Landsvirkjun

Annual Report 2025

Energetic Iceland

The Company 2

Operations in 2025 8
Operations 8
Finance 16
Construction 18
Sales and Service 23
Communication 26

Environment, Climate and Community 28
Environment and Climate 28
Community 30

The Future 32

ENERGETIC ICELAND

Strong Results in a Challenging Year

Landsvirkjun's performance remained solid in 2025, despite challenging conditions and uncertainty in the operating environment. Priority was placed on the secure operation of power stations, responding to fluctuations in water reserves, as well as the preparation of construction projects intended to meet society's future energy needs.

This Annual Report reviews the Company's key activities during the year, including energy production and operations, electricity markets and security of supply, climate and environmental matters, the workplace, construction projects and future initiatives, as well as community engagement, communication, and education.

About the Annual Report 2025
This year's Annual Report is presented in a new format and includes interviews with employees about the year's operations.

he content is available online at landsvirkjun.com/annualreports/2025, along with links to the sustainability statement, financial statements and the year's climate accounts. All interviews are also available there in video format.

Date of publication
27 February 2026

Editor and Project Manager
Ívar Páll Jónsson
ivar.pall.jonsson@landsvirkjun.is

Design and Layout
Steinar Birgisson
steinar.birgisson@landsvirkjun.is

Annual Report Web Development
Arnar Snæberg Jónsson/Hugsmiðjan
arnar.snaeberg.jonsson@landsvirkjun.is

Video Production
Aron Atli Finnbogason
aron.atli.finnbogason@landsvirkjun.is

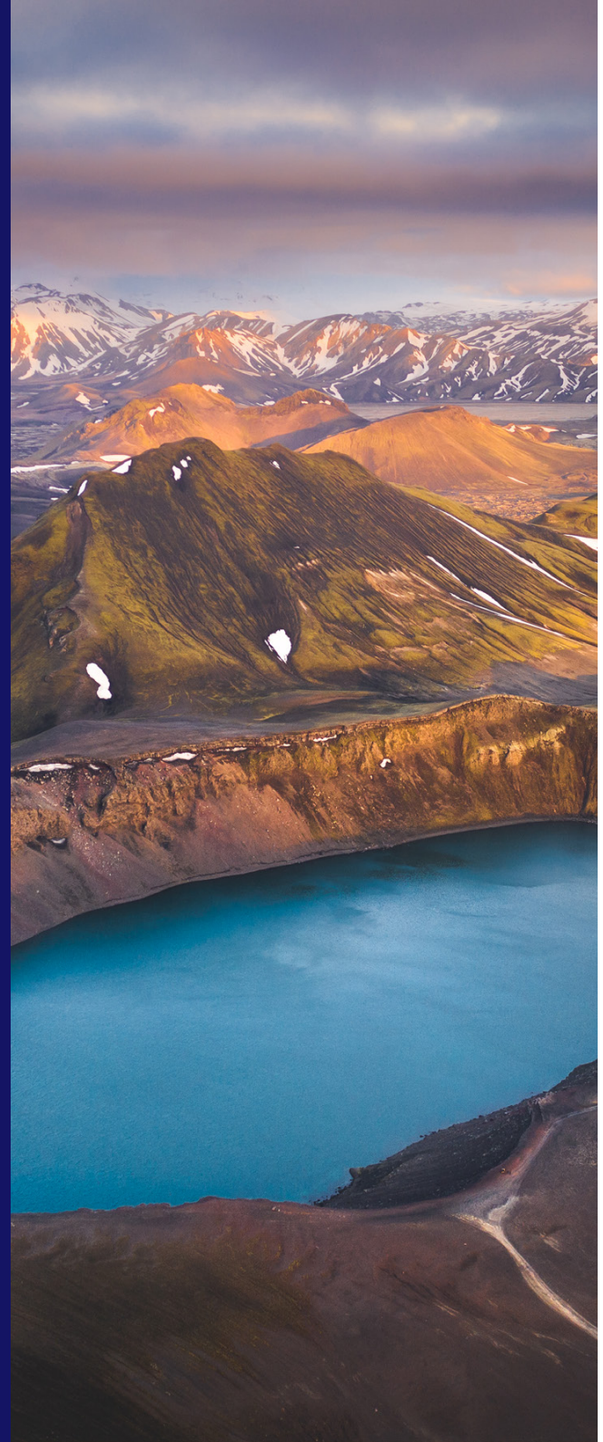
Project Leader
Þóra Arnórsdóttir
thora.arnorsdottir@landsvirkjun.is

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future



CHAIRMAN'S STATEMENT

A Time for Responsibility and Foresight

Brynja Baldursdóttir
Chairman of the Board

The year 2025 marked a milestone in the history of Landsvirkjun, as the Company celebrated its 60th anniversary. Important progress was made in the preparation and development of new power projects during this anniversary year. At the same time, it is clear that the Company – along with the government and the nation as a whole – faces decisions that call for clarity of vision and a strong sense of responsibility.

Since its establishment in 1965, Landsvirkjun has played a key role in the development of Icelandic society. By harnessing the nation's renewable energy resources, a robust electricity system has been built – one that underpins value creation, economic activity, and the quality of life we enjoy today. Electricity is fundamental to a modern society and essential to the security and stability of the nation.

Operations of our power stations were strong during the year, despite challenging conditions and fluctuations in hydrology. Our employees have demonstrated in practice that they are worthy of the significant national trust placed in them through the stewardship of the country's energy resources. This is reflected in the high level of public trust in the Company, as shown in opinion polls.

While Landsvirkjun stands on solid ground, an extensive development phase lies ahead – one that will test the Company's capacity. To meet society's pressing needs, support the energy transition, and enable continued economic growth, Landsvirkjun must undertake more extensive energy development than ever before.

This is not the first time the Company has been entrusted with a nationally significant task. Over the past six decades, the support and mandate of our owner, the Icelandic state, have been decisive in building Iceland's electricity system. We are grateful for that support, and it will continue to be of critical importance during the development phase now underway.

History shows that forward-looking decisions in energy policy have delivered substantial benefits to the nation. It now falls to our generation to assume responsibility for the next steps and ensure that Landsvirkjun continues to serve as a pillar of Icelandic society, for the benefit of current and future generations.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

CEO'S STATEMENT

Cost-Effective Energy Development Is Key to Competitiveness

Hörður Arnarson
CEO

Landsvirkjun delivered a strong performance in 2025, despite challenging conditions and fluctuations in the external environment. The results reflect a solid core operation and a strong financial position. This strength is particularly important at a time when clear decisions are needed regarding the next steps in energy development for Icelandic society.

Landsvirkjun's financial resilience provides the Company with the capacity to undertake the necessary investments and fulfil its role responsibly – towards its owner, the Icelandic nation, as well as businesses and households across the country.

Our role is to maximise the value of the renewable energy resources entrusted to us, guided by sustainability and efficiency. To maintain Iceland's long-term competitiveness and quality of life, it is essential to prioritise economically sound power projects and make effective use of existing infrastructure. Competitive electricity transmission costs are equally critical. In an isolated power system, cost-effective energy development and an efficient transmission network are fundamental to value creation and stable electricity prices.

Responsible resource utilisation is not solely about technical and financial decisions; it also depends on trust and dialogue. Landsvirkjun operates in close partnership with communities throughout the country, and public opinion surveys show that the Company enjoys a high level of trust. That trust is valuable and is built on transparency, professional work practices, and a willingness to listen.

We are at a turning point. The decisions made today will have a decisive impact on Iceland's energy security, competitiveness, and quality of life in the years ahead. Landsvirkjun does not make those decisions alone, but we stand ready to step up our efforts further, should a clear mandate and direction be provided by the appropriate authorities.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

WHAT DEFINES LANDSVIRKJUN AS A COMPANY?

A Beginning That Marked a Turning Point

Hörður Arnarson
CEO

Kristín Linda Árnadóttir
Deputy CEO

Hörður Arnarson, CEO, and Kristín Linda Árnadóttir, Deputy CEO, describe a company whose history is closely intertwined with Iceland's development. Landsvirkjun was established in 1965, alongside the decision to build the aluminium smelter in Straumsvík. Its founding marked the beginning of a systematic approach to harnessing Iceland's renewable energy resources. That decision had far-reaching effects on the country's economy, industry, and living standards — and continues to shape the Company's role today.

"We are a company owned by the Icelandic people, and the nation has entrusted us with extremely valuable assets."

A Company Owned by the Nation
The establishment of Landsvirkjun was based on a shared national decision to utilise domestic natural resources for electricity generation. "We Icelanders decided to harness our abundant natural resources to generate electricity that could be sold to international industry," says Hörður. That journey, he explains, has since become one of the strongest pillars of Iceland's economy. Ownership has been central to this development, as Landsvirkjun is publicly owned and operates on behalf of the nation.

Kristín Linda emphasises that public ownership shapes the Company's identity. "We are a company owned by the Icelandic people, and the nation has entrusted us with extremely valuable assets," she says.

Búrfell Power Station under construction in 1967. Picture: Ólafur K. Magnússon.

That responsibility is clearly reflected in the mindset of employees, who recognise that these resources are a shared national asset to be managed with care and long-term perspective.

"All Icelanders benefit when Landsvirkjun performs well."

Benefits That Extend Across Society
When Landsvirkjun performs well, the benefits are widely felt. "All Icelanders benefit when Landsvirkjun performs well," says Hörður. The impact is visible in dividend payments and tax revenues that support public services such as education and healthcare. It is also reflected indirectly in the electricity that underpins value creation across diverse industries throughout the country.

"Electricity is the oxygen of Iceland's diverse economy," Hörður adds, underscoring the importance of reliable and stable delivery. By supplying energy to large industrial users, electricity retailers, and households, Landsvirkjun plays a key role in the daily functioning of society — far beyond the boundaries of its own operations.

Renewable Energy in an Isolated System
In an international context, Landsvirkjun occupies a unique position.

"We are an energy company that generates electricity exclusively from renewable sources," says Kristín Linda. All energy sources are domestic, and Iceland's power system is not connected to other countries. This creates both strength and responsibility, as the country must independently ensure balance and security of supply.

"This means we must constantly think about energy security — how we ensure reliable supply today and into the future," she explains. Long-term thinking, professional expertise, and responsible resource management are therefore essential. Landsvirkjun's role is not only to meet current demand, but also to lay the groundwork for society's future development.

President Vigdís Finnbogadóttir lays the cornerstone of Hrauneyjafoss Power Station on 11 September 1981, as Jóhannes Nordal, Landsvirkjun's first Chairman of the Board, looks on.

WHAT IS IT LIKE TO WORK AT LANDSVIRKJUN?

Professionalism, Trust and Opportunities to Grow

Sveina Berglind Jónsdóttir
Chief Human Resources Officer

Landsvirkjun is a knowledge-based company with a clear purpose and a strong identity. Its employees bring deep expertise and ambition to their work, in an environment that emphasises wellbeing, safety, and balance. According to Sveina, the workplace is characterised by a strong team spirit and continuous development.

"Our employees are passionate about the projects we are working on."

"Our employees are passionate about the projects we are working on," she says. "We are constantly evolving as a workplace, and there are genuine opportunities for people to grow and thrive in their roles."

A Diverse Workplace Across the Country
Landsvirkjun's employees work in locations throughout Iceland. At year-end, 378 people were permanently employed by the Company, and including temporary positions, a total of 413 individuals worked at Landsvirkjun. Approximately 59% of employees are based in the capital area, while 41% work in regional locations in South, North, and East Iceland.

"This is an important part of who we are," says Sveina. "Our operations are spread across the country, and that shapes both our culture and internal communication."

Þóra Arnórsdóttir, Director of Communications, and Selma Svavarsdóttir, Director of Improvement and Safety, in discussion. Photo: Birgir Ísleifur Gunnarsson.

"The fundamental principle is that people should feel safe at work."

Safety, Wellbeing and Flexibility
When it comes to working conditions, Sveina says the priority is clear. "The fundamental principle is that people should feel well and safe at work," she says. Health, wellbeing, and safety are cornerstones of the working environment.

Landsvirkjun also places strong emphasis on quality facilities, flexibility in work arrangements, and a healthy work–life balance. Education and professional development are prioritised, and employees are encouraged to continuously expand their knowledge and skills.

"We want to create a working environment where everyone can be themselves and flourish."

"We want to create a working environment where everyone can be themselves and flourish," says Sveina. "We know that equal opportunities and mutual respect lead to greater wellbeing and better performance."

A Strong Culture and Commitment to Learning
According to Sveina, Landsvirkjun's culture is built on trust, collaboration, and a strong sense of team cohesion. As a knowledge-driven organisation, learning and development are integral to daily operations.

"We have a strong safety culture, and that is essential," she says. "But the culture is also positive and enjoyable. We want people to enjoy coming to work." The employees' association, STALA, plays an important role in this respect, organising a range of events that strengthen connections and cohesion within the Company.

A Sought-After Employer
Landsvirkjun is considered an attractive workplace, and job postings typically receive a large number of applications.

"We receive many applications for all positions," says Sveina. "That reflects both the Company's important role and the fact that we take good care of our people. Word spreads."

She adds that this presents a positive challenge. "We are able to select from a strong pool of qualified candidates — and that is a real strength."

A cheerful moment at a staff event.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

Landsvirkjun at a glance

Landsvirkjun is a publicly owned energy company that generates electricity exclusively from renewable energy sources: hydro, geothermal and wind. The Company produces over 70% of all electricity generated in Iceland for industry, the service sector, and households.

Landsvirkjun operates 14 hydropower stations, 3 geothermal power stations, and 2 wind turbines. The Company's headquarters are in Reykjavík.

Preparations and construction are underway for new power projects and the expansion of existing stations to meet growing energy demand.

Landsvirkjun is a public partnership owned by the government.. Its vision is a sustainable world, powered by renewable energy, and its role is to maximise the yield of the natural resources it has been entrusted with, in a sustainable, responsible, and efficient manner.

Installed Capacity	14 Hydropower Stations	3 Geothermal Stations	2 Wind Turbines
2,158 MW	2,001 MW	155 MW	2 MW

Key Figures

Energy generation
13.5 TWh ↓5%

Profit before unrealised financial items
287 m. USD ↓5%

Avoided emissions from el. generation
2,532,355 t CO_2-eq ↓0.1%

Emissions per energy unit
3.1 CO_2-eq/kWh ↓4.6%

Total assets
3,584 m. USD ↑3%

Net debt
677 m. USD ↑1%

Number of employees
378 ↑8.6%

H-value*
0 ↓100%

Gender balance among management
42 % Women 58 % Men

Gender balance in the executive team
44 % Women 56 % Men

*The H-value is the number of accidents leading to absence, divided by the total hours worked, times 200,000 hours.

HYDROPOWER OPERATIONS AND THE WATER YEAR

“We Set High Standards as the System Must Deliver”

Gunnar Guðni Tómasson
Executive VP, Hydropower

Hydropower operations were generally strong in 2025, despite challenging conditions and several serious incidents. Gunnar Guðni Tómasson, Executive Vice President of Hydropower, says operations remain well structured, but the year nevertheless put pressure on the system — particularly due to equipment failures in the Þjórsá area and fluctuations in hydrology.

Total electricity generation by Landsvirkjun during the year amounted to approximately 13.5 terawatt hours, which is somewhat below the long-term average. “That is primarily explained by demand,” says Gunnar. Hydropower accounted for approximately 12.4 terawatt hours, or just under 92% of total generation. “In a strong water year, we reduce geothermal generation and make greater use of hydropower,” he explains.

“Reliability cannot be taken for granted.”

Reliability Is Not a Given
Monitoring, supervision and day-to-day operation of hydropower stations generally went well throughout the year. Landsvirkjun’s stations are monitored every day of the year. However, several serious incidents occurred that affected system availability, particularly equipment failures at Vatnsfell, Búrfell and Hrauneyjar. Gunnar notes that such events serve as a reminder that reliability cannot be taken for granted, even in a system that typically performs well.

Landsvirkjun uses clear performance indicators to monitor system condition. Unplanned interruptions in hydropower remained within target during the year, totalling 35 events, against a target of fewer than 40. However, overall availability declined to approximately 97.2%, below the Company’s 99% target.

“We place high expectations on ourselves.”

“In absolute terms, that is still very strong availability,” says Gunnar, “but we set high standards.” He emphasises that the system must be reliable in order to honour contractual obligations and safeguard security of supply. “The expectations placed on us are high — and we place high expectations on ourselves.”

Large Infrastructure and Complex Operations
According to Gunnar, hydropower operations are fundamentally reliable and relatively straightforward. However, the scale of the infrastructure makes operations demanding. “We operate large and complex structures that can be challenging to repair if something fails,” he says, also noting the impact of natural forces, such as unexpected floods, which can create complex operating conditions.

Hydropower plays a key role in Iceland’s electricity system. “Landsvirkjun’s hydropower accounts for roughly two-thirds of all electricity generation in Iceland,” says Gunnar. “We operate within an isolated, 100% renewable system and must respond immediately to fluctuations in both supply and demand.”

A rotor on the floor of Búrfell Power Station.

From a Historic Low to a Strong Water Year
The 2024–25 water year proved unusual and highly variable. Gunnar describes it as a rollercoaster. “We entered the water year in a very difficult position,” he says. Reservoir levels were historically low following several challenging years, and groundwater levels in the Þjórsá area were very low, affecting winter inflows to the power stations.

Autumn 2024 was particularly demanding, and curtailments were implemented unusually early. “We began curtailments as early as October in Southwest Iceland,” Gunnar explains. Conditions gradually improved before the end of the year, though not sufficiently to avoid having to initiate buy-backs in January 2025.

“Buy-backs are our last resort to conserve water in the reservoirs,” Gunnar Guðni explains.

In 2025, however, the situation shifted rapidly. “Inflow conditions became very favourable, and the overall position improved significantly,” he says. By the end of the water year in late September 2025, it ranked as the third strongest of the past twenty years. Inflows were unevenly distributed across regions, with strong conditions in the North and East, while Southern Iceland remained slightly below average.

“Groundwater levels in the Þjórsá area have continued to recover,” Gunnar concludes. “They are now in a fairly good position and approaching normal levels.”

He adds that this creates stronger operating conditions for hydropower generation as the Company looks ahead to the next water year.

OPERATIONAL CHALLENGES IN THE ÞJÓRSÁ AREA

A Challenging Year with Several Issues Unfolding at Once

Georg Þór Pálsson
Station Manager, Þjórsá Area

Operations of Landsvirkjun's hydropower stations in the Þjórsá area proved unusually challenging during the year. Extensive maintenance work on the Þórir gates, an unexpected leak at Vatnsfell Power Station, and increased water inflow into the catchment area all occurred at roughly the same time. "When so many factors come together, the room to manoeuvre narrows quickly," says Georg Þór Pálsson, Station Manager for the Þjórsá area.

Maintenance and Reduced Regulation Capacity
During the year, extensive maintenance was carried out on the Þórir gates, which play a key role in regulating water flow from Þórisvatn reservoir into the Þjórsá hydropower system. The gates had been in operation since 2001 and had become worn and no longer fully watertight. Half of the gates were overhauled during the year. Seals were replaced and the structures repainted. "This was a necessary project to ensure long-term reliability," says Georg.

While the repairs were underway, the ability to regulate water from Þórisvatn was limited. That called for closer monitoring and extra caution in all water management, as the water is used through every station downstream of Þórisvatn and changes there have wide-reaching operational effects.

Unexpected Leak at Vatnsfell
The situation became even more complicated when a leak was unexpectedly detected at the intake structures of Vatnsfell Power Station, and the station was taken out of operation. In response, Vatnsfell Reservoir was drained and flow was kept to a minimum. "We had to react quickly and prioritise with safety in mind," says Georg. "This affected all water regulation downstream."

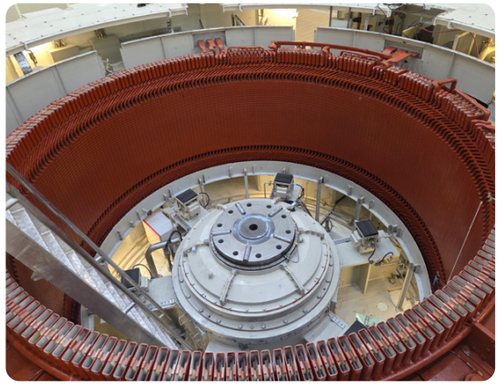
Eyjólfur Hannesson, Árni Freyr Pálsson and Svavar Jón Bjarnason prepare for installation of units at Búrfell. Sigurður Hjartar Magnússon in the background.

"We maintained continuous monitoring during this period."

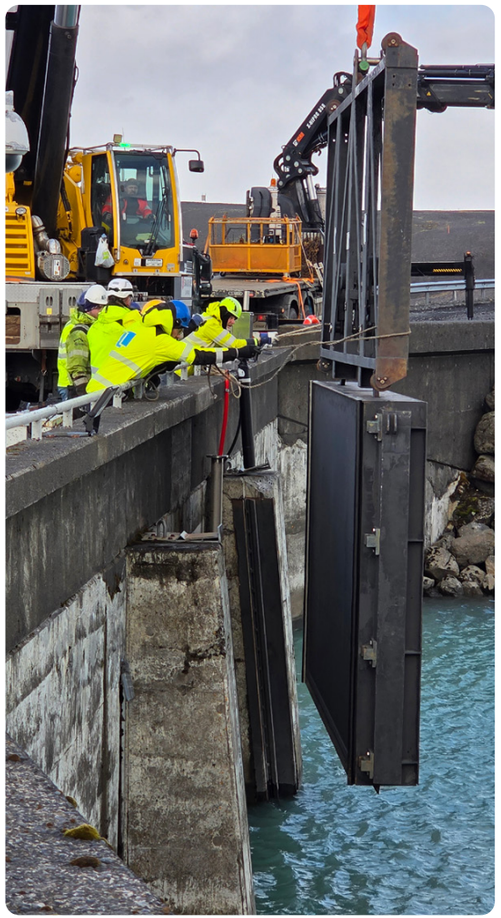
At the same time, water volumes increased in the catchment, and Þórisvatn filled for the first time since 2019. Heavy meltwater and sudden shifts in river flows required more manual control, and staff more frequently needed to be on site at gate structures. "We maintained continuous monitoring during this period," says Georg.

All key tasks completed before winter
Under conditions like these, pressure increases on staffing, safety procedures, and coordination with others using the area—for example, those working in river channels. Special emphasis was therefore placed on communication and coordination. "When water is released into channels that are nearly dry, every decision must be made with great care," says Georg.

Despite the complexity, all key tasks were completed before winter set in. The Þórir gates were tight again, the first phase of sealing work at the Vatnsfell intake leak was finished, and the system was ready for winter operations. "This was a demanding period," says Georg, "but through a coordinated effort we managed to bring operations into a good and safe state."



Repair work on the generator of Unit 2 at Búrfell.



Stoplogs lowered into place at Þórislokur.

LEAK AT VATNSFELL HYDROPOWER STATION

An Unexpected Discovery During an Inspection Tour

Guðlaugur Þórarinsson
Specialist in Hydropower Development

Landsvirkjun staff noticed unusual conditions at Vatnsfell Station on Saturday 2 August, during the bank holiday weekend. While on an inspection trip up at Vatnsfell, they spotted a crack and water leaking from the eastern slope above the power station building. As the area is normally expected to be dry, it immediately drew attention and it was clear something unexpected was happening.

"This is normally supposed to be dry, but there was basically a stream channel there."

"This is normally supposed to be dry," says Guðlaugur Þórarinsson, Specialist in Hydropower Development. "But there was basically a stream channel there, and it had washed down silt, sand and gravel,it looked bad." The leak had already caused erosion on the road to the station, and the culvert under the road had filled with sediment.

Emergency response activated the same day

The station manager was called out and the situation was assessed as serious. Landsvirkjun's emergency response was activated that same day and met three times. The station was shut down, the reservoir level was lowered, and the relevant authorities were alerted. "The police, Civil Protection, and Landsnet's control centre were notified that a serious incident was underway," says Guðlaugur.

Vatnsfell Hydropower Station is normally unmanned, so 24-hour monitoring was put in place while uncertainty was greatest.

Dredging the drainage channel.

At that point it was not clear what had caused the leak or how it would develop. "We didn't really know straight away what was going on," says Guðlaugur. "This was completely unexpected, and we had to monitor the situation very closely."

The leak was linked to the reservoir level

Once the reservoir level was lowered, it soon became clear that the leak steadily decreased as the water level went down. By Sunday morning, the water level had dropped by almost eight metres and the leak had nearly disappeared. "That's when we could see straight away that it was directly linked to the water level," says Guðlaugur.

The uncertainty level was cancelled and detailed analysis of the area began. On Monday the leak had stopped completely and the channel had become dry. Then focused work began to map what had actually happened and the nature of the problem.

A rare crack in an unexpected location

A specialist team from Landsvirkjun examined the area in detail, including land surveying, drone flights and depth measurements. Satellite data were also used to assess whether any larger ground movements might be involved. "It turned out that a crack had opened right across the channel," says Guðlaugur. "In some places it was one to two centimetres wide where it was visible; elsewhere it was wider."

The crack was in an area that is not classified as an active fracture zone. Cracks do exist there, but they are generally considered stable. "That's why this came as such a surprise to us," says Guðlaugur. "This isn't an area where we expect movement."

The crack branched and in places was clearly open.

Repairs and lessons for the future

Vatnsfell Hydropower Station is one of Landsvirkjun's newer hydropower stations and has long been regarded as particularly well designed and well finished. "If I want to show international partners how we work in Iceland, I often take them to Vatnsfell," says Guðlaugur. "Everything is well reinforced, cast in concrete, and finished to a high standard."

"No dam is watertight, this isn't a bathtub, but we don't want leaks like this."

During August, work focused on analysis and the design of repairs, alongside sourcing specialist equipment and securing contractor involvement. Construction began around the turn of August and September and continued for about six weeks. The crack was cut open, sealed with injection grouting and then re-cast in concrete. In mid-October, the reservoir was refilled and the station brought back into operation.

"No dam is watertight, this isn't a bathtub," says Guðlaugur. "But we don't want leaks like this." He says the incident is extremely rare in Landsvirkjun's history, but also a reminder that Icelandic nature can always take you by surprise. "This can happen, even where we least expect it, and that's why it matters that we are well prepared and respond in the right way."

OPERATIONS OF GEOTHERMAL POWER STATIONS DURING THE YEAR

“Geothermal stood up to heavy loads under great strain”

Bjarni Pálsson
Executive VP, Wind and Geothermal

Landsvirkjun’s geothermal power stations performed extremely well in 2025, says Bjarni Pálsson, Executive Vice President of Wind and Geothermal. Geothermal played a key role when demand on the power system was at its highest, especially in the first part of the year. “We were able to run at full load,and even overload, during the toughest periods and make a strong contribution to the power system,” says Bjarni.

Steady generation in a demanding water year
Electricity generation from the geothermal power stations totalled around 1,100 GWh during the year, equivalent to about 8.3% of Landsvirkjun’s total electricity production. Geothermal proved particularly important in the 2024–25 water year, which was demanding. “We were well prepared for this difficult water year,” says Bjarni. “We had enough steam in all geothermal areas and the units were in good shape.”

This enabled Landsvirkjun to make full use of geothermal power when it mattered most. “We were able to get through the most difficult period at full load, and even overload, both at Þeistareykir and at Krafla,” he says, adding that this clearly shows how geothermal and hydropower can work together in the power system.

Preparation and expertise are key
According to Bjarni, the main challenges in operating geothermal power stations lie in ensuring there is sufficient steam available when demand is highest. “We need to know the resource we are working with extremely well,” he says. That calls for regular research, solid preparation, and having make-up wells and reinjection ready when needed.

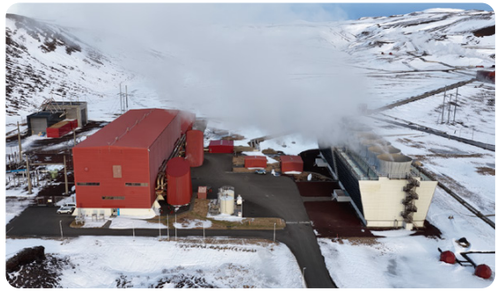
Major upgrades have been carried out at Bjarnarflag, Landsvirkjun’s oldest geothermal power station.

“It is extremely important that the machines keep turning when they are needed most.”

In recent years, Landsvirkjun has significantly strengthened its capabilities in this area. “We now have a very strong team covering the resource side, the environmental side, and not least the mechanical side,” says Bjarni. Reliable plant operation is crucial. “It is extremely important that the machines keep turning when they are needed most.”

Three stations, different challenges
Landsvirkjun operates three geothermal power stations in Northeast Iceland. The oldest is Bjarnarflag, commissioned in 1969. “We have carried out major upgrades there in recent years and are aiming for further improvements,” says Bjarni. Krafla Station, built in the 1970s during the Krafla fires, has been in operation at Landsvirkjun for almost 40 years, and the focus there is both on equipment renewal and increased utilisation in the future.

The newest station is at Þeistareykir, where two units are currently in operation. “You could say we have a half-built station there, and we plan to continue expanding over the coming years,” says Bjarni. Operations have gone well and the station has attracted attention widely. “Many people see Þeistareykir as one of the most successful geothermal power plants in the world today,” he says.



Krafla Station, built in the 1970s during the Krafla Fires, has been operated by Landsvirkjun for nearly 50 years.

The newest station is at Þeistareykir, where two units are currently in operation.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

THE GEOTHERMAL RESOURCE IN NORTHEAST ICELAND

“Ideal conditions for robust and sustainable utilisation”

Anette K. Mortensen
Specialist, Geothermal Development and Resources

Geothermal energy is a key part of Landsvirkjun’s electricity production in Northeast Iceland. The Company operates three geothermal power stations in the region, drawing on its distinctive geology. According to Anette K. Mortensen, Specialist in geothermal development and resources, operations have increasingly focused on responsible production and long-term sustainability. “Today, sustainability is a guiding principle in how we run the stations,” she says.

Decades-long history of geothermal utilisation
Landsvirkjun operates three geothermal power stations in Northeast Iceland, with a combined installed capacity of 155 MW. The oldest is the steam power station at Bjarnarflag, Iceland’s first geothermal power station. Krafla followed, and most recently Þeistareykir. “Krafla was the first large geothermal power station built in Iceland,” says Anette, adding that Þeistareykir is also the first station Landsvirkjun built from the ground up.

She says operations have generally gone well, though challenges have been part of the story. “The early years were marked by the Krafla Fires,” she says, noting that wells were damaged and it took time to reach stable production. Over time, monitoring and experience have supported more reliable operations.

Powerful systems along an active rift zone
Anette says the region’s main strength lies in its geology. “The geothermal areas are located on volcanic and rift zones,” she says. Magma accumulates

The geothermal areas are located on volcanic and rift zones. Photo: Garðar Ólafsson.

at shallow depth beneath central volcanoes, creating powerful high-temperature systems. “Temperatures can reach—and exceed—300°C, which offers excellent conditions for geothermal utilisation.”

“The geothermal areas in Northeast Iceland are among the largest in the country.”

Mapping shows that the three geothermal areas—Þeistareykir, Krafla and Bjarnarflag—are among the largest in Iceland, ranging from 20 to 45 square kilometres. “Capacity assessments indicate that each area may be able to support electricity generation in the range of 100 to 200 MW,” says Anette.

The geothermal areas in Northeast Iceland are among the largest in the country. Photo: Garðar Ólafsson.

Targeted monitoring and mitigation measures
Geothermal utilisation inevitably has environmental impacts. Anette mentions changes in pressure and temperature, gas emissions and land disturbance, as well as visual impacts. She says Landsvirkjun works systematically to limit these impacts through monitoring and by adjusting production.

“We place great emphasis on reinjection to maintain long-term production and reduce surface discharge,” she says. She adds that directional drilling was first used at Krafla to reduce the number of well pads and minimise disturbance, and that there is also a strong focus on revegetation and restoring disturbed land. “This is Landsvirkjun’s approach to geothermal utilisation,” says Anette.

The electricity generated at the stations is delivered into Landsnet’s transmission system and serves both households and businesses, in Northeast Iceland and beyond. “This is part of the overall power system and supports both the local community and the whole country,” she says.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

ICELAND'S WIND ENERGY RESOURCE

"Wind can become the third pillar of the electricity system"

Vordís Sörensen Eiríksdóttir
Head of Wind Energy

Wind power is an important part of Landsvirkjun's future vision, says Vordís Sörensen Eiríksdóttir, Head of Wind Energy. She says Iceland's natural conditions offer very good opportunities for utilising the resource. "In Iceland, the wind blows often, and we've seen that the country is very well suited to wind power," she says, noting that strong wind resources can be found both in the highlands and along the coast.

A strong resource that fits the system well

Landsvirkjun has operated wind turbines at Búrfell for more than ten years, and that experience matters. "We've been operating wind turbines above Búrfell since 2013 and we see a very high utilisation rate there," says Vordís. She notes that the turbines generate electricity just over 40% of the time. "That's considered very good by international standards," she says.

Vordís emphasises that wind power fits well into Iceland's electricity system. "Iceland is built on hydropower and geothermal, and we see that wind works extremely well alongside hydropower," she says. That makes it possible to use hydropower even more effectively and strengthen the system as a whole.

Why wind power now?

Asked why wind power has not been utilised more in Iceland earlier, Vordís says: "We've had access to very cost-effective options, both in hydropower and geothermal," adding that at the same time wind power was a more expensive option and the technology was less advanced. "But wind power has developed very rapidly, especially over the last ten to twenty years," she says, "and prices have fallen significantly. So perhaps it's only now becoming a cost-effective and competitive option for us."

Variability and balancing the system

Wind is inherently variable, but Vordís says Iceland's system is well placed to respond. "We address this mainly in two ways," she says: on the one hand through substantial water storage and regulation in reservoirs, and on the other through more flexible use of the power system. "Hydropower stations are very well suited to balancing wind power," she says, adding that the electricity market is also increasingly calling for greater flexibility.

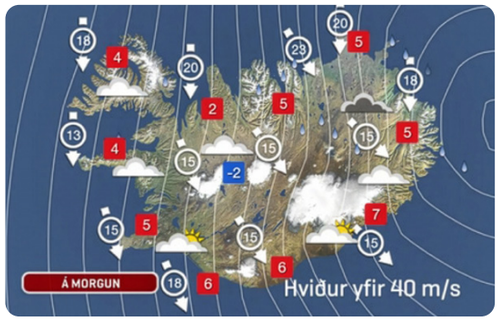
We have operated wind turbines at Hafið, above Búrfell, since 2013, and experience shows strong performance in the area. Photo: Garðar Ólafsson.

Impacts and responsible utilisation

According to Vordís, the main environmental impacts of wind farms are visual, along with possible effects on birdlife and flight paths. During construction, disturbance can occur due to road building and infrastructure development.
"It matters enormously to take great care with design and siting," she says.

She mentions Vaðalda as an example. "The location is no coincidence," she says, noting that it is one of Landsvirkjun's largest generation areas, where infrastructure is already in place. The project has undergone redesign and detailed studies, including on bird migration routes, with the aim of minimising impacts.

Vordís explains that the impacts of wind power differ in important ways from other energy options. "Wind power doesn't require reservoirs and doesn't alter watercourses," she says, adding that the works are, for the most part, reversible.



The wind is gathering strength.

"Responsible resource utilisation isn't about avoiding impacts, but about taking responsibility for them."

A milestone in Iceland's energy history

The construction of Vaðalda is a milestone, in Vordís's view. "Wind power will come in as the third pillar alongside hydropower and geothermal," she says. She adds that the project will build valuable knowledge and experience—not only within Landsvirkjun, but also among the many parties involved.

"Responsible resource utilisation isn't about avoiding impacts," says Vordís, "but about taking responsibility for them and doing what we can to minimise them.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

LANDSVIRKJUN'S CONTROL CENTRE

The Control Centre Is the Heart of Operations

Ragnar Guðmannsson
Head of Control Centre

Landsvirkjun's new control centre is a key part of the company's operations. All of the company's power stations are now monitored and controlled from there, around the clock. Ragnar Guðmannsson, Head of Control Centre, says changes in the market were one of the reasons why Landsvirkjun decided to establish its own control centre again.

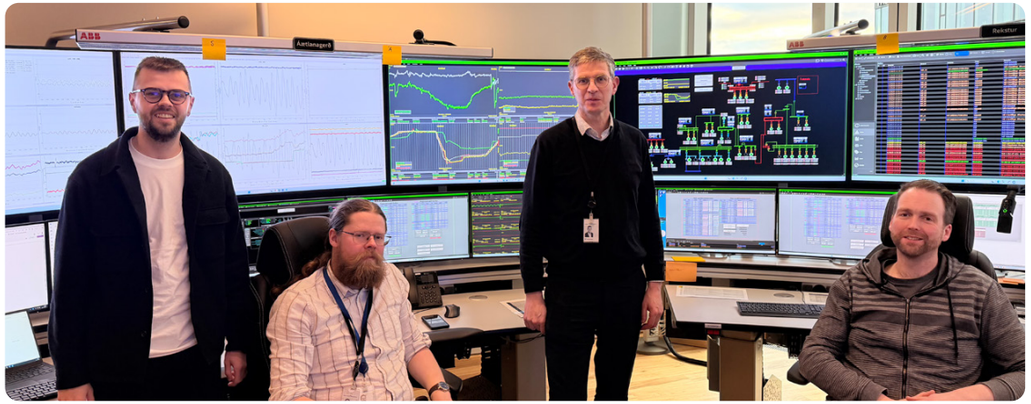
"New entrants appeared in the market and the arrangements had, to some extent, entered a grey area with regard to competition law," he says. "This prompted us to make a clear decision and bring this activity back in-house."

From Landsnet back to Landsvirkjun

For many years, Landsvirkjun did not operate its own control centre. After the company was restructured and Landsnet was established in 2005, the control centre function moved to Landsnet under a service agreement. According to Ragnar, this reflected the circumstances and priorities at the time.

"At that time there was extensive work underway on the Kárahnjúkar project and the focus was on that," he says. "The staff who moved to Landsnet had strong expertise in power plant operations, and the arrangement worked well. Prudence, one of Landsvirkjun's core values, also played an important role."

When the decision was later made to establish a new control centre, the implementation took around three years. "This was a large project," Ragnar says. "We had to select an energy management system, recruit and train staff, and establish both a main and a backup control centre." He also highlights the extensive work of technical specialists and the contribution of Eggert Guðjónsson, an experienced project manager in generation planning.



Einar Ari Árnason, Specialist; Hákon Valur Haraldsson, Specialist; Ragnar Guðmannsson, Head of Control Centre; and Valgeir Arnar Knútsson, Specialist, on duty in the control centre.

"We approached this in stages, to ensure both safety and proper staff training."

The control centre first took over monitoring and control of the Sog area before additional power stations were gradually added. Today, all Landsvirkjun power stations are operated from the control centre. "We implemented this in stages, both to ensure safety and to train staff gradually," Ragnar explains.

The role of the control centre is broad. Operators monitor alarms, respond to incidents and call out standby teams when needed. "In essence, we provide a service function for the power stations," Ragnar says, "and work closely with the generation planning department and other parts of the company." He describes the control centre as the place where all operational threads come together.

Greater overview and improved safety

In Ragnar's view, the main benefit of the control centre is greater overview and support for the power stations. "We have staff who were trained in the power stations themselves and know the operations well," he says. "That allows us to support the stations more effectively and strengthen monitoring."

The control centre now receives more alarms than before and uses camera systems and other tools that strengthen response capability. Dam safety also plays an important role in the work. "We are constantly trying to improve operations and be better prepared to respond to whatever may arise," Ragnar says.

Commissioning and daily operations have gone well, even though challenges inevitably come with an implementation of this kind. "We had access to a training simulator and were able to prepare staff for real-world situations," Ragnar says. "But you learn the most during disturbances. When we respond well, confidence grows and the system becomes even stronger."

The implementation was a large-scale project.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

SAFETY

“No Task Is More Important Than Our Lives and Health”

Selma Svavarsdóttir
Head of Improvements and Safety

Safety is an integral part of all Landsvirkjun operations, according to Selma Svavarsdóttir, Head of Improvement and Safety. The company operates in an environment where hazards can arise, and therefore the safety of employees and contractors must always be a top priority. “We want everyone to return home safely,” says Selma. “No task is more important than our lives and health.”

Safety is about understanding the risk factors and having safeguards in place.

A continuous improvement approach
Selma says it is important to approach safety with a mindset of continuous improvement. “The moment we start to think we are good at safety, there is a risk that we relax – and that is something we absolutely want to avoid,” she says. She explains that although Landsvirkjun monitors performance indicators and draws lessons from operations, mistakes and accidents can still happen. “We are human,” she says, adding that safety work is largely about understanding risk factors and having safeguards in place so that the consequences are not severe if something goes wrong.

Life-saving rules and appropriate safeguards
So-called life-saving rules are an important part of Landsvirkjun’s safety work. They were introduced to reduce the likelihood of serious accidents in the situations considered most hazardous in the work environment. “We analysed these situations together with our employees,” Selma says, mentioning work at height, work on water and tasks where there is a risk of gas exposure.

The rules clearly state what safeguards must be in place. “For example, using fall protection when working at height, and gas detectors and respiratory protection where there is a risk of gas exposure,” she says. The goal is always that everyone returns home safely at the end of the working day.

“Safety is about understanding the risk factors and having safeguards in place.”

Learning, communication, and safety culture
According to Selma, good safety work begins before the task. “It is extremely important to carry out a risk assessment and understand the work we are about to begin,” she says. It is also important to record deviations and accidents, analyse their causes and learn from the mistakes that occur.

“We must always approach safety with a mindset of continuous improvement.”

Safety culture and communication are key in this context. “It matters that we speak up, ask questions and feel confident to stop work if we believe the conditions are unsafe,” Selma says. Such a culture supports both safety and continuous improvement in operations.

FINANCIAL PERFORMANCE DURING THE YEAR

“The Company is Stronger Than Ever”

Rafnar Lárusson
Executive VP, Finance and Information Technology

Landsvirkjun delivered solid financial results during the year, according to Rafnar Lárusson, Executive Director of Finance and Information Technology. Revenues increased year-on-year and the company continued to report a profit. “Revenues were satisfactory last year,” says Rafnar. They amounted to around USD 607 million during the year, compared with roughly USD 560 million the year before..

“Revenues were satisfactory last year.”

Revenues and core operating profit
Rafnar says the main explanation for higher revenues lies in developments in the markets. “Aluminium prices were high last year, so we generated additional revenue from that,” he says. He also notes that the exchange rate of the króna had a positive effect on revenues and that “we also sold more Guarantees of Origin than ever before.” At the same time, costs increased, partly due to higher transmission costs and other external factors.

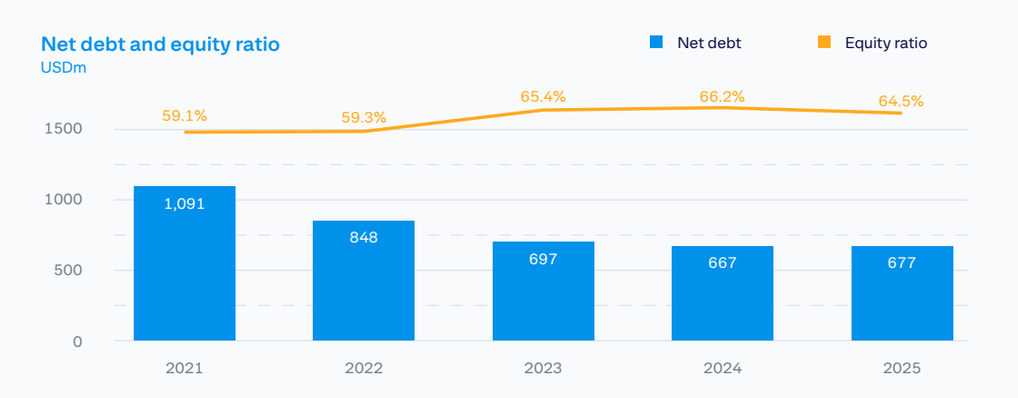
Core operating profit amounted to around USD 286 million. It declined slightly compared with the previous year, but Rafnar emphasises that this reflects performance before calculated financial items are included. “This is profit before we move into calculated items such as derivatives,” he says.

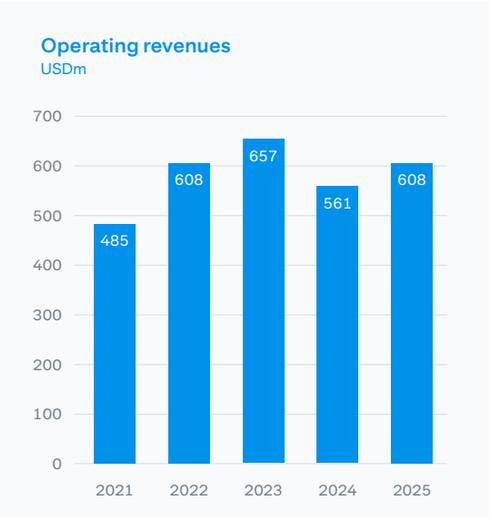
“The Company’s core operations remain strong, even in challenging conditions.”

A strong position looking ahead
Profit after financial items increased year-on-year and amounted to around USD 205 million. Rafnar highlights the impact of embedded derivatives in the company’s power sales contracts. “The embedded derivative linked to our sales contracts increased significantly in value last year, which affects the final result,” he says.

Landsvirkjun’s equity ratio declined slightly and now stands at just over 64%, but Rafnar says the position remains very strong in historical terms. “When we look at the company’s 60-year history, the equity ratio is still very high,” he says, noting that the company is entering a period of major development. “The foundations are strong, although the ratio will decline slightly in the coming years as these projects are financed.”

Looking further ahead, Rafnar says the company’s financial position is very robust. “Our debt position has never been better and our equity position has never been stronger,” he says. “The company is therefore well prepared to take on the development projects ahead — stronger than ever before.”





The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

LANDSVIRKJUN'S FINANCING

"We Have Financed Ourselves Sustainably Since 2018"

Karen Bjarney Jóhannsdóttir
Head of Treasury

Landsvirkjun's financing is built with a long-term perspective in mind, according to Karen Bjarney Jóhannsdóttir, Head of Treasury. The company places strong emphasis on sustainable financing, and in recent years it has moved fully in that direction. "Since 2018, Landsvirkjun has essentially financed itself entirely through sustainable financing," Karen says.

Landsvirkjun issued green bonds totalling USD 150 million during the year.

Green bonds and sustainability-linked loans
Landsvirkjun's sustainable financing is reflected, among other things, in the issuance of green bonds and sustainability-linked credit facilities. "Most recently, in May, we issued green bonds worth USD 150 million on the U.S. bond market," Karen says. Sustainable financing means looking not only at financial returns, but also at environmental and social factors, as well as sound governance.

She points out that the concept is an umbrella term covering several financing instruments. "It includes green bonds and sustainability-linked credit facilities, which Landsvirkjun has made use of," she says.

S&P Global
Ratings
A-

"Our debt position is strong and comparable to that of Nordic and European energy companies."

Strong debt position and solid credit rating
According to Karen, Landsvirkjun's debt position is strong and stable. "It is well in line with what we see at comparable Nordic and European energy companies," she says. In recent years, the company has focused on reducing debt and strengthening its balance sheet, which has significantly improved its financial position.

Landsvirkjun also enjoys favourable conditions in financial markets. "We hold an A- credit rating from S&P in the investment-grade category," Karen says, noting that such a rating is crucial for access to international capital markets and the terms available there. "The credit rating has improved considerably over the years, as debt has declined and financial performance has strengthened."

"Debt will rise temporarily, but it will still remain historically low."

Financing aligned with a new period of development
Landsvirkjun is entering a period of major development, and new power projects will require additional financing. "Yes, that will require further borrowing and increased leverage," Karen says. The issuance of bonds related to these developments is expected to begin already this year.

She emphasises, however, that the increase in debt will be temporary. "Debt will rise temporarily, but it will still remain historically low," Karen says, adding that all key financial indicators are expected to remain strong.

Active dialogue with investors
Karen also highlights the importance of maintaining strong relationships with investors and the financial markets. Clear communication about the company's operations, strategy and financial position is essential. "Open and regular communication with investors is an important part of our work," she says.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

FORTHCOMING CONSTRUCTION PROJECTS

“We Are Beginning One of the Largest Construction Periods in Landsvirkjun’s History”

Ásbjörg Kristinsdóttir
Executive VP, Planning and Construction

A major construction period lies ahead for Landsvirkjun, says Ásbjörg Kristinsdóttir, Executive Vice President of Planning and Construction. The year 2025 marked a turning point after a long period of preparation. “Last year, we finally got underway with power projects that have long been in preparation,” she says. Construction on several key projects now lies ahead, and these will strengthen the electricity system for the future.

“Last year, we finally got underway with power projects that have long been in preparation.”

Hvammur Power Station will be a 95 MW hydropower station in the Þjórsá region.

The Vaðalda Wind Farm will be a 120 MW wind farm in the Þjórsá region.

Wind Power and Hydropower to the Fore
One of the largest projects is the Vaðalda Wind Farm, a 120 MW wind farm in the Þjórsá area. Construction there is already well advanced. “Last year, we placed major emphasis on preparing the site,” says Ásbjörg. She mentions road construction, wind turbine foundations, and the cable system that connects the turbines to each other and to the grid. “This preparation was extremely important, because this spring the wind turbines will arrive in Iceland and be transported to the site and connected,” she says.

Alongside the wind project, preparation for Hvammur Power Station continues. This is a 95 MW hydropower station in the Þjórsá area and will become the eighth station harnessing the fall of the Þjórsá river. “This power station has been a long time in preparation,” says Ásbjörg. She says important preparatory works began last year, including road construction into the area and work camp facilities for staff and contractors. “Everything is therefore ready to move forward as soon as all permits are in place,” she says.

Better Use of Existing Assets
This construction period is not only about new power plants, but also about making better use of the 19 stations already in operation around the country. “We place strong emphasis on maintenance and improvements in order to ensure security of operation,” says Ásbjörg. She adds that there are also opportunities to increase the power and generation capacity of those stations.

She mentions Sigalda Power Station. “The station was originally designed in such a way that space was left to add a fourth turbine,” she says. The plan now is to make use of that. With a new 65 MW unit, both power and generation capacity will increase substantially. “This project entered the tendering stage last year, and this year the main tenders relating to the construction will be issued,” says Ásbjörg.

Another example is Þeistareykir Station, where work is under way to add a so-called topping unit. “There, we can make use of pressure drop that is not utilised today,” she says. With a new 25 MW unit, electricity generation can be increased without additional drilling. “We are making better use of what is already there,” she says.

“If plans proceed as expected, we will be able to deliver 1.3 TWh of new green energy by the end of 2030.”

Construction for the Future
Asked about the purpose of this construction period, Ásbjörg points to Landsvirkjun’s role in Icelandic society. The company celebrated its 60th anniversary in 2025. “For 60 years, Landsvirkjun has built the infrastructure that Icelandic society relies on,” she says. She notes that the last power station was commissioned in 2018, and that the need for new energy has increased since then.

“We want to take an active part in the energy transition and support the prosperity of society with green energy,” says Ásbjörg. If plans proceed as expected, Landsvirkjun will be able to deliver around 1.3 TWh of new green energy into the electricity system by the end of 2030. “That is a goal that matters to all of us,” she says.

HVAMMUR POWER STATION

Cost-Effective Project in a Populated Area

Ólöf Rós Káradóttir
Project Manager, New Construction

Hvammur Power Station will be built in the lower part of the Þjórsá and will become the eighth hydropower station in the Þjórsá and Tungnaá area. According to Ólöf Rós Káradóttir, Project Manager in New Construction, its location is a key part of the project's efficiency, because the water volume is high even though the head is relatively low.

"Hvammur Power Station is well located within the system."

"Hvammur is located low in the Þjórsá, where the water volume is great," says Ólöf. "Power output is determined by the product of head and water volume, and here we can make very good use of the water." The station will have an installed capacity of about 95 MW and estimated annual generation of around 760 GWh.

Location and efficiency
All concrete structures for Hvammur Power Station will be in Rangárþing ytra, on the eastern side of the Þjórsá. The reservoir will, however, extend partly into Skeiða- og Gnúpverjahreppur, and the project area will therefore affect more than one municipality. Ólöf says this calls for close consultation and clear planning, as the station is being built in a populated area.

One of the main reasons Hvammur is considered cost-effective is that it makes use of infrastructure already in place. "The power stations further upstream in the Þjórsá have storage reservoirs, so the river's flow is well regulated," says Ólöf.

Hvammur Power Station makes use of infrastructure already in place in the Þjórsá region.

"That means we do not need as large a reservoir or as extensive flood-control structures as would otherwise be necessary."

Its location in lowland also matters. According to Ólöf, access to the area is good, so there is no need to build an extensive new road system or new transmission lines. "We will connect to the transmission system already in place, through a new Landsnet substation," she says.

"We are building the first smolt passage in Iceland, designed into the power station from the outset."

Environment and river flow
Like other projects, Hvammur will have environmental impacts, and strong emphasis is therefore placed on mitigation measures. One of those is a smolt passage, which will be part of the structures themselves. "We are building the first smolt passage in Iceland," says Ólöf, "and it has been designed into the station from the outset and placed in the best possible location."

According to her, this is a costly and extensive mitigation measure, but also an important one. "Smolt passages are often installed later, once a power station is already in operation and impacts have come to light," she says. "Here, we can design the solution together with the structures, and that makes a big difference."

Hvammur will affect the flow of the Þjórsá along a limited stretch. The reservoir will be about seven kilometres long, and flow will be reduced over roughly three kilometres. Ólöf emphasises that fluctuations in the reservoir will be very small and that flow below the tailrace will remain unchanged in practice.

"If more water flows into the reservoir than we can use in the power station, it passes straight through," she says. "We open the spill gates and release the water downstream, so the flow below the station remains unchanged." She says this is one of the design's basic principles.

"This is a power project in a populated area."

Consideration for neighbouring communities
The fact that Hvammur is being built in a populated area affects the whole project. "We are very close to people's homes, farming and business activities," says Ólöf. "That means people feel the effects of the construction sooner and more clearly than they otherwise would, and we have to take full account of that in all our working methods."

According to Ólöf, the project progressed well during the year, with emphasis on preparatory works, including material extraction, road construction within the area and preparation of work camp facilities. "We have very good contractors and the work has gone well," she says.

Part of the preparation relates to the new Búðafoss road and bridge across the Þjórsá. Landsvirkjun is financing the project, while the Icelandic Road and Coastal Administration will act as road authority and handle preparation, construction and operation. "For many people, this is one of the most visible and positive changes that comes with the project," says Ólöf.

And why is Landsvirkjun developing Hvammur? "This is a very cost-effective option that is already far advanced in the preparation process," she says. "Society's demand for energy is growing, and Hvammur Power Station will strengthen the position of the electricity system for the future."

Hvammur's annual generation is estimated at 760 GWh.

VAÐALDA WIND FARM

“We Are Building The Country’s First Wind Farm”

Elín Hallgrímsdóttir
Project Manager, New Construction

At Vaðalda, Landsvirkjun is building Iceland’s first wind farm. Twenty-eight wind turbines will be installed there, with total capacity of 120 MW. According to Elín Hallgrímsdóttir, Project Manager in New Construction, this is a large and complex project built on many years of preparation. “We are building the country’s first wind farm, and we will install 28 wind turbines there,” says Elín.

“The capacity factor of the wind farm is expected to be around 42%.”

Good Efficiency and Strong System Integration
The Vaðalda site is well suited for wind power. “The expected capacity factor is around 42%, which tells us this is a favourable site for wind utilisation,” says Elín. She notes that, globally, wind farms generally generate electricity about 25 to 44% of the time. Proximity to hydropower stations in the Þjórsá area also matters. “We are very close to the heart of hydropower generation in Iceland, and that will help greatly in providing dispatchable power when the turbines are not generating,” she says.

Extensive long-term studies have also been carried out in the area. “In 2013 and 2014, experimental wind turbines were installed at Hafið to test the interaction of wind power and hydropower,” says Elín. She says that work was an important basis for the location and design of the wind farm.

Multi-Faceted Construction
The main components of the project are varied. “They include road construction within the area, foundations for the wind turbines, a collection substation, and the transport and installation of the turbines,” says Elín. In addition, road improvements outside the area have been necessary to make transport possible.

Ten foundations had been poured by February 2026.

The transport operation will be extensive. “Each wind turbine involves around 18 transport movements,” she says. Most of them will take place at night because of oversize and overweight loads. “Each turbine is expected to take around three to five nights to transport,” says Elín. Half of the turbines will be moved in 2026 and the other half in 2027.

“We bring each wind turbine online as soon as it is installed.”

Phased Commissioning
Construction began in autumn 2024 with road building within the site area. “All road construction within the area has been completed,” says Elín. Work has also been under way on the foundations and the substation. “About ten foundations have been poured, and the collection substation will rise in January,” she says. As of late February 2026, around 100 people are working on site, while the highest number during 2025 was about 150.

Commissioning of the wind farm will take place in stages. “We bring each wind turbine online as soon as it is installed,” says Elín. From July, the first turbines will begin operation, and around 60 MW are expected to be connected by autumn 2026. “In 2027, all the turbines will then be in operation, and the construction project will be fully complete.”

Environmental Impact and Mitigation Measures
The environmental assessment for Vaðalda was carried out in 2016, and additional studies have been undertaken since then. “We have, among other things, studied birdlife, visual impact and noise,” says Elín. She says the project also went through a redesign in 2020 in response to comments that were raised.

She points out that the wind farm is located in an area that has already been disturbed. “We make use of Landsvirkjun infrastructure already in place and in that way avoid causing excessive disturbance,” says Elín. Measurements and studies will continue in order to minimise impacts. “We will continue to do what is needed to reduce, as far as possible, the impacts the project has,” she says in conclusion.

Landvegur road has been reinforced to enable the transport of the wind turbines.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

EXTENSION OF SIGALDA POWER STATION

Increased Capacity With Minimal Disturbance

Kristján Gerhard
Project Manager, Improvements

The project at Sigalda Power Station involves adding a fourth turbine, says Kristján Gerhard, Project Manager in Improvements. Sigalda was commissioned in 1978 and designed from the outset so that a fourth turbine could be added later. "When the station was built, provision was made for four turbines, so both the intake and a concrete conduit through the dam are already in place," says Kristján. That makes the expansion possible with minimal disturbance to existing structures.

"The role of the new turbine is first and foremost to provide power, as there is a shortage of power in the system."

The Fourth Turbine Strengthens System Capacity

Sigalda currently has installed capacity of 150 MW, with three 50 MW turbines. The new turbine will be about 65 MW. "The role of this turbine is first and foremost to provide power, not energy," says Kristján. The expansion does not change storage capacity or increase inflow, but only adds power capacity at the station.

This matters greatly for the electricity system. "We are increasing Landsvirkjun's flexibility in responding to fluctuations in the system," says Kristján. He explains that although the energy itself, the water in the system, is available, it is also important to have enough power capacity when demand is highest. "This is really about enlarging the engine, not the fuel tank," he says.

The expansion does not involve changing storage or increasing inflow to the area, but solely increasing the station's power capacity.

Preparations Well Under Way

According to Kristján, preparation for the project has gone well. During the year, tender design work was carried out and the works were tendered in three main contracts. "All of these tenders are now under way and detailed design is currently in progress," he says. At the same time, extensive preparatory work has taken place on site.

He says this has included infrastructure for work camp and operations areas, preparation for the camp itself, and the laying of power, water and telecommunications lines. "We also began preliminary earthworks for the extension of the powerhouse last autumn," says Kristján. That work was temporarily halted when the construction permit was invalidated, but the project remains broadly on schedule.

Permits and Next Steps

The extension falls outside the framework plan, because it is an addition to an existing structure, but it is nevertheless subject to environmental impact assessment. That assessment has been completed and the National Planning Agency has issued its opinion. "Following that, we received a generation licence from the National Energy Authority and applied for a construction permit," says Kristján.

"Overall, the project has progressed well and remained more or less on schedule."

The permits were appealed, but the appeals against the generation licence and the work camp permit were dismissed. The appeal against the construction permit for the expansion itself was, however, upheld to the extent that remedial work was required. "That work is under way now," says Kristján, adding that an updated construction permit is expected in the second quarter of 2026.

Commissioning of the fourth turbine is scheduled for the end of 2029. "We expect to be able to start physical construction work in 2026," says Kristján. "Overall, the project has gone well and has remained more or less on schedule."

The station was originally designed for four turbines.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

HOW DO WE PRESERVE SPECIALIST KNOWLEDGE?

“Knowledge Is Not Created in a Single Project, It Accumulates”

Jón Smári Úlfarsson
Project Manager, New Construction

Over decades, extensive knowledge has been built up within Landsvirkjun on the design, construction and operation of power plants. Jón Smári Úlfarsson, Project Manager in New Construction, has followed that development at close range and has been involved in numerous major power projects. That knowledge is not created in a single office or within a single project; it is shaped through the experience of people who follow projects from the first idea all the way to operation. Jón Smári says preserving knowledge is a key issue in the company’s long-term operations.

“Knowledge is built up at every stage, from the initial idea all the way through to operations.”

Knowledge Created at Every Stage
“Knowledge is really formed at every stage of a project,” says Jón Smári. It is created throughout the design process, from concept and preliminary design, through detailed and tender design, through procurement, in the construction itself, and later as important support for operating the structures. “This is not just one type of knowledge, but an interplay of many factors — engineering, project management, sound design, cost and time planning, and experience of what actually works.” Each project adds new experience that benefits the next ones. It is therefore very important that hard-won experience is carried over from one project to another.

“If knowledge is not documented and made accessible, there is a risk that it will be lost.”

According to Jón Smári, one of the main challenges is to ensure that this knowledge is not lost. “Projects take a long time and staff turnover is a natural part of the work,” he says. He says that is why it is necessary to record documents, decisions and lessons learned in a systematic way and store them in the company’s database. “The knowledge has to be accessible, not only for those who were part of the project, but also for those who take over later.”

“The most important transfer of knowledge often takes place in the day-to-day work, between people.”

Experience Is Passed Between Generations
Although systems and databases matter a great deal, Jón Smári emphasises the human factor. “The most important transfer often happens in day-to-day work,” he says. He says new employees learn the most by working with experienced people and getting to follow projects through. “That is how an understanding of the bigger picture is formed, not only on paper, but in execution.”

Construction at Búrfell in 1976.

Construction at Sigalda in July 1976.

Continuous Development of Working Methods
Since Jón Smári began working at Landsvirkjun, methods and technology have changed significantly. He says that the recording of progress, the traceability of decisions and the flow of information are all much better than before. “Today, we have entirely different tools for managing projects,” he says. “That allows us to learn systematically from each project and build on the knowledge that already exists.”

ELECTRICITY MARKETS DURING THE YEAR

Markets Taking Shape: Greater Visibility and Predictability

Jónas Hlynur Hallgrímsson
Director of Business Analysis and Market Development

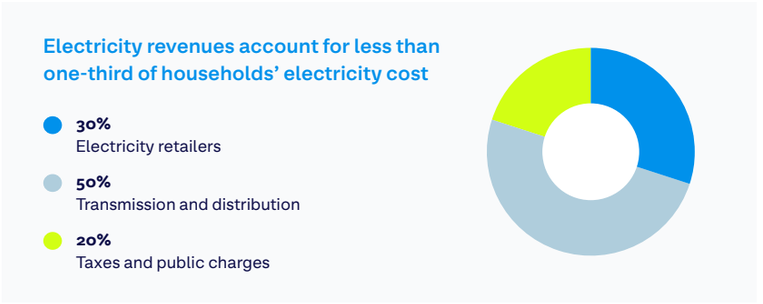
The year 2025 marked a turning point in the development of Iceland's electricity markets. With the introduction of two trading platforms for electricity transactions, it has become easier to see how supply and demand meet and how market prices are formed. Jónas Hlynur Hallgrímsson, Director of Business Analysis and Market Development, says this is a major step forward.

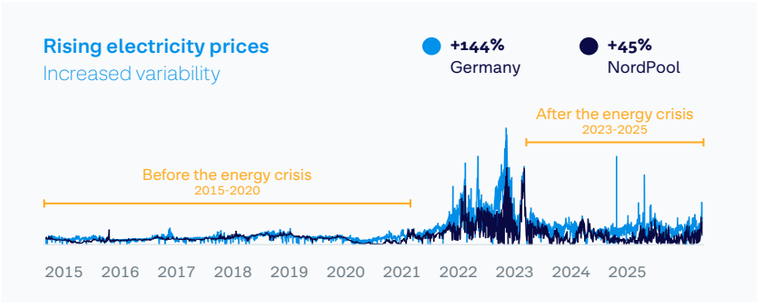
"Now we can see more clearly than before how supply and demand develop and how market prices are formed," says Jónas. "This is an extremely important development for the market as a whole."

Price Developments Reflect Demand
Prices in the domestic electricity market fell in the spring and again in the autumn, when demand contracted. Jónas mentions in particular an event at Norðurál, which had a significant effect on the market.

"When major demand dropped out, supply was left available, and that became visible in the market straight away," he says. According to Jónas, this clearly showed how sensitive the market is to changes in demand, especially in a small and concentrated system such as Iceland's.

The development has also revealed more clearly how Iceland differs from foreign electricity markets. Abroad, electricity prices generally rose by as much as 10% during the year, although the increase varied between markets. What most characterises foreign markets, according to Jónas, is greater price volatility.





Price Volatility in Foreign Markets
A different picture emerges when looking beyond Iceland. There, electricity prices generally rose by as much as 10% during the year, although the increase varied between markets. According to Jónas, what most characterises foreign markets is growing price volatility.

"Long-term contracts create important predictability."

"This is largely weather-related," he explains. "When the wind blows and the sun shines, electricity prices can become very low, even negative. But when the sun disappears and the wind drops, prices can shoot up."

This trend affects large users in Europe, especially heavy industry, which is finding it increasingly difficult to secure long-term contracts. "Greater volatility makes operating plans more difficult and affects competitiveness," says Jónas.

Iceland's Distinct Position Creates Stability
In this context, Iceland is in a unique position. The electricity system is isolated, built entirely on renewable energy sources and not connected to other countries. "We can neither import nor export electricity," says Jónas. "That means we have to take all of this into account in electricity sales."

Electricity trading in Iceland is based predominantly on long-term contracts, especially with large users. "At Landsvirkjun, we can offer long-term contracts at stable and predictable prices," he says. "That creates important predictability for both us and our customers."

In his view, these contracts have served all parties well. "Large users operate very extensive activities and need to be able to rely on stability. Long-term contracts have therefore suited both Landsvirkjun and our customers."

"We can now see much more clearly how supply and demand meet."

Jónas emphasises that efficient electricity pricing matters greatly, both in the short and the long term. "The electricity price determines which energy options can be pursued and how they are utilised," he says.

Although Iceland is not connected to other electricity systems, as is common in many other countries, pricing still plays a key role. "It influences how well we take care of the resources," says Jónas, "and it also indicates customers' ability to pay over the longer term, when bilateral contracts are negotiated."

Looking ahead, Jónas is optimistic. "The future is bright for the Icelandic electricity market," he says. "We have a great deal to offer, not least a unique, renewable electricity system and long experience of long-term thinking."

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

CUSTOMERS

The Success of Large Power Users Matters to Society

Valur Ægisson
Director of Account Management

Fluctuations in international commodity markets, tariffs and tension between major powers left their mark on the operations of electricity buyers in 2025. Companies that buy electricity from Landsvirkjun operate in international markets and are therefore affected by the uncertainty there. Their performance thus reflects not only domestic conditions, but also developments in the global economic environment.

Valur Ægisson, Director of Account Management, says the year was challenging in many ways. Although conditions varied between sectors, and even individual companies, it is clear that the success of large power users matters greatly, both for Landsvirkjun and for Icelandic society as a whole.

Few but Large Customers

Despite the scale of the business, Landsvirkjun's customer base is relatively small. "We have contracts with 11 large users," says Valur. In addition, the company sells electricity wholesale to retail companies and to the transmission company Landsnet through the electricity market.

The largest customers are the three aluminium smelters: Alcoa, Rio Tinto and Norðurál. Landsvirkjun also sold electricity to companies in the silicon industry; Elkem and PCC, as well as to the industrial company TDK. Data centres are also an important part of the customer base, including atNorth, Borealis and Verne Global, and have been expanding rapidly, among other things in connection with artificial intelligence.

Finally, Valur mentions Landsvirkjun's newest type of customer: land-based aquaculture companies. Agreements have been made there with Laxey in Vestmannaeyjar and First Water in Þorlákshöfn.

"Our customers operate in international markets and feel the impact of fluctuations."

A Challenging Year in International Markets

The year proved challenging for Landsvirkjun's customers, not least due to uncertainty in international markets. "Our largest customers all operate in international commodity markets and are directly affected by what happens there," says Valur.

Performance varied across industries, however. The aluminium market was relatively strong, which benefited the smelters. At the same time, the silicon market was weaker. As a result, production at Elkem was reduced, and PCC temporarily suspended its operations in the summer of 2025.

A serious incident also occurred at Norðurál, when transformers failed and caused around two-thirds of the plant to shut down temporarily. "Landsvirkjun sells Norðurál around 40% of the energy the company uses," says Valur, while other energy sellers provide the remainder. There is hope that production will return to normal as soon as possible.

Long-Term Relationships

Despite these challenges, Valur says communication between Landsvirkjun and its customers has generally gone well. "We place great emphasis on treating people with kindness and respect," he says, pointing out that many customers have been in business with Landsvirkjun for decades.

A serious incident occurred at Norðurál in the autumn, when transformer failures caused around two-thirds of the plant to shut down temporarily.

Landsvirkjun has historically grown alongside its customers, building power stations as large users increased their production. That approach has not changed, even though contracts and negotiations can sometimes be demanding. "When major interests are at stake, discussions can be tough," says Valur, "but we always place emphasis on professional working methods and good communication."

A Major Period of Renegotiation

One of the largest renegotiation periods in Landsvirkjun's history lies ahead. "Many of our contracts expire over the next five years," says Valur, and discussions are therefore now under way with most of the company's large customers.

Among them is the contract with Alcoa, which runs until 2048 but contains a price review clause that takes effect in 2028. "Discussions are also under way in relation to that," says Valur. He says they call for a great deal of work and careful consideration, because both operational and societal interests are at stake.

"Electricity sales to large users are one of the main pillars of the Icelandic economy."

Why Does the Success of Large Users Matter?

In Valur's view, it is very important that large users do well. That applies to the companies themselves, their employees, neighbouring communities and the economy as a whole. "Electricity sales to large users are one of the main pillars of the Icelandic economy," he says, alongside fisheries and tourism.

For Landsvirkjun, this is core business. The generation of electricity and its sale to large users is the foundation of the results the company has achieved in recent years. That success is reflected, among other things, in dividend payments to the owner — the Icelandic nation — and in continued investment within the Icelandic economy.

"The performance of large users is a key variable in this context," says Valur. When they do well, the conditions are created for stability, long-term thinking and continued value creation, to the benefit of Landsvirkjun and society as a whole.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

ELECTRICITY MARKETS AND SECURITY OF SUPPLY

“There Is No Room for Error”

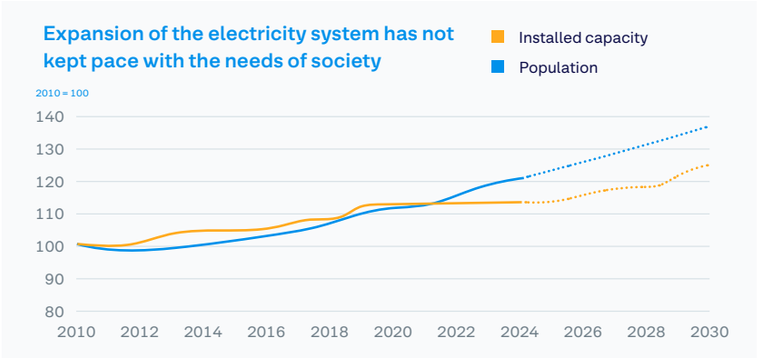
Tinna Traustadóttir
Executive VP, Sales and Services

A large share of the electricity produced in Iceland is sold through long-term contracts, a cornerstone of Landsvirkjun’s operations and of the Company’s customers. Tinna Traustadóttir, Executive Vice President of Sales and Services, says this arrangement reflects the unique nature of the Icelandic electricity system and creates both predictability and stability, which are crucial for the competitiveness of the economy.

“Long-term contracts make up by far the largest share of electricity trading in Iceland,” says Tinna. “We make bilateral agreements with aluminium smelters, silicon plants, data centres and land-based aquaculture companies.” At the same time, there has been positive development in the general market with the arrival of trading platforms Vonarskarð and Elma, which have different areas of focus in their operations.

Long-Term Contracts and Trading Platforms
Vonarskarð is primarily a platform for long-term transactions, while Elma serves the day-ahead market and short-term trading. According to Tinna, this strengthens market transparency and efficiency without undermining the importance of long-term contracts. “They provide predictability for us as well as for customers,” she says, “both in terms of secure delivery and stable electricity prices.”

The difference between Icelandic and foreign electricity markets is largely determined by the different energy systems. “Here we operate a closed, renewable system that relies heavily on hydropower,” says Tinna. “On the continent, electricity generation is still to a significant extent based on fossil fuels, and a much larger share of transactions is short-term in nature.”



Competitiveness in Europe
This difference affects industrial competitiveness, especially in Europe. Tinna points out that industry there has contracted and that the importance of long-term contracts has been highlighted in that context. “In Europe, there is now increasing emphasis on long-term power contracts to strengthen industrial competitiveness,” she says, adding that Iceland has a certain advantage there.

Long-term contracts provide not only price stability, but also security of delivery. “For energy-intensive industry, this matters enormously,” says Tinna. “Predictability in electricity supply is a prerequisite for companies to be able to plan their operations over the longer term and compete internationally.”

“In a closed system, we have no room for error if supply does not keep up with the growth of society.”

A Closed System and Growing Energy Demand
Iceland faces particular challenges when it comes to security of supply. “We operate a closed system,” says Tinna. “We have no coal- or gas-fired power plants and no subsea cables for importing electricity.” This means that supply must keep up with the growth of society, with no possibility of looking outside the system when shortages arise.

Since 2010, the population has grown by tens of thousands, while electricity supply has not increased at the same rate. “We know the discussion around permitting and delays in new supply,” says Tinna. “That has affected the situation, but hopefully we are looking towards brighter times.”

“Security of electricity supply is about clear criteria and responses when it is tested.”

In recent months, systematic work has been under way to define security of electricity supply more clearly. Cooperation between government, the energy sector and other stakeholders has been important in this respect. “We need to analyse security of electricity supply, define criteria and decide what measures should be taken if it is threatened,” says Tinna. “That work is still ongoing, but it is extremely important.”

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

COMMUNICATIONS

“The Target Group Is Just One: The Icelandic Nation”

Þóra Arnórsdóttir
Head of Communications and Information

Energy matters are complex, technical and often controversial. Yet they affect all Icelanders. For a company such as Landsvirkjun, which has been entrusted with the use of the nation’s shared natural resources, it is therefore important to speak clearly, honestly and in plain language about what is being done. Information is a prerequisite for the public to form an opinion and the foundation of the social licence on which the Company’s operations depend.

Within Landsvirkjun’s Communications and Information department, work is carried out systematically to communicate information in diverse ways to a broad audience. Þóra Arnórsdóttir, head of the department, says the its primary role is to ensure that the owners, the Icelandic nation, have access to the information that matters.

“We Really Have Nothing to Hide.”

Transparency as Part of the Responsibility
Landsvirkjun is owned by the nation and operates with the public interest as its guiding principle. This entails a duty of transparency. “We really have nothing to hide,” she says, adding that certain items of information fall under competition law or specific commercial interests, but otherwise the information should be on the table.

The challenge lies not least in getting the information across. The Company’s communications policy is based on proactive disclosure: to communicate newsworthy developments in operations at the company’s own initiative, without waiting for questions. “And to do it in plain language,” says Þóra. “Many issues are complex and technical,” she adds, and a large part of the communications department’s work lies precisely there.

Diverse Ways of Reaching People
To achieve this, Landsvirkjun uses a wide range of communication channels. The company’s website plays a key role, with detailed information on operations and dedicated websites for major projects such as Hvammur Power Station and Vaðalda Wind Farm. There, people can follow progress from day to day as the projects develop.

Management and staff have also been active in speaking and writing publicly at meetings, conferences and in the media. Þóra points out, however, that traditional channels are not enough. “We know very well that these channels are not enough to reach people under forty.”

Greater emphasis has therefore been placed on newer communication channels, including social media, visual communication and the Grænvarpið podcast, which covers energy, environmental and climate issues. The aim is to show the diversity of Landsvirkjun’s operations and that energy issues can be interesting and accessible. The response has been good, and the company’s followers on social media now number in the thousands.

The Owners in the Foreground
Although target groups can be divided in many different ways, Þóra sees the core audience as one. “The target group is just one. And that is the owners – that is to say, the Icelandic nation,” she says.

From the recording of Grænvarpið, Landsvirkjun’s podcast. Ívar Páll Jónsson speaks with Jóhanna Hlín Auðunsdóttir.

Age, place of residence or background should not matter; the communication simply needs to allow as many people as possible to understand what Landsvirkjun is doing, where, and why.

This approach is also linked to the responsibility that comes with utilising natural resources. In Þóra’s view, the company must enjoy a social licence to operate. For that to be possible, the public must have access to all key information. “In order to be able to form an informed opinion,” she says, “all the fundamental information must be accessible and available.”

“There Is a Direct Link Between Knowledge and Positivity.”

Results Measured in Trust
The results of this information work are reflected, among other things, in Gallup’s annual surveys. The latest results show that never before have so many people expressed a positive view of Landsvirkjun.

Around two-thirds of respondents say they are positive towards the company, while the proportion of negative responses is low.

The results also show that trust in the company has increased and that more people feel they know its operations well. “There is a direct link between knowledge and positivity,” says Þóra. People have greater trust in Landsvirkjun, see the company as important for Icelandic society, including in relation to climate issues and value creation.

Trust Is Built Through Dialogue
Þóra says these results matter a great deal, not least because public debate can sometimes give a different impression. The support of the owners is not something that can be taken for granted; rather, it is built up gradually through clear information, ongoing dialogue and a willingness to answer questions, including the difficult ones.

“For those of us who work to communicate information about the nation’s energy company, it is incredibly valuable to feel that people are satisfied,” she says. In her view, this shows that the path taken in communications is the right one. The emphasis on transparency, plain language and diverse channels has resulted in greater knowledge, more trust and a stronger connection with the owners.

COMMUNICATION REGARDING NEW CONSTRUCTION

“Trust Is Built by Being Present and Engaging in Dialogue”

Gunnar Aron Ólason
Communications Officer for New Construction

Communication with neighbouring communities is a key part of all Landsvirkjun activities related to new construction. According to Gunnar Aron Ólason, Communications Officer for New Construction, his role is first and foremost to connect the projects with the people who live and work in the surrounding areas. “My role is to be the link between the projects and the people in the neighbouring community,” he says.

“People need good information to be able to organise their daily lives.”

Information That Supports Daily Life
Gunnar Aron says clear and regular information matters greatly to people living near new construction projects. “People are trying to organise their lives, their work and their day-to-day routines,” he says. He says that by providing timely an accessible information, Landsvirkjun can help people respond to changes and reduce uncertainty in daily life.

He says communication is not only about conveying facts. “It is also important to maintain good communication so that people can tell us how we can adjust our working methods so that their work and ours fit together better,” says Gunnar Aron.

“Direct human interaction makes all the difference around new construction.“

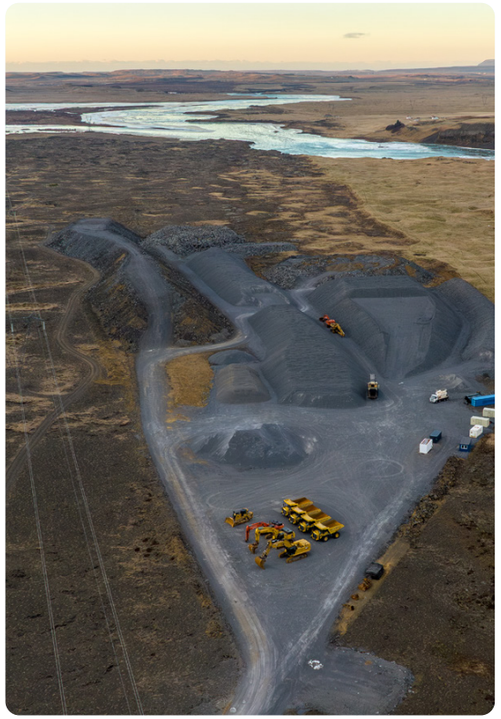
Work has been under way on improvements to Landvegur in connection with the Vaðalda project.

Human Interaction Builds Trust
In Gunnar’s view, direct human interaction matters most when it comes to large projects of the kind Landsvirkjun undertakes. “Respect has to be there between the developers and the people in the neighbouring community,” he says. Trust is built up gradually, through dialogue and presence. “It is difficult to build trust through media alone,” he says, adding that he places emphasis on being accessible, listening to all voices that are heard and ensuring regular communication.

According to Gunnar, people’s attitudes in the vicinity of the projects are naturally varied. “Many people see opportunities in the development, for example stronger infrastructure and more jobs,” says Gunnar Aron. “Others are concerned, among other things, about the impact on nature.” In all cases, he says, it is important to listen and try to find solutions.

Wind Power, Transport and Demanding Projects
Gunnar Aron’s main tasks during the year were connected chiefly to preparations and construction related to the Vaðalda Wind Farm. Considerable communication has taken place there about the project itself, its plans and its progress. “It has been important to communicate clearly what is happening and when,” he says.

Major heavy transport operations now lie ahead in connection with the installation of wind turbines for the wind farm. “These are very large and complex projects,” says Gunnar Aron. He says the aim is for information sharing to minimise disruption for residents living near the works. “That is where good communication and regular information make all the difference,” he says.



At Hvammur.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

LANDSVIRKJUN'S CONTRIBUTION TO CLIMATE ACTION

The Greatest Contribution Is Electricity Generation Itself

Ívar Kristinn Jasonarson
Specialist in Climate and Sustainability

Climate issues are an integral part of Landsvirkjun's operations. According to Ívar Kristinn Jasonarson, Specialist in Climate and Sustainability, the company's greatest contribution lies in electricity generation itself. "The largest part of the climate problem is caused by fossil fuels, by the burning of oil and coal," he says. "We need to replace those energy sources with renewable ones, and Landsvirkjun is part of that solution."

"Emissions from Landsvirkjun's electricity generation were only 3.1 grams per kilowatt-hour in 2025."

Low Emissions in an International Context
Emissions from Landsvirkjun's electricity generation are very low by any comparison. Ívar points out that the global average is 440 grams of carbon dioxide per kilowatt-hour generated, while the European average is around 190 grams. "In 2025, emissions from Landsvirkjun's electricity generation were only 3.1 grams per kilowatt-hour," he says.

He adds that even compared with other renewable power generation, Landsvirkjun's emissions are very low. "The European Union has set a benchmark for what qualifies as green power generation, and that is 100 grams of carbon dioxide per kilowatt-hour over the full life cycle of power plants," says Ívar. "All of our power stations are well below that benchmark."

Avoided Emissions Show the Real Impact
In Ívar's view, it is important not only to look at Landsvirkjun's own emissions, but also at avoided emissions: the emissions that would have occurred if the company's customers had used electricity with a larger carbon footprint elsewhere.

"Landsvirkjun's avoided emissions are equivalent to around 85% of all territorial emissions in Iceland."

"Avoided emissions from Landsvirkjun's electricity generation were estimated at around two and a half million tonnes of CO_2 equivalents in 2025," says Ívar. "That is equivalent to around 85% of all territorial emissions in Iceland." He says this is a clear example of how large a contribution renewable electricity can make to climate action.

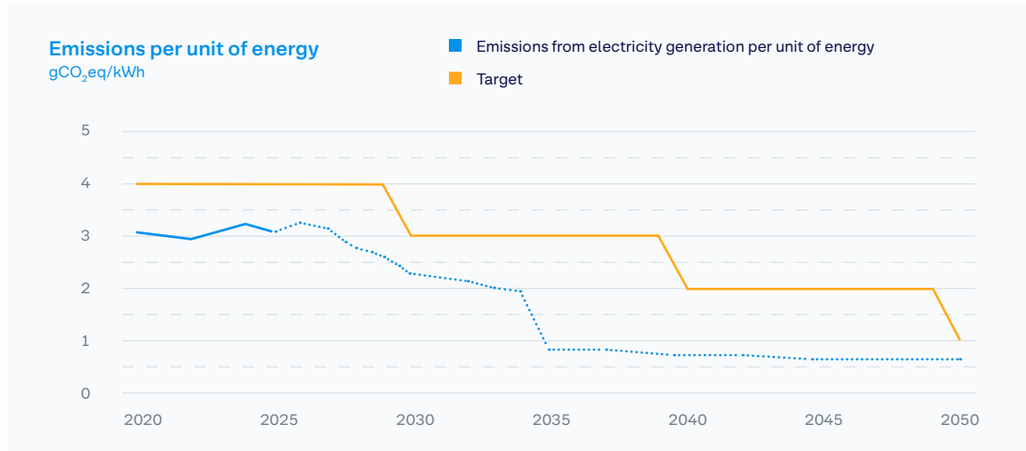
Iceland Is Well Positioned in the Energy Sector
Iceland, and its energy sector, is well positioned in climate matters compared to other nations. "You could say that we have already completed the first and second energy transitions," he says, referring to electricity generation and space heating, almost entirely based on renewable energy sources.

He points out, however, that the fight against climate change is a global task. "The contribution of Iceland and Landsvirkjun matters in a broader context," says Ívar, "not least when clean electricity replaces energy sources with high emissions elsewhere."

440 g
Emissions from electricity generation worldwide

100 g
Benchmark for green power generation

3,1 g
Our emissions



The Company
Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication
Environment, Climate and Community
Environment and Climate
Community
The Future

RESOURCE MONITORING AND RESEARCH

“We Need To Understand The Resource In Order To Utilise It Better”

Árni Jóhann Óðinsson
Project Manager in Community and Nature

At Landsvirkjun, our goal is to utilise the resources entrusted to us in a sustainable and efficient way. To monitor how that is going, the company carries out extensive research and monitoring of those resources, enabling better utilisation while also minimising waste and the negative impacts of operations.

Árni Jóhann Óðinsson, Project Manager in Community and Nature, knows these issues inside out, having worked on environmental and community matters in East Iceland for the past 17 years. “Yes, it is necessary to understand the resource entrusted to us in order to ensure that its utilisation is sustainable and delivers as much value as possible into the future for the national economy,” he says.

He gives examples. “For instance, operating hydropower stations requires that we understand glacier mass balance. We need to understand the glaciers in order to grasp how changes in them affect the operation of our stations. We also need to understand our reservoirs and the flow of water to the station, to name just a few things,” he says.

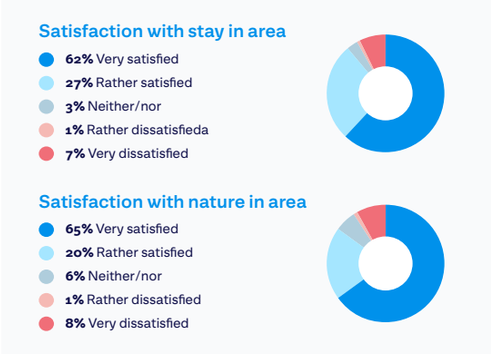
Maximising Yield at the Lowest Possible Cost
Through this work, Landsvirkjun seeks to maximise what can be obtained from the resource, at the lowest possible cost to the environment and society. “This is the responsibility that comes with being entrusted with this resource. It is not only the environment that we need to understand, because we know that building a power station involves major disturbance. We also need to understand the impacts on communities, perhaps especially those

Bank protection work at Kringilsárrani, within the Hálslón reservoir area. The bank protection is intended to protect a sensitive area by the reservoir.

closest to construction sites and future operating areas. And that is what we make every effort to do,” he continues.

“To make the right decisions, we need to understand the resource very well.”

Monitoring and research are highly extensive. The company monitors life in rivers and reservoirs and terrestrial ecosystems, including animals and plants on red lists. Fish studies are carried out, as are studies of microscopic aquatic organisms, and on land there are studies of vegetation, birds and reindeer. The company also monitors the effects reservoirs and river channels can have on dust transport and bank erosion, as well as impacts on habitats of animals and plants. In this way, we can assess and monitor the condition of ecosystems and the impacts we cause.



Tourist views at Kárahnjúkar.

A Wide Range of Mitigation Measures
We work on a range of mitigation measures set out in official requirements placed on the company, including measures to restore natural values disturbed by operations, as well as actions that support ecosystems. Emphasis is placed on measures being carried out in cooperation with specialists working at universities, research institutes, consulting firms and as independent experts, as well as with neighbouring communities.

Asked about monitoring and research in his own operating area, East Iceland, Árni says that it has been based on the conditions set when Fljótsdalur Power Station was built. “That includes monitoring windblown sediment at Hálslón reservoir, vegetation succession and the condition of the pink-footed goose population,” he says. In addition, the company has decided to monitor various other factors, among other things in connection with the East Iceland sustainability project, established in 2003 in cooperation with Alcoa Fjarðaál. “Within that, there are around 70 indicators covering social, environmental and economic factors,” says Árni.

He says that the monitoring has shown that the mitigation measures taken are working. “What the monitoring has revealed is that the mitigation measures we have implemented are effective and help us prevent windblown sediment from smothering vegetation,” says Árni.

Positive Attitudes in East Iceland
He also mentions two attitude surveys carried out in East Iceland during the year: one on residents’ attitudes towards the operation of Fljótsdalur Power Station, and the other on tourists’ views at Kárahnjúkar on the interaction of nature, wilderness and structures. “The results of both were extremely pleasing for us. Close to 90% of residents in East Iceland are satisfied with us, while only 2–3% are dissatisfied, according to the results of the first survey,” he says.

The other survey, carried out for us at Kárahnjúkar by the Icelandic Tourism Research Centre, showed that visitors were pleased with their visit, found the area beautiful, peaceful and impressive. Kárahnjúkar Dam, Hálslón and the power station itself were seen by many as interesting structures and part of a positive experience — often the highlight of the visit. Árni says those results are especially pleasing and noteworthy.

The Company
Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication
Environment, Climate and Community
Environment and Climate
Community
The Future

LANDSVIRKJUN'S CONTRIBUTION TO SOCIETY

"Being A Good Neighbour Is About Trust, Dialogue And Responsibility"

Jóhanna Hlín Auðunsdóttir
Head of Climate and Sustainability

Landsvirkjun's greatest contribution to society lies in generating electricity from the country's renewable resources for households and businesses across Iceland. According to Jóhanna Hlín Auðunsdóttir, Head of Climate and Sustainability, this is the foundation of everything the company does.

"Electricity is something we care deeply about, and it is a major contribution to society," she says. "It is extremely important that security of electricity supply is ensured here, both for the public and for business activity. But Landsvirkjun's contribution to society is also far broader than that alone."

A Broad Contribution Across The Country

Landsvirkjun operates in many parts of the country, and power stations are often located close to communities. They create well-paid jobs, as well as demand for local services. Jóhanna Hlín points out that the Company monitors how large a share of procurement takes place in the local communities.

"When we look at smaller purchases by power stations, under ISK 15 million, around 35% come from neighbouring communities. That matters, because the services that develop around the operations have a real impact on those communities," she says.

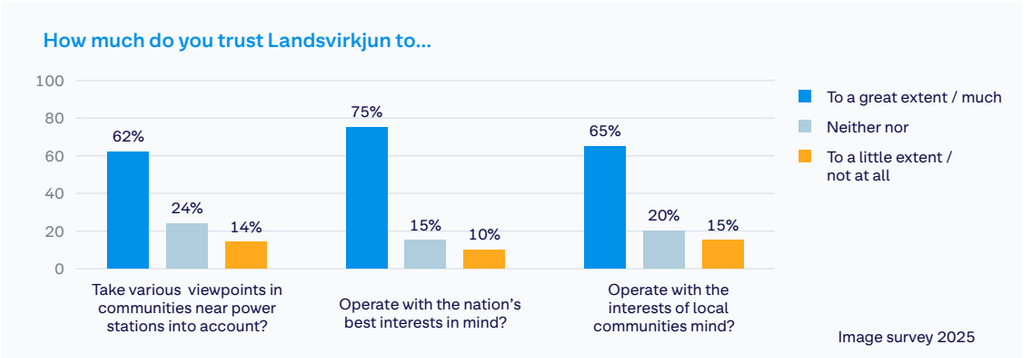
But the contribution does not consist only of jobs and procurement. Dialogue and cooperation with neighbouring communities matter just as much. "Being a good neighbour is about listening, showing respect and being present. We are always learning and can always do better," says Jóhanna Hlín.

Trust And Social Licence

The use of natural resources inevitably affects nature and the landscape. Jóhanna Hlín says that this is where one of the most important social issues lies. "We Icelanders have strong feelings about nature. That is why it matters that we show in practice that we can be trusted with these resources; that we use them responsibly and with respect for both nature and society," she says.

"The trust shown to us in opinion surveys matters enormously to us, and we want to maintain it."

Trust is reflected, among other things, in opinion surveys. In a 2025 survey on Landsvirkjun's power stations, an overwhelming majority of Icelanders said they trust the company and believe that consideration is shown to neighbouring communities.



"This matters enormously to us," says Jóhanna Hlín. "We want to maintain that trust and continue to work carefully and responsibly."

Monitoring Social Impacts And Listening To Feedback

Landsvirkjun places strong emphasis on monitoring the effects of its operations and listening to feedback. In 2025, for example, a visitor survey was carried out at Kárahnjúkar Dam, where both Icelandic and foreign tourists were asked about their experience of the area.

"The vast majority were there to experience nature, but at the same time a very large majority viewed both the area and the structures positively," says Jóhanna Hlín. "This kind of community monitoring is important, because it helps us see what is being done well and where we can improve."

Targeted Participation In Community Projects

In addition to its core operations, Landsvirkjun takes part in a range of community projects. These include Eimur, Orkídea and Blámi, which aim to promote innovation and community development in different parts of the country. The Landsvirkjun Energy Research Fund has also supported research in the fields of energy, climate and environmental issues for nearly twenty years. In 2025, around ISK 72 million was allocated to such projects.

"We place emphasis on participating in projects that create real social value and connect to our vision for the future," says Jóhanna Hlín. "Whether that relates to scientific work, innovation, safety or environmental matters."

Contribution To The Future

Looking ahead, Jóhanna Hlín says that Landsvirkjun's contribution to society will become increasingly important in the context of energy security, the energy transition and climate issues. "Access to renewable electricity at affordable prices matters to all of us. It is not only the foundation of daily life but also a key prerequisite for the energy transition and climate action," she says. "That is where one of Landsvirkjun's greatest contributions to society lies, both today and in the future."

COMMUNITY RELATIONS

“Trust Is Built on Honesty and Not Avoiding Difficult Issues”

Hildur Vésteinsdóttir
Project Manager in the Mývatn Area

Landsvirkjun operates in many parts of the country, in close proximity with locals. Communication with communities therefore matters, not as a side project but as an integral part of operations. According to Hildur Vésteinsdóttir, Project Manager in Local Communities and Nature, this communication is built on being present, listening and taking part.

“We are part of the community and need to be present.”

“We are part of the community,” says Hildur. “In some cases, our stations are the residents’ closest neighbours, and then it is especially important to have good and honest communication.”

She points out that Landsvirkjun puts communication with neighbouring communities in the foreground and has shown that in practice. Project managers at the company’s operating areas play a key role there, both through regular dialogue and by taking an active part in the community. “This is extremely important to us,” she says.

A Clear Policy on Being a Good Neighbour
The communication is based on Landsvirkjun’s community policy, where three key elements serve as guiding principles. The first concerns being a good neighbour, the second that neighbouring communities should benefit from the operations, and the third that the company should take an active part in the community.

Landsvirkjun hosted “News Tidbits Served with Coffee” at the Skjólbrekka community centre in the Mývatn area.

“We want to have constructive communication, provide education in diverse ways and support projects that have positive social impact,” says Hildur. In her view, trust is what matters most here. “It is very important to build trust, show honesty in communication and not avoid the difficult issues. We most certainly make an effort to do that.”

A Diverse Group of Stakeholders
Landsvirkjun’s main stakeholders in neighbouring communities include municipal councils and municipal staff, landowners, fishing associations and various organisations. Who counts as a stakeholder, however, depends on each project.

“We manage this in a very structured way,” says Hildur, explaining that the stakeholder list is reviewed regularly. “We go over whether everyone who needs to be on the list is there, and then we update it as the projects develop.”

Human Contact and Diverse Channels
When it comes to communication channels, Landsvirkjun places emphasis on diversity. The company publishes general newsletters nationwide, but also targeted newsletters for neighbouring communities, where it goes into more detail about what is happening in each operating area.

“Then there are all these human interactions,” says Hildur. Regular meetings with different groups of stakeholders matter a great deal, and social media are also used both nationwide and at the local level. “And then we listen to people,” she adds. “If there is demand for something specific, we always try to respond.”

“Most people are simply very pleased to have us, and the rest keeps us on our toes.”

Positive Attitudes with Important Restraint
In Hildur’s view, communication with neighbouring communities has generally gone well, although not everyone always agrees. “That is only natural,” she says. “And it gives us important restraint.”

Landsvirkjun has had various surveys carried out, both nationwide, among tourists and specifically in the neighbouring communities of its power stations. The results show that people are generally pleased with the company’s presence. “Most people are simply very pleased to have us,” says Hildur, adding that the group that is not pleased is no less important. “They keep us on our toes.”

WHAT SHOULD ENERGY BE USED FOR?

“Energy Demand Will Increase Significantly in the Coming Years”

Ríkarður Ríkarðsson
Executive VP, Business Development and Innovation

In the coming decades, energy demand in Icelandic society will increase substantially, driven by the energy transition, population growth and economic growth, says Ríkarður Ríkarðsson, Executive Vice President of Business Development and Innovation. “We are moving towards full energy transition and electrification is already well under way,” he says. According to the latest Iceland Energy Forecast, around two additional terawatt-hours are needed to fully electrify road transport and homes.

Electrification and Growth in Society
Ríkarður points out that energy demand is not linked to transport alone. “General production in the country is energy-intensive,” he says. He says there are signs of continued population growth, with forecasts assuming 500,000 to 600,000 inhabitants in 2050, in addition to four to five million tourists a year. “It takes energy to serve this society,” he says, whether the focus is on homes, general industry or services.

“Electricity demand will increase both due to the energy transition and continued growth in society.”

Ríkarður also says there is room for continued growth in energy-intensive industry, within the limits of responsible resource utilisation. “We have opportunities to grow in areas such as data centres, food production and land-based aquaculture,” says Ríkarður, in addition to strengthening the industry already operating in the country.

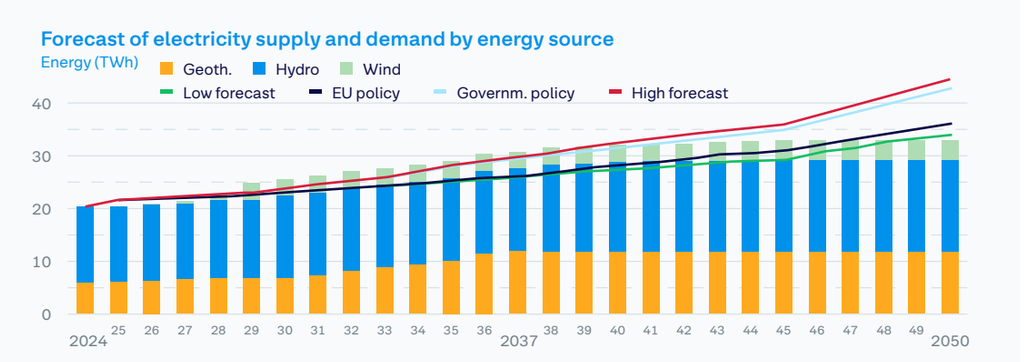
How Great Is the Need?
According to Iceland’s baseline energy forecast, demand is expected to increase by eight terawatt-hours by 2050. “According to the high forecast, it is more than twice that,” says Ríkarður. He says that if the government’s goals on the energy transition and economic development are to be achieved, the high forecast is the more relevant one. For 2035, the need is likely to amount to an additional four to eight terawatt-hours.

“To meet the baseline forecast, we need to add about 40 MW a year.”

To meet the baseline increase, the system would need to expand by 20–40%. “The energy system has grown by an average of 50 megawatts a year over the past 60 years,” he says. Reaching the baseline would require about 40 megawatts a year, or “one turbine at Theistareykir every year.”

About half of the increased energy demand would go to homes, the energy transition and general use, and the other half to economic development. “That includes data centres, land-based aquaculture, food production and, as the case may be, the energy-intensive industry already operating in the country.”

Landsvirkjun’s Responsibility
According to Ríkarður, Landsvirkjun’s responsibility lies first and foremost in ensuring the supply of competitive electricity on the basis of responsible resource utilisation. “We build on hydropower, geothermal energy and onshore wind power,” he says. He says the Company needs both to maintain generation and to add to it.



How much is added, however, depends on a joint decision by society. “This is about the nation’s willingness to generate more energy,” says Ríkarður. Within that framework, projects then need to be prioritised on the basis of competitiveness and value creation.

“At its core, this is about the nation’s willingness to generate more energy.”

Not a Simple Solution to Reduce Sales
Ríkarður rejects the idea that future demand can simply be met by stopping electricity sales to large users. “In the longer term, that would happen gradually if energy generation did not grow,” he says. In that case, energy-intensive industry would move out of the country, since it does not have the same ability to pay as homes and general industry.

In his view, such a development would be neither economically nor socially sensible. “Energy-intensive industry accounts for around or more than 20% of exports,” he says, pointing out that around 12,000 people work there in direct and indirect jobs. Renewable electricity generation also has environmental value. “Iceland’s biggest contribution to climate action is renewable electricity,” says Ríkarður.

Efficiency Is Key for the Future
In Ríkarður’s view, meeting growing energy demand requires an efficient process from the decision to generate energy to its operation. “We need to be efficient in deciding where and how we develop power,” says Ríkarður. Licensing, planning and construction need to proceed smoothly if Iceland’s competitiveness is to be maintained.

“We first need to decide on the willingness to generate more energy,” he says. “After that, it is about making use of the energy we decide to produce in the most beneficial way possible for society.”

LICENSING OF POWER PROJECTS

“Delays Affect Electricity Security and the Energy Transition”

Jóna Bjarnadóttir
Executive VP, Community and Environment

The licensing process for power projects is a fundamental part of building up the energy system, according to Jóna Bjarnadóttir, Executive Vice President of Community and Environment at Landsvirkjun. She says it ensures thorough working methods and gives stakeholders the opportunity to present their views. “The licensing process is very important to ensure that work is carried out properly,” she says. At the same time, she points out that the process, as it has become today, is “very complex and very slow.”

Many Steps and Many Parties
Jóna explains that the process consists of many separate steps. First comes the Master Plan, where a political decision is taken on the areas to be used for energy production. After that, municipalities put the projects into planning, an environmental impact assessment must be carried out, and applications made for a generation licence and an implementation licence. “You need to obtain approvals from around 10 to 12 parties for each plant,” she says, and that makes the road to licensing very long.

If only the application process is considered, after a project has been placed in the utilisation category of the Master Plan, the process takes a minimum of about five years. “In reality, though, this is very often taking eight to ten years, or even longer,” says Jóna.

Environmental Impact Assessment Is Key
Although she criticises the complexity, Jóna stresses that the process itself is important. “One of the most important cornerstones of the process, in my view, is the environmental impact assessment,” she says. There, she says, the project and its effects on both the environment and society are reviewed, while also identifying how negative impacts can be reduced and the project improved.

In her view, this work often yields significant benefits. The problem, however, lies in repetition and delays. “What used to take three to four months can now take 18 to 19 months,” she says, adding that this reflects the fact that public administration has become slower in recent years.

“The process has become far too slow and complex.”

No Shortcuts, but a Simpler Process
Jóna emphasises that the criticism is not about relaxing requirements. “No shortcuts,” she says. “The process is very important.” She does believe, however, that the same result can be achieved in a more efficient way. “Instead of going through 10 to 12 processes, it should be possible to go through the process once,” she says, or at least reduce the number of steps substantially.

In her view, that would benefit everyone. “This would be more efficient for developers, the administration and the public,” says Jóna. She also points out that slow progress has wide-ranging effects. “This affects the supply of electricity,” she says, which in turn can affect the energy transition, business development and electricity security, especially in difficult water years, and thereby living standards in the country.

The list is long and involves many parties

Permits
- Exploration licence
- Master Plan
- Environmental impact assessment
- Municipal plan
- Detailed plan
- Permit from the Cultural Heritage Agency
- Permit from the Directorate of Fisheries
- Authorisation from the Transport Authority
- Authorisation from the Environment and Energy Agency
- Permit from the Prime Minister’s Office and municipality
- Landowner permits
- Permit from the Road and Coastal Administration
- Utilisation licence
- Power generation licence
- Construction permit
- Building permit
- Operating licence for health and pollution control

Issuing authorities
- Althingi (Parliament)
- Directorate of Fisheries
- Prime Minister’s Office
- Public Health Authority
- Cultural Heritage Agency
- Landowners
- Transport Authority
- Planning Authority
- Municipalities
- Ministry for the Environment, Energy and Climate
- Environment and Energy Agency
- Road and Coastal Administration

Appeal channels
- Environment and Natural Resources Complaints Committee
- Minister
- Courts

Statutory consultees
- Courts
- Issuing authorities
- Master Plan expert groups
- Icelandic Tourist Board
- Electronic Communications Office
- Land and Forest Iceland
- Landsnet
- Marine and Freshwater Research Institute
- Cultural Heritage Agency
- Icelandic Institute of Natural History
- Environment Agency of Iceland
- Master Plan Steering Committee
- Icelandic Meteorological Office
- Road and Coastal Administration
- ...

Public comments
- Regional development agencies
- Tourism industry
- Local residents
- Residents’ associations
- Environmental NGOs
- Fishing associations

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

PEAK TURBINE AT ÞEISTAREYKIR

“This Is, in Effect, Found Capacity and Found Energy”

Valur Knútsson
Project Manager in New Developments

At Þeistareykir, Landsvirkjun is preparing a project that is not about drilling new wells, but about making better use of resources already in use. Valur Knútsson, Project Manager in New Developments, says the peak turbine is based on utilising high-pressure steam that is not currently fully used.

“We have both high-pressure and conventional steam wells at Þeistareykir,” says Valur. “What is unique here is that we intend to utilise the pressure in the high-pressure wells and make better use of the steam.” With the peak turbine, the high-pressure steam is used for additional generation before entering the existing system.

What Is a Peak Turbine?

The peak turbine uses high-pressure steam that comes directly from the wells at around 27 bar. In the current setup, that pressure is reduced before the steam enters the station.

“With the peak turbine, we take this high-pressure steam directly into a separate turbine,” says Valur, “and extract energy from it before it continues into the existing units.”

To make this possible, a new high-pressure steam pipeline must be laid from the well pads to a new turbine hall. There, the steam passes through a separator and a turbine that can deliver up to 22–25 megawatts of power, before being connected back into the existing steam system.

“We are not drilling new wells, but making better use of the steam.”

200 Gigawatt Hours per Year

The peak turbine is expected to deliver up to 200 gigawatt hours of additional energy per year. “This is, in effect, found capacity and found energy,” says Valur. “We are not drilling new wells, but making better use of the steam we already bring up today.”

Computer-generated images of the peak turbine building.

“This is clearly one of the most cost- effective power projects for Landsvirkjun.”

According to Valur, the addition amounts to about 25–30% of the energy produced by the station. “That is why this is a very cost-effective project,” he says. “This is clearly one of the most cost-effective power projects Landsvirkjun has today.”

Moderate Environmental Impact

Although new structures will be built, the environmental impact is considered moderate. “We will lay the new high-pressure steam pipelines alongside those already in place,” says Valur. “That way, we do not cross new and undisturbed areas, although the appearance will change somewhat.”

A turbine hall of 1,100 square metres will be built next to the separator station. Valur says emphasis will be placed on maintaining the character of the area. “We use the same architecture and take care with design and finishing,” he says. “The aim is to keep the impact to a minimum.”

Commissioning Planned for 2028

The scale of the works will be considerable, with an estimated 160 to 200 person-years created during the construction period. “We aim to begin preparatory works in the summer of 2026,” says Valur, “with work on infrastructure, road connections and the turbine hall foundations.”

The main construction phase will then begin in spring 2027, with the building of the turbine hall and the laying of steam pipelines. The peak turbine is scheduled to be commissioned on 28 November 2028. “The existing station was commissioned on 17 November 2017,” says Valur, “and we think it is nice to have a certain consistency in those dates.”

INTERNATIONAL PROJECTS

“Our Expertise Is Valuable Abroad”

Kristján Guðmundsson
Head of International Projects

Landsvirkjun’s international activities focus on sharing and applying the expertise the company has built up over past decades, says Kristján Guðmundsson, Head of International Projects. “We have over 60 years of experience in the development, construction and operation of hydropower and geothermal power plants,” he says. That experience is not widely available abroad, where little or no such infrastructure has been built in many places for decades.

Expertise That Creates Opportunities

Kristján says this gives Landsvirkjun a clear competitive advantage. “In many countries, energy companies simply do not have experience of going through the development of large power projects,” he says. Landsvirkjun can therefore take part in international projects with both expertise and investment. “We enter projects with expertise, investment and the aim of achieving good returns,” he says.

Day-to-day work on the international projects includes cooperation with foreign partners, assessment of power options and profitability analysis. “We look at where we should step in and where we should not,” says Kristján, stressing that project selection is careful and long-term in outlook.

A Clear Purpose to the International Activities

The purpose of Landsvirkjun’s international activities is threefold. Firstly, climate issues. “Landsvirkjun’s vision is a sustainable world, powered by renewable energy,” he says. By taking part in projects abroad, the company wants to contribute to the energy transition, just as it does in Iceland.

Cooperation agreement signed with stakeholders in Newfoundland: Jenny Hill, Ambassador of Canada to Iceland; Ríkarður Ríkarðsson, Executive VP; Robert Woolgar, CEO of Growler; and Andrew Parsons, Minister of Industry, Energy and Technology of Newfoundland and Labrador.

“We have extensive experience built up over the past 60 years.“

The second part is value creation. “This is about strengthening Landsvirkjun’s dividend-paying capacity in the future,” says Kristján. The third part is risk diversification. “There is a certain risk in having all power projects subject to the same external conditions,” he says, pointing out that projects in different countries are governed by different dynamics. The activities also have positive effects on the company itself. “They make Landsvirkjun a more international and exciting workplace,” he says.

Priority on Projects in the Arctic

Landsvirkjun’s international projects focus primarily on hydropower and geothermal energy in the Arctic. “We place emphasis on areas where we know the conditions well,” says Kristján. He mentions Greenland and Canada in particular, where Landsvirkjun has built up relationships and cooperation over a long period. “It takes a long time to build relationships in new markets, but they are crucial,” he says.

In Greenland, Landsvirkjun is looking at a large hydropower project comparable in size to Kárahnjúkar. “There, the project has to be conceived together with the energy user,” says Kristján, since domestic demand for electricity is limited.

In Newfoundland, Canada, wind projects are further advanced. “They are comparable to Vaðalda in size and profitability,” he says, and smaller hydro projects in the same area are also being examined.

A Strong Position After the First Year

The year 2025 was the first full year after Landsvirkjun’s new strategy for international activities was approved. “This year went very well,” says Kristján. Alongside continued work on projects, internal analysis of organisation and working methods also took place. “We have had to adapt our internal operations while building up the projects,” he says.

Major steps have been taken, particularly in the wind power project in Newfoundland, but also in the large hydro project in Greenland. “We took part in the early stage of the tender process there, and that work will continue in the coming years,” says Kristján. “We are very pleased with where we stand today, compared with where we were a year ago.”

Landsvirkjun participates in a public meeting on a power project in Newfoundland.

The Company

Operations in 2025
Operations
Finance
Construction
Sales and Service
Communication

Environment, Climate and Community
Environment and Climate
Community

The Future

BUSINESS DEVELOPMENT AND INNOVATION

Preparing for the Energy Sales of the Future

Haraldur Hallgrímsson
Head of Business Development

Business development and innovation at Landsvirkjun are, at their core, about one thing: preparing the Company for the future. According to Haraldur Hallgrímsson, Head of Business Development, this involves developing new business opportunities and finding ways to make better use of the energy system and create new value.

"On the one hand, we are looking at future energy sales, both of electricity and other forms of energy," says Haraldur. "On the other hand, we are examining how we can make better use of the system, whether through new technology, new business models or by linking energy to new needs in society."

Business Development Closer in Time

Although the terms are related, Haraldur says there is a certain difference between business development and innovation. Business development is more about larger opportunities that are closer in time, while innovation looks further ahead.

"In innovation, we are trying to understand what might be coming; what technologies, what markets and what business models could fit Landsvirkjun, the Icelandic energy system and Icelandic society," he says. "And then we take the first steps towards such opportunities."

Data Centres and Aquaculture in the Foreground

When it comes to electricity sales, which are Landsvirkjun's core business, Haraldur says the biggest business opportunities today lie in the build-up of new energy-intensive industries. Data centres are foremost among them.

"We already have three data centre customers, and this is an industry that is growing very rapidly worldwide," he says. "Artificial intelligence is the biggest growth driver there, but so are cloud services and other digital services that rely on data centres."

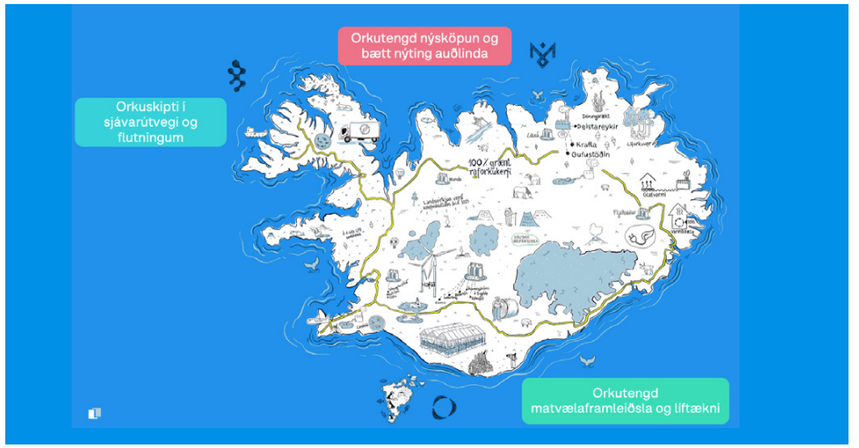
"Data centres and aquaculture are the biggest growth opportunities."

Another vital sector is land-based aquaculture, where Iceland benefits from geothermal energy and knowledge in the fishing industry. "These are very exciting companies that produce high-quality protein and are built on domestic energy and expertise," says Haraldur. In addition to these two areas, Landsvirkjun is in dialogue with many other projects, some close to implementatio and, others at an early stage, relating more to innovation.

Cooperation in Local Communities

An important part of business development and innovation at Landsvirkjun takes place in cooperation with local communities in rural Iceland. Haraldur says the aim has been to work directly with key stakeholders where the energy is produced and used. "We wanted to create a platform for working on the energy transition and energy-related innovation with municipalities, universities and other stakeholders," he says.

That led to three regional cooperation projects. In the Westfjords, Blámi focuses on the energy transition in marine-related activities and transport. In South Iceland, Orkídea works on high-tech food production and the utilisation of by-products. In North Iceland, Eimur focuses on the use of heat, including waste heat from industry and geothermal areas.



"We are very proud of these projects and of what has come out of them," says Haraldur, pointing out that the government has also taken part in the cooperation.

"In innovation, we need to look far ahead."

A Clear Focus in Innovation

When it comes to innovation, Haraldur says it is important to have a clear focus. Landsvirkjun has therefore defined three priority areas.

"First, there is the multiple use of geothermal energy: what can we do beyond conventional electricity generation, for example through the direct sale of heat," he says. "Second, there is the energy transition, which is both tremendously exciting and necessary. Third, there is the development of the energy system itself, where we need to respond to increased variability in supply and demand."

According to Haraldur, these are areas that align well with Landsvirkjun's role and the company's vision of a sustainable world, powered by renewable energy.

landsvirkjun.com
2026

Hydropower Sustainability Standard
GOLD
Project: Fljótsdalsstöð Hydropower Project
Stage: Operation
Date: March 2025

JAFNLAUNAVOTTUN
2025 - 2028

Jafnlaunagreining PwC
2025

S&P Global Ratings
A-