 2 and 3). In addition, the Company accounts for biogenic CO₂ emissions from reservoirs and from biodiesel combustion which fall outside of scopes, according to the GHGP methodology.

↓ Carbon footprint



Carbon intensity of electricity generation was 3.6 gCO₂e/kWh in 2021, which is below the emissions' limit value of 4 g/kWh, as defined in Landsvirkjun's Climate and Environment Policy.² Emissions from electricity generation using geothermal energy exceeded emissions from electricity produced using hydropower, 31 gCO₂e/kWh for geothermal energy vs. 1.1 g/kWh for hydropower. In comparison, the EU defines electricity generation as climate change mitigation, when carbon intensity is below 100 gCO₂e/kWh.³

Carbon intensity was 1.2 gCO₂e/kWh, compared to 1.3 gCO₂e/kWh in 2020, a 6% reduction.

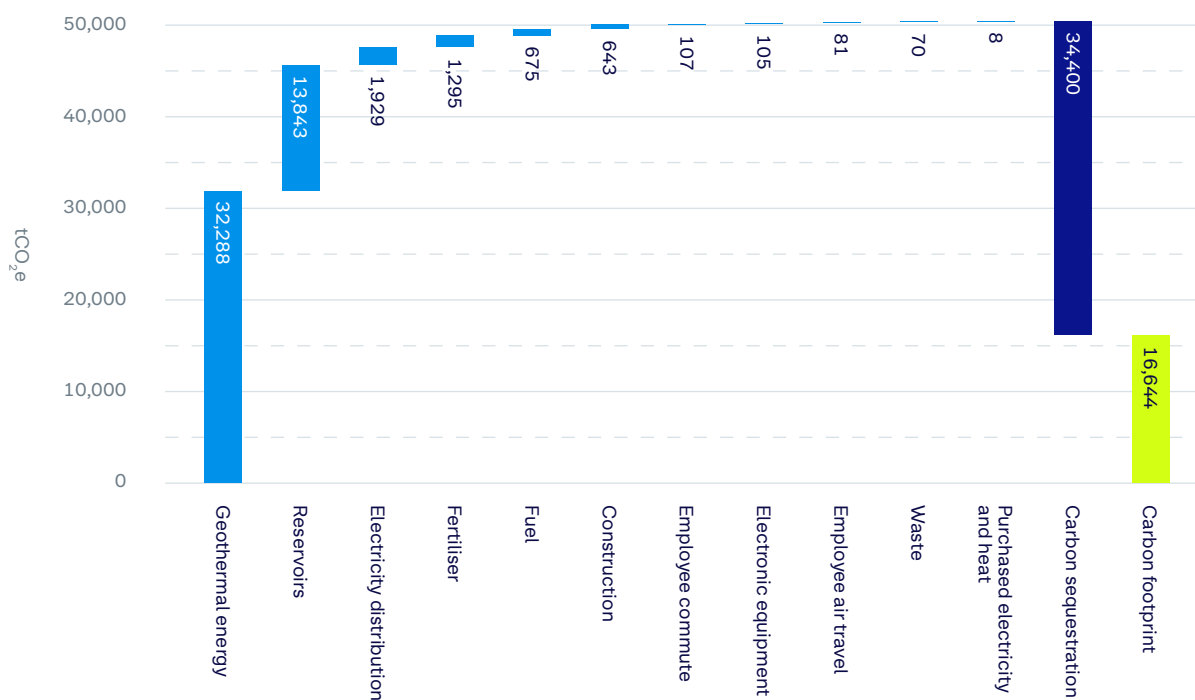
↓ Carbon intensity by energy source (gCO₂e/kWh)

	2019	2020	2021	Change from 2020
Geothermal energy	30	32	31	-2.6%
Hydropower	1.3	1.1	1.1	-4.7%
Total emissions from electricity generation	3.5	3.3	3.3	-1.4%
Other emissions	0.51	0.42	0.35	-18%
Total emissions	4.0	3.7	3.6	-3.3%
Carbon sequestration	2.3	2.5	2.4	-0.88%
Carbon footprint	1.7	1.3	1.2	-7.9%

This table allocates emissions from energy sources, linking emissions directly from generation to the energy source used. Thus, direct geothermal emissions result from the release of gases into the atmosphere, whereas direct hydropower emissions consist of emissions from reservoirs. The total sum of other factors, e.g., fossil fuel consumption, SF₆ leakage, employee air travel and waste, plus other emissions, is recorded in the table as "other emissions".

All calculations are based on whole decimal notations. Due to rounding to a decimal place, a slight difference in the total is possible, also in charts demonstrating proportional change year on year.

↓ Carbon footprint



² Landsvirkjun's Climate and Environment Policy. Landsvirkjun, 2021.

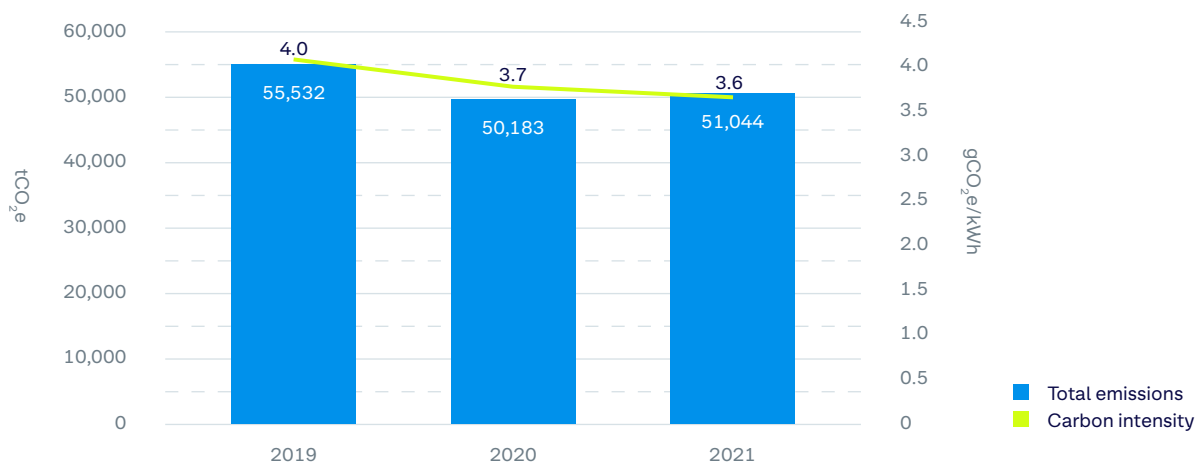
³ Supplementing Regulation 2020/852. EU, 2021.

Greenhouse Gas Emissions

Landsvirkjun's greenhouse gas emissions from its operations in 2021, defined within scopes, were 44.6 thousand tCO₂e. Whereas 90% of emissions within scopes are included in direct emissions (scope 1), and 10% are indirect emissions (scope 3).

Total emissions from Landsvirkjun's operations in 2021 were approximately 51 thousand tCO₂e, with emissions from geothermal energy comprising the major share, or 32.3 thousand tonnes, and emissions from reservoirs, which were approximately 13.8 thousand tonnes, thereof 6.4 thousand tonnes from organic carbon dioxide emissions, which are defined outside of scopes. Total emissions increased slightly from 2020, by approximately 2%, but carbon intensity has been reduced from 3.7 gCO₂e/kWh in 2020 to 3.6 g/kWh in 2021. However, total emissions have been reduced by 8%, compared to 2019.

↓ Emissions from Landsvirkjun's operations

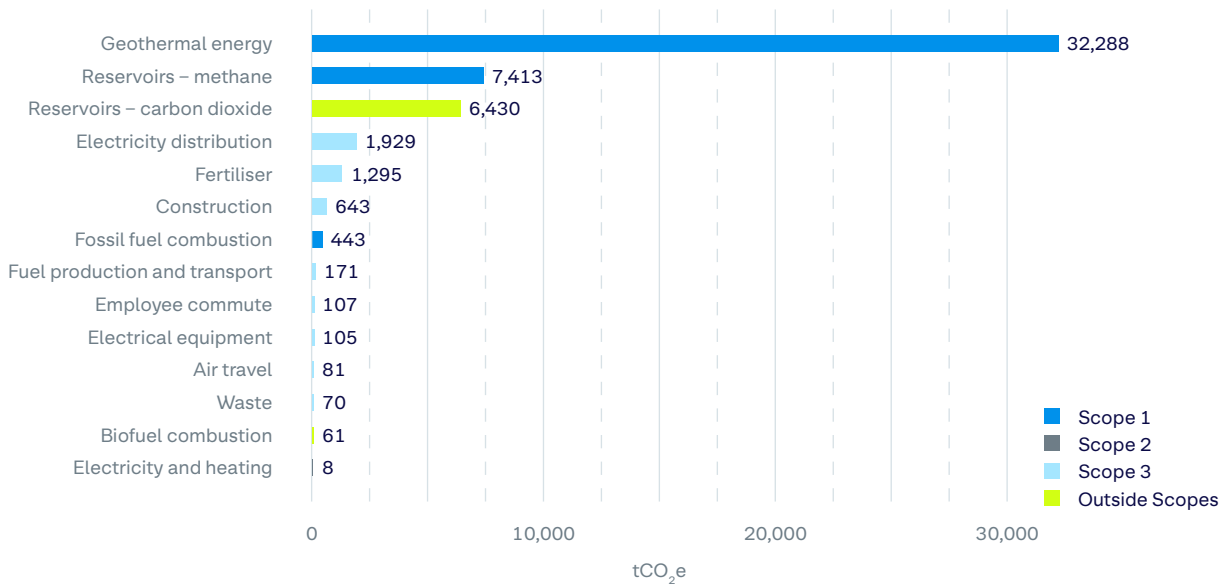


The largest part of increased emissions stems from increased electricity generation from geothermal power stations, these emissions are categorised as direct emissions (scope 1). On the other hand, indirect emissions (scope 3) continued to decrease.

↓ Emissions from Landsvirkjun's operations (tCO₂e)

	2019	2020	2021	Change from 2020
Direct emissions (scope 1)	41,550	38,422	40,249	4.8%
Electricity and heating (scope 2)	8.9	11	8.3	-26%
Indirect emissions (scope 3)	6,346	5,268	4,296	-18%
Total emissions (scope 1–3)	47,905	43,700	44,553	2.0%
Total emissions including Emissions outside scopes	55,532	50,183	51,044	1.7%

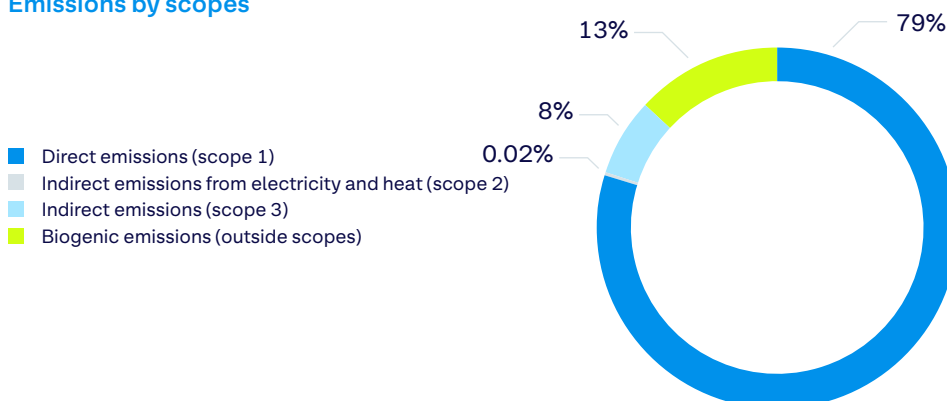
↓ Emissions by Sources



Electricity generation from geothermal sources produces the largest share of emissions. Methane emissions from reservoirs are also a large part of total emissions. These two factors are defined as direct emissions (scope 1). In addition, biogenic carbon emissions from reservoirs constitute a large share of emissions, but those are defined outside of scopes, according to the GHGP methodology, and do not fall under the Company's direct climate impact. Emissions from combustion of fossil fuels do not constitute a significant share of direct emissions. Furthermore, emissions from production and transport of fuel are a small share of total emissions, but those are categorised as indirect emissions (scope 3).

Emissions from electricity distribution constitute the largest part of indirect emissions (scope 3). These are emissions from the insulating medium SF₆ used at Landsnet's (the Icelandic transmission system operator) power grid but are recorded as indirect emissions at Landsvirkjun. The amount is proportional to the Company's share of total electricity generation in Iceland. Emissions from the use of fertiliser in land reclamation and afforestation projects, followed by emissions from fossil fuel combustion and waste management in the Company's construction projects. However, it is worth noting that the use of fertiliser impacts the climate favourably by increasing vegetation growth and carbon sequestration. Employee commute, either by air or private cars, and waste management do not constitute a significant proportion of Landsvirkjun's total emissions.

↓ Emissions by scopes



Carbon Sequestration

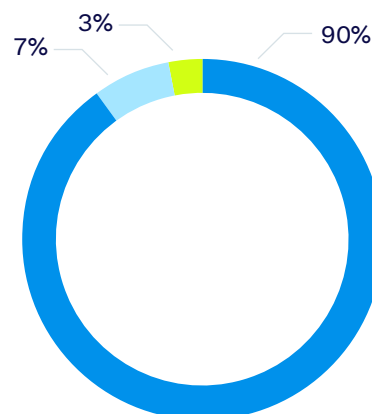
Landsvirkjun's total carbon sequestration for 2021 was at 34,400 tCO₂e, an increase of 4% from 2020. Carbon sequestration in the Company's projects was 31,100 tCO₂e in land reclamation, 2,350 tCO₂e in afforestation, and 950 tCO₂e in wetland restoration.

↓ Carbon sequestration (tCO₂e)

	2019	2020	2021	Change from 2020
Land reclamation	-28,800	-29,400	-31,100	5.8%
Afforestation	-2,000	-2,100	-2,350	12%
Wetland reclamation	-100	-500	-950	90%
Carbon funds	-1,000	-1,000	0	-100%
Total carbon sequestration	-31,900	-33,000	-34,400	4.2%

↓ Proportion of carbon sequestration by measures

- Land reclamation
- Afforestation
- Wetland reclamation



The frame of reference are measurements from 2016-2017, conducted by the Soil Conservation Service of Iceland and the Icelandic Forest Service, on carbon sequestration in land reclamation and afforestation projects carried out by Landsvirkjun or in cooperation with the Company, taking into account new projects, which were not part of the previous assessment. Calculations for reduced carbon emissions, where wetlands have been restored to reduce emissions, are based on a reduction factor. No sequestration was purchased from carbon funds in 2021.

Starting in 2020, Bureau Veritas reviewed and certified Landsvirkjun's data for carbon sequestration. Bureau Veritas has conducted a review for the Company for 2021 and issued a certification. Thus, the methodology for the assessment of Landsvirkjun's carbon sequestration has been confirmed.

Land reclamation, afforestation, and wetlands restoration are in part countermeasures due to constructions, land improvements in the vicinity of the Company's power stations, and the newly launched project aimed at carbon sequestration in soil and vegetation. Carbon sequestration is proportionally most intense in the extensive land reclamation sites.

Land reclamation projects, with carbon sequestration as a main objective, are located at Rangárvellir and Hólasandur. Similar afforestation projects are located at Eiðsstaðir, in the vicinity of Blanda power station, at Belgsá in Fnjóskadalur, at Laxaborg in Haukadalur, at Skarfaness in Landsveit, and at Skálmholtshraun in Flóahreppur. Furthermore, wetlands have been restored at Sogn in Ölfus and Ytri-Hraundalur at Mýrar, and the project at Skálholt is now accounted for in the Climate Account, for the first time. These projects have been carried out in cooperation with landowners and professionals, such as the Soil Conservation Service of Iceland, the Icelandic Forest Service and forestry associations.

↓ A map of Landsvirkjun's sequestration projects



Carbon Neutral by 2025

Landsvirkjun intends to make a good thing even better and become carbon neutral in 2025. To achieve this milestone, Landsvirkjun adheres to its Climate Action Plan, which is based on a thorough mapping of the Company's carbon footprint. The Climate Action Plan has ambitious targets and clear measures which lead the way. The Climate Action Plan was approved in 2019 and extends to 2030.

Landsvirkjun has prioritised its action on climate change to achieve maximum result in the most efficient manner:

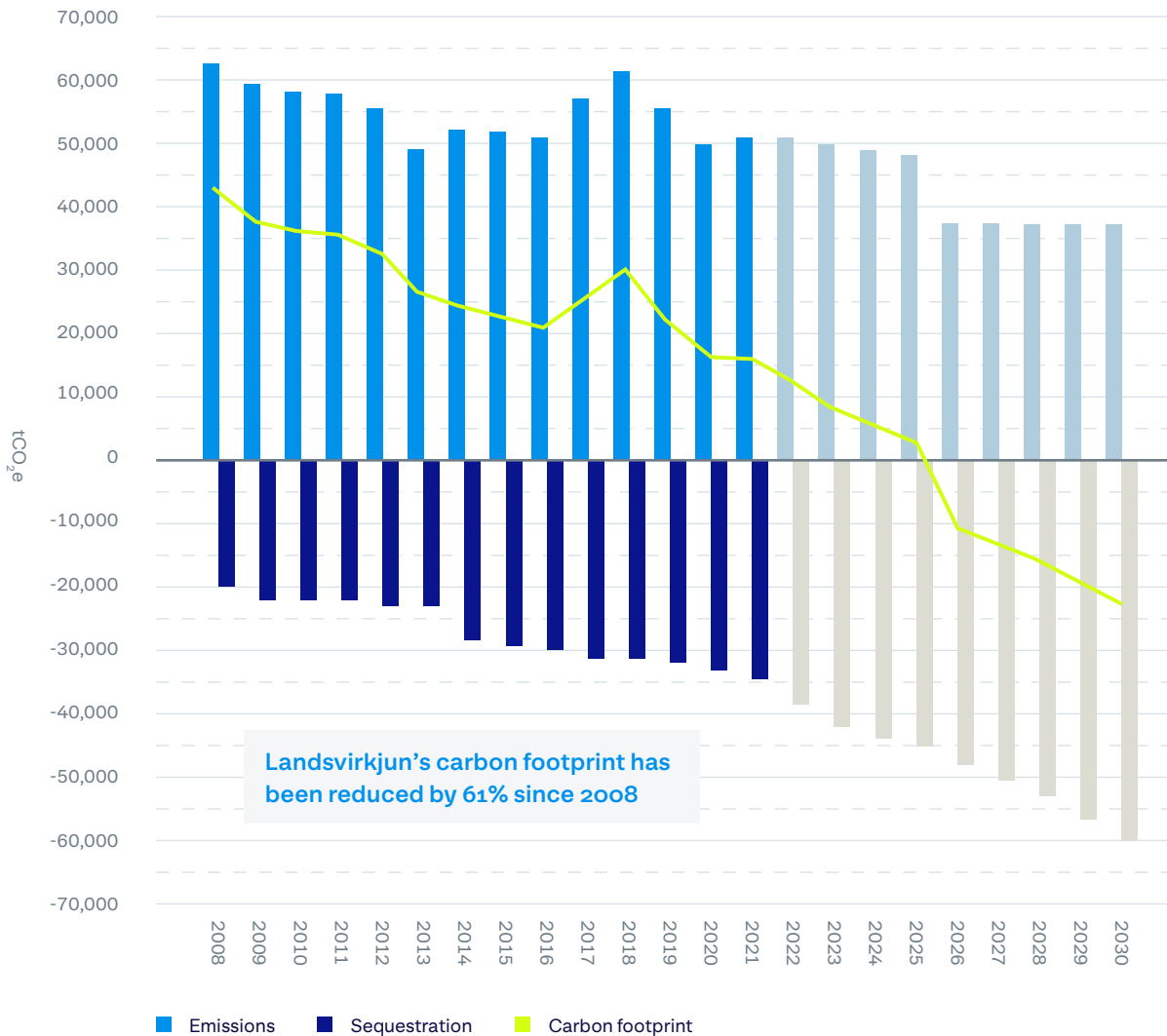
- Prevent new emissions
- Reduce current emissions
- Implement measures

The Company's Climate Action Plan is founded on best practices, scientific knowledge, and decades long experience on climate affairs. Emissions are monitored steadily over the year. It is important, to be able to ensure continuous monitoring of the progress of implemented measures and record the findings. Obviously, recording emissions only serves its purpose if it leads to better informed decisions.

The internal carbon fee is used to make informed decisions about emissions from operations, which means that emissions – or rather, the future costs of emissions – is figured into larger financial decisions, from procurement of production supplies to new power station options. Landsvirkjun's internal carbon fee for 2021 was USD 58/tCO₂e.

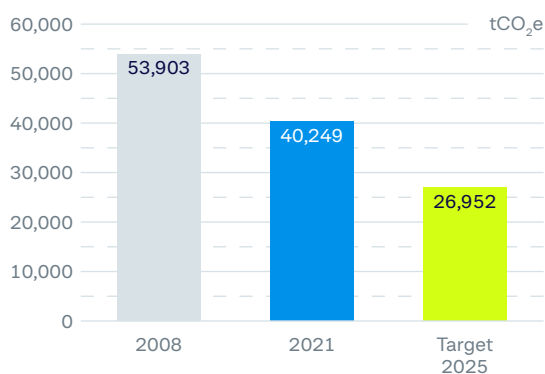
Landsvirkjun's Climate Action Plan

↓ Landsvirkjun's Climate Action Plan until 2030



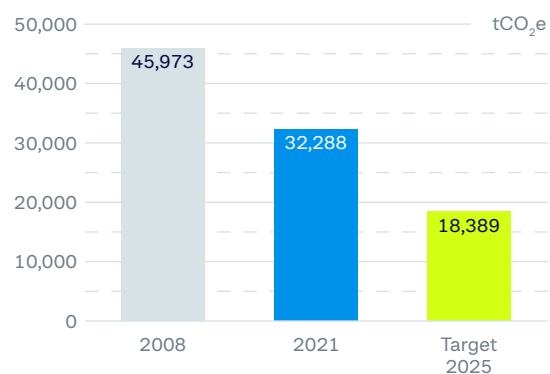
Landsvirkjun's Climate Action Plan reduced emissions targets

↓ 50% reduction in direct emissions by 2025, vs. 2008



Direct emissions from Landsvirkjun's operations have been reduced by 25%, with 2008 as base year.

↓ 60% reduction in direct emissions by 2025 vs. 2008

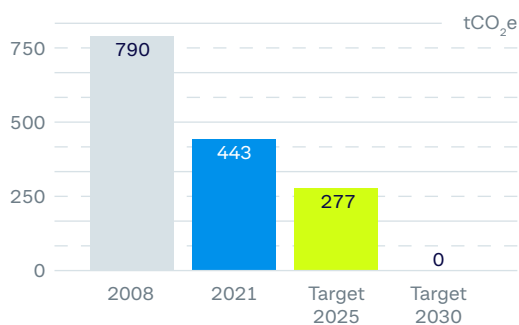


Emissions from geothermal power generation has been reduced by 30%, with 2008 as base year.

Geothermal power generation is the single largest emissions factor in Landsvirkjun's operations. The Company has already started to control the energy generation with the objective of minimising emissions while maximising the energy generation. An example of such mitigation action would be the integration in utilising hydropower and geothermal energy. Landsvirkjun's largest climate action is the project Koldís, and from 2025 the project Koldís will capture almost all carbon dioxide and hydrogen sulphide from the Peistareykir Geothermal Station and return it subterranean.

Decreased emissions from geothermal energy generation directly impact Iceland's obligations in climate affairs. Landsvirkjun's target of 60% reduction in emissions from geothermal energy generation means a reduction of 31,600 tonnes CO₂e from 2005. The Company's reduction in emissions from geothermal energy generation is 3.5% of Iceland's obligations, which stipulates a 29% reduction in direct emissions, with 2005 as base year. This equals 1.9% of Iceland's target reduction of 55%, with same base year, as stated in the current Government Platform.

↓ **Stop procurement of fossil fuels in 2030**



Emissions from fossil fuel combustion have been reduced by 44%, from 2008.

Since approving the target to stop the procurement of fossil fuels in 2030, Landsvirkjun has used the Energy Transition Plan to pave the way. The Energy Transition Plan was revised in 2021 and new targets approved. These targets lead the way to fossil fuel free operations.

Energy Transition Plan Targets until 2025

Landsvirkjun plans to have reduced the use of fossil fuels by 65%, with 2008 as base year.

Cars

- From 2022: only used cars procured if no clean energy cars available.
- From 2023: only used pick-up trucks procured if no clean energy pick-ups available.
- Before year-end 2023: fast charging stations at every energy production area.
- After 2024: all rental cars to be 100% clean energy cars.
- Before year-end 2025: the target for Green Steps Program (Græn skref) reached for 75% of all passenger cars to be clean energy cars.

Equipment

- When equipment is replaced, the first choice is always clean energy.

Power stations

- In 2025 analysis will be ready detailing the options for energy transition at the Sauðafellslón Power Station and smaller power stations which are used as reserve power generators and for research.

Landsvirkjun at the Forefront Against Climate Change

Landsvirkjun was awarded the Climate Recognition of the City of Reykjavík and Festa (Centre for Sustainability) in 2021. And in 2020, Landsvirkjun scored an A-, which stands for leading in climate action, from CDP, the independent global disclosure system, which assesses climate control at companies and municipalities. A decision was taken not to disclose information to CDP in 2021, rather continue work on improvements and opportunities, suggested by the CDP in the last years. Landsvirkjun will again disclose information to CDP in 2022.



Interplay Between Nature and Utilisation

Impact from Energy Generation on the Environment and the Biota

The utilisation of renewable resources means disturbance which can impact nature and biota. Therefore, Landsvirkjun conducts research and monitoring on nature and biota before construction projects commence, during construction, and after the power station starts operations. Thus, the Company gains scientific knowledge on if and how its operations impact the environment. Over Landsvirkjun's span of 56 years, as well as in the long history of energy utilisation in Iceland and abroad, environmental incidents have occurred, which have provided deeper understanding on the sensitive interplay between utilisation and nature. Landsvirkjun works tirelessly at gaining further knowledge on how to do better when it comes to environmental issues and protect and/or reclaim natural assets.

Landsvirkjun monitors various biota factors in areas impacted by the Company's operations, in collaboration with universities, research institutions, and independent specialists. The monitoring gives indication on if and how the operations impact nature and biota, and if mitigating measures need to be implemented. The Environment Agency of Iceland is responsible for monitoring impact on waterbodies, which are defined as units in the EU's Water Framework Directive and fall under the management of aquatic matters. The Icelandic [Water Viewer at the Environment Agency's website](#) reports no waterbodies under pressure from pollution or discharge from Landsvirkjun's operations.

Conservation Areas

Landsvirkjun's operations areas are in the vicinity of several defined conservation areas. These areas are in different conservation categories, from municipalities' district conservation to national parks. Furthermore, the areas are under conservation for different reasons, e.g., specific landscape, geological formation, biota, cultural or antiquities. The Company is aware of these areas and works with authorities and stakeholders in fulfilling provisions on conservation in each area.

Species on Red Lists

To assess the impact from the Company's construction projects, Landsvirkjun conducts monitoring and research on animals and plants which are on the Iceland Institute of Natural History's Red Lists, using The International Union for Conservation of Nature's (IUCN) standard. The species that fall under the criteria of endangered species are specifically monitored.

The propagation of the fern adders-tongue (*ophioglossum azoricum*) has been monitored in the impact region around Mývatn area, which is an area affected by the Company's operations, but adders-tongue only grows in geothermal areas. In collaboration with the Environment Agency of Iceland, the spread of the nootka lupine (*lupinus nootkatensis*), a non-native and invasive plant, is being controlled in the habitat of the adders-tongue.

Protected and Reclaimed Habitat

Landsvirkjun's operations inevitably entail disruption, which can affect the habitat of animals and vegetation. This can happen when reservoirs are formed, or due to sedimentation, aeolian deposition, and bank erosion. To reduce the impact on biota, Landsvirkjun has implemented various measures, which aim at protecting and reclaiming the habitat.

Aeolian Deposition Defence

Impact on vegetation from Landsvirkjun's operations is predominantly on account of aeolian deposition from the reservoir banks at Hálslón and Blöndulón. To protect the vegetation against aeolian deposition fertiliser is applied for reinforcement, encroachment defence is installed where needed, sand traps for erosion control are put in place, and trapped sediments in certain areas are removed. In 2021, encroachment defence around the reservoir Blöndulón was repaired, to prevent free roaming sheep to enter. To reinforce the vegetation and for surface binding in fenced areas, fertiliser was applied, and seeds disseminated. Recent monitoring findings from the Icelandic Institute of Natural History show that aeolian deposition and erosion at the reservoir Blöndulón from the reservoir banks was at its minimum in 2016-2020, the lowest measured since monitoring began in 2014.

Riverbank Erosion Control and Repairs

In 2021, Landsvirkjun's project on riverbank erosion control at Lagarfljót to protect vegetation continued. This is a 350 m riverbank erosion repairs at Skriðuklaustur. Furthermore, a 1,300 m riverbank erosion repair project on the east bank of Lagarfljót near Egilsstaðir (downstream from the bridge) was started in 2021 and its completion is expected in 2022. Riverbank erosion had already started before the Fljótsdalur Power Station was constructed. After operations began at the Fljótsdalur Power Station, water levels in Lagarfljót rose. New riverbank erosion repairs are intended to halt the erosion and the project is part of mitigation measures on behalf of Landsvirkjun.



Vegetation Reclamation

From 1967, Landsvirkjun has participated in an extensive collaboration with public bodies and organisations on mitigations in land reclamation, afforestation, and wetland reclamation. The collaboration's objective is to reclaim vegetation and land qualities, where disturbed, support sensitive habitat of vegetation and animals, and counteract natural soil- and sand erosion. Measures in land reclamation have been most extensive in the areas around the Blanda Power Station and the Fljótsdalur Power Station. Afforestation has been significant in the Þjórsá area, but also in the Sog area and in the area around the Blanda Power Station. These measures are part of Landsvirkjun's carbon capture and climate action targets.

Environmental Incidents

Incidents with an environmental impact in connection to Landsvirkjun's operations can occur. Such incidents are recorded as environmental incidents, the cause is analysed, measures implemented and subsequently monitored. Two environmental incidents occurred in 2021, but neither incident called for penalties.

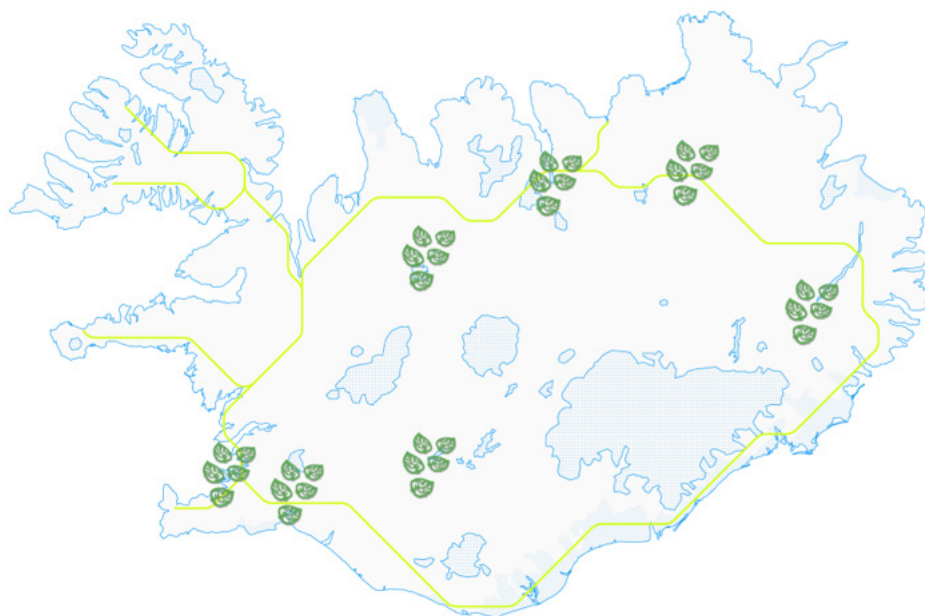
In June 2021, while work was being carried out at a mine near the Sporðöldulón Power Station, turbid water drained into the river Tungnaá and spoiled the water quality of the river around the source of the leak, with possible impact on biota and fishing. In collaboration with the Marine Research Institute, a sediment trap was installed as a countermeasure, which trapped approximately 90% of the turbidity, thus significantly reducing the possibility of impact from the incident. The cause of this incident was analysed, processes revised, and procedures updated, to avoid reoccurrence.

In August 2021, findings from a soil sample showed that the strength of arsenic (As) at several points at the Bjarnarflag Power Station was greater than the allowed maximum limit for land use in operational areas, in accordance with a new regulation on polluted soil, issued in December 2020. These findings are not surprising, as it is common to find arsenic in sediments and fluids in geothermal areas in Iceland, but the amount varies depending on different geological conditions.

Subsequently, the Public Health Authority in the Northeast, the Licence Issuer, was contacted for instructions. The outcome was to consult with specialists in pedology and conduct more research to further map the background level of the arsenic in the area. According to findings, plans for necessary improvements will be made. A plan for this research was put forward in an action plan which was introduced to the National Energy Authority in December 2021. Problem solving will continue in 2022, in collaboration with the previously mentioned entities.

Green Operations

Landsvirkjun places emphasis on green operations and ever-growing environmental awareness by employees. The Company has successfully introduced the Green Steps Program in all its workplaces, fulfilling the target of the Government Offices' Climate Action Plan, which states that companies in majority ownership of the State, institutions, and ministries, complete all the five steps in the Green Steps Program, before year-end 2021.



Water Consumption, Monitoring Water Supply Areas

At Landsvirkjun's offices in Reykjavík and Akureyri, potable water is supplied by the local municipalities. As for the power stations, cold groundwater is extracted from the water supply areas, which the Company owns and/or operates.

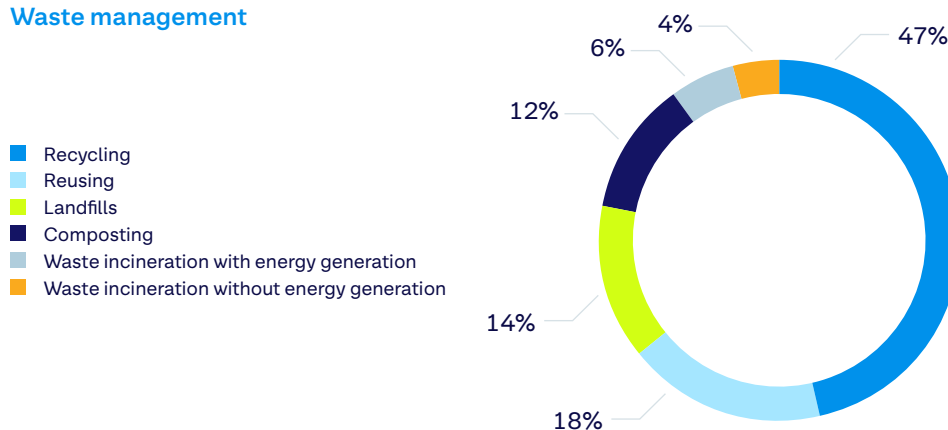
Requirements for water supply areas' conditions and the quality of potable water are stated in Landsvirkjun's power stations licences. The local Public Health Authority, the Licence Issuer, monitors possible effects from utilisation of the water supply areas. Findings obtained from monitoring have not reported effect on the water supply areas from Landsvirkjun's operations.

All effluent (sewage) from the Company's operations goes through the local municipality's sewage system, or through a two-tier cleaning process, at the minimum, operated by Landsvirkjun and monitored by the local municipality's public health authority.

Waste // Recycling and Disposal

Landsvirkjun has set the objective that no active waste from general operations will go to landfills in 2024. In 2021, 38 tonnes of waste from the Company went to landfills, or 14% of the total waste. Thereof, 14 tonnes were inert waste (glass, rocks, soil), e.g., from construction.

↓ Waste management



To hit the target, an analysis was performed to categorise the types of waste from the Company, find out how the waste is processed, and identify opportunities for improvements.

Waste from the Company's operations is sorted and sent for recycling or disposal at approved waste management companies. In accordance with law and regulations, hazardous material is returned to approved collection points, to ensure correct waste treatment. Landsvirkjun only buys services from waste management companies which have the necessary licences from the Public Health Authority and the Environment Agency of Iceland. Waste is sorted at Landsvirkjun's operational areas, as specified by local waste management companies and relevant municipalities. Where the possibility for sorting waste is restricted, e.g., in smaller municipalities, Landsvirkjun has worked with the waste management companies on improving the service, thus, benefiting local communities.

Detailed information on emissions from waste and hazardous material is in Landsvirkjun's Climate Account 2021.

Efficient Energy Generation and Progress

Landsvirkjun's vision is a sustainable world, powered by renewable energy. For this vision to materialise, energy must be generated in an efficient and renewable manner, for the benefit of current customers and generations to come. Landsvirkjun's responsibility weighs heavily in the matter as the Company generates over 70% of electricity in Iceland. The Company's obligation is to ensure that the energy generating system, which is based on the renewable natural resources which Landsvirkjun is entrusted with, is run as responsibly as possible, with obligation to effectiveness and safety. A mathematical model of the Company's energy system emulates the Company's operations and uses electricity sales forecasts and estimates of water levels in reservoirs to plan electricity generation at Landsvirkjun's power stations.

Repairs and maintenance at power stations are always of the best quality, ensuring that the natural resources are always effectively utilised. Landsvirkjun is a reformative and progressive company, continually seeking ways to enhance knowledge and improve operations. Choices in electricity generation are developed with a green future in mind and various options in hydropower and geothermal power are under consideration, in addition to further develop as a robust wind power generator.



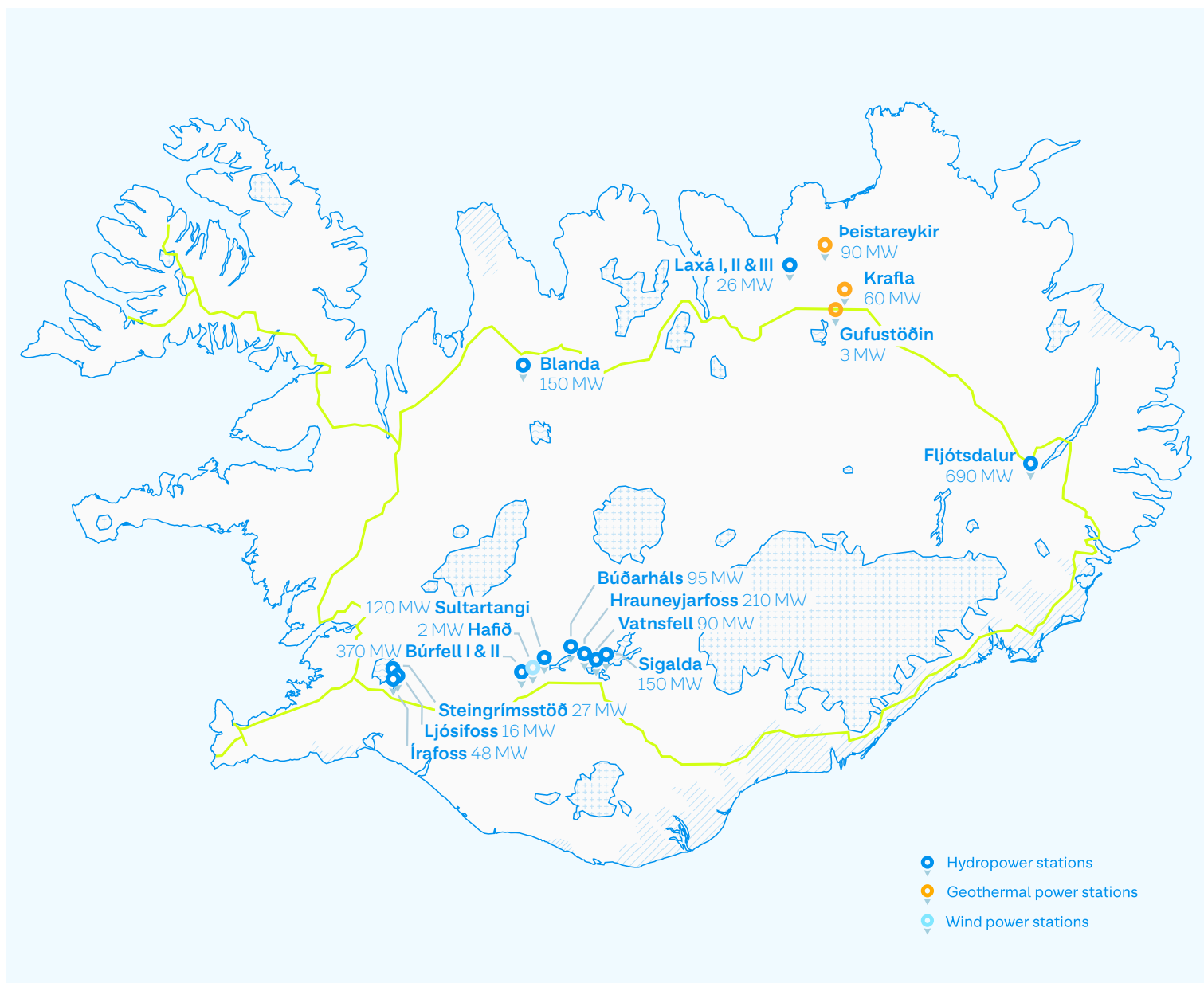
Electricity Generation 2021

Power Stations' Utilisation and Overview

Almost 100% of electricity generated in Iceland comes from renewable energy sources. Landsvirkjun generates **three quarters of this energy**.

Landsvirkjun delivered 13,998 GWh of electricity to Landsnet's energy transmission system in 2021, which is an increase of 5.2% year on year. The Company's power stations operational emphasise is comprehensive vision, with efficiency, dependability, and harmony with the environment and community as a guiding light.

↓ Landsvirkjun's Power Stations



Hydropower 13,074 GWh

- Electricity generation in Landsvirkjun's power stations was approximately 13,074 GWh in 2021, compared to 12,458 GWh in 2020. This accounts for 93% of the Company's energy generation in 2021.
- Landsvirkjun operates fifteen hydropower stations around Iceland, in four operational areas.
- The Þjórsá area has seven power stations with a total of nineteen generating units and several waterway structures, which cover the area from the glacier Hofsjökull to the Búrfell Hydropower Station.
- The Sog area has three power stations with a total of eight generating units and waterway structures at lake Þingvallavatn and lake Úlfljótavatn.
- The Laxá Power Stations are part of the Blanda area, with four power stations, a total of eight generating units, and associated waterway structure. The waterway at the Blanda Power Station spans an area of 25 km, from the mountain Reftjarnarbunga to the river Gilsá.
- The fourth operating area is the Fljótsdalur Power Station, the largest hydropower station in Iceland, with six generating units and a comprehensive waterway structure, with a total of 70 km tunnel.

Geothermal Energy 1,052 GWh

- Electricity generation in Landsvirkjun's geothermal steam power stations was approximately 1,052 GWh, compared to 972 GWh in 2020. This amounts to approximately 7% of Landsvirkjun's total electricity generation. The Company has three geothermal steam power stations: Krafla, Þeistareykir, and Bjarnarflag, with a total of five generating units.
- Landsvirkjun places importance on utilising geothermal heat in a sustainable and responsible manner. An integral part of that approach is maintaining the balance between utilisation and the natural inflow of the geothermal reservoir. Separated hot water, which is not used for electricity generation, is reinjected into the geothermal reservoir.
- The geothermal power stations utilise the geothermal fluid that comes from approximately 2,000 m deep boreholes. The geothermal fluid is a mixture of steam, which contains various types of gas and geothermal water. In the power stations, the steam is separated from the geothermal fluid and used for electricity generation.

Geothermal Fluid

- Requirements for releasing geothermal fluid into sediments and ground water are stated in the power stations' licences. The licences are issued by the Public Health Authority in the local municipality, which monitors possible environmental impact from fluid emissions. Landsvirkjun works purposefully with the authorities and other stakeholders to reduce surface fluid emission.
- Although the better part of the geothermal fluid is injected into the geothermal system, research has shown evidence of local impact from run-off water from geothermal power generation at the Krafla Geothermal Station. There, fluid is emitted into surface water, the river Dallækur, where it passes into the groundwater body, and does have some environmental impact. However, impact on ground water is barely perceptible. Landsvirkjun monitors ground water in ground water bodies, ravines, and springs, to assess possible impact from run-off water on lake Mývatn.
- The monitoring includes analysing the level of arsenic (As), which is much higher in the power stations' run-off water than in ground water. Regular testing at lake Mývatn started in 1997, but since then no significant effect has been detected. The level of arsenic, other substances, and heavy metals has always been within environmental limits.
- Due to the impact on surface water in the river Dallækur, Landsvirkjun has started preparations for release of eluent from the Krafla Geothermal Station by injecting it below ground water level, which will have a mitigating effect. This is done in collaboration with the Public Health Authority in the Northeast.
- In collaboration with the National Energy Authority, the Environment Agency of Iceland, and the Municipality of Skútustaðahreppur, Landsvirkjun has approved a plan of implementation to reduce surface fluid emissions from the Bjarnarflag Power Station. Furthermore, new pipes between bottoming cycle stations were installed, which reduces run-off water and improves utilisation of geothermal fluid.

Wind Power 6.1 GWh

- Landsvirkjun operates two wind turbines for research purposes, at the lava field Hafið, north of the Búrfell mountain. Each wind turbine has 0.9 MW installed capacity. The wind turbines' combined electricity generation was 6.1 GWh in 2021, compared to 6.7 GWh in 2020.

Sustainable Use of Natural Resources

Landsvirkjun's objective is to use the natural resources, for which it is entrusted with, in a sustainable and efficient manner. The Company's goal is to improve the utilisation of natural resources and reduce waste. Great importance is placed on maximising utilisation of the resources already harnessed.

Monitoring and Research of Natural Resources

The Company conducts comprehensive research and monitoring of the natural resources used for energy generation. This includes glacier surface mass balance, flow and temperature of rivers, chemical composition and the rate of groundwater flow, fluvial sediment transport, reservoir levels and capacity, as well as monitoring the weather and changes in the landscape. The overall condition of the geothermal areas is monitored with a special model for each geothermal area. The geothermal reservoir is measured and monitored, ground water streams and chemical content are monitored, and gas emissions into the atmosphere are monitored.

The research and monitoring activities make it possible to see into the future, so to speak, and maximise utilisation of the natural resources, with sustainability as a guiding light.

The Water Year 2020-2021

The water year is defined as beginning October 1, 2020 and ending September 30, 2021. At the beginning of the water year, all reservoirs were full, and the drawdown started in the middle of October. Water conditions were rather monotone until spring, dry weather, and low inflow, especially in the Þjórsá river area. Almost no winter thaw occurred until March, but thaws were predominantly at the Blöndulón catchment area. Weather conditions in April were average, but May was especially dry and cold. No improvements were in the month June and at the end of the month reservoir levels at the Þjórsá river area were at a historic low. Water conditions completely changed in July, August, and September. Inflow was well above average. The reservoir Hágöngulón filled up at the end of July, with Blöndulón and Hálslón filling up in August. Þórisvatn improved considerably, up from very low water levels, with stable inflow, however, it did not suffice to fill the reservoir. The highest water levels were at the end of September, or 576 m.a.s.l., needing 300 GL, or 300 GWh, to fill up the reservoirs.

Geothermal Reservoirs 2021

In 2021, 8,191 thousand tonnes of steam were used to generate 1,052 GWh of electricity at the Mývatn area (Krafla-, Bjarnarflag-, and Þeistareykir Geothermal Stations). During energy generation from the geothermal systems the mass extraction was 33,751 thousand tonnes. Whereas extracted condensate- and separated water from energy generation was 11,783 thousand tonnes, with 8,388 thousand tonnes reinjected into the geothermal system.

Comprehensive research on the utilisation of geothermal energy is conducted at Landsvirkjun's operational geothermal areas. The research is focused on ongoing operations and future utilisation. Landsvirkjun works tirelessly at ensuring secure and sustainable geothermal electricity generation, while reducing any possible environmental impact.

Power Stations Operations

Landsvirkjun's power stations' operations were excellent in 2021, despite COVID-19, which certainly made its mark, as in the previous year.

Supervision, maintenance, and monitoring at power stations were stable in 2021, irrespective of the pandemic. However, there were instances where inspections needed to be postponed or their scope reduced, and some maintenance had to be delayed.

Instances of spontaneous disturbance in Landsvirkjun's power stations were a total of 59 in 2021 but were 58 in 2020. The Company aims at having all machinery in its power stations operational 99% of the year, excluding scheduled maintenance periods. This was achieved in 2021. Machinery was available 99.9% of the year. Landsvirkjun operates integrated, certified quality-, environment- and safety management system, based on ISO 9001, ISO 14001, OHSAS 45001, and internal electricity safety management (RÖSK), which conforms to the Iceland Construction Authority's standard for electricity safety management. Landsvirkjun's electricity generation was certified as green by the German certification body TÜV SÜD, and the Company's IT safety management system is certified in accordance with ISO 27001.

Property Development Projects at Power Stations

In 2021, 84 investment- and property development projects in power stations were under way. The largest project in 2021 was in the South, where generator stators and cooling system in a generating unit and connected units at the Sultartangi Hydropower Station were renewed. The project will increase energy generation by 8.5 GWh per year.

The largest project in the North and Northeast was renewing expansion joints, voltage regulator, governor, and connected units, in generating unit number one at the Krafla Geothermal Station, in addition to repairs and maintenance at Krafla's cooling tower.

Postponed projects and delays occurred as a result from COVID-19, resulting in some of the projects being undertaken in 2022.



Impact from COVID-19 on Operations, Repairs, and Maintenance

Vaccinations started in the beginning of 2021, and the pandemic lay somewhat dormant and had limited impact until mid-July, nevertheless, various restrictions were followed at the Company, to safeguard operations at the power stations. In the middle of July, the fourth wave of the pandemic started, ending in a low at the end of September, only to be succeeded by the fifth wave. At the beginning of 2022, the pandemic was still running, and it did affect projects on repair and maintenance, especially the ones requiring specialists from abroad, but having to separate projects and operations to safeguard undisturbed operations did in fact have an interruptive impact.

Curtailing Due to Low Water Balance

In December 2021, Landsvirkjun had to take measures regarding customers with the most flexible agreements. Supply of electricity to fishmeal plants had to be curtailed. In January 2022, it became clear that no electricity would be available in this market until spring.

Furthermore, Landsvirkjun informed other customers with flexible power agreement, i.e., large industrial end-users and district-heating plants, that if the situation did not change, electricity delivery would probably have to be curtailed soon.

In Accordance with Power Agreements

In each occurrence, the curtailing is in accordance with power agreements between Landsvirkjun and these customers, i.e., curtailing delivery is a possibility as renewable energy systems are under the caprice of nature. On the other hand, the power agreements have provisions stating that these customers can reduce their electricity procurement when needed. Landsvirkjun generates electricity in a responsible manner and the large buyers have shown an understanding of this possible situation during negotiations.

How to Power a Sustainable Future?

We stand at a crossroads, global warming is real, energy use is unsustainable in the world and there is a universal appeal for harnessing renewable energy. The Icelandic Government has set ambitious targets for a carbon neutral Iceland in 2040 and at the same time completely stopping the use of diesel and petrol.

In the Ministry of the Environment, Energy and Climate's newly published Green Paper, where status and challenges in energy matters are discussed, says that if Iceland is to reach its climate issue targets it necessary to take steps to increase energy generation. In the Green Paper the energy transition alone is said to need 16 TWh and increased energy demand from households and industries is said to be 8 TWh until 2040. These numbers combined are more than the total electricity generation in Iceland today. What the exact energy need will be only the future can tell. However, energy demand is substantial.

The electricity power system is generating at almost maximum installed capacity, and the electricity transmission system is at full capacity. In that context the curtailing of delivery to Landsvirkjun's customer is a point in case, but the curtailing is partly due to bottlenecks in the transmission system. Energy demand is expected to increase greatly in South, thus, it is preferable that opportunities for increased energy generation in that region are available.



Expansion and Power Increase Projects at Power Stations

Global warming causes great changes all over the world. In Iceland, this has manifested itself as glacial ablation, a development that will continue in the coming decades. The ablation creates more water inflow through Landsvirkjun's power stations. The Company places emphasis on projects for expansions and power increase, to maximise the utilisation of this natural resource. In accordance with the current legislation, all projects that increase power by 10 MW or more, must be included in the Framework Programme.

Recently, projects were concluded at the Bjarnarflag Power Station and the Búrfell Hydropower Station. A project aimed at increasing the utilisation at the Sultartangi Hydropower Station is currently in progress. Next projects under consideration are the Hrauneyjafoss Power Station and the Sigalda Hydropower Station. The former option involves renewing the machinery at the Hraunaeyjafoss Power Station, which would boost the power generation by 20 MW. Another option is to expand the Sigalda Hydropower Station by one 50 MW generating unit. It should be noted that these projects entail limited increased in energy generation.

In the long term, expansion of the Þjórsá Power Station by one generating unit, comparable to proposals for the Sigalda hydropower Station here above, and the Vatnsfell-, Hrauneyjafoss- and Búrfell Power Stations are under consideration. Expansions at the geothermal power stations at Þeistareykir and Krafla are also under consideration, these expansions are in the utilisation category of the Framework Programme.

Available Power Station Options in the Coming Years

Landsvirkjun has under consideration various options for power stations which could meet the energy demand of the future. The Company has sustainable development at the forefront when assessing these options, with emphasis on the balance between the three pillars of sustainability: economic-, environmental-, and social issues.

From the moment a location is identified for a power station, a long process starts involving detailed feasibility- and environmental studies, and extensive planning- and permit procedures, where institutions, stakeholders, and the public, can comment on the various stages of the project.

- » The Hvammsvirkjun Power Station (hydropower): located in the South of Iceland and included in the utilisation category of the Framework Programme. The Hvammsvirkjun Power Station has installed capacity of 95 MW and an annual electricity generation capability of 720 GWh.
- » Expansion of the Þeistareykir Power Station (geothermal): installed capacity is 45 MW and annual electricity generation capability is 370 GWh. Furthermore, instalment of topping stations is under consideration at Þeistareykir, with an annual installed capacity of 5-15 MW and 40-120 GWh electricity generation capability, annually. The Þeistareykir Power Station's expansion is included in the utilisation category of the Framework Programme.
- » The Power stations at Blanda (hydropower): this power station option has installed capacity of 30 MW and annual electricity generation capability is 190 GWh. The power stations are included in the utilisation category of the Framework Programme, however, bottlenecks in Landsnet's transmissions system prevent these constructions.

Excellent Customer Service

Landsvirkjun's role is to maximise the value of the natural resources it has been entrusted with, in a sustainable and efficient manner. This means that Landsvirkjun generates electricity in an efficient manner from economic-, social-, and environmental perspective. Landsvirkjun emphasises diverse business and aims at risk diversification. The customer's success is the premise for the Company's success.

Landsvirkjun places emphasis on knowing the customer's needs and building solid business connections. This is the result of providing excellent service on a global scale and offering competitive terms, along with close collaboration and continuously looking for opportunities to increase the value creation. The financial gain – the dividends – is shared with the community, either as payments to the Treasury or with other gains from Landsvirkjun's operations.



The Electricity Market

The Icelandic electricity market is divided into two separate sub-markets: the general market and the market for large energy-intensive industries. The large industrial end-users use approximately 80% of all electricity generated in the country, other companies 15%, and households approximately 5%.

↓ The electricity markets



Electricity is defined as a marketable product in a competitive market. Furthermore, general law on competition apply to electricity sales in Iceland. Thus, publicly owned energy companies cannot sell their electricity below cost. The EFTA Surveillance Authority monitors that applicable law in the electricity market within the European Economic Area are followed.



Large Industrial End-Users

To be defined a large industrial end-user, the customer must use 80 GWh annually (approximately 10 MW) at the same location, in accordance with the Electricity Act. The large industrial end-users are directly connected to Landsnet's transmission system, and the energy delivered is high voltage.

Improved Performance – Higher Prices at International Markets and Turn-Around Since the Start of COVID-19

There was a turn-around in the international markets in 2021. Prices in the Nordic electricity market Nord Pool went sharply up, as did prices for aluminium and silicon, after a historic low in 2020, in the wake of the pandemic.

Many interconnected factors led to increased energy and production prices, in the beginning of 2021. The economy recovered, demand increased steeply, and consumers were quick to turn to products and away from services due to limits on gatherings. The winter in the Nordic countries was cold and dry, which meant reservoirs did not fill up, leading to lower electricity supply. Prices of coal and gas rose sharply and record prices for electricity in the UK and Germany were repeatedly broken.

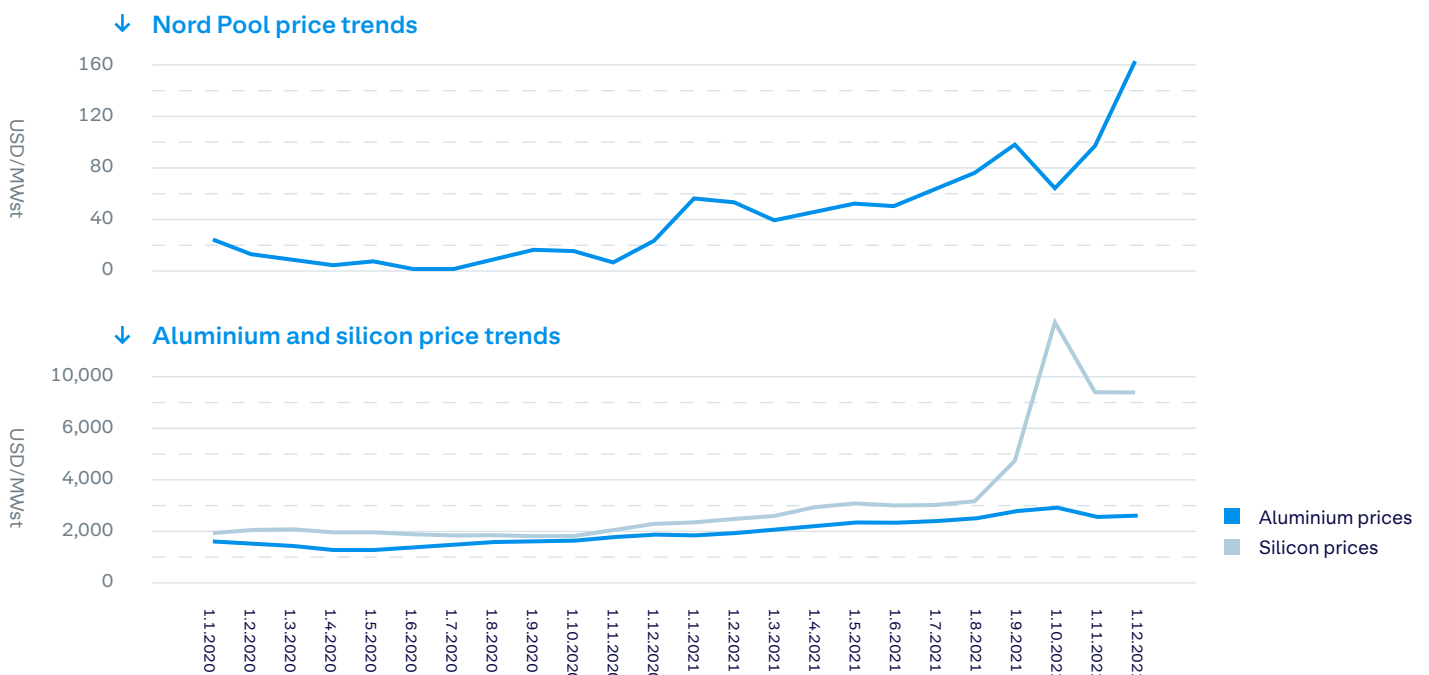
Supply of aluminium and silicon metal was lower than expected, for various reasons. This was in part due to effects from China, but China's policy on environmental issues is reducing the use of electricity and decreasing greenhouse gas emissions. Limits on electricity use were set, and producers of aluminium and silicon were ordered to cut their production.

The difference between the lowest aluminium prices in 2020 to the highest in 2021 was 120%, with average prices being 43% higher. When aluminium prices hit the highest level, a slight drop followed, and at year-end prices were USD 2,600 per tonne. For comparison, average prices for the last ten years have been USD 1,900 per tonne.

The increase in silicon metal prices was 450% year on year, with a 200% rise in only two months, from September through October 2021.

Average prices at Nord Pool were little under USD 13 per MWh in 2020, but average prices were USD 74 per MWh in 2021, a 470% rise year on year.

Forecasts and futures anticipate continued high market prices ahead and that prices will remain higher than before the pandemic.



Important Power Agreements in Place – Customer Support During Rough Seas and Increased Demand

Never have as many and important power agreements been signed as in 2021. The total value is nearing three hundred billion ISK.

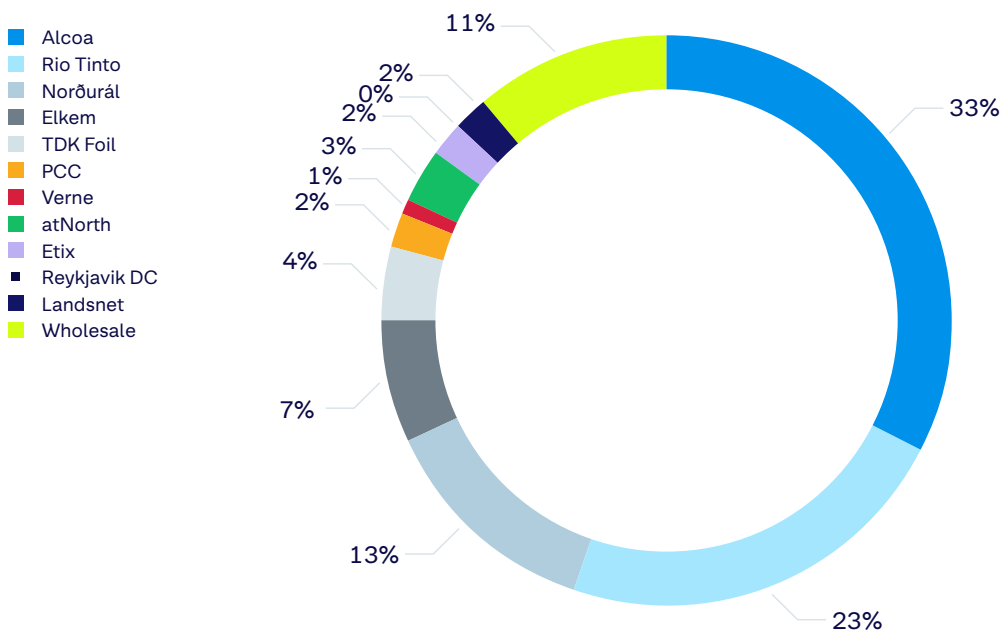
Landsvirkjun's customers have benefitted from high market prices, manifested in a surge in demand for electricity in Iceland.

- Market demand was higher in 2021 than it was before COVID-19. Large industrial end-users in Iceland, such as aluminium smelters, silicon plants, and data centres, detected increased demand.
- In February 2021, Rio Tinto and Landsvirkjun signed an additional provision to the current power agreement from 2010. The agreement aimed at increasing competitiveness, limit operational risk and support operational conditions for years to come.
- Norðurál signed a new power agreement with Landsvirkjun in the middle of 2021. The electricity volume was increased and Norðurál will invest in a new cast house for value creating specialty product, supporting the company's competitiveness.

International investors have procured operations of three data centres in Iceland, but the main value of the data centres, in addition to the real estate, is the long-term power agreements. The data centre industry is the fastest growing industry in the world, and conditions in Iceland are especially favourable for high tech data centres.

New power agreements, increase in production prices, and increased market demand led to increased electricity sales in 2021, year on year. Electricity sales in 2021 were 14 TWh, with electricity sales to customers in energy-intensive industries comprising approximately 87%, or approximately 12.2 TWh. As before, the largest part of electricity sales was to customers in the aluminium industry.

↓ Division of electricity sales, volume sold



Competitive Advantage Strengthened

Iceland's competitive advantage has increased during heavy fluctuations in international energy- and product markets. Electricity prices to large industrial end-users in Iceland have never been higher due to increasing production prices and increasing prices at the Nordic energy market, Nord Pool. Electricity prices in Iceland have not gone up at the same rate, compared to international markets. In 2020, Landsvirkjun's average electricity prices were USD 21 per MWh, but USD 32.7 per MWh in 2021, a 56% increase, year on year. These are the highest average prices to large industrial end-users from the beginning.

Electricity prices in Iceland have been shown to be competitive irrespective of external conditions, and the predictability provided by the long-term power agreements with fixed prices have proven to be a strength.

The value of renewable energy is on the rise and the pressure to lower the carbon footprint from the whole value chain plays a key role. Renewable energy is a game changer when it comes to the fight against climate change.

This development has been confirmed by increased demand. The Icelandic electric power system is generating at almost maximum capacity and demand exceeds supply. In addition, new customers want to bring their operations to Iceland, e.g., electric fuel producers and other green industries.

The future is bright, and Iceland's competitive advantage continuous to be strong.

Guarantees of Origin

Climate change is currently one of the greatest challenges of our times, and consumers are continuously becoming more aware of the importance of mitigating measures. Key component to reducing greenhouse gas emissions is the energy transition to renewable energy. The Guarantee of Origin's (GOs) system is based on an international collaboration between European countries and plays a major role in increasing financial incentives to generate renewable electricity. Demand for green energy and GOs has increased considerably in the last few years, with accompanying price hikes in green certificates. Landsvirkjun's revenues from selling GOs in 2021 were over ISK 1 billion, and revenues from this source are expected to increase in the coming years.

The General Market

In the general market are customers, both households and companies, that use less than 80 GWh at the same location annually. Low voltage electricity is delivered to the general market, after the distribution utilities get electricity delivered from Landsnet's transmission system.

The Wholesale Market

The wholesale market is a platform for selling electricity between electricity suppliers. Landsvirkjun does not sell electricity directly to households or smaller companies, rather to electricity suppliers on the wholesale market, which sell it on to end users. Approximately 11% of Landsvirkjun's electricity sales, or 2 TWh, are on this market. Landsvirkjun's share in the wholesale market varies year on year, but it has been decreasing and is now approximately 40%. Electricity sold wholesale by Landsvirkjun comes with a Guarantee of Origin, which certifies that the electricity originates from renewable resources.

In 2003, new law regarding electricity came into effect, the Electricity Act No. 65/2003. The purpose of the law is to support an efficient electric power system on a macroeconomic scale. The law covers electricity generation, transmission, distribution, and selling. The law is, e.g., intended to create a platform for competitive markets for electricity generation and sales.

Three new wholesale companies entered the market in the last few years and joined Landsvirkjun's group of customers: **Íslensk orkumiðlun** (now **N1 rafmagn**), **Straumlind**, and **Orka heimilanna**. This development has supported further competition in the electricity market. Now, there are eight companies in the market: Orkusalan, Orka náttúrunnar, HS Orka, Fallorka and Orkubú Vestfjarða. Some of these companies also generate electricity in their own power stations. Increased competition has led to lower electricity prices for households and companies in the country. Greater number of households change electricity suppliers now than before, or 3% in 2021.

A new contract mechanism for the wholesale market was introduced in the beginning of 2017, intended to maximise utilisation of the natural resources the Company is entrusted with. Furthermore, importance has been placed on prices reflecting the cost of production of different products in the wholesale market and increasing the product range for cost effectiveness and the benefit of customers and the electricity system in its entirety. After these changes, Landsvirkjun's power obligation is considerably lower, and trading has increased. Improved utilisation of the electric power system entails improved utilisation of natural resources.

Wholesale Power Agreements

Landsvirkjun offers varied selection of wholesale power agreements and customers are offered flexible contract period. Via the Company's online trading website, customers can procure electricity on a short notice. Landsvirkjun's products and services are continually being developed to adapt to customers' demand.



Primary Energy

Base load: procurement of the same volume of primary energy (MWh), 24/7, the whole year. Base load is suitable for customers with long-term stable energy use. Furthermore, a base load agreement with a 95% purchasing obligation is available, which provides further flexibility for the customer within the year. The price of base load is in ISK/MWh.

Variable energy: procurement of variable volume of primary energy (MWh) within the agreed upon power limit (MW) for one month. Variable volume of primary energy is suitable for customers with variable energy use, e.g., difference in electricity use between night and day. The price of variable power is split into a capacity charge, ISK/MWh and an energy charge, ISK/MW/month. The energy charge and the capacity charge can vary from month to month.

Monthly contract: procurement of same volume (MWh) for every hour of the calendar day for one month. Monthly contract is suitable for customers with stable energy use within the month, but variable from month to month. The price of a monthly contract is in ISK/MWh and can differ from month to month.

Spot procurement: single hours of primary energy (MWh) procured with the minimum notice of 125 minutes. Spot procurement is suitable to meet short-term spike in volume demand or unforeseen fluctuations in use. The price of spot procurement is ISK/MWh and may vary from one hour to the next.

Curtailable Power Agreements

Curtailable power agreement for distribution utilities: procurement of interruptible electricity where Landsvirkjun can, on a short notice, curtail delivery, e.g., due to malfunction in power stations (curtailed delivery happens within one hour notice), or due to low reservoir levels (curtailed delivery for several weeks or months at a time). The agreement is valid for one year. The customer is obligated to use other types of energy or stop using electricity, in case of curtailed delivery. Electricity use must be within a certain maximum power limit and a plan for energy use is in place. The customer is not obligated to procure minimum volume of electricity, and this would be suitable where demand is not known.

Curtailable power agreement for large industries: a short-term agreement for the procurement of electricity with the possibility of temporary curtailment of delivery, where Landsvirkjun can, on a short notice, limit or stop delivery. The agreement is valid for several months at a time. As delivery is mainly dependent on reservoir levels, there is a possibility that these types of agreement are not always available. The customer is obligated to use other types of energy or stop using electricity in case of temporary curtailment of power during the agreement term. Electricity use must be within a certain maximum power cap, which Landsvirkjun is free to limit. The buyer is not obligated to procure minimum volume of electricity; thus, this type of agreement is suitable when there is uncertainty of the volume of electricity needed.

Business Development and Innovation Focus

Myriad of opportunities lie in business development in green energy-intensive industries. Green and renewable energy provides the opportunity to produce green and healthy food. This same green energy provides the opportunity to stop spending billions purchasing petrol and diesel every year and instead produce hydrogen and other environmentally feasible fuels. The electric vehicle adoption also means greatly increased production of batteries. The data centre industry is growing continuously, as data are continually becoming more important for businesses and in everyday life. In Iceland, where the infrastructure is solid, and the climate is superbly suited for data centres, renewable energy is available to power this important industry.

These are all opportunities which would further support the economy, meanwhile Iceland would increasingly be contributing to the fight against climate change, as the country is in the unique position of generating and utilising green energy. Simultaneously, new, and exciting jobs are created, value creation rises, and the country's energy independence is secured.

Hydrogen and Electric Fuel – Strong Position for the Energy Transition

To reduce greenhouse gas emissions, it is necessary to look for more green energy sources to power larger vehicles, e.g., lorries, heavy equipment, ships, and airplanes in an environmentally friendly manner, as electrification is not always feasible. The generation of green energy, e.g., hydrogen, or other electric fuel in the form of ammonia, methanol, or methane, is an example of more green opportunities waiting to be seized.

Hydrogen- and electric fuel production requires a lot of energy, and demand for green hydrogen, produced by electrolysis and renewable energy, is likely to increase in the coming years, in line with climate issues targets. Landsvirkjun intends to achieve full energy transition no later than 2040, in accordance with the Government Platform.

Green fuel generation is still in its early stages, but the opportunities are there.

The production of green fuel is beneficial in many ways. Lower petrol and diesel imports mean reduced greenhouse gas emissions and foreign exchange savings. In due course, Iceland can become completely energy independent.

Landsvirkjun and the Port Authority of Rotterdam have concluded preliminary inspection on the possibility of transporting green hydrogen from Iceland to Rotterdam. Findings demonstrate that the technology is in place, the project is financially profitable, and it would be a significant contribution to measures against climate warming.

Furthermore, Landsvirkjun has signed an agreement of collaboration with Carbon Recycling International, Elkem Iceland, and Þróunarfélag Grundartanga, the development association, to study the possibility of producing green methanol at Grundartangi.

Data centres – Superb Conditions for Clever Solutions

Four data centres are now Landsvirkjun's customers. Iceland offers excellent data link connection, and a new submarine cable will increase capacity and security of data transmission between Iceland and Ireland.

Iceland has variable benefits:

- › Offers green and renewable energy
- › Competitive prices
- › Cold climate cools data centres and lowers energy costs
- › Modern infrastructure
- › Safe environment
- › Well educated and ambitious employees
- › EU legislation and incentives

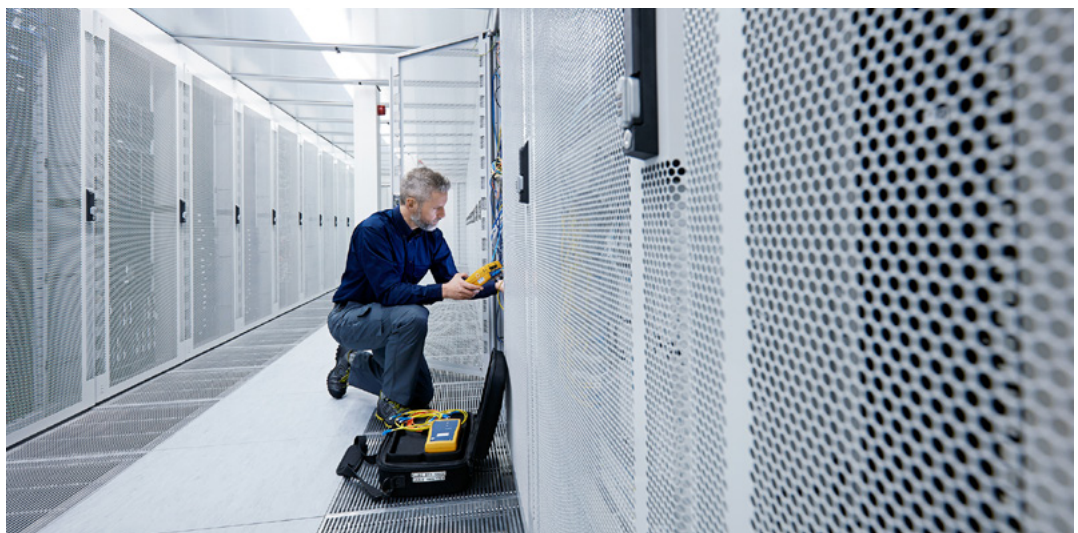
The data centres, or server farms as they are also called, offer hosting, connection and backup services, data storage, and various specialised services. The largest technical companies in the world are preparing construction of more data centres and have shown interest in Iceland in that regard, as experience has shown that it is both an economical and safe option. New data are continuously being produced and the demand for safe storage and distribution is constantly becoming louder.

The data centre industry is the fastest expanding energy-intensive industry in the world. Demand for High Performance Computing (HPC) and professional services, which is stored in a massive system of interconnected computers with blockchain technology, is ever-growing.

According to predictions, an annual growth of 9% is expected in the data centre industry. And the reason is simple: we all use more data today than yesterday, and all of us will use more data tomorrow than we do today.

Data centres are energy intensive, and electricity costs can be up to 40% of their operating costs. According to the most recent forecasts, data centres will go from using 1% of all electricity used in 2018 up to 13% in 2025. With its green and 100% renewable energy, Iceland is ready to open its doors to this industry.

Verne Global, the first data centre in Iceland, started its operations in 2012. Advania Data Centers in 2016, Etx Everywhere Borealis in 2018, and a year later the newest data centre, Reykjavik DC, joined the group.



Food Production – Energy, Technology, and a Dash of Genius

New challenges and fresh emphasis call for new solutions in food production. These solutions must be sustainable and environmentally favourable.

Iceland is in the enviable position to make its mark when it comes to new solutions in food production, with easy access to electricity from renewable natural resources and heat from geothermal energy.

This unique position can be used to develop high-tech food production.

Food production has been traditional in Iceland throughout the ages, intended to feed the people and for export. This is a strong foundation to build on, advance further and build more branches in food production, using the green energy and clean water.

Cultivation in high-tech greenhouses, microalgae, protein production, land-based fish farming, various biotechnology, dehydration, freeze drying, distillation and processing are only a few examples of the opportunities waiting to be seized.

The gain from high-tech food production in Iceland is significant, as the production has a lower carbon footprint, it improves natural resources utilisation, it combines expertise from traditional food production with high-tech food production, creates new and desirable jobs all over the country, and increases export earnings.

Landsvirkjun has already had a hand in the matter by establishing various innovation projects in energy related food production. For instance, the collaboration project Orkídea is an innovation project, where Landsvirkjun, the Agricultural University of Iceland, the Association for Municipalities in the South (SASS), and the Minister of Fisheries and Agriculture, will combine their forces on advancing high-tech food production and biotechnology in the South, with emphasis on sustainable value creation.



Batteries – Electrifying Value Creation

The number of electric cars is rising fast, calling for vastly increased production of batteries, just as the demand for batteries for mobile phones, computers, electric bikes, etc., is steadily rising. International battery producers are currently looking for suitable locations for their manufacturing plants in Europe, placing emphasis on sustainable production.

The fight against climate change demands green batteries, as the whole world must go through the energy transition. In the coming years and decades, petrol- and diesel-powered vehicles will be exchanged for electric ones. In the current Government Platform, the target for fossil fuel free Iceland is 2040.

According to forecasts, sales of electric vehicles will be ten times higher in 2030 than today, or approximately 34 million vehicles, which would also equate to reduced carbon emissions by 6-700 million tonnes, compared to now. The saved carbon emissions are not the only important factor for the climate, but also that green energy is used for the batteries production. The contribution to climate issues increases in line with how environmentally favourable the production of batteries is.



Progressive and Sought-After Workplace

Landsvirkjun aims at being an excellent place of work. The goal is to be a sought-after workplace – not only because the Company's operations are crucial for the energy transition and sustainable development in Iceland – but simply because it is a good place to work. Landsvirkjun operations are based on expertise, where initiative and innovation are encouraged. The Company celebrates diversity and works tirelessly towards equal rights. Employees' facilities are outstanding, and the work environment supports health, safety, and wellbeing. At the end of the day, workplaces are first and foremost the people that work there, together towards a common goal.

A good team unity achieves better results. It is important that the employees feel that they are valued, get the opportunity to grow in their expertise, and that communication in the workplace is based on mutual respect and empathy. In case of an incident, e.g., inappropriate behaviour from one employee towards another, plans for swift and secure reaction are in place.



Landsvirkjun's Board of Directors

The Board of directors is appointed annually by the Minister of Finance and Economic Affairs, in accordance with the Act on Landsvirkjun, No. 42/1983. The Board of Directors and the Chief Executive Officer are responsible for the Company finances and operations.

Landsvirkjun's Board of Directors was appointed at the Company's annual general meeting on April 22, 2021. At the Board's first meeting after the annual general meeting, Jónas Þór Guðmundsson was re-elected Chairman of the Board and Álfheiður Ingadóttir was elected Vice Chairman.



Jónas Þór Guðmundsson
Advocate to the Supreme Court
Chairman of the Board



Álfheiður Ingadóttir
Biologist
Vice Chairman of the Board



Hákon Hákonarson
Mechanic



Gunnar Tryggvason
Power Engineering



Jón Björn Hákonarson
Chairman of Fjarðabyggð Town Council

Reserve members of the Board

Arna Ír Gunnarsdóttir, social worker
Ásta Björg Pálmadóttir, CFO
Jens Garðar Helgason, Director
Ragnar Óskarsson, teacher

Guðfinna Jóhanna Guðmundsdóttir was appointed on the Board in April 2021 but resigned on October 20, 2021. Thus, the Board's gender ratio was 40% women when the Board was appointed, and the gender ratio was 20% women at year-end.

The Board's age distribution was as follows, seven members and reserve members of the Board were over the age 50 in 2021 and two were between 31 and 50.

Landsvirkjun's Executive Board of Directors

The Board of Directors appoints the Chief Executive Officer, and the Board and the CEO are responsible for the Company's operations. The Deputy CEO oversees cross-divisional affairs, directs policy making and ensures quality corporate governance. Landsvirkjun had seven executive directors at year-end of 2021, with a total of nine members on the Executive Board of Directors, thereof four women and five men.

The Executive Board's age distribution was as follows: five members were between 30 and 50 in age and four were over 50.



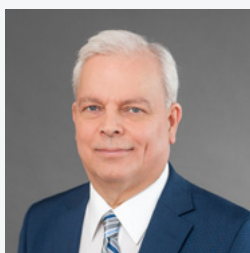
Hörður Arnarson
Chief Executive Officer

The CEO is responsible for Landsvirkjun's daily operations in accordance with the Board of Directors' policy and instructions. The CEO handles recruiting, is responsible for the Company's accounting methods in accordance with law and normal practice and that assets are handled in a safe and secure manner. The CEO represents Landsvirkjun in matters that are within the CEO's defined scope of responsibility.



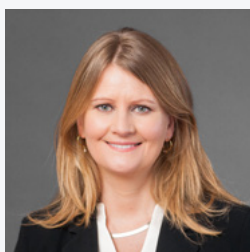
Kristín Linda Árnadóttir
CEO's Office, Deputy CEO

The role of the CEO's Office is to direct Landsvirkjun's policy making, oversee cross-divisional affairs, and ensure quality corporate governance. The CEO's Office is responsible for implementing Landsvirkjun's main policy, creating channels for improvements, and coordinate reforms across all divisions.



Einar Mathiesen
Wind and Geothermal Division, Executive Vice President

The Wind and Geothermal Division is responsible for efficient operations of the geothermal- and wind power stations, and maximising energy generation. The Division is responsible for repair and maintenance, refurbishment, and ensuring that the power stations fulfil environmental- and security requirements. The Division is responsible for developing new energy options for geothermal- and wind energy, and innovation leading to improved utilisation of the natural resources, as well as monitoring and investigative monitoring of the natural resources.



Tinna Traustadóttir
Sales and Services Division, Executive Vice President

The Sales and Services Division handles agreements with current customers and ensures that the Company provides good services. The Division is responsible for maximising Landsvirkjun's revenues in the long-term. The Division is also responsible for customer relations, the Company's online trading website, and settlement of balances for electricity sales. The Division develops pricing strategy in markets for wholesale- and large industrial end-users' and makes demand forecasts. Landsvirkjun's business environment and the Company's competitive position and that of its customers is analysed in domestic and international markets by the Division.

**Ríkarður Ríkarðsson**

Business Development and Innovation Division, Executive Vice President

The role of the Business Development and Innovation Division is to develop new business opportunities and manage Landsvirkjun's participation in projects in energy related innovation. The Division is responsible for planning and supervising business development and innovation projects, and collaborates with municipalities, other companies, clusters, and other entities, both domestically and internationally, to further the mission.

**Jóna Bjarnadóttir**

Community and Environment Division, Executive Vice President

The Community and Environment Division leads Landsvirkjun in matters regarding the community and the environment. The Division supports other Divisions within the Company in their joint progress toward carbon neutrality, green operations, active collaboration and communication with the local community, and corporate social responsible operations.

**Gunnar Guðni Tómasson**

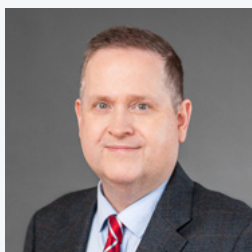
Hydropower Division, Executive Vice President

The Hydropower Division is responsible for the Division's assets, the hydropower stations' operations are effective, and electricity generation is maximised. The Division is responsible for repair and maintenance at the Company's hydropower stations, ensuring that environmental- and security requirements are met. The Division is also responsible for developing hydropower options, monitoring reservoir levels, research in connection with new energy options, and monitoring dams and other constructions. The Division is responsible for controlling electricity generation and delivery, in accordance with current power agreements.

**Ásbjörg Kristinsdóttir**

Project Planning and Construction Division, Executive Vice President

The role of the Project Planning and Construction Division is to manage Landsvirkjun's power stations construction, from the preparation stage to a fully operational power station. The Division monitors costs, quality and progress of each construction project and ensures that the finished project is ready for operations and conforms to the set criteria, schedule, and the Company's needs.

**Rafnar Lárusson**

Finance and IT Division, Executive Vice President

The role of the Finance and IT Division is to create the foundation for efficient operations and support maximum results from all Landsvirkjun Group's units.

The People

Landsvirkjun employs 274 regular employees, which are key to the Company's success. By retaining their expert knowledge, skills, and safeguarding their well-being, a safe and positive job environment is created, for the benefit of all.

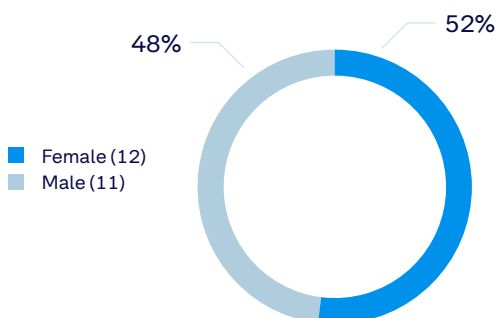
Landsvirkjun's employees are paid according to the collective pay agreement, excluding the CEO and the Executive Board. The minimum term of notice for regular employees is three months. The minimum term of notice and minimum wage are defined in the collective pay agreement. Landsvirkjun complies with Act No. 129/1997 on mandatory insurance on pension rights and operations of pensions funding services.

Full-time equivalent units were 265 at year-end 2021, roughly 192 men and just under 73 women. Fixed-term contracts were eleven at year-end 2021, approximately six women and five men. The number of full-time employees (employment ratio 100%) was 258, 189 men and 69 women. The number of part-time employees was twelve, five men and seven women. Landsvirkjun's Management resides in Iceland and knows the community within which the Company operates.

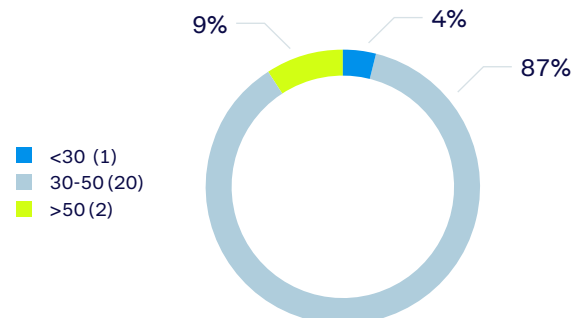
↓ Regular employees at year-end 2021

	Skilled workers	Specialists, project managers	Specialised office workers	Managament	Various jobs
Female	1.9 (2%)	36.6 (30%)	11.7 (100%)	13 (33%)	10.3 (64%)
Male	72.7 (98%)	86.3 (70%)	0 (0%)	27 (68%)	5.8 (36%)
<30	0 (0%)	4.3 (3%)	0 (0%)	1 (3%)	1 (6%)
30-50	43.6 (58%)	65.6 (53%)	1 (9%)	28 (70%)	6 (38%)
>50	31 (42%)	53 (43%)	10.7 (91%)	11 (28%)	9 (56%)
Total	74.6	122.9	11.7	40	16

↓ New recruitment – Gender balance



↓ New recruitment – Age distribution



Mental and Physical Health

The first step towards good health is understanding how we feel. Therefore, at Landsvirkjun, health-related protection involves conducting workplace analysis on cultural, social, environmental, and professional factors, but these factors can all affect our health and well-being. The analysis is conducted at least annually and applies to all operations within the Company. The findings are used to improve the work environment and further develop the Company culture at the workplace.

Furthermore, the workplace analysis provides a better understanding on how the Company can better provide health protection at the workplace. Landsvirkjun has made an agreement with a company that provides health services for occupational mental and physical health protection. The company is currently conducting psychosocial risk assessment on the work environment, which will enable the Company to provide a tailor-made health surveillance at each operational area.

Landsvirkjun encourages employees to tend to their mental and physical health by offering various health related benefits. Most of the Company's operational areas offer fitness training facilities and the canteens offer healthy food. Various electronic courses regarding health and well-being at the workplace have been made available. Furthermore, the Company collaborates with the employee association for interesting electronic events.

Safety at the Workplace

Landsvirkjun provides training in security issues on a regular basis in all its operational areas. E.g., courses in first-aid, fire prevention, hoisting safety, fall prevention, etc., are offered. The value of such training is undisputed and has helped people avoid accidents and react correctly in difficult conditions.

Every employee has an accident insurance, which is valid in the workplace and outside it. This insurance covers disability. Contractors' insurances are outlined specifically in contractor agreements. In 2021, a single time loss injury was reported. The Lost Time Injury Frequency Rate or LTIFR for 2021 is 0.33, but the LTIFR is the number of lost time injuries divided by the total work hours times 200,000 hours. No incidents of work-related diseases were reported in 2021.

Landsvirkjun has a certified occupational health and safety protection system, ISO 45001:2018. The Company also conforms to a policy on occupational health and safety protection. Risk assessment, processing tips, and Root Cause Analysis (RCA) of incidents are important factors in preventing accidents and incidents. Risk assessment at all operational areas is being updated.

Information Dissemination from Day One

All new employees are invited to take an orientation course. The course is offered via an electronic portal, where various courses, both elective and compulsory, are available for employees. These courses increase the employee knowledge on the Company's operations and enhance own skills. The learning content supports employee training in matters concerning safety-, health-, and environmental issues.

Various other courses and information are available to employees, either required by the Company or initiated by the employee. Landsvirkjun collaborates with many outside parties offering educational material for the workplace, i.e., Iðan, a non-profit education centre, the Technical College and Endurmenntun, the continuing education centre at the University of Iceland, to name but a few. The educational activities are partly intended to do regular analysis of requirements among employees, resulting in changes in the educational programme.

A special course *Tímamót og tækifæri* (*E. Juncture and Opportunities*) is offered for employees nearing retirement. In the course, opportunities, and choices this juncture can offer and basic elements such as nutrition, finances and mind set, are discussed.

Rights and Benefits

Landsvirkjun's employees enjoy various benefits. Regular employees and/or full-time employees are offered an annual health check, as well as a subsidy for fitness centre's fee. Employees on a fixed-term contract and/or in a part-time job can also use these benefits. Landsvirkjun offers commuting subsidiary for employees who commute at least three days a week in an environmentally favourable manner.

Landsvirkjun reimburses employees eye-tests, according to ophthalmologists' tariffs and their contract with the State Social Security Institute. The Company reimburses screenings for uterine- and breast cancer.

The right to maternity- and parental leave is in accordance with Icelandic law and Landsvirkjun's employees can apply for leave as defined in the law. The total number of employees taking maternity- or paternal leave was 17 in 2021, five women and twelve men. Six employees were still using their maternity- and parental leave at year-end 2021, two women and four men.

Equal Opportunity

Landsvirkjun follows an equal rights action plan. The action plan states, e.g., that more than 40% of management employees shall be female. At year-end 2021, this objective had been met at the executive level, but elsewhere at the Company the ratio of females in management was 33%. Members of Landsvirkjun's Board of Directors are appointed in accordance with the Companies Act No. 2/1995, with subsequent amendments regarding gender balance on boards of directors. Female members of the Company's Board were 20% at year-end 2021.

Equal Pay Management System

Landsvirkjun has been awarded an EQUAL-SALARY certification and has as a conformation received a renewed certificate for the next three years from the British Standard Institution. Furthermore, the accounting firm PwC analysed wage data and confirmed that the gender pay gap is well within the criteria and merits awarding the gold standard of equal pay certification. The difference in basic salaries was 0.8%, in favour of men, but when looking at total wages the difference is 1.2%. This is the seventh time that Landsvirkjun achieves this success. The equal pay system follows a set procedure, but this procedure is continuously under review and improvement. The Company prides itself of its success in this matter. Landsvirkjun's equal pay system ensures employees equal pay for work of equal value. The Company's work environment and Landsvirkjun's role calls for miscellaneous jobs and employees' background is varied when it comes to education, qualifications, and experience. Landsvirkjun's equal pay system reflects this diversity and supports professional methods of work which prevent any discrimination regarding terms of employment.

Every employee has two employee interview per year with a superior. The interviews are a part of regular performance and work development review, each with a different approach. This way, a regular platform is available for discussions on well-being and expectations, to bring forth challenges and success, both as individuals and as a team.

Exemplary in Open Communication and Collaboration

As an energy company owned by the people of Iceland, open and active communication with all stakeholders, characterised by respect, is especially important. The most important stakeholder is the people of Iceland, the owner of Landsvirkjun, and it is paramount that the people of Iceland have trust in the Company. Landsvirkjun places emphasis on informing its owners about the operations and impact on the community and the environment, and in general to communicate knowledge regarding energy matters and trustworthy information in an accessible manner. Information dissemination is conducted through open meetings and direct dialogue, reporting new information from the operations, publish material, in the Company's visitor centres at the Ljósafoss- and Krafla power stations, and guided tours around the Fljótsdalur Power Station in collaboration with the Vatnajökull National Park. Thus, the Company actively supports and engages in informed social dialogue. Furthermore, Landsvirkjun is an active participant in the community, especially in the local communities of the power stations' operational areas and the Company develops opportunities for creative collaboration and energy related innovation.



Increased Importance on Environmental- and Social Issues

Changes were made to Landsvirkjun's organisational chart in March 2021, where the importance of environmental- and community issues was further emphasised. These sets of issues were combined in the new Community and Environment Division. A specialised Department of Local Community and Green Operations took over the visitor centres and oversees grant programs and social funds, sustainability projects in the North and the East Iceland, as well as continuing the Company's path towards greener operations. All the Company's operational areas had established the five steps in the Green Steps Program for government agencies, at year-end 2021. Landsvirkjun's Community Policy was also drafted in 2021. The Company is one of the founding members Reykjavík University Research Institute on Sustainability, which is intended to encourage education and research on renewable energy and its effect on the environment and community.

Projects in Local Communities

Social Collaboration Projects on Energy Innovation

Landsvirkjun supports various projects that enable innovation in the power stations' local communities. These collaboration projects are, e.g., Orkída in the South, Eimur in the North, and Blámi in Westfjords. Landsvirkjun also collaborates with start-ups, e.g., MýSilica and MýSköpun, located in Mývatnssveit. In addition to financial support, the Company is an active participant in many projects where expertise and experience is exchanged in energy related innovation.

Landsvirkjun conducts comprehensive research in matters of the environment- and climate-, and sustainability. A large part of the research projects is in collaboration with other companies and institutions, e.g., Icelandic Meteorological Office, Iceland GeoSurvey, the Institute of Earth Sciences, civil engineering firms and universities. Landsvirkjun is one of the largest buyers of research projects, e.g., in connection with the Company's energy generation, the development of power stations options, business opportunities and environmental monitoring.

Blámi

The collaboration project Blámi was established at year-end 2020 in partnership with the Westfjords Regional Development Office and the Westfjords Power Company.

The project is intended to inspire the development of innovative energy transition projects in connection with shipping and land transport, in fisheries, fish farming, and other industries. Furthermore, the area offers various innovation opportunities and new value creation from undeveloped raw materials.

Blámi has established a green energy cluster in the Westfjords in collaboration with companies and municipalities in the area, intended to support green energy projects in marine operations and provide expertise and experience. Recently, Blámi issued a report on energy transition on feeding barges in fish farming, and other energy analysis projects are under way. Blámi works with municipalities, educational institutions, and companies on energy transition projects and expertise development in the field of green energy.

Orkídea

Landsvirkjun, the Agricultural University, the Association of Local Authorities in South Iceland, and the Minister of Fisheries and Agriculture established the collaboration project Orkídea in July 2020, to support the development of high-tech food production and biotechnology in South Iceland, with emphasis on sustainable value creation. The positions of Managing Director and Director of Research- and Development have been filled.

Along with establishing Orkídea, the business accelerator Startup Orkídea, was opened and serves as a platform for business ideas and innovation projects for sustainable solutions in the field of high-tech food production and biotechnology, further strengthening sustainable value creation in South Iceland, increasing the number of well-paying jobs, and increasing export based on ingenuity. Five companies were offered to participate in the business accelerator and Landsvirkjun invested in the company Krakkakropp for ISK 5 million, to support its development. Landsvirkjun used its option to buy shares in Krakkakropp, acquiring 10% of the shares.

In 2021, Orkídea applied for a grant in Horizon Europe with foreign collaborators. The goal of the project is to map biological raw material in certain areas which could be used for further value creation or fuel generation. Orkídea is preparing facilities for other entrepreneurs in the area, thus lending them a support in their initial phase.

Eimur

The innovation project Eimur is a collaboration project which aims at better utilising natural resources and increase innovation in energy matters in Northeast Iceland. Eimur was focused on the business accelerator Vaxtarrými in 2021. Vaxtarrými is under the aegis of Norðanátt, an umbrella organisation for innovation in the North. Norðanátt is a collaboration project between Eimur, the Northeast Iceland Development Fund, the Association of Municipalities in the Northwest Iceland, the Hraðið and Innovation in the North. Eight teams from North Iceland participated in the business accelerator, an eight-week seminar that finished in November.

Furthermore, Eimur is now preparing an application, with Icelandic New Energy, Blámi, and the National Energy Authority, for LIFE, an EU sponsored project, focused on the energy transition. The project is aimed at supporting municipalities in dispersed settlements in Europe to adapt to the energy transition.

Eimur's goal is, e.g., to support the development of the economy, with emphasis on sustainability, green solutions, innovation, and high technology in the area. Furthermore, importance is put on exchanging expertise and experience in the field of research and innovation in Northeast Iceland, to strengthen competitiveness in larger markets where Iceland's strengths play key role. Eimur has, e.g., mapped natural resources in the Northeast, operated a summer school in design and sustainability at the Krafla Geothermal Station, sponsored a competition for the best idea, and run various promotions. Eimur puts emphasis on collaboration with universities and research institutions.

Sustainability Projects in the North and the East

Active communication takes place in the platform of two sustainability projects in connection with Landsvirkjun's operations in the North and the East. The projects are in collaboration with the Company's stakeholders, and the aim is to track the impact from Landsvirkjun's operations and associated operations on the community, environment, and economy in regions.

The sustainability projects' annual meeting was held at Egilsstaðir, October 20, under the heading: *Equal Rights in a Wider Context*, and in Mývatnssveit, December 2, under the heading: *Reducing Greenhouse Gas Emissions – New Methods in Land Use and Car Fleet's Energy Transitions*.



Other Projects

Landsvirkjun worked on several social projects in 2021. Among those, the new pedestrian- and riding bridge over the river Þjórsá and riding trails in the area. Furthermore, several projects in connection with constructions which will benefit the community, e.g., a connecting road from the Þeistareykir Geothermal Station, which leads south to Mývatnssveit, opening an amazing tourist road from Hólasandur to Þeistareykir and further still to Húsavík. In 2021, work on the road Hjálparvegur, an all-season road from the road Þjórsárdalsvegur to the waterfall Hjálparfoss, was finished, i.e., the surface and road signage. The road was officially handed to the Public Road Administration in the autumn of 2021.

The river Þjórsá pedestrian- and riding bridge



Visitors Welcomed

The visitor centres at the Ljósafoss- and Krafla power stations were reopened in 2021 after closing their doors due to COVID-19. At Ljósafoss the visitor centre was opened on June 1, but the visitor centre at Krafla was opened on June 30. The Krafla Geothermal Station Visitor Centre was open during the summer until August 31, but the Ljósafoss Power Station Visitor Centre was open throughout the year. The visitor centre at Ljósafoss welcomed 5,429 guests and at Krafla 7,166 guests.

In addition to welcoming guests at visitor centres, Landsvirkjun offers guided tours at the Fljótsdalur Power Station. Furthermore, Landsvirkjun takes part in operations of Stöng Commonwealth Farm (Þjóðveldisbærinn Stöng) in Þjórsárdalur, which is open during the summer.

Grants for Research and Social Issues

Landsvirkjun's Energy Research Fund Orkurannsóknasjóður

The objective of Landsvirkjun's energy research fund, Orkurannsóknasjóður, is to award annual grants to students and research projects at universities, institutions, companies, and individuals. The grants are intended to make Landsvirkjun's contribution to research more effective and visible and ensure that the funded research is in accordance with Landsvirkjun's environmental policy.

The Fund awarded ISK 60 million in grants in 2021. In the last fourteen years the Fund has awarded 338 grants to research projects. The educational- and research projects are almost equally split between themes in energy- and harnessing research and in nature- and environmental research. The Fund has awarded grants in the total amount of ISK 788 million.

Landsvirkjun's Social Issues Fund

Landsvirkjun's fund for social issues, Samfélagssjóður, awards grants for diverse projects which positively affect the community. In 2021, the Fund granted ISK 12 million to 36 projects. The amount of the grants varied from ISK 150 thousand to ISK 1 million. The projects were of various nature, e.g., humanitarian, cultural- and historical projects, support for organisations, public health, and social issues.

The announcement of Orkurannsóknasjóður's allocation of grants was made via video conference due to COVID-19 meeting restrictions.



Furthermore, Landsvirkjun supported many good causes with sponsorship lines, for a total of ISK 4.7 million, in addition to operating the summer job youth project Margar hendur vinna létt verk (E. many hands make light work). The youth work teams attend to maintenance and gardening at the Company's power stations and their vicinity, as well as collaborating with Landsvirkjun's neighbours on various projects, all over the country. The Company offers summer jobs in youth work teams and supervision positions in projects including gardening, cleaning, maintenance, and other environmental projects, and various community projects.

Cooperation and Dialogue

Various construction projects in 2021 called for consultation with different stakeholders. The following stakeholders were consulted regarding enquiries and licence applications: the Icelandic National Planning Agency, the Environment Agency of Iceland, the National Energy Authority, the Public Roads Administration, the Cultural Heritage Agency of Iceland, and local public health authorities. Furthermore, the Company consulted with landowners and municipalities, as well as other stakeholders.

The projects in question are constructions at Trjáviðarlækur at the Búrfell Hydropower Station, a pedestrian- and riding bridge and riding trails in the Búrfell area, action plan for surface emissions at the Bjarnarflag Power Station, and preparations for the construction of an injection borehole at the Krafla Power Station.

Monitoring nature and biota, and varied other measures, i.e., due to provisions in licences, call for consultation and dialogue with various parties, e.g.: the State Soil Conservation Service, the Iceland Forest Service, the Icelandic Forestry Association, the Icelandic Institute of Natural History, the Marine and Freshwater Institution, the University of Iceland Science Institute, Icelandic Meteorological Office, the Environment Agency of Iceland, the Northeast Iceland Nature Research Centre and the East Iceland Nature Research Centre.

Landsvirkjun and the municipality of Fljótshálsa (now Múlaþing) have come to an agreement that the Company contributes to the development and operations of a new accommodation called Ormsstofa at the Egilsstaðir House of Culture. Múlaþing municipality is working on refurbishments and the opening date is set for 2022. Landsvirkjun has stressed cooperation with residents. A brainstorming meeting was held in March 2021, with representatives from residents and the municipality. The meeting's objective was to bring to light the vision and needs of the community: how best to use Ormsstofa so that the community wants to utilise it for work- and recreational purposes. The outcome of the meeting will be used lead the way in the progress of creating an environment that best serves the community. Due to COVID-19 meeting restrictions, the meeting was a video conference, with 31 participants.

Landsvirkjun is focused on being a good neighbour and contributing to the community. At year-end 2021, Landsvirkjun and the company PlastGarðar made an agreement for the project named Hey!Rúlla (E. Hey!Bale) to be housed at the Bjarnarflag Power Station. The project aims at developing and designing reusable plastic bags for bales and stop the use of disposable plastic bags for bales in agriculture, for an environmentally friendly and a much better multi-use solution. By supporting this project Landsvirkjun lends support to innovation and strengthens its links with the community at the same time.



Collaboration and Partnerships with Associations and Organisations

Landsvirkjun is an active participant in various kinds of collaboration with associations and organisations, domestically and internationally. Collaboration of this kind provides a platform to exchange expertise, learn from others, and merge measures for energy-, environment-, social-, and climate issues. *The following are some of the projects Landsvirkjun is a participant or is affiliated with:*

International

International Hydropower Association
UN Global Compact
Nordisk hydrologisk forening Centre for Energy Advancement through Technological Innovation
WindEurope

Domestic

Festa – a centre for sustainability
Grænni byggð – Green Building Council of Iceland
Grænvangur – platform for the government and businesses regarding climate issues and green solutions
Græna orkan – green energy partnership government and businesses
Reykjavík University – Research Centre on Sustainable Development
Jarðgangnafélag Íslands – Icelandic Tunnelling Society
Jöklarannsóknarfélag Íslands – Icelandic Glaciological Society
LÍSA samtök um landupplýsingar á Íslandi – Icelandic Geographic Society
Orkuskipti – Iceland Renewable Energy Cluster
Samorka – Federation of Energy and Utility Companies in Iceland /Samtök atvinnulífsins – Confederation of Icelandic Employers
Stjórnvísir – the largest management company in Iceland
Viðskiptaráð Íslands – Iceland's Chamber of Commerce
Íslenski ferðaklasinn – Iceland Tourism
Jarðhitafélag Íslands – Geothermal Association of Iceland

Comments on Changes in the Law- and Regulation Environment

Changes in the law- and regulation environment can be of great importance for Landsvirkjun's interests and future. Therefore, the Company monitors all possible changes in its operating environment and sends its comments within set time limits. Landsvirkjun places importance on clear and concise comments. In 2021, Landsvirkjun sent 24 comments. Landsvirkjun's comments are public documents and are available at the relevant bodies' websites.

Communication Plans

Communication plans are made annually, for each operational area, regarding the relevant operations. This is done to ensure regular communication and active disclosure to stakeholders and local communities. Furthermore, communication plans are made for construction projects. The scope of the plans depends on the magnitude of the projects, sometimes leading to comprehensive plans. Invariably, the focus is on everyone having access to communication.

Meetings and Addresses

The Annual Meeting

„Demand for renewable, green energy is continually on the rise. The energy transition in the world is an immense project for the coming decades. Iceland has vowed to be fossil fuel free in 2050 and to be at the forefront in climate issues. This means many challenges in energy generation, but also multiple opportunities for new development in a new industry. The National Energy Company will lead the way in the energy transition, based on a solid foundation of experience and expertise,” says in an introduction to Landsvirkjun Annual Meeting 2021, which was a video conference due to COVID-19 meeting restrictions.



↑ *Make the World Green Together* was the heading of the Annual Meeting 2021. Minister of Finance and Economic Development, Bjarni Benediktsson, and the Chairman of the Board, Jónas Þór Guðmundsson, addressed the meeting.

List of addresses:

- › *New times, New Policy, New Opportunities* – Hörður Arnarson, CEO
- › *Sustainable and Green Community* – Kristín Linda Árnadóttir, Deputy CEO
- › *Utilising Natural Resources for the Benefit of the People* – Tinna Traustadóttir, EVP Sales and Customer Services Division
- › *Energy Transition and Energy Independence* – Ríkarður Ríkarðsson, EVP Business Development and Innovation Division
- › *Leadership in Climate Issues* – Jóna Bjarnadóttir, EVP Community and Environment Division

Open Meetings

Four open meetings were held in 2021, under the heading New and Green Energy Opportunities, New Dawn in the Markets, Competitive in a Sustainable World, and Seizing the Opportunities Together, the last meeting was held in collaboration with the Federation of Icelandic Industries.

New and Green Energy Opportunities

The subject of the meeting was the opportunities of the future: green fuel, data centres, batteries, and food production.

Ríkarður Ríkarðsson, EVP Business Development and Innovation Division, introduced Landsvirkjun's emphasis on innovation and future opportunities in energy intensive industries, along with his team: Dagný Ósk Ragnarsdóttir, Haraldur Hallgrímsson, Sigurður Markússon and Vala Valþórsdóttir. For further discussion on Landsvirkjun's emphasis on data centres, electric fuel, innovation in food production and batteries, see page 59.

Klemens Hjartar, partner at McKinsey & Co. in Copenhagen, spoke about energy opportunities in an international context, in his address New World for Energy and Climate – New Opportunities. He commented that the new chapter in the energy transition in the world demanded new approach in Iceland, where innovation, new regulation, new way of thinking, and new jobs, were needed.

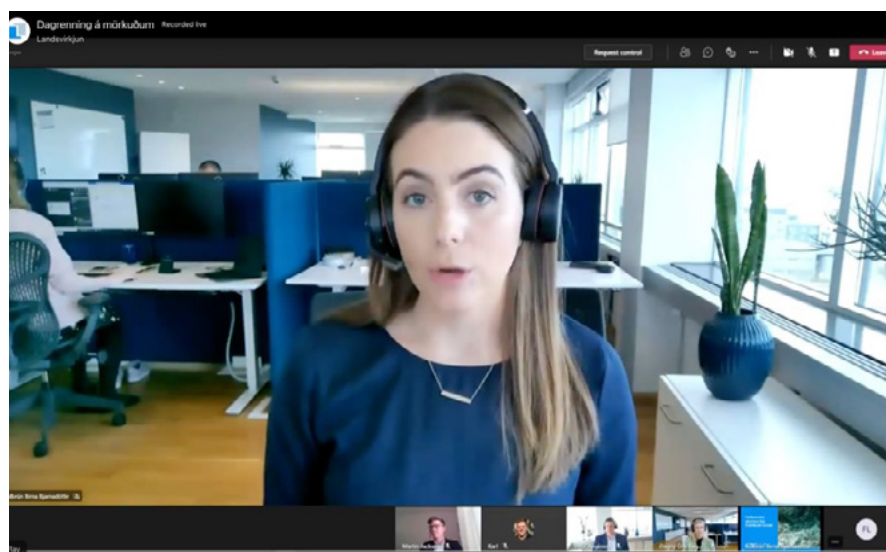
- ↓ Following the addresses, Harpa Pétursdóttir, the president of the Association for Women in the Energy Sector, was a moderator at a panel discussion with Hörður Arnarson, CEO and Þórdís Kolbrún Reykfjörð Gylfadóttir, the Minister of Travel-, Industry-, and Innovation.



New Dawn in the Markets

At the meeting, the conditions in energy- and aluminium markets following the turmoil in global economics the year before due to COVID-19, were discussed. Furthermore, the competitive position of the electricity sector in Iceland 2020 was discussed.

Kolbrún Birna Bjarnadóttir, a specialist in Business Analysis and Market Development, discussed price fluctuations on the aluminium market in Norway. Martin Jackson, aluminium specialist at the UK company CRU, explained China's impact on the aluminium market, and Valur Ægisson, head of Business Analysis and Market Development, discussed Iceland's strong competitive position in the international energy sector. Chairing the meeting was Dagný Ósk Ragnarsdóttir, a specialist in business analysis and market development.



Competitiveness in a Sustainable World

At the meeting Competitiveness in a Sustainable World, a team of business analysts discussed Iceland's and Landsvirkjun's competitive position in times of fluctuations in international energy markets. Dagný Ósk Ragnarsdóttir chaired the meeting, with speakers Valur Ægisson, Kolbrún Birna Bjarnadóttir, and Jónas Hlynur Hallgrímsson.



Seizing the Opportunities Together

Landsvirkjun and the Federation of Icelandic Industries held an open meeting at Harpa, the Concert Hall in Reykjavík, a live streamed video meeting. The focus of the meeting was on the future, as well as discussion on Iceland and if it was ready to welcome new green energy intensive industries, e.g., large greenhouses, super data centres, electric fuel generation, or battery plants. Also discussed was if Iceland had the infrastructure needed, how best to support all facilities, the energy, and the collaboration of companies, the State, municipalities, and other stakeholders involved.

Magnús Þór Gylfason, Director of Corporate Communications at Landsvirkjun, chaired the meeting with Sigríður Mogensen, Director of Creative Industries at the Federation of Icelandic Industries. Pétur Þ. Óskarsson, Executive Director of Business Iceland and Kristján Þór Magnússon, Director of the local council Norðurþing, addressed the meeting, followed by discussions; firstly between the Minister of Travel-, Industries-, and Innovation Þórdís Kolbrún Reykfjörð Gylfadóttir and Hörður Arnarson, Landsvirkjun's CEO, and Sigurður Hannesson, Managing Director of the Federation of Icelandic Industries; secondly between Jóhann Þór Jónsson, Director at atNorth, Sólveig Bergmann, Head of Communication at Norðurál, and the aforementioned Kristján Þór Magnússon.



The Greencast

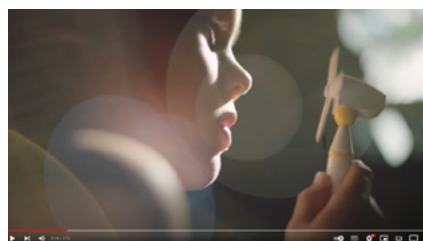
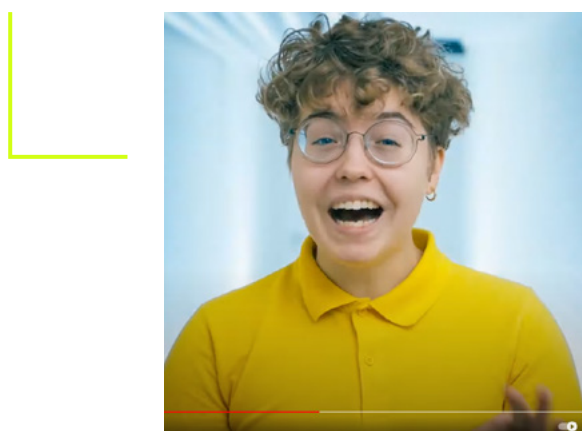
Grænvarpið, Landsvirkjun's podcast on green solutions, continued in 2021. Guests included Ragnheiður Ólafsdóttir and Laufey Lilja Ágústsdóttir, discussing matters regarding waste generated from Landsvirkjun's operations, Orri Björnsson, CEO Algalif Iceland, discussing the company's operations, Stefania Guðrún Halldórsdóttir discussing the sustainability fund at Eyrir Ventures, Sigurður Halldórsson, founder and Executive Director at Pure North Recycling discussing his company's operations, and Sigurður Ingi Friðleifsson, Executive Director at Orkusetur, discussing the energy transition.



Informative Video Presentations

Landsvirkjun produced new video presentations in 2021. In the video *Tökum vel á móti framtíðinni* (E. *Embrace the Future*), discussing the role of renewable energy in the electricity transition and the opportunities in Iceland in that regard.

Other new videos, published on social media, introduced the Company, its role, and operations.



Newspaper Articles

Representatives of Landsvirkjun wrote numerous newspaper articles in 2021, to support an open and informed discussion on energy affair.

The following are highlights from several articles:

Green Energy Foundation for Innovation

Morgunblaðið, January 4, 2021. By Ríkarður Ríkarðsson, EVP Business Development and Innovation Division, Landsvirkjun, and Salóme Guðmundsdóttir, Executive Director Icelandic Startups.

“One of the key premises for the forecast on food production in Iceland to come to fruition is continued access to renewable green energy, which is based on the responsible use of natural resources.”

Facts About the Largest Contracts

Fréttablaðið, January 26, 2021. By Ragnhildur Sverrisdóttir, Corporate Communications, Landsvirkjun.

“Energy prices to energy intensive industries are competitive with other countries and reduced revenues in the last few months are due to the pandemic, not energy prices. Let’s discuss fairly and justly the largest business contracts, made on behalf of the people in Iceland.”

Design – a Mirror on the Present

Fréttablaðið, January 29, 2021. By Jóhanna Harpa Árnadóttir, Project Manager Corporate Social Responsibility, Landsvirkjun.

“Landsvirkjun has implemented an environmental policy and defined important factors relating to it in the Company’s operations. One of these environmental factors is about effects from aspect and nature: the visual impact and landscape.”

Assertions are not Necessarily Facts

Fréttablaðið, February 10, 2021. By Ragnhildur Sverrisdóttir, Corporate Communication, Landsvirkjun.

“The Fraunhofer Report was categorical about the competitiveness of power intensive industries in Iceland. The Report defined all factors of the power agreements, not only energy prices. Certainly, the prices vary between customers, just as in the reference countries. However, the conclusion on competitiveness is unequivocal.”

Avoided Emissions

Fréttablaðið, April 9, 2021. By Jóhanna Hlín Auðunsdóttir, Executive Director Climate and Environment, Landsvirkjun, and Signý Sif Sigurðardóttir, Executive Director Treasury, Landsvirkjun.

“Landsvirkjun’s electricity generation in 2020 led to avoided greenhouse gas emissions of approximately 2.7 million tonnes CO₂ equivalents, which is equal to three times the emissions from road transport in the country annually and is in fact comparable to emissions which are considered direct responsibility of the Icelandic Authorities.”

Blámi – Ideas and Diligence

Bæjarins besta, April 16, 2021. By Hörður Arnarson, CEO, Landsvirkjun.

“The opportunities in Westfjords are countless and if I am not mistaken, residents of Westfjords will not run out of ideas or diligence to carry them out.”

Green Future for Energy Generation and Industries

Morgunblaðið, May 6, 2021. By Hörður Arnarson, CEO, Landsvirkjun, and Sigurður Hannesson, Managing Director Federation of Icelandic Industries.

“Together we will take active part in increasing the shared value in our community. Therein lie the joint interests of the people of Iceland.”

Green Opportunities in the Data Centre Industry

Morgunblaðið, May 11, 2021. By Tinna Traustadóttir, EVP Sales and Customer Services Division, Landsvirkjun, and Sigríður Mogensen, Director Creative Industries Federation of Icelandic Industries.

“Iceland has a definite competitive edge on other countries in this field.”

Numerous Opportunities in Energy Intensive Industries

Morgunblaðið, May 8, 2021. By Ríkarður Ríkarðsson, EVP Business Development and Innovation Division, Landsvirkjun, and Sigurður Hannesson, Managing Director Federation of Icelandic Industries.

“Green and renewable energy provides the opportunity to produce green and healthy food. This same green energy provides the opportunity to stop importing petrol and diesel for tens of billions of the Icelandic Krona annually, and rather produce hydrogen and other environmentally sound fuel.”

Spring Again After a Hard Winter

Fréttablaðið, May 11, 2021. By Kolbrún Birna Bjarnadóttir, Specialist Business Analysis and Market Development, Landsvirkjun, and Valur Ægisson, Head of Business Analysis and Market Development, Landsvirkjun.

“The perfect storm developed at Nord Pool last year, so to speak. Many concurrent factors led to interruption in connection to other markets with electricity prices at their lowest point. In addition to the impact from the global crisis on demand, electricity was in excess supply due to favourable weather conditions and fast development in wind power.”

Sensible Decisions and Equal Rights

Vísir, May 27, 2021. By Rafnar Lárusson, EVP Finance and IT Division, Landsvirkjun.

“When Landsvirkjun put auditing the Annual- and Semi-Annual Statement up for tender, a prerequisite was set for two auditors, not of the same gender, to sign the statements. Thus, Landsvirkjun made a constructive incentive for a gender balance among the Company’s auditors.”

Improving on Harnessing the Power

Vísir, June 29, 2021. By Hörður Arnarson, CEO, Landsvirkjun.

“Landsvirkjun intends to use the energy at Þjórsá area further. As of now, three hydropower stations are on the drawing board: the Hvammur Power Station, the Holtá Power Station, and the Urriðafoss Power Station. These new power stations utilise the infrastructure already in place, i.e., power lines, roads, and the reservoirs Þórisvatn and Hágöngulón. Recently, Landsvirkjun applied for a power station licence for the Hvammur Power Station, at the National Energy Authority. The Hvammur Power Station will be the lowest level power station at Þjórsá river. The licence is a prerequisite for a development permit. An application for a power station licence means we are one step closer to improving on harnessing – allow me to stress this point one more time – the incredible power in the rivers in this generous area.”

We Take Responsibility for Our Emissions

Vísir, August 9, 2021. By Jóna Bjarnadóttir, EVP Community and Environment Division, Landsvirkjun.

“Landsvirkjun, the largest electricity company in Iceland, is responsible for taking care of natural resources and environment it is entrusted with. The Company is committed to reducing greenhouse gas emissions from its operations as much as possible. Thus, the people at Landsvirkjun work tirelessly on finding new ways to improve the Company’s operations.”

We Must Act Now!

Vísir, August 12, 2021. By Hörður Arnarson, CEO, Landsvirkjun, and Kristín Linda Árnadóttir, Deputy CEO, Landsvirkjun.

“Each tonne of carbon dioxide, which is emitted into the atmosphere, increases global warming. This simple fact can be found in the Sixth Assessment Report (AR6), newly published by the Intergovernmental Panel for Climate Change (IPCC). The report paints the bleakest picture to date. The authors’ conclusion is that we must take decisive steps immediately to avert disaster.”

Emissions from Landsvirkjun’s Geothermal Power Plants Decreasing Year by Year

Vísir, August 18, 2021. By Jóna Bjarnadóttir, EVP Community and Environment Division, Landsvirkjun.

“Landsvirkjun has been successful in decreasing emissions, with 39% reduction in emissions while doubling geothermal electricity generation contemporaneously, with the new plant at Þeistareykir.”

Energy Dividends to the People

Vísir, August 26, 2021. By Hörður Arnarson, CEO.

“In the last ten years debt has been reduced by ISK 155 billion, despite the equivalent and simultaneous investment in energy infrastructure. Now, however, the Icelandic people enjoy dividends from their natural resources directly: Landsvirkjun made dividend payments of ISK 10 billion to the Treasury in 2020, and in 2021 the amount is ISK 6.5 billion, irrespective of the tribulation due to the pandemic. It is anticipated that dividend payments will increase in the future.”

Landsvirkjun Supports Wider Choice in the Electricity Market

Vísir, September 1, 2021. By Jónas Hlynur Hallgrímsson, Specialist Business Analysis and Market Development, Landsvirkjun, and Tinna Traustadóttir, EVP Sales and Customer Service Division, Landsvirkjun.

“New companies have entered the electricity market in recent years, resulting in rapidly increased competition. In the wake of this beneficial development, households and companies now enjoy lower energy prices.”

The Circular Economy and Eco-Industrial Parks

Vísir, September 15, 2021. By Kristín Linda Árnadóttir, Deputy CEO, Landsvirkjun, and Ríkarður Ríkarðsson, EVP Business Development and Innovation Division, Landsvirkjun.

“Many industries are faced with various challenges when it comes to environmental issues. One of the solutions on the horizon are eco-industrial parks. Their ethos is based on the circular economy, which creates opportunities for manufacturing companies to improve utilisation and put to use waste and by-products from their production.”

A Sustainable Energy Future

Vísir, September 22, 2021. By Tinna Traustadóttir, EVP Sales and Customer Services Division, Landsvirkjun, and Pétur Blöndal, Managing Director the Icelandic Association of Aluminium Producers.

“For more than half a century, Iceland has had the good fortune to have the operations of robust electricity producers with large international wholesale customers. The result is a powerful electricity system that has been developed in this remote and sparsely populated country. This is a solid foundation for the future, regarding green jobs and the energy transition. Iceland is in the enviable position to form a realistic vision of becoming: “... land of clean energy, where all energy is derived from renewable sources.”, just as stated in the new Energy Policy.”

Regulatory Environment for Wind Power Must Be Simplified

Vísir, October 6, 2021. By Einar Mathiesen, EVP Wind and Geothermal Division, Landsvirkjun.

“It is urgent to ease the uncertainty regarding the licencing process for wind power stations if the increased demand for electricity is to be met with this efficient power plant option. Irrespective of the Government’s good intentions, the process of the Framework Programme is not practical for dispensing wind power options. Furthermore, the bill, which is intended to amend the laws on the process of wind power options will not simplify the regulatory environment. Thus, it is imperative to formulate a fresh and straightforward approach to ensure that the licencing process takes no longer than twelve months.”

The Energy Transition Must Be Propelled, But How?

Vísir, November 11, 2021. By Jóna Bjarnadóttir, EVP Community and Environment Division, Landsvirkjun.

“One of the leading causes of climate change is the use of fossil fuels. Therefore, it is essential that the whole world transition to renewable natural energy, such as hydropower, geothermal energy, and wind- and solar power.”

Green Energy Reduces Carbon Footprint from Goods and Services

Vísir, November 16, 2021. By Jóna Bjarnadóttir, EVP Community and Environment Division, Landsvirkjun, and Tinna Traustadóttir, EVP Sales and Customers Service Division, Landsvirkjun.

“Landsvirkjun is the National Power Company of Iceland which generates more than 70% of all energy produced in the country. The Company produces energy from renewable natural resources and its energy production has one of the lowest carbon footprints in the world. Greenhouse gas emissions per kWh were only 3.7 g last year, whereas the general benchmark for green energy production is 100 g. In fact, energy production can fill its 100 g glass and still be considered green, while Landsvirkjun’s energy production will only cover the bottom of that glass. This unique position means that goods, produced here in Iceland, specifically in energy-intensive industries, have a much lower carbon footprint than if produced elsewhere.”

Iceland Can Complete the Energy Transition

Vísir, November 19, 2021. By Hörður Arnarson, CEO, Landsvirkjun.

“Powerful, renewable electricity production in Iceland provides us with an opportunity to conduct a pilot test without delay. This can deliver substantial advancement on the road to carbon neutrality and ending the use of fossil fuels. It is now time to select the projects and execute them so that we can attain the set goals on climate issues that the world is calling for.”

More Green Energy Needed

Vísir, December 3, 2021. By Gunnar Guðni Tómasson, EVP Hydropower Division, Landsvirkjun.

“Demand for electricity has never been higher in Iceland. This is good news for Landsvirkjun, of course, as its main purpose is selling electricity. Furthermore, this high demand reflects favourable conditions for Landsvirkjun’s large buyers. These large buyers are producing more than ever, for premium markets. This demand is also a sign of vitality and general prosperity in the country. Now, however, Landsvirkjun barely has the capacity to supply all electricity needed, not to mention embracing new opportunities.”

Landsvirkjun’s Water Balance and Electricity Generation System

Vísir, December 11, 2021. By Gunnar Guðni Tómasson, EVP Hydropower Division, Landsvirkjun.

“The fact is that Landsvirkjun’s electricity generating system is fully sold now. On the other hand, customers have certain flexibility, in accordance with agreements, to not fully use their power supply in difficult times, such as happened in 2020 and the first months of 2021. This in turn gives Landsvirkjun also certain flexibility to reduce delivery of electricity when the water levels are low. However, contractual electricity cannot be used for the energy transition in the future.”

Realistic Picture of Demand for Electricity

Morgunblaðið, December 21, 2021. By Hörður Arnarson, CEO, Landsvirkjun.

“The question that we as a community must answer is [...] how acceptable the situation is, while the need for renewable energy increases in Iceland and elsewhere in the world in the effort to reduce the use of fossil fuels and make the world a more sustainable one.”



landsvirkjun.is
2022



græn SKREF



S&P Global
Ratings
BBB+