

Annual Report 2023



Reykjavík Energy

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From the CEO

Sævar Freyr Þráinsson

In 2023, the Reykjavík Energy underwent a year of transformation. New leadership took the helm, and a fresh direction was charted. The company now strides toward a sustainable future, acting as a driving force in a diverse collaboration aimed at enhancing the communities it serves.

Throughout the year, the concept of energy security gained deeper significance as the natural forces that play a major role in the quality of life in Iceland revealed their darker aspects. Addressing these challenges with foresight, just as our predecessors did, is essential to steer our nation to where we are today. The advancement of solutions, a core theme in Reykjavík Energy's new strategy, can unite us towards a sustainable future.

Deep Roots

Reykjavík Energy has a long history. The water utility is over a century old, and the utilization of natural resources it provides, like fresh water, has simultaneously improved public health and been a pillar for a robust economy, especially in fish processing and other food industries. The sewage systems represent the other end of this service, where safe waste disposal without harming our environment is crucial. The electric utilities, initially starting with relatively small hydroelectric power stations, replaced oil lamps and coal stoves, and are now the foundation of many of the country's most powerful companies, pushing forward transportation means for even greater benefits for the climate and environment. The revolution caused by the district heating systems changed living conditions across the country. Today, nine out of ten Icelanders enjoy cost-effective geothermal heating in homes, numerous companies utilize geothermal energy in their production processes, geothermal bathing tourism is thriving, and swimming pool visits are an integral part of our national culture. The rapid technological development in recent years has also demonstrated how vital robust telecommunications connections are to our quality of life, essential in homes and absolutely indispensable in business.

Knowledge is Valuable

This operation forms the core activity of Reykjavík Energy. The company has evolved significantly over time as the knowledge and skills of its staff have developed and been leveraged. RE has shared the knowledge gained from experience, often in public forums or through professional collaboration, and sometimes on commercial terms. The unique carbon capture method Carbfix, developed at the Hellisheiði Power Station, is an example of the latter, where the knowledge, diligence, and resilience of the staff, in cooperation with some of the world's leading scientists, have garnered well-deserved global attention, opening up corresponding business opportunities.

The generous nature of the earth is the foundation of many of RE's most important activities. Knowledge of and respect for nature are therefore core principles in all operations. For most of its history, RE has acted as a bridge between the resources and the communities it serves, where nature is one terminal and homes and businesses the other. This model has changed. Instead of a straight line from one point to another, we now envision a circle where nature nourishes the communities, which in turn nourish nature. This circle is not singular but includes countless smaller circles where the waste of one process becomes the raw material for another.

Developing a Circular Economy

Building such a circular economy requires knowledge of the needs of communities – both homes and businesses – resilience, diligence, and not least, creative thinking. This is the work environment and culture RE aims to create with its staff. It also relates to how the company is equipped to adopt the latest technologies in its services, the use of extensive data for automatic control of complex and large utility systems, power plants, telecommunications systems, and carbon capture, and the application of artificial intelligence where it is most suited. How technology is best utilized is based on knowledge, ingenuity, and creativity of people, and the innovation joy of the staff. In Reykjavik Energy's new overall strategy, one main emphasis is on performance-oriented teamwork, assuming it will be maintained with RE's continued leadership in gender equality and ensuring the talents of the staff are utilized in a safe and inclusive workplace.

Home Safely

Many of RE's staff and subsidiaries work in dangerous conditions. High-voltage electricity is often nearby, as is hot water or even hotter steam, and deep trenches are frequently close to fast traffic. RE has a clear policy for a workplace without accidents and does much to enable staff to take responsibility for and manage risks in their environment. There will be no relaxation in these efforts as people's lives and limbs are at stake.

Safety is paramount in our minds, especially when the downside of the gift that geothermal energy presents made Grindavik uninhabitable, at least for a while. Lives have already been lost, and thousands more have been significantly disrupted.

Reykjavik Energy is among the world's largest geothermal companies, and its main source of energy is the Hengill area with the namesake volcano. Energy security, therefore, took on a deeper meaning in our minds with the volcanic activity on the Reykjanes Peninsula. Repeated evacuations of our colleagues from the Svartsengi geothermal power station during seismic or eruption periods and the fear of a hot water shortage even across all of the Reykjanes Peninsula have sharpened our focus on the need for more comprehensive emergency response plans than have been made to date. The role of home heating in the nation's energy security cannot be overstated.

Energy Security

In the general discussion in 2023, energy security was often linked to electricity issues. This discussion is also urgent. Climate-friendly energy transitions from fossil fuels require electricity, and Orkuveitan will participate in generating it. Mid-2023, OR presented several options for increasing energy production from wind in Southwest Iceland, and later in the year, plans for cooperation with the Ölfus Municipality on geothermal energy utilization in Ölfusdal were announced. Although there has been no shortage of declarations of intent for reforms in the laws and regulations governing power plant operations and ideas about successful paths forward, actual reforms have stalled. Meanwhile, fears of energy shortages are growing.

One of OR's roles is to produce and sell electricity. With the technology we know today, electricity will play a key role in replacing fossil fuels where they are still in use. In some cases, electricity is used directly, in others in batteries, and in some cases in chemical processes to create fuel alternatives.



From the Chair of the Board

Gylfi Magnússon

Reykjavik Energy will face many enormous challenges in the coming years. The company's position and role in the Icelandic energy market inevitably mean it must contribute significantly to the upcoming energy transition. In Iceland, there will be a significant reduction in the burning of fossil fuels and, in their place, renewable and environmentally friendly energy sources will be utilised. In recent decades, the company has focused primarily on geothermal energy in its energy production, although hydropower has also been harnessed. This production will continue and grow, but increased emphasis will be placed on other energy sources, which will be utilised in an environmentally friendly manner in harmony with the community.

Duality of geothermal forces

The formidable forces inherent in geothermal energy are not easily harnessed. Coexistence with them involves risks, as recent seismic activity in Reykjanes has unpleasantly reminded us. The power plants and other structures of Reykjavik Energy in the Hengill area have not been endangered so far, but the area is active, and it is not impossible that there will be damage from natural disasters in the future. Water reservoirs could also be damaged in such events.

In the development of utility systems and individual structures, such risks must be considered, and efforts must be made to ensure that individual events cannot paralyze essential operations. This requires ensuring that it is possible to access and deliver to consumers electricity, hot and cold water from many locations and through many routes. The same applies to data distribution systems; they must be able to withstand failures, attacks, and other potential disruptions. In all these areas and more, Reykjavik Energy has played a key role and will continue to do so.

Financial strength

The demands and expectations of society on Reykjavik Energy are high and should be. More energy is not the only demand. Environmental demands are also increasing. Among other things, radical changes will need to be made to sewage systems in the coming years to improve wastewater treatment. Reykjavik Energy will also be at the forefront of developing and implementing new solutions to capture carbon dioxide through its subsidiary Carbfix.

Although all these tasks require significant investment and ingenious solutions, there is no doubt that Reykjavik Energy has the capacity to meet them. The staff of the Reykjavik Energy Group will play a key role. Financially, Reykjavik Energy has never been stronger than now. At the end of year 2023, the company's equity was ISK 246 billion, and the equity ratio 54.7%. This has been achieved even though the cost of services to households has decreased in real terms in recent years, in some cases significantly. At the same time, it has been possible to pay dividends to owners.

The business of the BoD in 2023

In 2023, the board of Reykjavik Energy held 18 meetings. A special workday was held in September to develop a new corporate strategy for the group. The corporate strategy was approved for consultation with owners in December and finally approved by the OR board in January 2024.

There were two formal Owners' Meetings in 2023; the annual general meeting in April and an extraordinary meeting for the election of an auditing firm in May.

Following The City of Reykjavik's adopting a new method for selecting its representatives through a nomination committee, significant changes in the composition of the board of Reykjavik Energy were made at the end of 2022. There were changes in the CEO position at the beginning of April when Bjarni Bjarnason stepped down and Sævar Freyr Þráinsson took over. For these reasons, the board decided that a regular assessment of the CEO's performance was not timely for the year, and an assessment of its own performance would be conducted early in 2024.

2023 in a nutshell

Here is a recap of the year's main events.



16. January 2023

ON Power's customers most satisfied in the electricity market

The year started with good news as it was announced that ON Power's customers were the most satisfied in the electricity market. This was the fourth consecutive year that ON received the Satisfaction Scale award. ON was also the year's highest jumper when looking at all companies in all sectors in Iceland.

31. January 2023

From an international pharmaceutical company to ON Power

Árni Hrafnar Haraldsson was appointed CEO of ON Power at the end of January and began his duties on May 1.



2. February 2023

The first EIA of its kind in Iceland

In early February, the National Planning Agency announced an Environmental Impact Assessment report from Carbfix regarding the environmental assessment of CO₂ sequestration at Hellisheiði. It was the first environmental assessment of its kind in Iceland.

3. February 2023

Sævar Freyr leads Orkuveitan

It became clear in February that Sævar Freyr Þráinsson would be the new CEO of Reykjavík Energy, taking over on April 1st from Bjarni Bjarnason, who had been CEO for 12 years.



14. March 2023

REÍ Growth Shoots win the Education Shoot 2023

Reykjavík Energy won the Education Shoot in 2023 for its project Growth Shoots, and the awards were presented on the Education Day of the business sector. The project aims to develop RE's workplaces and change culture to better cope with a changing environment and increasing demands and expectations of customers.

22. March 2023

CO2 and H2S injection begins at Nesjavellir

A new Carbfix pilot plant for carbon capture and storage at ON Power's Nesjavellir power plant was inaugurated in March. One of the project's goals is to lay the groundwork for the near-full capture of CO₂ and H₂S from the plant later on. The project is a significant step towards further reducing greenhouse gas emissions from geothermal power plants, which is one of Iceland's key projects in climate action.



19. April 2023

Sólrun on the board of the IGA

Sólrun Kristjánsdóttir, CEO of Veitur Utilities, was elected to the board of the International Geothermal Association. She will sit on the association board for the next three years.



21. April 2023

Iceland leads in the utilization of fiber optics in Europe for the fourth consecutive year

Iceland once again maintained its top spot as the European country with the highest proportion of households using fiber optic connections to meet their data transfer needs.



3. May 2023

60 Minutes features Carbfix's carbon capture

60 Minutes, the most popular news program in the United States, featured Carbfix's carbon capture method on CBS. Reporter Bill Whitaker visited the Hellisheiði Power Plant where Sandra Ósk Snæbjörnsdóttir and Kári Helgason spoke with him and explained the technology.



26. May 2023

Cleaning of the Nesjavellir pipeline

The Nesjavellir pipeline was cleaned in June, having last been cleaned 20 years ago. The purpose of the cleaning was to increase the pipeline's capacity. The Nesjavellir pipeline is one of the principal transportation routes for hot water to the capital area.



16. June 2023

Rapid charging station at your company

ON Power increased both public charging and rapid charging capacity during the year and has been a leader in energy transitions from the beginning. To get even more companies on board, ON Power began offering interested companies to set up rapid charging points on their premises.



20. June 2023

ON sells 28 MW to a land-based fish farm in Þorlákshöfn

ON Power and the land-based fish farming company GeoSalmo signed a power purchase agreement electricity contract of up to 28 MW of electricity to be used for a land-based fish farm in Þorlákshöfn.



26. June 2023

Meters in ON's charging points meet requirements

The Icelandic Energy Authority concluded pleasingly for ON Power that the meters at the company's EV charging points meet requirements, but uncertainty about the issue had been evoked.



28. June 2023

RE explores the construction of wind farms near Hellisheiði

Reykjavík Energy submitted a request to the Iceland Energy Authority for the project management of the Energy Master Plan to discuss three wind power options near Hellisheiði.



30. June 2023

Significant steps towards making Hellisheiði Power Plant carbon neutral

Edda Sif Pind Aradóttir, CEO of Carbfix, and Árni Hrannar Haraldsson, CEO of ON Power, took the first shovel stroke for a new purification station, which will be named Steingerður. With its arrival, it will be possible to capture almost all carbon dioxide and hydrogen sulfide from Hellisheiði Power Plant.



10. July 2023

Confirmation of climate goals

Reykjavík Energy received confirmation from the Science Based Targets initiative (SBTi) that the group's climate goals are based on scientific grounds and support the actions of the Paris Agreement to keep global warming below 1.5°C.



11. August 2023

Carbfix and partners receive a grant from US authorities

A collaborative project of 13 parties led by Carbfix, RMI, and Pacific Northwest National Laboratory (PNNL) received a grant from the US Department of Energy to develop a project on carbon capture from the atmosphere and its storage in geological formations in the northwest United States. The grant amounts to USD 3 million.



31. August 2023

New CEO of Reykjavík Fibre Network

Einar Þórarinnsson was appointed the new CEO of Ljósleiðarinn at the end of the summer. Einar, who has over 20 years of experience as a manager, came to the company from Sidekick Health, and before that, he worked at Advania and Vodafone.



13. September 2023

RFN offers TEN GIG for the future

Everyone who could connect to Reykjavík Fibre Network had the opportunity to tenfold their speed from October when the maximum speed became 10 gigabits instead of 1. RFN looks to the future and prepares homes in the country for ongoing development.



15. September 2023

Equity increase approved and mandate granted

Shareholders of Ljósleiðarinn ehf. approved at a shareholder meeting to increase the company's share capital by an amount corresponding to one-third of the company's share capital after the increase.



26. September 2023

A milestone in Iceland's energy transition

In September, a cruise ship was shore-powered in Reykjavík for the first time. Veitur laid the electrical cable for Faxaflóahafnir, and the connection can serve two ships simultaneously.



28. September 2023

The ICA approves RFN's buying Sýn's backhaul network

The purchase of Sýn hf.'s backhaul network by Reykjavík Fibre Network was approved unconditionally by the Iceland Competition Authority. Alongside the purchase agreement, a long-term service agreement was made between the companies.



17. October 2022

International awards for closing the gender pay gap

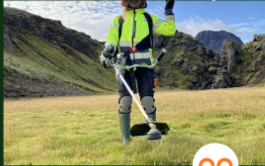
Reykjavík Energy was awarded by the organisation Rise & Lead Women for its success in bridging the gender pay gap. Ellen Ýr Aðalsteinsdóttir, executive director of Human Resources and Culture, accepted the awards at a ceremonial event in The Hague.



4. October 2023

Carbfix wins the Nordic Blaze Awards

Carbfix won the Nordic Blaze equality award in the "Guardian" category, which is awarded to companies or individuals working on sustainability, climate issues, and environmental protection with an emphasis on the links between diversity, inclusion, and climate protection.



5. October 2023

Summer employees plant 10 hectares of land

This year, the summer employees of ON Power's land restoration team restored and planted 10 hectares of land, corresponding to the binding of 31.22 tons of CO₂ per year!

13. October 2023

RE, Veitur, and RFN receive the Equality Scale

Reykjavík Energy, Reykjavík Fibre Network and Veitur Utilities won the Equality Scale, an award from the Association of Women in Business, for achieving success in equalising the gender ratio of individuals in managerial positions. The awards were presented at a conference titled "We Lose on Uniformity - Equality is a Decision".



20. October 2023

Veitur score highest in influence of women

Women in Energy (KÍO) published its fourth report on the status of women within the Icelandic energy and utility sector. It showed that Veitur had the highest sample score, 71.1%.

3. November 2023

Carbfix begins testing carbon capture with seawater - a novelty worldwide

A significant milestone was reached by Carbfix when experiments began in Helgukvík to use seawater instead of freshwater for the permanent binding of carbon dioxide (CO₂) in rock layers. The experiment is a novelty worldwide and an important step in the development of carbon capture technology.



8. November 2023

Curiosity Corner opened

A Curiosity Corner is opened at the Geothermal Exhibition at the end of October. The Corner is an educational space for children of all ages.

16. November 2023

CEO of Carbflix on TIME's list of the 100 most influential climate business leaders

For the first time, TIME magazine published a list of the world's 100 most influential business leaders in the field of climate, among them was Edda Aradóttir, CEO of Carbflix.



21. November 2023

The Council of Europe awards RFN

Reykjavík Fibre Network received the European Broadband Awards for 2023 from the Council of Europe. The awards were given to RFN for the project "The Race Against Fagradalsfjall," which was undertaken when a volcanic eruption started near Fagradalsfjall in the spring of 2021. Axel Paul Gunnarsson accepted the awards at a ceremonial event in Brussels.



24. November 2023

PPA signed for 5 MW for salmon farming

ON Power and Thor Landeldi ehf. signed a power purchase agreement that secures Thor 5 MW of electricity. Thor Landeldi is preparing on-land salmon farming near Þorlákshöfn.



24. November 2023

30 receive grants from RE's Science Fund

Grants were awarded from Reykjavík Energy's Science Fund, VOR, in November when thirty projects received funding. One hundred million and five hundred thousand were distributed at a ceremonial event held in Elliðaárstöð.



24. November 2023

The Presidential couple visits Elliðaárstöð

The Presidential couple, Guðni Th. Jóhannesson and Eliza Reid, visited Reykjavík Energy on November 23, along with the mayor, Dagur B. Eggertsson, and his wife, Arna Dögg Einarsdóttir. The visit was part of the Presidential couple's official visit to Reykjavík.



28. November 2023

RE and Ölfus collaborate on geothermal energy utilization

Reykjavík Energy, the municipality of Ölfus, and Titan announced at a joint meeting plans to jointly apply for a research permit with cooperation on utilising geothermal energy in Ölfusdal in mind. A letter of intent was also signed between RE and the municipality of Ölfus.



14. December 2023

RE applies for a geothermal research permit in Meitlar and Hverahlíð II

Reykjavík Energy applied for a research permit from the Icelandic Energy Authority for geothermal research in Meitlar and Hverahlíð II for 10 years. There is a need for further energy production in Hengill in the coming decades to meet both the growing demand for hot water and to maintain and possibly increase electricity production.



22. December 2023

Veitur receives utilization permits

At the end of the year, Veitur Utilities received utilisation permits from the Icelandic Energy Authority for geothermal energy at Bakki and Hjallakrókur in the municipality of Ölfus. There has been increasing demand in Ölfus for hot water, and it is essential that Veitur can fulfil its legal obligation and further ensure sufficient water for the heating utility.





Climate

Reykjavík Energy (RE) aims for carbon neutrality of its own operations by 2030 and net-zero emissions also for its supply chain by 2040.

The climate goals were validated by the Science Based Targets initiative (SBTi) in July 2023. Thus, they meet the requirements of climate science and are intended to fulfill the goal of keeping the temperature increase below 1.5°C. See appendix.

In 2023, RE thoroughly examined its energy and utility operations, along with projects that contribute to biodiversity and carbon sequestration, to better encompass the climate impacts associated with the company. See RE's climate account in the appendix.

RE has already taken significant steps towards achieving its climate goals, as outlined in the priorities listed below.

Reykjavík Energy's climate priorities:

- Aims for carbon neutrality of RE's own operations by 2030 and net-zero emissions also for its supply chain by 2040.
- Increase capture and sequestration of carbon dioxide, domestically and globally.
- Motivate energy exchange in the transport and construction sector.
- Develop measures and strengthen the resilience of utility systems and power plants to adapt to climate change.

The chapters on climate issues address greenhouse gas emissions from RE's operations, as well as projects implemented to ensure that RE meets its climate targets.

E1 Greenhouse Gas Emissions

Promotes UN's Sustainable Development Goals



Reykjavík Energy's climate goals validated by the Science Based Targets initiative (SBTi)

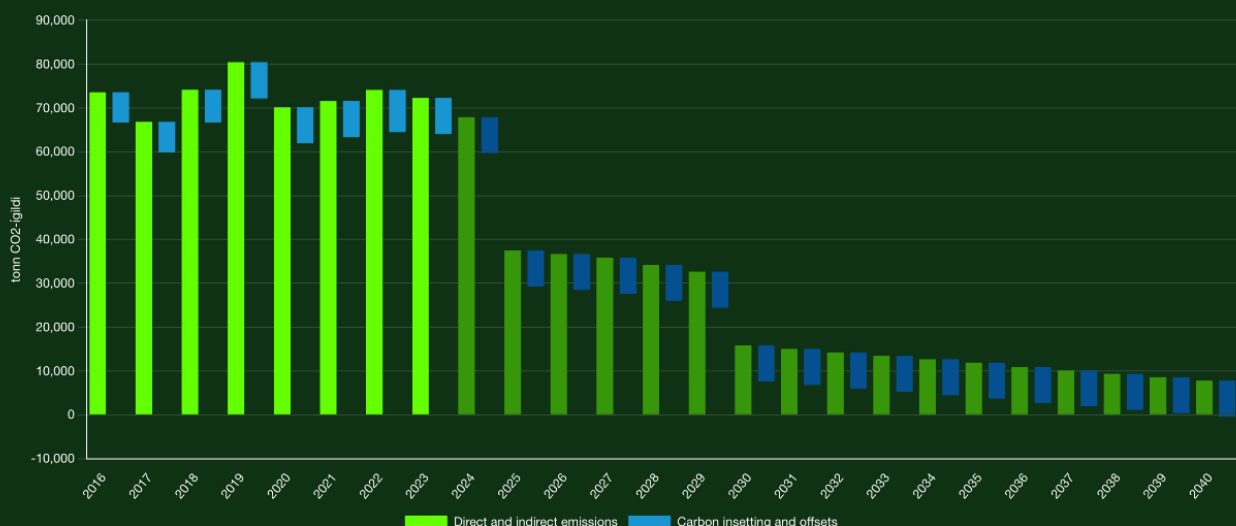
Reykjavík Energy (RE) is continuing its aim towards carbon neutrality for its own operations by 2030, as well as for its supply chain by 2040. This means the company intends to reduce greenhouse gas emissions by 90% in scopes 1 and 2, and by 40% in scope 3 by 2030, compared to the baseline year of 2016. Furthermore, emissions in the company's supply chain, scope 3, will be reduced by 90% by 2040, see appendix.

These goals were validated by the Science Based Targets initiative (SBTi) in July 2023, ensuring they meet the requirements of climate science. Simultaneously, RE joins the "Business Ambition for 1.5°C" campaign, a growing group of companies aiming to meet the goal of keeping global warming below 1.5°C. RE thus becomes part of the "Race to Zero" campaign supported by the United Nations.

Reykjavík Energy (RE) has already taken significant steps towards achieving its climate goals. For instance, by employing the Carbfix method at Hellisheiði Geothermal Power Plant, the plant will become carbon neutral by 2025, and Nesjavellir Geothermal Power Plant by 2030. This means that 95% of the carbon dioxide from the plants will be captured and sequestered in rock. Additionally, RE plans to reduce emissions from its vehicle fleet, encourage sustainable procurement, and promote energy transition in operations.

Moreover, RE will enhance the resilience of the community by adapting its service systems to climate change, see appendix.

Direct and indirect emission, and carbon insetting and offsets by Reykjavík Energy, 2016-2040

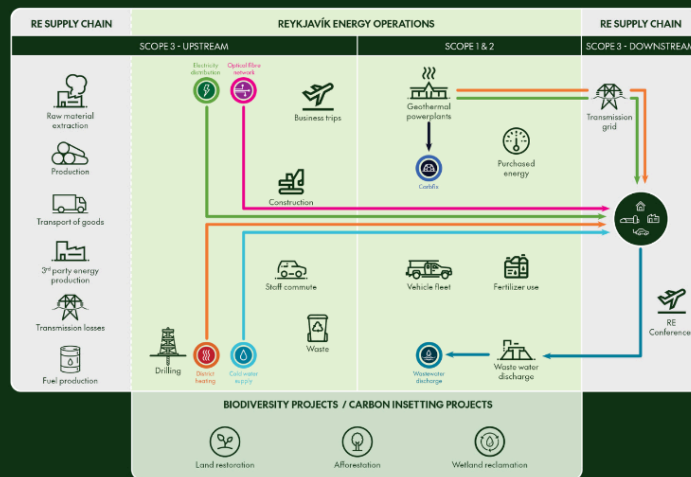


Certified Climate Account 2023

In 2023, Reykjavík Energy (RE) conducted a thorough review of its energy and utility operations, along with projects that contribute to biodiversity and carbon sequestration, to better encompass the climate and environmental impacts of the company. This work has highlighted previously unexplored greenhouse gas (GHG) emissions that had not been accounted for in the company's climate accounting until now. Although there is still work to be done in this area, the presentation of RE's total carbon footprint has made significant progress.

RE's climate accounting is conducted according to the methodology of the Greenhouse Gas Protocol (GHGP) and has been certified by the auditing company Bureau Veritas in accordance with the international standard ISO 14064-1, see RE's climate account 2023 in appendix.

The image below outlines the framework for RE's climate accounting.



The framework for Reykjavík Energy's climate account includes sources of greenhouse gas emissions, where emissions occur in the company's supply chain, and highlights the main projects that contribute to biodiversity, ecosystem enhancement, and carbon sequestration.

Greenhouse Gas Emissions 2023

Total Emissions

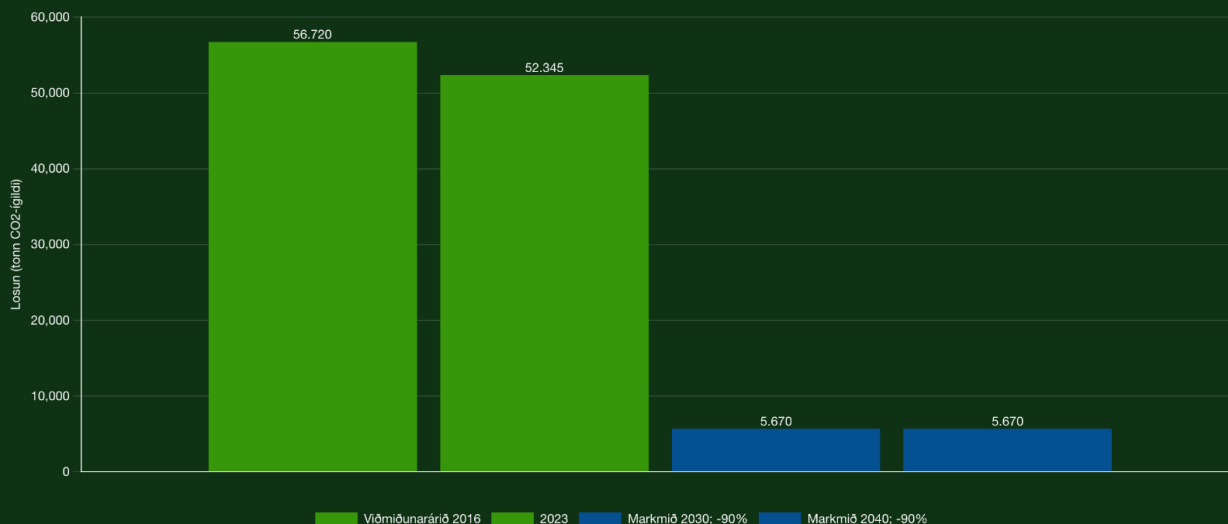
In 2023, the total greenhouse gas (GHG) emissions from Reykjavík Energy (RE) increased by approximately 650 tons of CO₂ equivalent (CO₂eq) from 2016, or by about 1%. The main contributors to this increase were the high concentration of CO₂ in new high-temperature wells connected, for example, to the Hellisheidi Geothermal Power Plant, increased energy production in the power plants during this period, and the inclusion of GHG emissions from purchases and treated wastewater in the sea in the climate account for the first time after a thorough examination, see RE's Climate Account 2023 in appendix.

In 2023, GHG emissions increased by over 1,900 tons of CO₂eq from 2022, or by nearly 3% year-on-year. The operational uptime of the abatement unit at Hellisheidi Geothermal Power Plant was lower in 2023 than in 2022 due to construction activities at the power plant site and unexpected malfunctions. In 2023, the relative capture and sequestration of carbon dioxide from the Hellisheidi Power Plant was about 25% of the plant's emissions. Trial-scale CO₂ capture and sequestration began at Nesjavellir Geothermal Power Plant in 2023, accounting for 8% of the plant's emissions, see the discussion about climate goals above.

Emissions in scopes 1 and 2

Emissions for scopes 1 and 2 in 2023 amounted to over 52,000 tons of CO₂eq, which is a reduction of 4,400 tons of CO₂eq from 2016, or about 8%. The emissions from the geothermal power plants weighs the heaviest in RE's carbon footprint, accounting for about 68% of all GHG emissions. As mentioned above, RE is working according to a plan for Hellisheiði Geothermal Power Plant to become carbon neutral by 2025 and Nesjavellir by 2030, meaning that 95% of the carbon dioxide from the plants will be captured and sequestered in rock by 2030. These projects will significantly reduce GHG emissions from RE as shown in the figure below. See RE's Climate Account 2023 in appendix.

Scopes 1 and 2



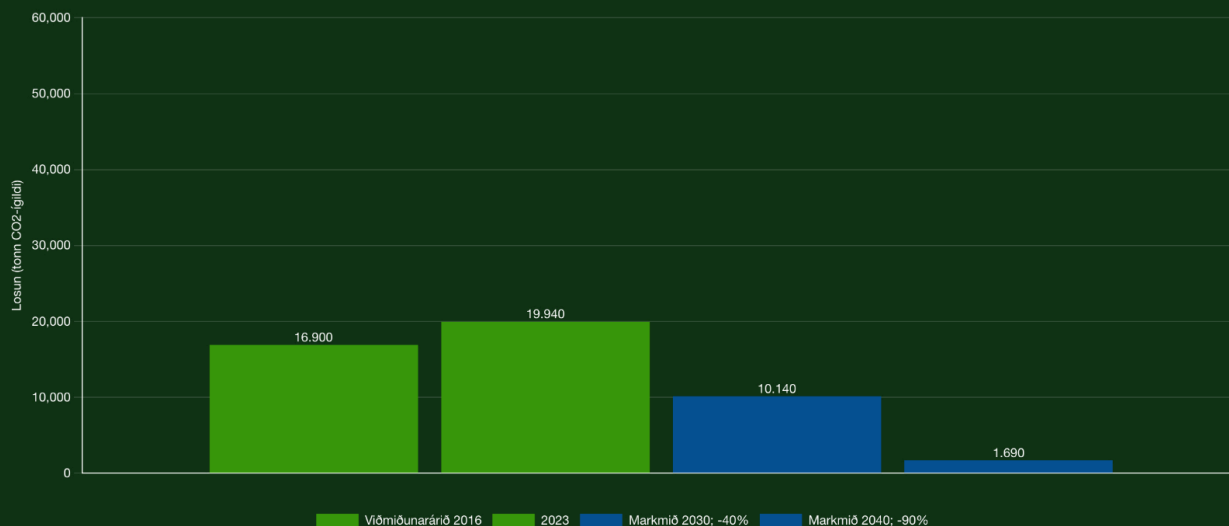
Total emissions, in thousands of tons of CO₂ equivalents, from scopes 1 and 2 in 2016 and 2023. Furthermore, the emissions according to Reykjavík Energy's climate goals, which are validated by SBTi for the years 2030 and 2040, are shown. It is assumed that the emissions for these years will be the same as the emissions from geothermal power plants will be similar in 2030 and 2040.

Emissions in scope 3

In 2023, emissions from scope 3 amounted to about 19,900 tons of CO₂ equivalents, an increase of over 3,000 tons of CO₂eq from the base year of 2016, or about 18%, see the figure below. The emissions that weighs the heaviest in scope 3 is purchases, accounting for about 25% of total GHG emissions, with the highest emissions coming from steel pipe purchases. However, these emissions decreased in 2023 compared to 2022 by about 4%. Reykjavík Energy (RE) is looking into purchasing "green steel," for example in steel pipes, once it becomes available on the market to reduce emissions. Steel pipes account for over 50% of the company's purchased goods, and thus a reduction in their emissions will significantly impact scope 3, see RE's Climate Accounting 2023 in the appendix.

Emissions have increased due to business travel of employees from 2016 by about 200 tons of CO₂eq. However, emissions have decreased due to waste by 50 tons of CO₂e and due to staff commuting by 30 tons of CO₂e in 2023 compared to the emissions in 2016. RE has offered its staff a comprehensive package to encourage more environmentally friendly modes of transportation. This includes a transport subsidy for those who travel in a climate-friendly manner, free charging for electric vehicles at the workplace, and access to electric bikes. In addition, RE supports flexible work arrangements, including the option to work from home.

Scope 3



Emissions, in thousands of tons of CO₂ equivalents, from scope 3 in 2016 and 2023. Furthermore, the emissions according to Reykjavík Energy's climate goals, which are validated by SBTi for the years 2030 and 2040, are shown.

Biodiversity and land-based carbon insetting projects

Reykjavík Energy (RE) has undertaken land reclamation and afforestation on the company's own land for more than 70 years, or since 1950. These nature-based projects aim to restore soil and vegetation cover, improve soil, rejuvenate natural birch forests, and enhance biodiversity. In the past decade, an additional goal has been to sequester greenhouse gases in vegetation and soil.

The land reclamation areas cover about 595 hectares, and the afforestation areas about 965 hectares. Rewetting of peatland was carried out on just over three hectares in the autumn of 2016 with the purpose of reducing carbon emissions from the previously drained peatland and to restore the peatland ecosystem. For more details, see the section on land improvements at RE's operational sites and biodiversity.

Carbon Sequestration through Afforestation and Land Restoration

In 2023, the GHG sequestration on RE's afforestation sites was about 5,740 tons of CO₂ equivalents, the same as the baseline year 2016. The reason for this is that the sequestration is assessed every 10 years, and thus it remains the same for a whole decade until it is updated. In 2023, the sequestration on land restoration sites was about 1,250 tons of CO₂eq, having increased by 4% compared to the baseline year 2016. The avoided GHG emissions from RE's rewetting of peatland were about 40 tons of CO₂eq in 2023, estimated to be the same since 2017, see RE's Climate Accounting 2023 in the appendix. A study is planned for the area in the summer of 2024 to confirm the results.

Carbon Offsets

RE has supported carbon offsetting projects since 2018. These projects aim to reduce greenhouse gas emissions and contribute to sustainable development and social and economic benefits.

United Nations Projects

RE has supported RIPPLE Africa's Improved Cookstove Project in Malawi, United Nations Carbon Offset Platform project, since 2020. In 2023 RE offset 1,200 tonnes CO₂eq which has increased by approximately 85% compared to 2020, see table 2. By supporting the Malawi project, it not only reduces GHG emissions but also combats deforestation and respiratory diseases, especially among women and children. RE's aim is to continue the support for this program.

Wetlands Fund Projects

From 2018 to 2021, RE supported initiatives to reduce GHG emissions through wetland restoration in Iceland. During this period, the accumulated avoided GHG emissions amounted to nearly 3,000 tons of CO₂eq, see RE's Climate Accounting 2023.

E2 Emission Intensity

Promotes UN's Sustainable Development Goals



Carbon intensity is defined as emissions relative to another specific unit, for example, emissions per unit of produced energy, revenue, or other metrics relevant to the activity.

Carbon Intensity

ON Power produces electricity for its customers and hot water which is sold wholesale to Veitur Utilities. The emission intensity of the electricity is given in grams of CO₂ equivalents per kilowatt-hour (gCO₂eq/kWh) and for hot water in grams of CO₂ equivalents per cubic meter (gCO₂eq/m³).

In 2023, the emission intensity of electricity was 7.3 gCO₂eq/kWh, which is a 26% reduction compared to the emission intensity in 2016, see the table below and [appendix](#). This achievement can be attributed to the initial steps taken in Reykjavík Energy's (RE) plan to make Hellisheidi Geothermal Power Plant carbon-neutral by 2025 and Nesjavellir Geothermal Power Plant by 2030, meaning that 95% of carbon dioxide from the plants will be captured, sequestered in rock, or utilized, see the image below.

In 2023, the emission intensity of hot water was 205.2 gCO₂eq/m³, which is a 16% decrease compared to the emission intensity in 2016, see the table below. The reason for this is the increased processing of hot water from the power plants compared to the total production of hot water.

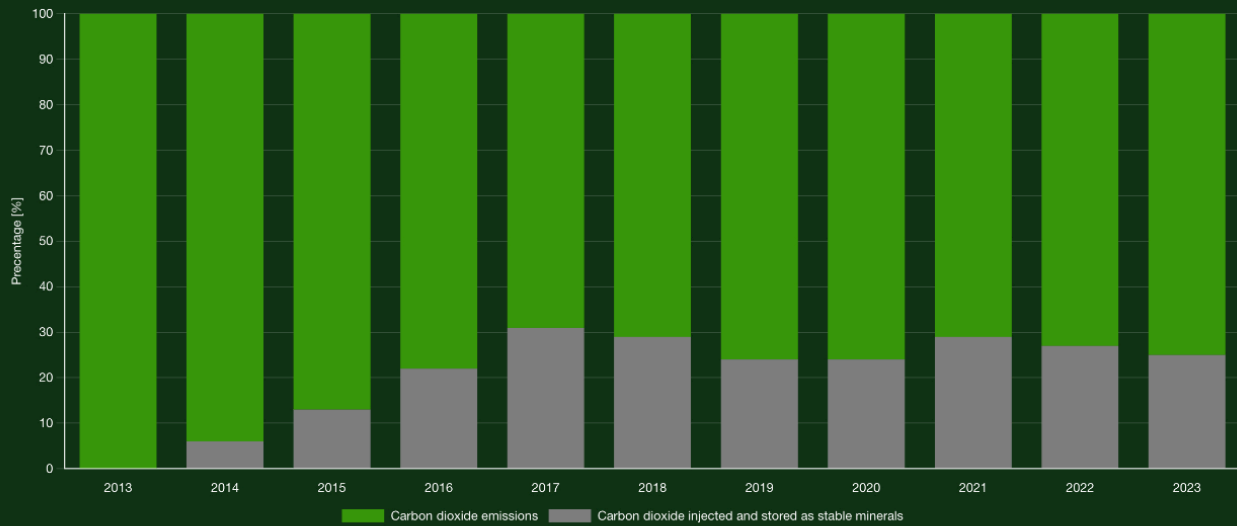
In 2023, the proportional capture and sequestration of carbon dioxide from Hellisheidi Power Plant was about 25% of the plant's emissions. In 2023, the capture and sequestration of carbon dioxide began on a trial basis at Nesjavellir Power Plant and reduced emissions by 9%, see images below.

Monitoring is conducted on the concentration of CO₂ and H₂S in several production wells of Hellisheidi Power Plant. The flow from the injection back into the production field appears to be less than one year, and indications are that the concentration has only slightly increased in two monitoring wells closest to the injection field. Efforts continue to optimize the method and direct the gas injection into injection wells farther from the production field.

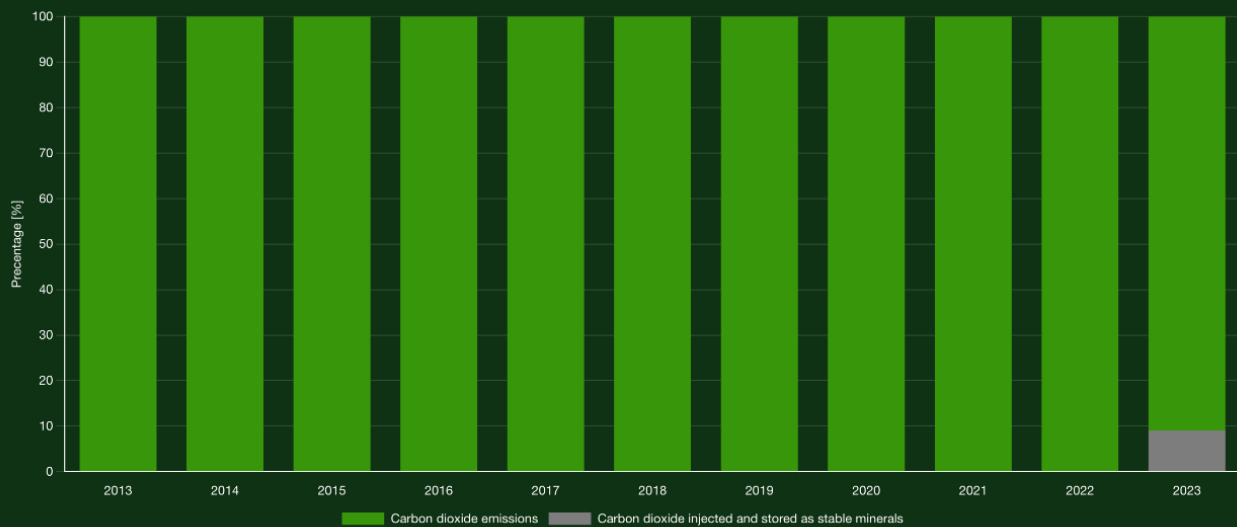
Carbon emissions from data transmission at Reykjavík Fibre Network have increased per unit of data transmission due to extensive construction activities in 2023.

RE does not release ozone-depleting substances due to its operations.

Annual percentage of injection of carbon dioxide from the Hellisheidi Geothermal Power Plant in 2013-2023



Annual percentage of injection of carbon dioxide from the Nesjavellir Geothermal Power Plant in 2013-2023



Carbon intensity										
Key performance indicators (KPIs)*	Unit	2016	2017	2018	2019	2020	2021	2022	2023	
Electricity	gCO ₂ eq/kWh	9.9	6.9	8.4	8.9	7.9	7.3	7.5	7.3	
Hot water	gCO ₂ eq/m ³	245.0	190.5	207.9	214.7	213.0	216.2	231.3	205.2	

* Carbon footprint of low-temperature geothermal fields has been rated as approximately 0 gCO₂eq/kWh.

According to the Environmental Agency's guidelines on emission factors (6th edition) the emission factor (EMF) per kWh electricity is 8.54 gCO₂eq and EMF per m³ hot water 434 gCO₂eq.

Energy production

Key performance indicators (KPIs)*	Unit	2016	2017	2018	2019	2020	2021	2022	2023
Electricity	TWh	3.4	3.6	3.5	3.5	3.6	3.5	3.5	3.5
Hot water:									
- There of high-temperature water	TWh	2.1	2.1	2.6	2.3	2.7	2.8	2.9	3.1
- There of low-temperature water	TWh	2.8	2.9	3.1	3.1	3.1	2.7	2.6	2.6

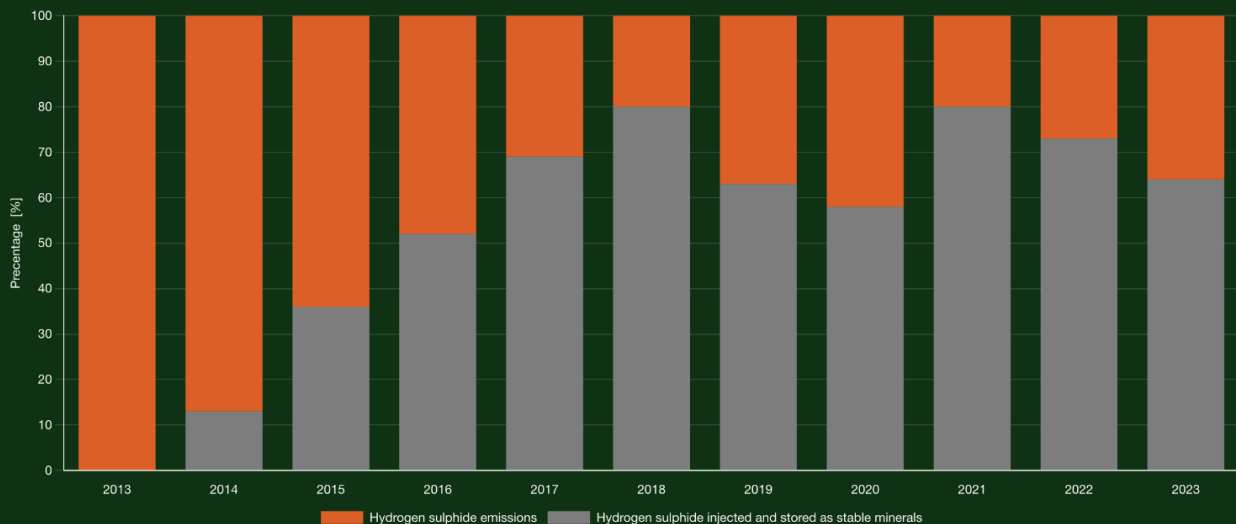
Hydrogen sulphide emission intensity

The hydrogen sulphide emission intensity from each produced kWh at the geothermal power plants has been reduced since 2015, or from 2.2 g per kWh to approximately 1.5 g, [see appendix](#).

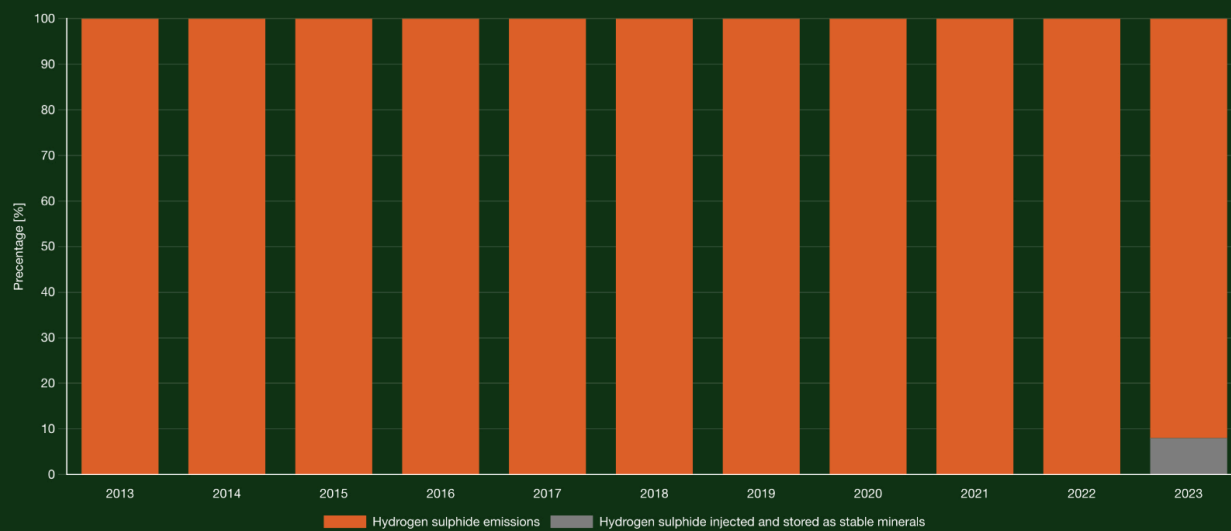
The emissions of hydrogen sulphide from Nesjavellir and Hellisheidi Geothermal Power Plants amounted to 9.7 thousand tons in 2023. The concentration of hydrogen sulphide (H₂S) in populated areas never exceed limits. Proportionate injection of hydrogen sulphide from the Hellisheidi geothermal power plant was approximately 64%. Injection of hydrogen sulfide began on a trial basis at Nesjavellir geothermal power plant in 2023 and accounted for 8% of the plant's emissions. See more details in the figure and table below.

Work is being carried out according to a plan for Hellisheidi power plant to become carbon-neutral by 2025 and Nesjavellir power plant by 2030, which means that nearly all hydrogen sulphide from the plants will be captured and sequestered in bedrock.

Annual percentage of injection of hydrogen sulphide from the Hellisheidi Geothermal Power Plant in 2013-2023

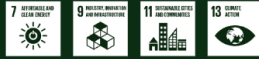


Annual percentage of injection of hydrogen sulphide from the Nesjavellir Geothermal Power Plant in 2013-2023



E3 Energy Usage

Promotes UN's Sustainable Development Goals



Reykjavik Energy (RE) produces renewable energy, electricity, and hot water, from sources such as geothermal energy and hydropower. RE utilises about 12% of produced electricity and a little under 1% of its hot water production for its own operations.

Fossil fuels, particularly diesel oil and methane, are used during construction activities and RE's operations.

The proportion of electricity use and hot water use by Reykjavik Energy is 98.1%, and use of fossil fuels and methane is 1.9%.

E4 Energy Intensity

Promotes UN's
Sustainable Development Goals



Direct energy consumption by operating unit, e.g. by average number of employees etc., is sometimes called energy intensity.

The Reykjavík Energy's (RE) own use of electricity is primarily due to the production of hot water, pumping of wastewater, hot and cold water, and property management. RE's own use of electricity has in general increased since 2016, as well as for hot water usage, [see appendix](#).

The use of fossil fuels per employee at RE has increased compared to the year 2016, especially between the years 2022 and 2023. The use of methane has increased compared to its use in 2016, but it decreased between the years 2022 and 2023, [see appendix](#).

E5 Energy Mix

Promotes UN's Sustainable Development Goals



Primary energy sources

Reykjavik Energy produces renewable energy, electricity, and hot water for district heating, from geothermal energy and hydropower, and uses part of this energy production for its own operations. The main sources of energy, which are used for the Group's operations, are electricity and hot water, which are 98.1% renewable.

At Reykjavik Energy, the effect of the climate change on its operations is mapped, since the resilience and ability to adapt of its utilities is affected by it and has direct effect on its operations, as well being the basis of quality of life for people and businesses. See further discussion on the effect of the climate crisis in [E8 Climate Risk Supervision / BoD](#) and [E9 Climate Issue Supervision / Management](#).

Renewable energy intensity

Energy intensity is identified as energy need per unit of indicator in the relevant operations, e.g. production, revenues or manpower.

The renewable energy intensity of Reykjavik Energy is high, as operating utilities and power plants is energy intensive. Almost all the energy, needed for these operations is derived from renewable energy sources, as for 1 MJ of non-renewable energy used by Reykjavik Energy, 856 MJ are renewable.

E8 Climate Risk Supervision / BoD

Promotes UN's
Sustainable Development Goals



Reykjavik Energy's Board of Directors oversees assessment and management of climate related risk for the company.

The Board reviews the Sustainability Strategy at least once a year, which includes climate and climate risks, and perspective important climate aspects, according to the Board's working program. The Board addresses gaps and guides the management if needed.

For further information on Reykjavik Energy's Board of Directors, [see here](#).

Actions for mitigation and adaptation to climate change

Climate related issues are scheduled into the Board meeting's agenda every month. At these monthly meetings, the Board reviews and monitors major plans of climate action, climate risks, implementation, and performance and progress of climate objectives as well as the opportunities inherent in this risk. At least once a year, the Board discusses a complete overview of the status and progress of mitigations and adaptation to climate change, [please see appendix](#).

E9 Climate Issue Supervision / Management

Reykjavik Energy's Executive Board of Directors reports climate risk issues to the Board of Directors.

The CEO receives updates monthly on climate-related performances from Reykjavik Energy's Head of Environmental Affairs. The responsibility of Reykjavik Energy's Head of Environmental Affairs includes keeping track of climate-related issues on a day-to-day basis. This includes the monitoring of the Reykjavik Energy's performance towards its climate goals.

Actions for mitigation and adaptation to climate change

Reykjavik Energy has identified and evaluated the severity of possible impact, due to climate change, on its operations and its appropriate responses. Potential adjustments have been identified to accommodate extreme precipitation, quick thaws, more frequent and exaggerated fluctuations in temperature, and rising sea levels. The water utilities monitor microbial and chemical contamination in potable water in real time, to be able to take precautionary measures and to guarantee its quality. The district heating utilities evaluate future demand for hot water and seek out new ways to increase usage efficiency to increase delivery reliability. The wastewater utilities monitor sea levels and extreme precipitation forecasts for planning purposes. Sustainable Drainage Solutions (SuDS) are used to channel and filter rainwater from roads before it flows into rivers and lakes. This also boosts biodiversity and enhances the urban environment. ON Power for example, monitors and reacts to the load on constructions to be able to ensure the reliability and delivery of electricity and hot water to customers. Reykjavik Energy is developing an action plan and the implementation of these actions in cooperation with local authorities, institutions, the academic community and research institutions as appropriate, [see appendix](#).

As Reykjavik Energy's operations include the construction and operation of infrastructure (utilities), which are expected to have a lifetime of over 50 years, the company needs to take into account these long-term climate-risks in its operations.

E10 Climate Risk Mitigation

Promotes UN's
Sustainable Development Goals



In 2021, Reykjavík Energy (RE) issued a framework for green financing. This framework outlines the policy that all financing through green bonds or loans adheres to the best possible practices, following the "Green Bond Principles" guidelines issued by the ICMA (International Capital Market Association). The Green Framework is based on four pillars:

- Definition of green project categories
- Selection process for green projects
- Management of funds
- Reporting to investors

RE's green financing framework received the highest possible rating from Cicero – shades of green (now part of S&P Global), confirming that RE's projects have a positive impact on the environment and that the financing framework is robust. Cicero is now part of S&P Global.

The purpose of the issuance is to finance the numerous green projects at RE and its subsidiaries – Veitur Utilities, ON Power, Reykjavík Fibre Network, and Carbfix. In 2023, RE financed many new green and climate-friendly projects for about 19.7 billion ISK. These projects included energy production from renewable sources, such as electricity production and expansion of district heating, water supply, sewage, and electrical systems, automatic meter reading of utility systems, carbon dioxide sequestration in bedrock, projects to enhance adaptation and resilience of utility systems to climate change, and more. This financing amounts to 32.2% of the Group's turnover. A multidisciplinary team within Reykjavík Energy selects the projects, and they are reviewed by an external party.

Electrification of Transport

Promotes UN's Sustainable Development Goals



Reducing emissions from transportation is one of the primary opportunities for Icelanders in climate issues and, indeed, also regarding air quality in urban areas. Due to the nature of the operations of Orkuveitan, the company can contribute significantly by promoting energy transitions in transportation.

Since ON Power installed the first fast-charging point in the country in 2014, the company has been a pioneer in developing infrastructure for energy transition in transportation. Fortunately, more companies have joined the effort and set up their own infrastructure.



Rapid chargers, public chargers, corporate chargers

ON Power has been a leader in energy transitions, focusing on installing fast-charging stations along main routes around the country.

ON's rapid chargers are located at key rest stops in and around the ring road, such as at Víðigerði, Baula, Varmahlíð, and Geysir, in Húsavík, Selfoss, Flúðir, and Freysnes, and in Búðardal and Hveragerði.

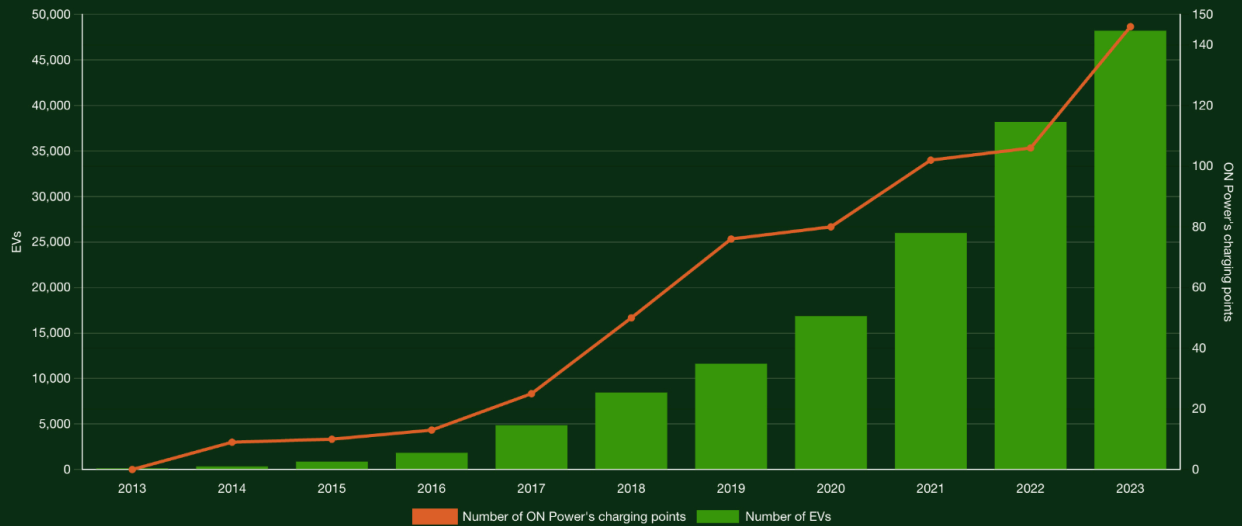
ON Power's public chargers are also on main routes for electric car owners. These chargers allow people to charge their vehicles at swimming pools, cultural houses, sports centres, schools, and kindergartens. They are also convenient for people who want to charge their car in their neighborhood but cannot charge at home.

The number of these stations has rapidly and steadily increased in recent years, given the high demand due to the expansion of the electric car fleet. ON also continually innovates in this area of its operations, aiming to support the journey ahead, as much remains to be done in this field.

ON's corporate charging (IS) is a comfortable and worry-free option for companies. ON's experts assess the needs of each company, suggest a suitable solution, and then handle all maintenance of the charging stations and provide 24-hour service.

The service is customised, offers significant transparency in operations through fleet management and load distribution, and provides valuable and important information about usage.

Number of EVs in Iceland and ON Power's charging points



Electricity from land to a cruise ship for the first time in Reykjavík

Veitur Utilities, Associated Icelandic Ports, and the state agreed in 2020 to invest ISK 100 million each in the first phase of enhancing electrical connections for large ships. The project aligns with Iceland's climate policy, and the premise for more robust connections is the construction of a new Veitur Utilities' substation at Sægarðar, which will also enhance the reliability of electricity delivery throughout the capital area.

In December 2022, a land connection for Eimskip's cargo ships was formally commissioned, and in September 2023, the first cruise ship was connected to land-based electricity.

Veitur Utilities' role in the project is to ensure that the distribution system can handle these connections and to lay the electrical cable.



Jóhannes Þorleiksson, manager of the electricity at Veitur Utilities, and Sigurður Ingi Jóhannsson, Minister of Infrastructure, on the occasion when a cruise ship was connected to Veitur Utilities' electric grid for the first time.

Environmental and Climate Innovations

Promotes UN's
Sustainable Development Goals



Reykjavik Energy (RE) has been at the forefront of innovation and development on climate and environmental issues for the past decade.

This work on innovation and development is being done within the company, as well as in collaboration with the academia domestically and internationally. The collaboration between the business sector, the academia, and municipalities is often a prerequisite for ideas to evolve into tangible projects that benefit the industry and society.

Examples of such projects being undertaken by RE, with high hopes attached, include:

- Near-Zero carbon footprint from geothermal energy at Hellisheidi and Nesjavellir.
- Improved EV charging. How EV owners charge and use their EVs and electrical load management on a large scale.
- Improved oversight of water quality and water distribution systems for climate impact analyses.
- Utilization of sewage waste.
- Better understanding of wastewater system responses to climate-related events.
- Use of artificial intelligence to predict hot water usage.
- Utilization of energy from deep within the geothermal reservoirs currently in use in high-temperature fields in Hengill.

Further information about these projects and other RE's initiatives in the fields of innovation and development regarding climate and environmental issues can be found in the appendices below.

Turning point

Examples of milestones in 2023 for innovation projects at Reykjavik Energy include:

- Carbfix started to utilize seawater instead of freshwater for the permanent sequestration of carbon dioxide (CO₂) in rock formations in Helguvík. These are innovations on a global scale and an important step in the development of Carbfix technology, [see appendix](#).
- The trial injection of Carbfix and ON Power of carbon dioxide (CO₂) and hydrogen sulfide (H₂S) from Nesjavellir Geothermal Power Plant began. This is a major milestone as the goal is for the power plant to achieve carbon neutrality by 2030, [see appendix](#).
- Construction started on a new abatement unit at Hellisheidi Geothermal Power Plant that will clean nearly all carbon dioxide (CO₂) and hydrogen sulfide (H₂S) from the plant by 2025, [see appendix](#). Furthermore, the first environmental assessment of its kind in Iceland due to large-scale CO₂ injection for storage at Hellisheidi was completed, [see appendix](#).
- Veitur Utilities' innovation-driven tendering process was used for the first time, where a specific problem was tendered, i.e., the utilization of fat from sewage, instead of a specified solution. Certain criteria must be met (sustainability and environmental goals in this case), [see appendix](#) for more information.
- Confirmation was received from the Science Based Targets initiative (SBTi) that RE's climate goals are based on scientific evidence and support the Paris Agreement's actions to keep global warming below 1.5°C, [see appendix](#). This calls for innovative solutions in procurement and other operations.



Reykjavik Energy's Science Fund

In 2023, ISK 150 million were spent on 30 projects in various fields of science through the RE's Science Fund (VOR). The purpose of the fund is threefold:

- To support Reykjavik Energy's vision of the future, which is to increase the quality of life with social responsibility as a guiding principle.
- To support master's and doctoral students' research related to Reykjavik Energy's field of work and priorities.
- To promote and strengthen research in Reykjavik Energy's field of activity with special emphasis on the United Nations Sustainable Development Goals that are a priority at any given time in accordance with Reykjavik Energy's policy.

Reykjavik Energy places special emphasis on six of the 17 Sustainable Development Goals: Affordable and Clean Energy, Gender Equality, Clean Water and Sanitation, Responsible Consumption and Production, Climate Action, and Life on Land.

[Here you can see \(IS\) which projects received funding in 2023.](#)

Veitur Utility's smart meters

The introduction of smart meters that measure the energy consumption of customers at regular intervals and automatically send the information to Veitur Utilities, provides insight into how the use of electricity and hot water is distributed over the day, weeks, or months. Thus, people can better control their usage, identify anomalies and malfunctions earlier, and create opportunities to save energy and lower their electricity bills.

Veitur Utilities gains better oversight, for example, on the impact of outdoor temperature on consumption, can predict energy needs more accurately, can respond more quickly to malfunctions, and can better support responsible and sustainable resource utilization, [see appendix](#). The environmental benefit from the introduction of smart meters is thus multifaceted.



Environment

Reykjavík Energy (RE) is among the largest companies in Iceland. Therefore, RE's performance in terms of environmental issues is of vital importance. The operations of RE are certified according to the ISO 14001 environmental management system, and RE regularly submits environmental reports to the Public Health Authority, the National Energy Authority, and the Environment Agency, all of which are licensing and monitoring authorities. For an overview of operating licenses, please see [appendix](#).

Environmental priorities of Reykjavík Energy:

- Water protection and safe drinking water for the future.
- More sustainable management of low- and high temperature geothermal resources.
- Near-Zero carbon footprint in water distribution, electricity supply, district heating, sewerage systems, and fibre network connections.
- Restoration of biodiversity and ecosystems where possible.
- Green loans and green funding.

Taking good care of the environment is a group effort, as it is necessary to combine practical know-how with ingenuity to reduce the carbon footprint. The chapters dealing with environmental issues describe the main actions to reduce Reykjavík Energy's negative impact on the environment in a cost-effective way and at the same time improve the quality of life of the companies' customers.

Water Protection and Water Management

Promotes UN's Sustainable Development Goals



Veitur Utilities has fifteen water sources, and its water utilities' distribution systems serve the capital area and the Western and Southern parts of Iceland. ON Power has two water reserves. The water utilities' distribution system serves 45% of the population in Iceland. Strategic water preservation, other preventive measures, and controls have been implemented in order to guarantee water quality. Constant improvements are needed due to the procedure for connecting pipes and flushing in Veitur Utility's distribution systems, see appendixes.

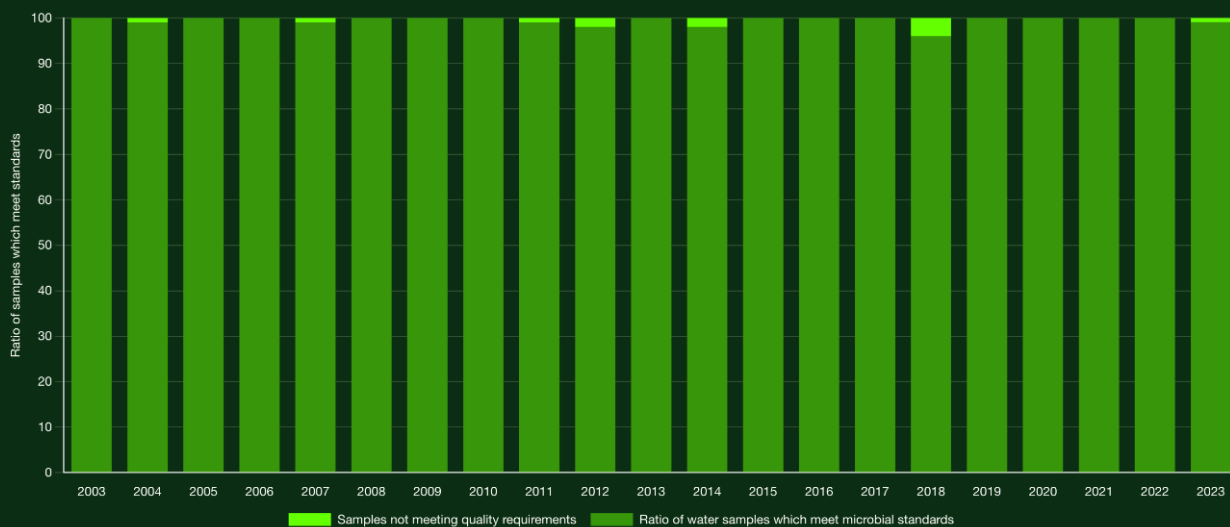
To ensure water quality, water purifying equipment, using ultraviolet (UV) light, have been installed since 2019 at Veitur Utility's water sources, both in the Reykjavik Capital area and in the countryside, and that work is still ongoing. By doing so, microorganisms that can enter the water supply are rendered inactive before the water is distributed to customers.

The water quality in the water supplies of Veitur Utilities and ON Power in 2023 was generally good and in most cases conformed to quality standards, provisions of laws and regulations, and the goals of Veitur Utilities. Some deviations occurred, which were addressed, and are described below.

Water Quality in Reykjavík

Minor non conformity occurred at Gaja, Sorpa's gas and composting station in Álfsnes in the autumn of 2023.

Water Quality in Reykjavík City 2003-2023



Water Quality in West Iceland

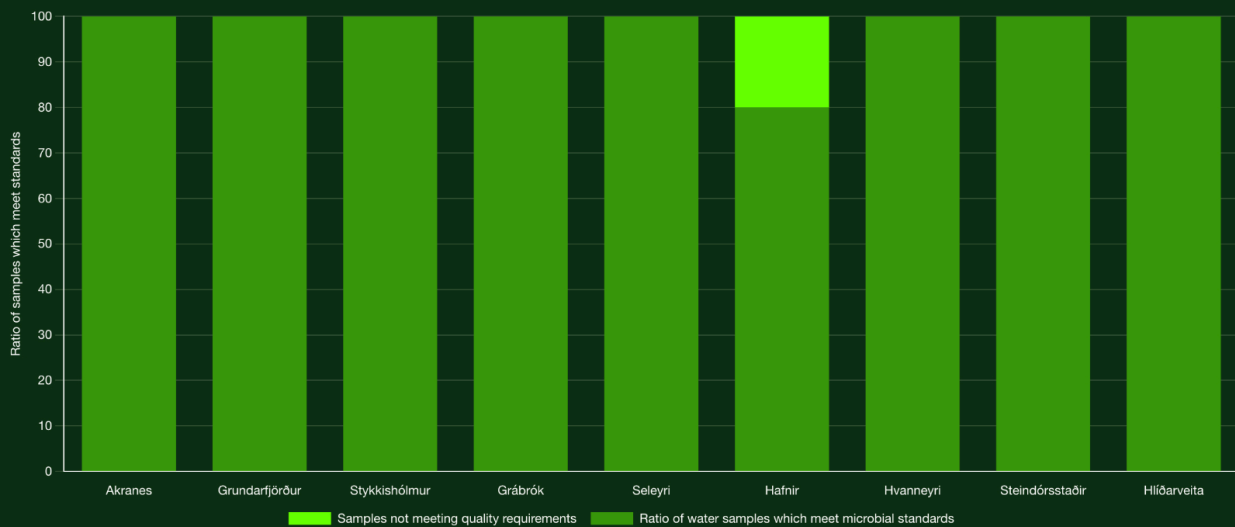
A minor non conformity occurred in the water supply of Veitur Utilities in Hafnarfjall Mountain in the spring 2023, but samples met the quality requirements upon repeated sampling. The deviation was likely related to the sampling process itself, and conditions at the sampling site were subsequently improved in cooperation with the Health Authorities.

Following a major earthquake in Reykjanes Peninsula in the summer of 2023, a significant increase in turbidity was observed in Veitur Utilities water reservoir in Grábrókarhraun Lavafield. The water was disinfected by UV light, but due to uncertainty , precautionary recommendations were issued to vulnerable users to boil drinking water. Repeated sampling showed good results.

In Akranes Township, residents noticed a bad-taste in the cold water in August 2023, which was traced back to green algae at the water source in Berjadalsá River. High solar radiation, calm conditions, and low water flow in the preceding weeks likely contributed to increased algae growth. Extensive sampling was conducted, and analyses confirmed that the types of algae found were harmless to people and animals. The water source was successfully cleaned.

In Borgarbyggð Municipality, preparations began for the utilization of water extraction wells at Seley, near the Borgarfjörður bridge, which were drilled in 2022. Construction of a new pumping station at Hvanneyri started in 2023 and is still ongoing. A water purifying equipment, using ultraviolet (UV) light will be installed in the pumping station.

Water Quality in West and South Iceland 2023



Water level, watershed, environment, climate, and volcanic eruptions

A dense network of water level meters exists in and around Veitur Utility's water resource near the Reykjavik Capital area. Preparations for research drilling in the Bláfiöll mountains are ongoing by the Association of Local Authorities in the Capital Area. The aim is to better determine the watershed in the area and thus the catchment area of the capital area's water sources.

Projects are still being worked on to better understand the connection between environmental factors, microbial pollution, and climate change. Research was undertaken to assess the impact of the eruptions in Reykjanes Peninsula on quality of drinking water. No noticeable changes on water quality were observed, [see appendix](#).

Water conservation

Water conservation areas are delimited around the water sources of Veitur Utilities and ON Power. Water conservation areas in Heiðmörk are monitored with regard to, among other things, the transport of oil, petrol and other hazardous chemicals. Accidents and incidents, caused by dangerous behavior within the protected water areas, are registered, addressed, and appropriate action taken. Veitur Utilities' and ON Power's employees and contractors, that work at the protected water sources, are required to take environmental courses before projects commence, to prevent contamination accidents. This requirement is stipulated in tender documents.

In order to reduce the risk of accidents from oil- or hazardous chemicals accidents in protected water zones within the area, Veitur utilities has consulted with the Icelandic Road and Coastal Administration (IRCA), the Association of Local Authorities in the Capital Area, and local health inspectorates. These include improvements to the Suðurlandsvegur road, development in the Hólmsheiði Area, closures and improvements to roads within the water protection area, as well as conducting further groundwater research in the area.

Mistakes were made during a joint project by Reykjavik Energy and Reykjavik City when a connection was made to the so-called Ullarhringur, which is a cross-country skiing trail in Heiðmörk. The aim of the project was to improve the skiing trail in the area. However, it was discovered that the connection lies within the catchment area of a water source at Myllulækur, but only a portion of the catchment area is fenced. The connection has been closed, a root cause analysis has been conducted with all parties involved, and tasks from that work have been initiated.

Delays have occurred in the demolition of summer houses within the Elliðavatn Area in Heiðmörk, which is part of the company's water protection measures. The Cultural Heritage Agency has requested a historical assessment of the area in order to preserve its cultural and historical value as one of the oldest summer house communities in Iceland.

U6 Water Usage

Own use

In 2023, Reykjavík Energy's production of cold water amounted to over 29 million m³ and hot water to around 99 million m³. Of the 99 million m³ of hot water produced, 54 million m³ was cold water, which was heated in ON Power's plants at the Hengill area. The rest was hot water from low-temperature geothermal fields.

Reykjavík Energy's own use of cold water was about 82 million m³ and its hot water use was about 1 thousand m³.

All thermal energy used to heat buildings at Hellisheidi is in a closed system. The same water is recirculated, and the use of thermal energy is not measured. Reykjavík Energy's own use of cold water is almost exclusively for ON Power's geothermal power plants at the Hengill area. In 2023, nearly 82 million m³ of cold water was pumped, almost 54 million m³ of which was utilised for thermal production, mainly domestic heating in the Reykjavík Capital area. Less than 1% was used for power plant operations.

Recycling

Approximately 70% of geothermal water from Hellisheidi and Nesjavellir Geothermal Power Plants has been reinjected into the geothermal field. The mission of the reinjection of the geothermal water into the reservoir is to prolong its use.

Veitur Utilities place importance on reinjecting used geothermal water back in to the reservoir, when applicable.

In 2023, the district heating utility started exploring the possibilities of further utilizing used geothermal water as part of the implementation of a circular economy, [see more in section U7 on Environmental Operations](#).

U7 Environmental Operations

Promotes UN's Sustainable Development Goals



Sustainability Strategy

In June 2023, a sustainability strategy replaced the environmental and resource policy of Reykjavík Energy (RE), as well as the strategy on social responsibility.

RE has committed to showing respect for the environment, resources, and the community in accordance with the company's ownership strategy. RE's sustainability strategy forms the basis for successful decision-making and good collaboration, built on information transparency. RE seeks feedback from stakeholders on the sustainability of its activities and responds to suggestions responsibly.

The sustainability strategy is based on RE's values – initiative, foresight, efficiency, and integrity - and is presented in alignment with the guiding principles of the company's ownership.

The sustainability strategy is based on six main principles that apply to all operational units of RE: Climate and climate risk, responsible resource management, quality of life, reduced emissions and improved utilization, being a good member of society, and daily operations. Emphasis is placed on the protection of drinking water, more sustainable use of resources, protection and restoration of biodiversity and ecosystems, carbon neutrality of RE's own operations by 2030, and also net-zero emissions for its supply chain by 2040, to enhance the resilience of society by adapting to climate change. In daily operations, emphasis is placed on efficiently using energy and resources in cooperation with suppliers and contractors.

RE defines the following aspects of sustainability as significant, in light of the principles stated in the sustainability strategy. RE sets goals for these sustainability aspects and defines responsibilities.

The operations of RE are not certified in accordance with a formal energy management system.

Responsible waste management

Greenhouse gas emissions from landfilled waste have decreased since 2016. The main reason is that instead of landfilling general waste, it is increasingly being incinerated. This transition significantly affects greenhouse gas emissions because the emission factor used in the calculations is different and lower than the one used for landfilled waste, as seen in RE's climate account for 2023 in appendix.

The amount of waste either decreased or increased. Appendices show how waste is divided among waste categories, operational stations, and municipalities.

Implementing circular economy

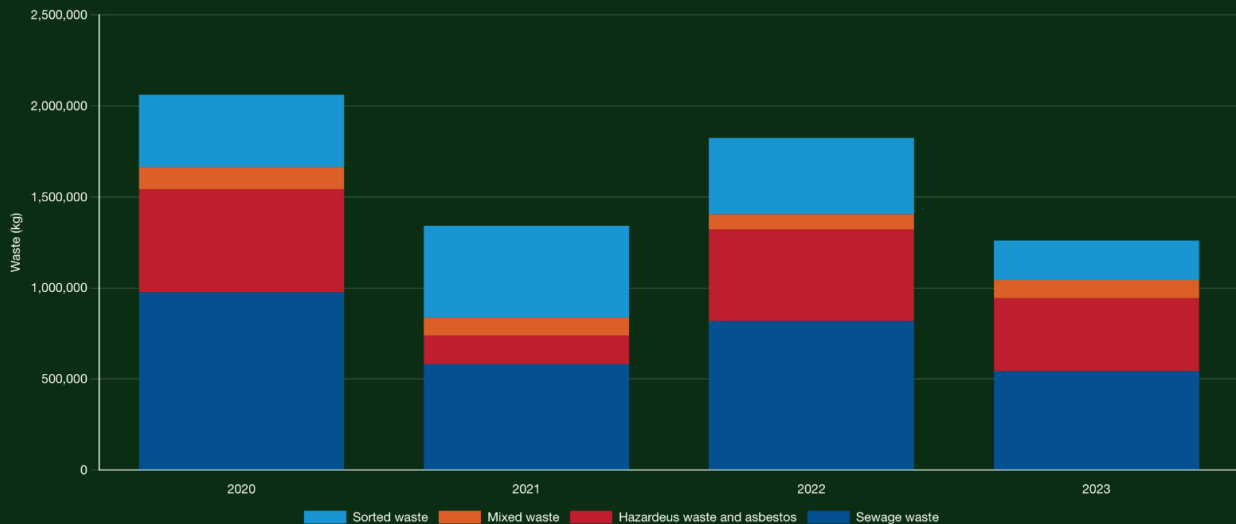
The portion of waste from wastewater treatment plants accounts for about 60% of the total waste volume and has increased since 2022, as shown in the chart below. There is no single explanation for the variation between years, but there is inconsistency in the data. The wastewater system has limited control over the amount of this type of waste generated at treatment plants since it originates from residents and businesses within the service area. In advertising campaigns, the wastewater utility has reminded the public of the damage that wet wipes and other trash can cause in the wastewater system.

The wastewater utility is keen on utilizing the part of sewage waste that is biodegradable, such as sludge and fat, as well as using the sand that accumulates there. As part of the implementation of a circular economy, the year 2023 was marked by:

- A contract was finalized with the sludge reception facility in Flúdir Town for receiving sludge from organic treatment plants in Borgarbyggð Municipality, [see appendix](#).
- Completion of a feasibility study on the recycling of sand from wastewater treatment plants, which received funding from the Ministry of Environment, Energy, and Climate. The results will be useful in decision-making in these matters.
- A tender has been prepared on the reception of fat from wastewater treatment plants. Such a service has not been available on the market, and the wastewater utility, therefore, resorted to a so-called innovation-driven tendering process. It is hoped that the dense dialogue already made with the market and waste management enthusiasts will result in bids for the service in 2024.

In 2023, the district heating Utility began exploring possibilities for further utilizing residual hot water, as part of the implementation of a circular economy.

Waste management at Reykjavík Energy 2020 to 2023



Reclamation of the Elliðaárdalur Valley

Promotes UN's Sustainable Development Goals



Electricity generation at the Elliðaár power station ceased in 2014 after the penstock pipe burst. The damage was deemed beyond repair. Subsequently, it was examined whether it would be feasible to replace it, but the conclusion was negative; electricity from the station would be so expensive that it would be hard to find a buyer for it. In 2019, it was definitively stated that electric power production would not resume in the foreseeable future. Then, a competition for new ideas for using the buildings, all of which had been protected in 2012, was initiated. The development under the Elliðaárstöð brand is the result of that work.

Elliðaárstöð

The most significant structures of the Power Station at Elliðaár are rapidly undergoing a rebirth under the name Elliðaárstöð. Here lies a new experience in the Elliðaárdalur Valley where both children and adults can learn about history and science through interactive play.

Among the milestones in the development in 2023 were:

- The *At the Bistro* restaurant's opening following a tender for the premises.
- The installation of the steam drill Dofri, which has been called the most valuable equipment in the history of Iceland due to its role in the spread of district heating and other geothermal utilisation.
- A water play area for children of all ages was created. In 2023, 4,100 students visited Elliðaárstöð on school trips to learn about energy, environmental issues, and innovation.

Restoration of natural qualities in Elliðaárdalur

This is the title of a project that was launched within Reykjavík Energy in 2021, and in late 2022, it was reshaped and is now a collaborative project between RE and the Reykjavík City Environment and Planning Department.

The project's objective, from RE's side, is to obtain approval for a statutory decommissioning plan for the Power Station, and from the City of Reykjavík's side, that the plan is reflected in the local zoning plan for the valley. The project emphasises strong information dissemination, but mistakes made by RE in its communication when Árbæjarlón (Árbær reservoir) was emptied in the fall of 2020.

Under the project's auspices, various data have been collected on the effects of emptying the reservoir and on the power generation structures in the valley, especially the Árbær Dam.

The salmon's great success

The reservoir had been filled and emptied alternately in autumn and spring until it was permanently emptied in the fall of 2020. Studies on the ecosystem since then strongly indicate that ceasing to create such instability in the river's ecosystem has already benefited the salmon. Reykjavík Energy has initiated special monitoring of the rivers' ecosystems, and below are links to reports on fish in the Elliðaá rivers and the Elliðaavatn (Elliðaá Lake) ecosystem. "The ecological condition of Elliðaavatn is considered to be very good..." says, among other things, an abstract of the attached report from Iceland's Marine & Freshwater Research Institute.

Restoration of Disturbed Areas and biodiversity

Promotes UN's Sustainable Development Goals



Reykjavik Energy (RE) is responsible for about 19,000 ha of land, some 16,000 ha of which are protected. Please see [appendix](#) that contains a list of protected areas and the species of birds and plants on the 'Red List', whose local habitat is situated in these areas. Emphasis is placed on the protection and restoration of biological diversity and ecosystems as possible.

Biodiversity

Land reclamation and afforestation have been practiced on the lands of RE for over 70 years, since 1950. The goal was and remains to rehabilitate the land, improve and maintain it, restore natural birch forests, and the biological diversity of the sites. Over the past decade, the objective has also included carbon sequestration from the atmosphere into vegetation and soil. It is clear that enhancing biological diversity on RE's land has been a focus much longer than carbon sequestration in vegetation and soil. Biological diversity is and will continue to be part of the goals for nature-based solutions at the company.

Restoration and reclamation

Particular emphasis is placed on restoration and reclamation of the natural environment when work is done in areas where RE operates. This is especially true when it comes to minimising visual impact of power plants. Procedures and training for employees and contractors are revised and improved regularly in order to ensure even better conduct, e.g. in the protected areas. To reclaim disturbed vegetated soil, the vegetative cover is reserved and replanted. This is done in collaboration with licence authorities, and according to RE's objectives.

There are great synergies in simultaneously undertaking the restoration of natural ecosystems and actions that help us adapt to climate change, as well as implementing mitigation measures to reduce greenhouse gas emissions. RE has shown this in action in recent years by:

- Restoring degraded ecosystems as possible to their former state, e.g. at Andakílsá river in Borgarfjörður Vest Iceland, Árbæjarkvísl in Reykjavík City and in the Hengil area.
- Blue-green surface water solutions in urban areas in cooperation with local authorities

The benefits are much greater than only for the natural systems, as such actions also result in social, economic and health-related well-being.



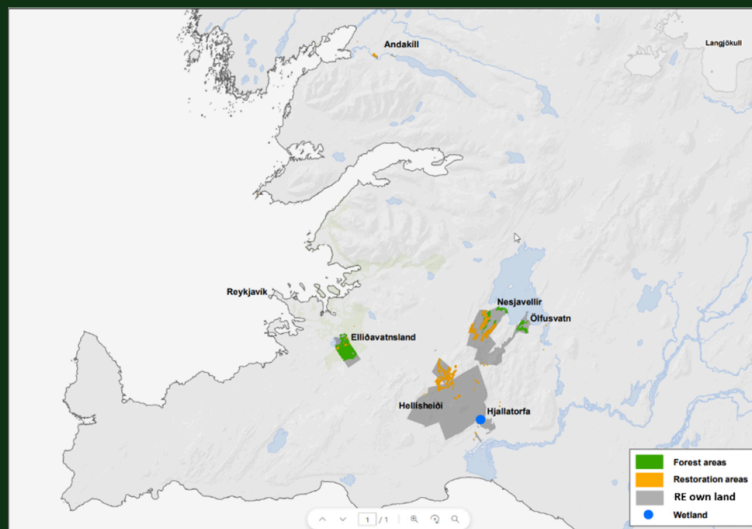
Surface restoration with local vegetation at the trench site of a water pipeline in ON Power's Geothermal Park in the summer of 2023.

Land reclamation, afforestation and rewetting of wetland

Most of the land reclamation is carried out on RE's own lands in Hellisheidi and in the Municipality of Ölfus, see map below. Furthermore, land reclamation is practiced on RE's own lands in the Nesjavellir area in Grímsnes- and Grafningshreppur municipality and in Andakill in the municipalities of Borgarbyggd and Skorradalshreppur. These areas account for about 87% of all of RE's land reclamation areas. Land reclamation is also practiced on a smaller scale on state-owned land in Hellisheidi, where RE has a permit for operations, or about 8%, and land reclamation is carried out on Hamragilsland, which is owned by ÍR, or about 5%. All these areas were initially barren or sparsely vegetated areas, with less than 20% vegetation cover. About six hectares were restored with local vegetation at Hellisheidi and near Ölfusvatn in 2023, in line with the company's goals to expand land reclamation areas, sequester carbon, and support biodiversity.

All afforestation is carried out within RE's own lands, that is, in Nesjavellir and Ölfusvatn in Grímsnes- and Grafningshreppur municipality and near Elliðavatn Lake in Reykjavík City. Afforestation only takes place on land that is fenced off so that grazing animals are kept from the area. These fenced areas thus define potential planting areas. On the company's own lands, there are more areas that could potentially be fenced off and afforestation started in the future. About 6,000 birch and rowan trees were planted in approximately four hectares of land near Ölfusvatn in 2023. This aligns with the company's policy of expanding afforestation areas with native tree species, carbon sequestration, and strengthening biodiversity.

Rewetting of wetland was carried out on a 3.2 hectare area owned by RE in the Municipality of Ölfus in 2016. Upon inspection in the autumn of 2023, it was clear that the restoration had been successful. A specific study of the area will be undertaken in the summer of 2024 to confirm the results.



The overview of afforestation, land reclamation, and rewetting of wetland managed by RE.

Hiking trails

For the last 30 years, Reykjavik Energy (RE) has overseen and maintained about 120 km of marked hiking trails at the Hengill area, going back to the start of operations at the Nesjavellir Geothermal Power Plant. Considerable increase in the number of hikers visit the area, and the area is very popular for hiking in all seasons. In the summer of 2023, hiking trails at Nesjavellir were repaired. The work will continue in the summer of 2024.

Reduction in moss damage at Hellisheidi

The Icelandic Institute of Natural History has been monitoring moss near the geothermal power plants in the Hengill area since 2012. Results from 2022 show that the frequency of moss damage, likely due to sulfur pollution, has decreased since 2017, [see appendix](#). Additionally, the concentration of sulfur in moss near Hellisheidi Power Plant has significantly decreased. The moss cover is largely intact, except in isolated locations near Nesjavellir Power Plant. The emission of hydrogen sulfide at Hellisheidi Power Plant has greatly reduced after the abatement unit of the power plant was expanded in 2017, and it is likely that these results can be attributed to the reduced emission of hydrogen sulfide into the atmosphere. In 2025, it is planned to commission a new abatement unit at Hellisheidi which will clean nearly all hydrogen sulfide from the power plant, and in 2030 at Nesjavellir Power plant.

The ecosystem in Andakílsá is thriving

The ecosystem in Andakílsá has recovered after a significant amount of sediment entered the river during an inspection of the intake dam of Andakílsá Hydro Power Plant in May 2017. Approximately 177 salmon were caught there in the summer of 2023. About 15,000 smolts were released into the river in 2023, and 15,000 salmon smolts were placed in hatcheries. The project has been firmly established. Work on nature based solutions continued on riverbank protections at Andakílsá River in 2023, including the planting of birch and willow on the banks.

Following a risk assessment conducted in 2021 regarding the planned cleaning of sediment from the intake reservoir of the power plant, it is estimated that dam structures will be improved and the reservoir cleaned up to ensure safety, both for people and the environment, as the structures do not meet safety standards. Efforts to obtain the necessary permits are underway.

Water levels in Lake Skorradalvatn and waterflow in Andakílsá River

The water level of Skorradalvatn Lake fell below the reference levels for the first three weeks of 2023 due to severe frost period, [see appendix](#). The flow in Andakílsá River was reduced according to recommendations from the Marine Research Institute. The water level of Skorradalvatn Lake exceeded the reference levels by mid-February 2023 due to significant thawing. The flow of Andakílsá River was within reference levels except when it was necessary to reduce flow at the beginning of the year due to frost.

The Marine Research Institute is conducting studies on the effects of water regulation on the ecosystem of Skorradalvatn Lake.

The ecological condition of Lake Elliðavatn is good

The findings of the Marine Research Institute's research on the ecosystem of Lake Elliðavatn indicate that the ecological state of the lake is very good according to calculations of the ecological quality ratio, which was based on available biological and physicochemical quality factors, [see appendix](#). RE is preparing regular monitoring of the condition of the Lake Elliðavatn dam, including for seismic activity, and aims to have the monitoring in place by 2024.

Responsible Management and Production at Low-Temperature Fields

Promotes UN's Sustainable Development Goals



Veitur Utilities operates thirteen district heating systems. The largest one is in the capital area, five are in West Iceland, and seven in South Iceland, [see appendix](#). These utilities provide space heating and hot water services to 2/3 of the country's population. In 2023, Veitur Utilities' production in low-temperature geothermal fields in the capital area and in distribution areas in South and West Iceland were in accordance with the company's policy and objectives, and the statutory and regulatory framework.

Responsible consumption of hot water

In recent years, attention has been drawn to the fact that hot water for domestic heating is not an inexhaustible natural resource. People now realize better than before, that geothermal heat needs to be prioritized in favour of central heating for the quality of life in Iceland. During the cold season, Veitur Utilities have encouraged people not to heat their homes unnecessarily and to keep windows closed.

The Capital area

Due to the load during the cold season in January 2023, Veitur (the utility company) had to reduce hot water supply to major consumers in the capital area, namely all swimming pools and lagoons, as Veitur always prioritizes hot water for house heating.

During summer 2023, hot water from geothermal power plants was temporarily supplied to the entire capital area from June to September. This water exchange lasted for a longer time than has been done before. Consequently, the production in the low-temperature fields at Reykir, Reykjahlíð, Laugarnes and Elliðaárdalur, was eased, leading to increased winter reserves in those areas, [please see chapter on innovation of climate and environmental issues](#).

Following the completion of a comprehensive review of plans for the future of the district heating system in the capital area, significant construction efforts have been undertaken to ensure the security of supply for the next decades.

In 2023, construction was underway on the fourth heating tank on Reynisvatnsheiði, where Veitur collects the hot water coming from geothermal power plants. This tank was put into operation in December 2023. Veitur also worked on renewing the main pipelines of the district heating system in Hafnarfjörður to increase flow capacity and meet the increased demand due to the growth in residential housing and the expansion of the town. This ensures all residents in Hafnarfjörður have access to hot water for the next decades.

In June 2023, the Nesjavellir hot water pipe was cleaned, the pipe is of the main flow routes for hot water into the capital area. The last cleaning of the pipeline was in 2003, and it was timely to clean it again to improve the flow capacity of the pipeline. The Nesjavellir pipe is about 30 km long and transports approximately 85-degree Celsius hot water from the geothermal power plant at Nesjavellir to the capital area. It was commissioned in 1990 and has a transport capacity of just over 1,700 liters per second. During this maintenance, was necessary to discharge about 60°C hot water to the surface. This was done in consultation with the Health Authorities of City of Reykjavík and the Reykjavík Environment and Planning Authority. In the spring of 2024, an assessment will be made of how the area has recovered and the need for repairs evaluated.

Looking ahead, there is a focus on increased heat production in the Hellisheiði Geothermal Power Plant as well as the planned HS-Orka power plant in Krýsuvík and new low-temperature fields in the Capital area. Eighteen thermal gradient wells were drilled in Kjalarnes at the end of 2022 and in 2023, and following the results, there are plans to drill two deep exploration wells at Brimnes, on the southern part of Kjalarnes, in 2024. Further thermal gradient drilling on the northern part of the peninsula will take place this winter. Subsequently, thermal gradient wells will be drilled in Álftanes with the aim of finding a suitable location for a deep exploration well.

Since 2018, research has been carried out on integration of the Reykjavik Capital region's heating utility system, so that it is possible to mix geothermal water from low-temperature fields with heated groundwater from geothermal power plants without the formation of scaling. The results are promising and have already been used for water exchange and summer rest in low temperature fields in the Capital area, please see above. It will completely change the operating system of the heat supply and the heat production of power plants towards a more sustainable manner. The research is scheduled to be completed in 2024.



One of Veitur Utilities' low-temperature wells in City of Reykjavík.

West Iceland

The situation in the low-temperature district heating areas in Western Iceland is generally good. Although increased demand at Akranes and Borgarfjörður district heating (HAB) has exhausted all extra capacity in the system. A new production well at Hellur in Bæjarsveit is providing additional power to improve the situation. The aim is to look for hot water resources closer to the urban areas, but also to look for resources in Bæjarsveit and Kleppjárnreykir rural areas.

South Iceland

Rangárveita district heating serves, among other areas, the urban areas of Hella and Hvalsöllur. Early 2023, the pumping capacity was increased with a new deep pump in Laugaland to enhance the peak power of the district heating for those areas where demand is highest. Further projects are being prepared, such as improving the hot water flow capacity from Kaldárholt to Laugaland, increasing the reliability of supply in Hvalsöllur, and searching for more hot water reserves. Eight thermal gradient wells were drilled near Laugaland in the summer of 2023, and there are plans to drill a deep exploration well in 2024. Discussions with landowners for research permissions at Ás and Hárlaugstaðir took place in 2023, and it is planned to drill thermal gradient wells in one or both areas in 2024.

The drilling of a new well at Gljúfurárholt in Ölfus, at the end of 2023, appears to have been successful, suggesting that it is now possible to significantly increase the power capacity of the utility.

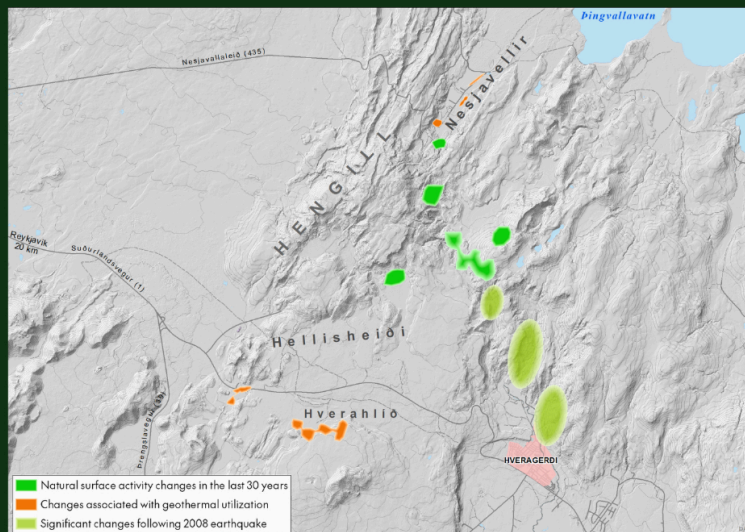
Responsible Management and Production at High-Temperature Fields

Promotes UN's Sustainable Development Goals



Geothermal energy activity is monitored at the surface at the Hengill area. This area can be impacted by natural changes, as well as the production of geothermal energy. There is no definite way of discerning whether the changes occur naturally or from human action. The changes in surface activity at Hverahlíð field for instance, started when wells were drilled in the area. Therefore, it may be inferred that these changes are due to utilisation of geothermal heat in the area, please see map below.

In the summer of 2023, it was noteworthy that significant geothermal activity surfaced, especially under Highway 1 in Hveradalabrekka near Hellisheiði geothermal power plant. ON Power closely monitors the situation in this area in cooperation with the Icelandic Road Administration.



Production field of geothermal power plants at the Hengill area and temperature changes at the surface.

Energy production at Nesjavellir and Hellisheidi/Hverahlid

In 2023, energy production at Nesjavellir and Hellisheidi was in accordance with the power plants' licences and ON Power's objectives. Maintaining the power plants' production capacity at the Hengill area has been one of the company's most important tasks in recent years.

An extension of the current production area in Hengill is anticipated, to ensure sufficient supply of hot water in the capital area and full production capacity of hot water and electricity at Hellisheidi and Nesjavellir Geothermal Power Plants for the long term. Due to this, extensive work has begun in obtaining the required permits. This includes the expansion of the production field in Hverahlid, an increased number of production and re-injection wells at Nesjavellir, and permits for exploratory drilling in new fields south of Hellisheidi.

The formal process of environmental impact assessment and planning for exploratory drilling in Meitlar and Hverahlid II, as well as the planning process for the energy production field at Nesjavellir, began in 2023. Various field studies were conducted in the summer of 2023, such as assessments of geological features, vegetation, and bird life.

Reykjavik Energy emphasizes that the utilization of resources should be as responsible as possible and that biological diversity and ecosystems should be protected.

Discharge of geothermal fluids at Nesjavellir and Hellisheidi/Hverahlid

Geothermal fluid is reinjected into the geothermal system at Nesjavellir and Hellisheidi Geothermal Power Plants, to protect surface and groundwater, as the geothermal fluid is warmer than groundwater and has a different chemical composition. The aim is also to increase the pressure in the geothermal reservoir, which in turn boosts responsible utilisation. There is full injection capacity for all separator water from both plants. In cases, where geothermal water is disposed of on the surface, the cause is unplanned interruptions in operation, which means that it is not possible to inject everything.

Various research and development projects have been conducted in recent years to fulfil reinjection requirements at Nesjavellir and Hellisheidi, with considerable success, [please see appendix](#).

In 2023, over 76% of the geothermal fluid extracted from the geothermal reservoir at Nesjavellir was injected into injection wells, of which about 35% were injected back into the geothermal reservoir. Despite the success in the injection operations of Nesjavellir Power Plant, geothermal production is associated with significant discharge of heated groundwater to the surface, manifesting as thermal pollution in wells and springs near Lake Thingvallavatn. Efforts continue towards the development of injection deep into the reservoir, and injection into a new well began in the summer of 2023. This well received nearly 25% of all geothermal water from Nesjavellir Power Plant that was injected down in 2023, despite being in operation for just over half the year. The blending of geothermal water with district heating water for the Reykjavik Capital area is planned for 2026, with expectations that this will prevent the mixing of geothermal water into groundwater, see discussion on increased supply of geothermal water for the capital area below.

In June 2023, maintenance was performed on the Nesjavellir pipeline operated by Veitur Utilities. At the same time, ON Power undertook maintenance at the power plant's heating station. Extraction from the geothermal field at this time was at its peak due to electricity production, requiring the release of a lot of hot water to the surface and steam into the atmosphere. Concurrently, ON Power conducted maintenance on a machine at Hellisheidi Power Plant, which necessitated significant steam emission into the atmosphere. Unnecessary extraction of this valuable resource is wasteful, has negative environmental impacts and on reputation, and makes it more challenging to maintain the operation of the power plants for the future. ON Power and Veitur Utilities have been urged to better coordinate maintenance to minimize environmental impact and resource wastage.

Over 70% of the geothermal fluid (separated water and condensate water) extracted from the geothermal reservoir in 2023 at Hellisheidi was injected back into it. The condensate water (condensed pure steam) that was not injected evaporated in the cooling towers or was discharged through the overflow (around 1.5%). The overflow is used either to procedure or incidents in operations.

In 2023, it was a considerable challenge to keep surface discharges within the goals of ON Power due to maintenance projects and unexpected failures, but it was ultimately successful.

Increased supply of geothermal water to the capital area

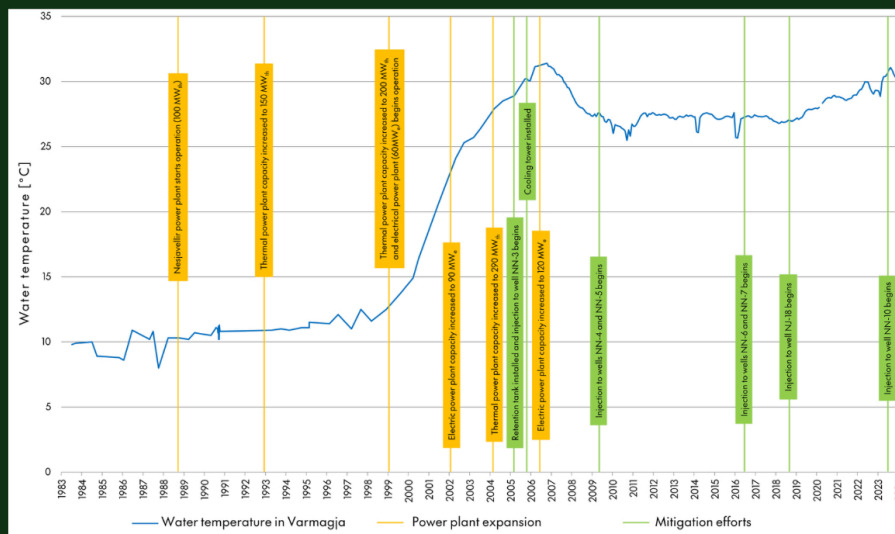
In the summer of 2023, the entire Capital area received heated groundwater from the geothermal power plants in the Hengill area. Research into the integration of the capital region's heating supply system so that it is possible to mix geothermal water and heated groundwater from power plants is promising. The project will completely change the operating system of the heating supply and heat production in the geothermal power plants as the aim is to decrease production from low-temperature geothermal fields during the summertime, in order to further utilise the energy that is produced in power plants.

The year 2022 was a considerable challenge in terms of surface dispersion at Nesjavellir due to unexpected failures and problems in maintenance projects at Veitur Utilities and ON Power. Despite this, it was possible to keep surface dispersion within ON Power's targets. Thus, there will be a significant reduction in the surface discharge of hot water at Nesjavellir, which will over time reduce thermal pollution along the shore of Lake Thingvallavatn.

Impact of discharge of geothermal fluids on the ecosystem in bay Thorsteinsvík

Monitoring the ecosystem in the bay Thorsteinsvík, in the Lake Thingvallavatn, began before the Nesjavellir Geothermal Power Plant was built. The results of measurements, made by the Natural History Museum of Kópavogur, show that trace elements from geothermal water, previously considered to have a negative impact on the ecosystem, do not show a statistically significant increase.

Analysis of the status of groundwater at Nesjavellir will continue, in order for ON Power to achieve its objective of reducing the environmental impact of the Nesjavellir Geothermal Power Plant..



Water temperature at Varmagjá at Lake Thingvallavatn, the development of the Nesjavellir Geothermal Power Plant and mitigation measures.

Induced seismic activity

Injection of geothermal water, particularly in the Húsmúli field, as well as explosions associated with geological research and drilling in high-temperature fields, can cause induced seismic activity or micro-earthquakes. ON Power follows procedures aimed at minimizing the risk of triggered earthquakes in and around the Hengill area.

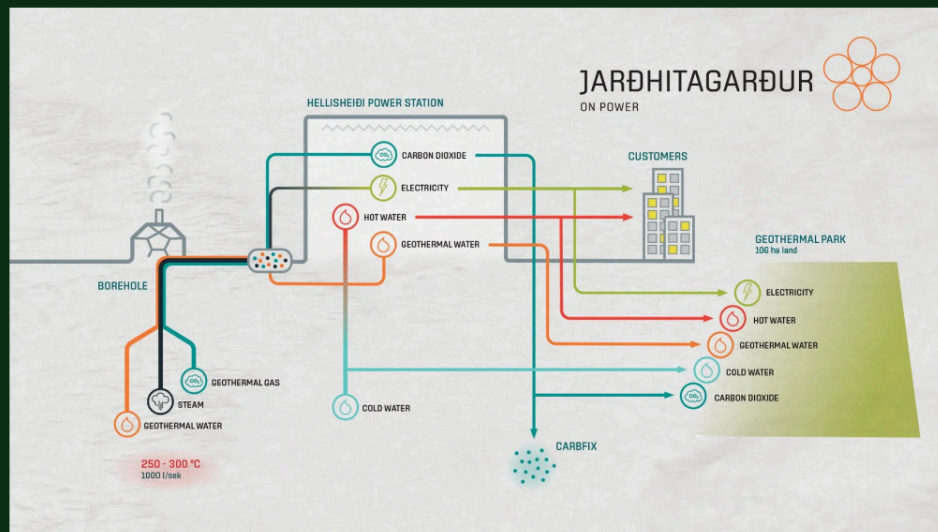
Reykjavík Energy's goal is to ensure that earthquakes potentially related to the injection of geothermal water cause minimal inconvenience and no damage, was met. In 2023, there was one earthquakes of magnitude 3 or over, in ON Power's injection fields. No changes were made in injection rates in 2023 and no notifications were sent to the Icelandic Meteorological Office's seismic activity division, or the Department of Civil Protection and Emergency Management of the Icelandic Police.

Geothermal Park at Hellisheiði

Promotes UN's Sustainable Development Goals



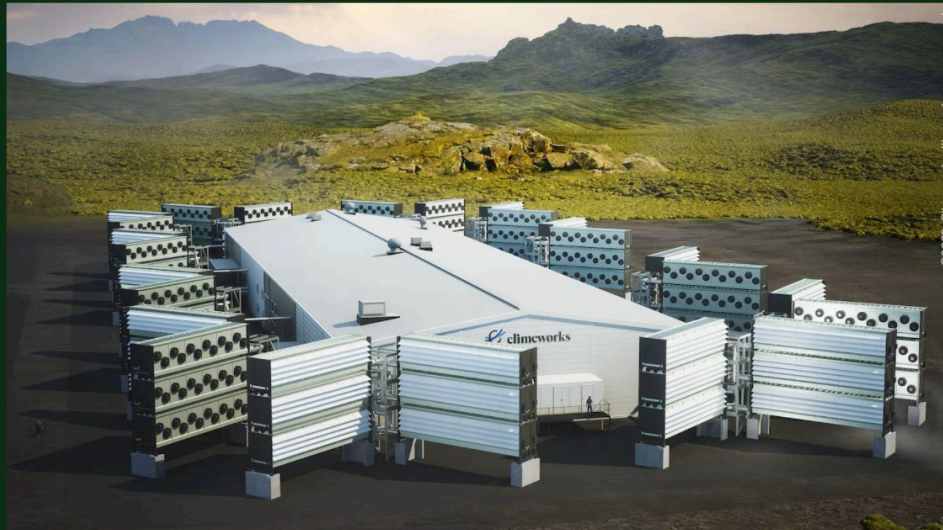
At ON Power's Geothermal Park at the Hellisheiði power plant, located in the municipality of Ölfus, ways are being sought to further diversify the utilisation of thermal energy, electricity, water and geothermal gases from the plant. A diversified use of geothermal energy can increase efficiency and strengthen environmentally sound operations and innovation in the business community. The diagram provides an overview of the energy-related natural resources that can be utilised in the operations of the Geothermal Park.



Overview of energy-related resource flows at the Geothermal Park at Hellisheiði Geothermal Power Plant.

Increased Carbon Capture from the Atmosphere

The Swiss innovation company Climeworks successfully captured CO₂ from the atmosphere at the ON Geothermal Park during the year. Under construction is a new capturing unit, Mammoth, that increases capturing ten-fold. The new unit also utilises the Carbfix method for the disposal of carbon into the subsurface. The combined capacity of Climeworks will then be 44,000 tons of carbon dioxide per year. This corresponds to the emissions of about 10,000 cars using fossil fuels.

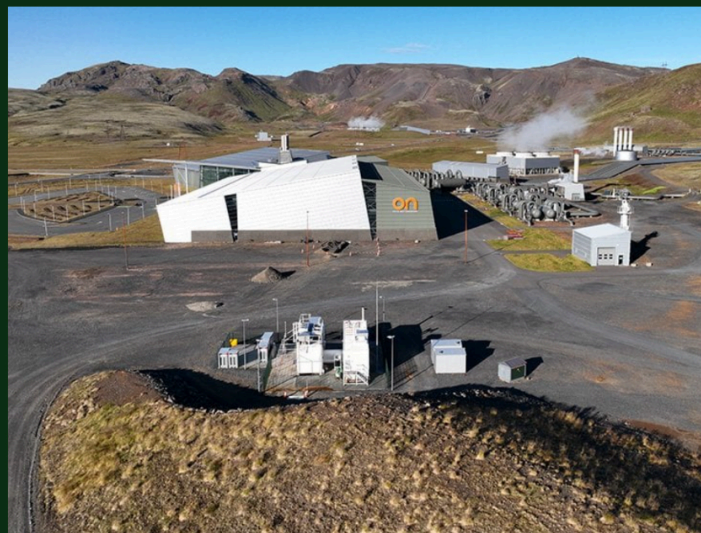


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Hydrogen production

ON Power produces hydrogen at the Hellisheiði Geothermal Power Plant for experimental purposes as part of the European Union's Hydrogen Mobility Europe development project. Energy production in the power plant is used for hydrogen production in periods when there is less demand for electricity, and the hydrogen is used for the benefit of the community and the economy in energy switching in transport.

Hydrogen has been produced in ON's Geothermal Park at Hellisheiðarvirkjun since 2020, and is the only producer of electric fuel in the country. Hydrogen can be used directly to power vehicles or mixed with carbon dioxide for methanol or related production.



Algae production

The international start-up company VAXA uses energy-related supplies in an algae producing facility in ON Power's Geothermal Park. The company has been successful, has increased its production considerably, and intends listing its shares in the United States.

Product development with Veitur Utilities

Veitur Utilities, ON Power's sister company, operates the heating utility in the capital area and draws more than half of its hot water from ON Power's plants at Nesjavellir and Hellisheiði. Heating water from Veitur's own low-temperature areas and the water from the power plants must be kept separate in the heating system due to the risk of scaling that can clog pipes. In ON Power's Geothermal Park, an R&D project run by Reykjavík Energy's scientists is under way, aiming to find ways to alter the properties of the hot water that comes from the power plants, so that it is safe to mix with the low-temperature water. The benefits of this are multiple, including; better utilization of water in the heating system, it will be easier to rest the natural low-temperature areas when necessary, the operation of the heating system will be simpler, and, finally, the magnesium silicates that are precipitated from the water are a marketable product for all kinds of chemical processing.

Sustainable businesses

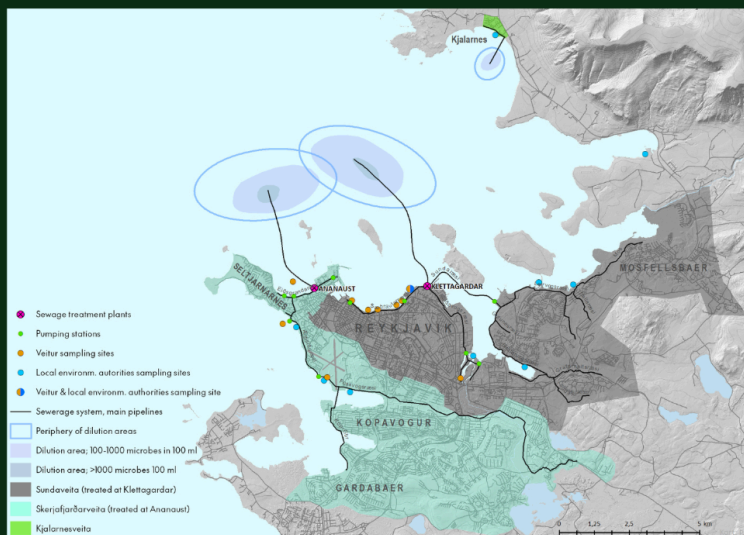
Strict requirements are placed on companies that intend to operate in the ON Power Geothermal Park regarding water protection, appearance, disturbances and orderliness. During the construction phases of projects, there are requirements to re-use the vegetation cover that is removed. It is put back in its place when the earthworks finish or it is used elsewhere where it may be needed. The commercial development of a swimming pool in Hveradalir Valley is ongoing, and ON Power's receives a number of inquiries from interested parties about the development of new activities in ON Power's Geothermal Park.

Wastewater Discharge

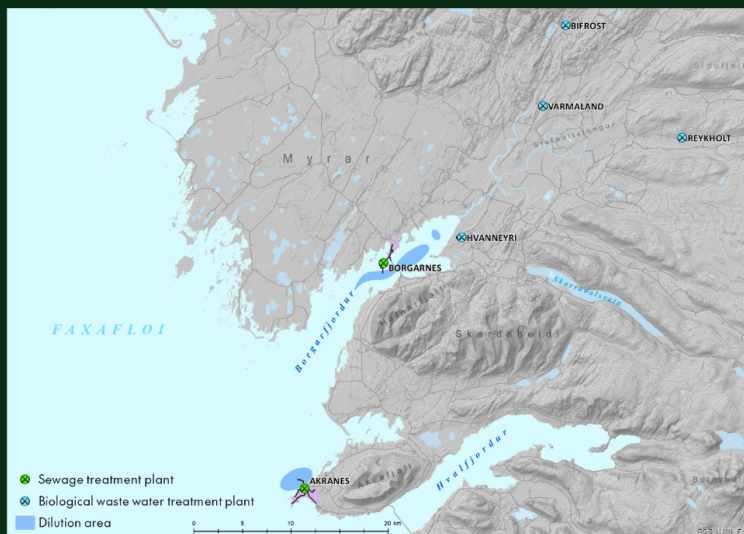
Promotes UN's Sustainable Development Goals



Veitur Utilities manages the infrastructure and operation of wastewater systems in Reykjavík City, as well as Akranes Township and Borgarbyggð Municipality in West Iceland. Wastewater from Kópavogsbær, Mosfellsbær and Seltjarnarnesbær, in addition to parts of Garðabær, is treated in wastewater treatment plants at Ánanaust and Klettagarðar. The infrastructure serves approximately 60% of the Icelandic population.



Wastewater from about 60% of the population in Iceland is treated in sewerage treatment plants at Ánanaust and Klettagarðar in Reykjavík.



Wastewater treatment plant in West Iceland

Residents and businesses in Veitur Utilities' accumulation area have access to utility systems and wastewater treatment plants, in accordance with regulations. However, the company has been exempted from the principle of sewage treatment against monitoring negative effects to the receiver, please see the discussion below on sea quality. Veitur Utilities have decided to start investments and measures for wastewater treatment at least in accordance with the regulatory definition of single stage treatment.

Veitur Utilities' long term objective is to ensure that the coastline is always clean, as the shore is defined as an outdoor recreational area. However, the discharge of unfiltered wastewater via overflows is an inseparable part of the wastewater system, which has been developed over the last decades. This kind of discharge will continue to be the case as long as sewage and surface water is mixed in the receptor, which accounts for approximately 28% of the wastewater collection system.

Effective measures taken to reduce the discharge of unfiltered wastewater via overflows are, e.g. the development of procedures to systematically search for leaks, revision of procedures in the servicing of pumping stations, and extensive investments in the pipe system to divert surface water from the wastewater system, this project is a priority. Currently, a long term plan is being developed to fully keep infiltration of extraneous water from the wastewater system. In 2022, projects were completed in the areas of Sogamýrarsvaedi in Reykjavik City and Kalmansvíkursvaedi in Akranes Township, the project in Midvogslækur in Akranes is almost finished as well as the watershed of Kópavogslækur within the municipal boundaries of Reykjavik City.

Seawater quality

A new phase in environmental monitoring of treated wastewater from the capital area and Akranes Township began in 2023 and will conclude in the latter part of 2024. The research this time is in accordance with nationwide standardized requirements based on the so-called Water Plan of Iceland, except that the Environmental Agency has waived the requirements for sampling invertebrates on soft bottoms near Akranes, among other reasons, because there is rocky seabed in the area and strong ocean currents. With this, Veitur Utility is contributing to maintaining a harmonized assessment of water bodies in Iceland, for those water bodies that the company impacts with its operations.

Veitur Utilities and the Reykjavik Health Authorities have monitored the quality of the coastal waters of Reykjavik City and Kjalarnes, monthly over the year 2023, totaling 165 samples. Along the coastline, 83% of the samples were below the reference limits for enterococci, and 93% of the samples were below the reference limits for fecal coliforms, indicating very low fecal pollution.

Biological wastewater treatment plants

Microbial concentrations near outflows from the biological treatment plants in the West of Iceland have been measured above the limits defined in the operating licenses in recent years.

In 2023, a more detailed analysis of microbial concentrations at the discharge points of the treatment plants was undertaken. Among other things, the locations of sampling sites were corrected in cases where samples were taken within fenced areas controlled by Veitur Utilities or from wells. Such samplings provide a misleading picture of the risk intended to be assessed by the samplings, that is, the public risk of microbial pollution in surface water where the public or food production may be exposed. All samples are now taken from surface water accessible to the public, or from wells where water extraction areas are near wastewater treatment plants. Results, based on updated locations, suggest that values at the outlets in Reykholt and Bifröst do not pose a health risk, but the values exceed limits at Hvanneyri and Varmaland. Remediation procedures are needed there.

All results of sampling and analyses from Veitur Utility's wastewater utility can be seen in the annual overview reports of sampling and measurements, which are available on the web, in addition to a special report issued in the same publication series in 2023 due to microbial sampling at the biological treatment plants in Borgarbyggd Municipality.

Surface water solutions

Veitur Utilities continue working on the implementation of blue-green surface water solutions, in collaboration with municipalities, to minimise the flow of rainwater from streets, roads, and other areas into the wastewater system, and reduce the probability, and likelihood, of discharge through the system into the sea. The Township of Akranes and Veitur Utilities, for example, have worked together to develop surface water systems that serve newly built neighborhoods in the eastern part of the urban area in Akranes.

Responsible consumer behavior and improved utilization of sewage waste

Veitur Utilities has repeatedly urged people not to use toilets as trash bins, as disinfectant and wet wipes, along with other trash, cause strain on equipment and the environment. In 2023, Veitur Utilities also emphasized, in collaboration with Sorpa, public education on how to dispose of fats and oils for biodiesel production instead of pouring this energy-rich material down the drain.

The wastewater utility is working on innovative projects to prepare for the reuse of sewage waste such as sand, sludge, fat, and garbage waste as part of the implementation of the circular economy. See the [appendix for Innovation Projects in the field of climate and environmental matters](#).

"Energy from the Kitchen" is a joint project of Veitur Utilities and Sorpa aimed at recycling leftover oil from kitchens and protecting household plumbing, see the video below.

Hazardous Substances

Promotes UN's
Sustainable Development Goals



The main hazardous chemicals used by Reykjavik Energy (RE) are asbestos, the base material used in insulation foam, chlorine, acids and bases, welding gases, geothermal gases, oil and solvents. In 2023, the use of hazardous chemicals was substantial, as in previous years. Accidents due to the use of hazardous substances are rare and no accidents were reported due to this in the year 2023.

In 2020, an effort was made to decrease the number of hazardous chemicals used, succeeding in lowering their number from 900 down to around 200. Furthermore, improvements were made with regard to their storage, sorting and disposal, and an effort was made to increase employees' awareness by publishing educational material. An example of this is that where hazardous materials are stored for cleaning and in the sewage system, QR codes have been placed on all hazardous materials to facilitate staff access to safety data sheets that describe personal protective equipment and first response actions in case of an accident.

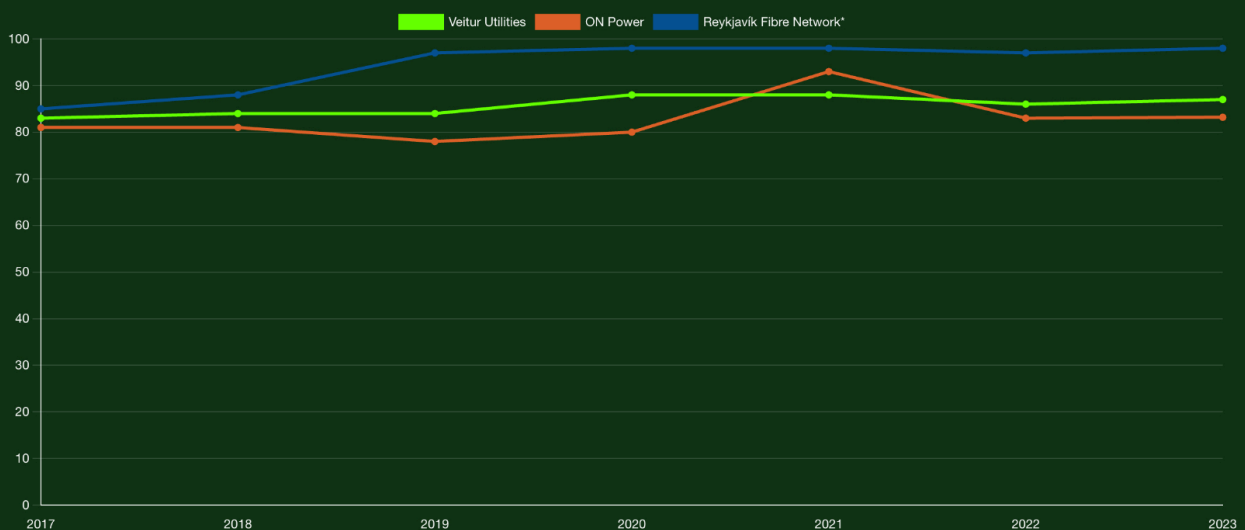


Society

In unison, Reykjavík Energy, Veitur Utilities, ON Power, and Reykjavík Fibre Network take on the societal role of ensuring that people enjoy water supply, sewage, electricity, district heating, and data services. The youngest family member, Carbfix, works diligently against climate threats. The most important responsibility of the RE family lies in ensuring that basic services are reliable and fairly priced, that there is customer satisfaction with the service, and that staff are satisfied to provide it.

Below is shown the development of the reliability of utility service delivery, customer satisfaction, and staff satisfaction.

Customer satisfaction 2017-2023



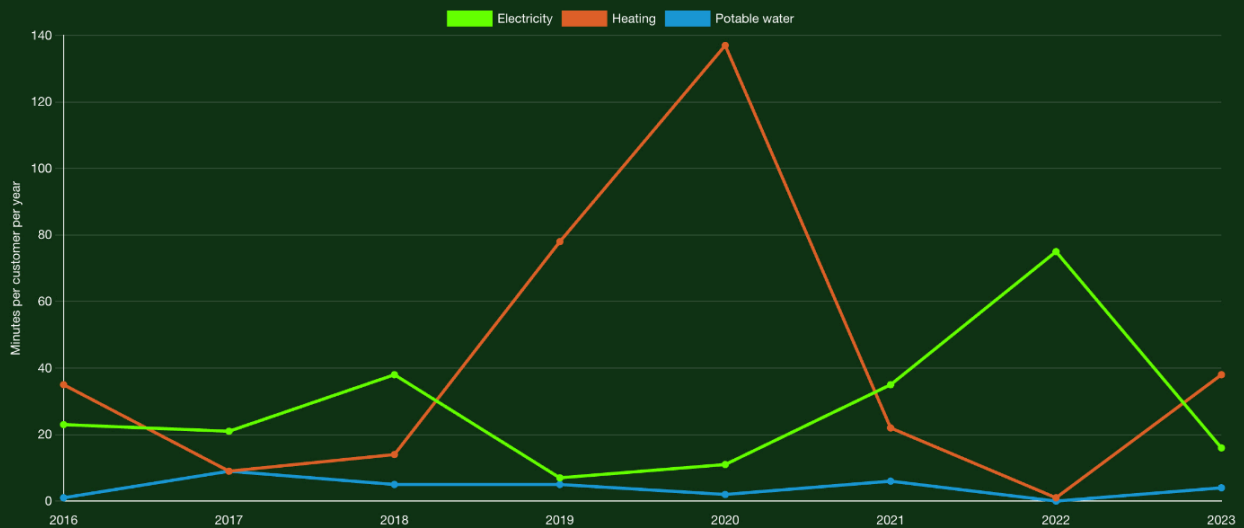
* RFN's measurements of customer satisfaction were changed in 2019. Since then, in-house calls are made to approximately 100 customers every week, inquiring about services and contentment.

ON Power tops Icelandic Customer Satisfaction fifth year running

For the fifth consecutive year, ON Power topped the Icelandic Customer Satisfaction Awards among electric power suppliers. Results were announced in January 2024.



Reliability of the utilities

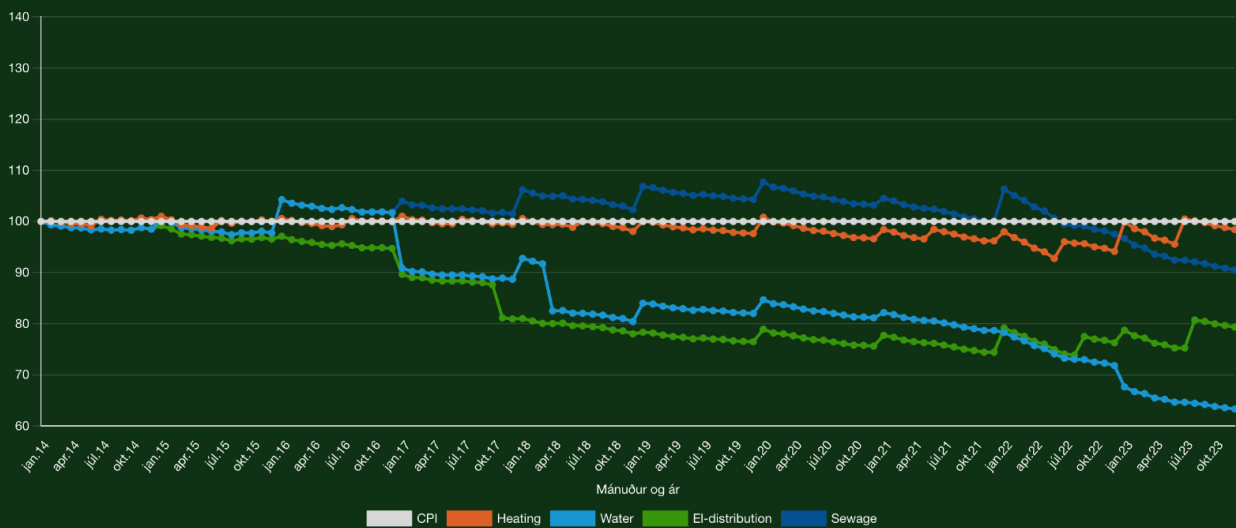


The calculation of delivery reliability is based on a method that has long been in use by electricity utilities. It is based on dividing the total duration of each disruption among the affected customers by all customers of each utility. Veitur adopted this method for district heating in 2015 and for the water supply in 2016. The chart is based solely on unforeseen disruptions when it is not possible to notify customers of the disruption in advance. Thus, service interruptions due to planned maintenance are not included. Due to data gaps, District heating figures for 2022 and 2023 are uncertain. Data transmission via Reykjavík Fibre Network is not licensed in the same way as the more traditional utility operations. However, RFN managers closely monitor the transmission security of individual parts of the data transmission system, its core, and access layers. RFN would probably be the most reliable utility if a similar metric were applied to the other utilities.

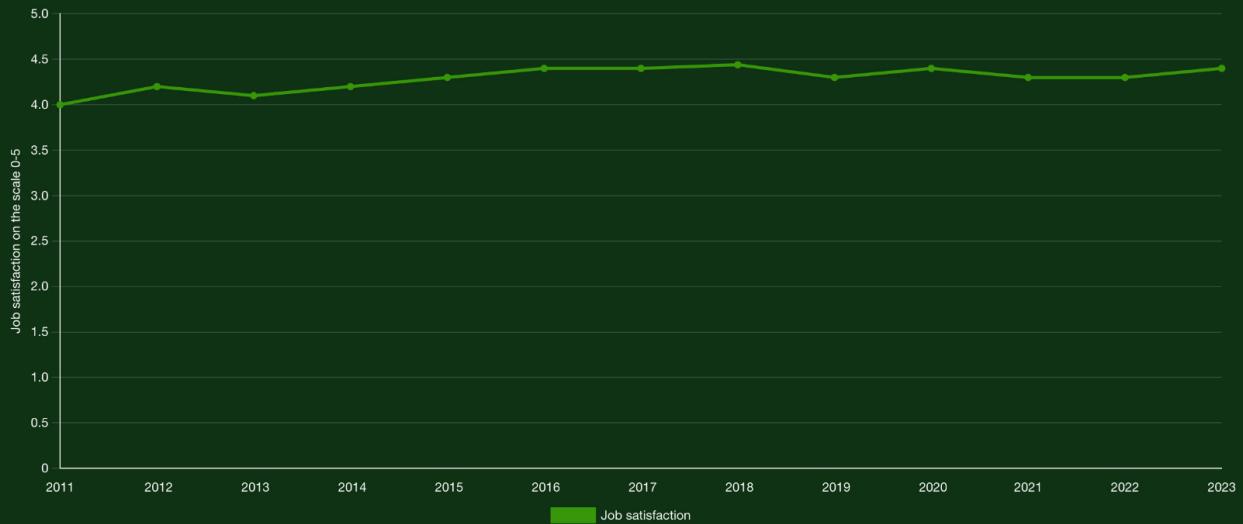
Price of licensed services

Since Reykjavík Energy was legally obliged to unbundle its operations, at the beginning of 2014, all tariffs for licenced services have decreased. The graph below shows how Veitur Utilities' tariffs have developed since the beginning of 2014 compared to the CPI, which is shown as a horizontal line. The real term reduction in water tariffs is 37%, 21% for electricity distribution cost, district heating tariffs have reduced by 2% in real terms, and sewerage tariffs by 9%.

Development of tariffs for licenced services 2014-2023 compared to CPI



Job satisfaction



Job satisfaction among all companies within the RE group is high compared to the Icelandic labour market. Since RE went through significant changes about a decade ago, employee satisfaction, according to regular workplace analyses, have been measured at a level of strength.

Tax footprint

KPMG has compiled Reykjavík Energy's tax footprint for the year 2023. The tax footprint consists of taxes that are charged to RE's operations and the taxes that its subsidiaries collect and pay to the state, municipalities, and pension funds.

In the year 2023, Reykjavík Energy's tax footprint amounted to ISK 10,522 million. KPMG's report is attached here below (IS), in which it is also stated that RE's value creation amounted to ISK 61.7 billion in 2023.

S1 CEO Pay Ratio



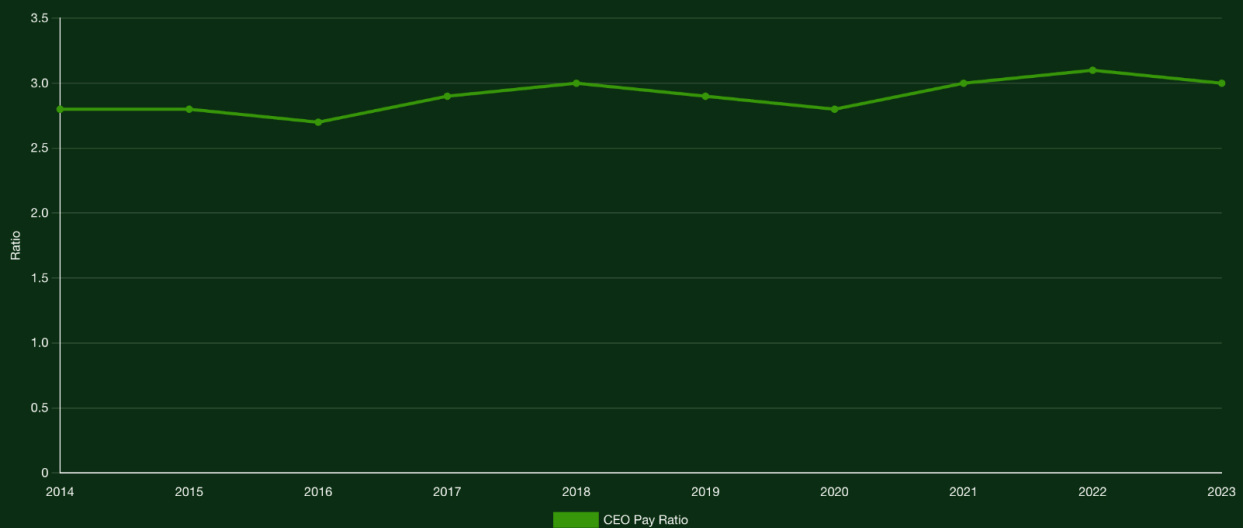
The Board of Directors of Reykjavík Energy appoints the CEO, determines his or her responsibilities and compensation. The Board of Directors takes into account the provisions of the ownership strategy of Reykjavík Energy, which stipulates that the CEO's compensation should be on par with comparable positions, but also mindful of the fact that the company is owned by public entities. The Compensation Committee reviews the CEO's compensation on an annual basis, based on the company's objectives and standards.

In 2023, there was a change in the CEO position when Sævar Freyr Þráinsson succeeded Bjarni Bjarnason.

The CEO's compensation ratio is measured as the CEO's total compensation divided by the median compensation of permanent employees within the group.

The monetary amount of compensation to Boards of Directors within Reykjavík Energy, the CEO of Reykjavík Energy, and Managing Directors of its subsidiaries, is published in the notes to Reykjavík Energy's Consolidated Financial Statements.

CEO Pay Ratio



S2 Gender-based Pay Ratio

Promotes UN's Sustainable Development Goals



Reykjavík Energy places great emphasis on gender equality. The company received the Equal Rights Award from the Equal Rights Council in 2014 and the Motivation Award from the Confederation of Icelandic Enterprise in 2015. Since 2021, it has been certified as a *Universal Fair Pay Leader*.

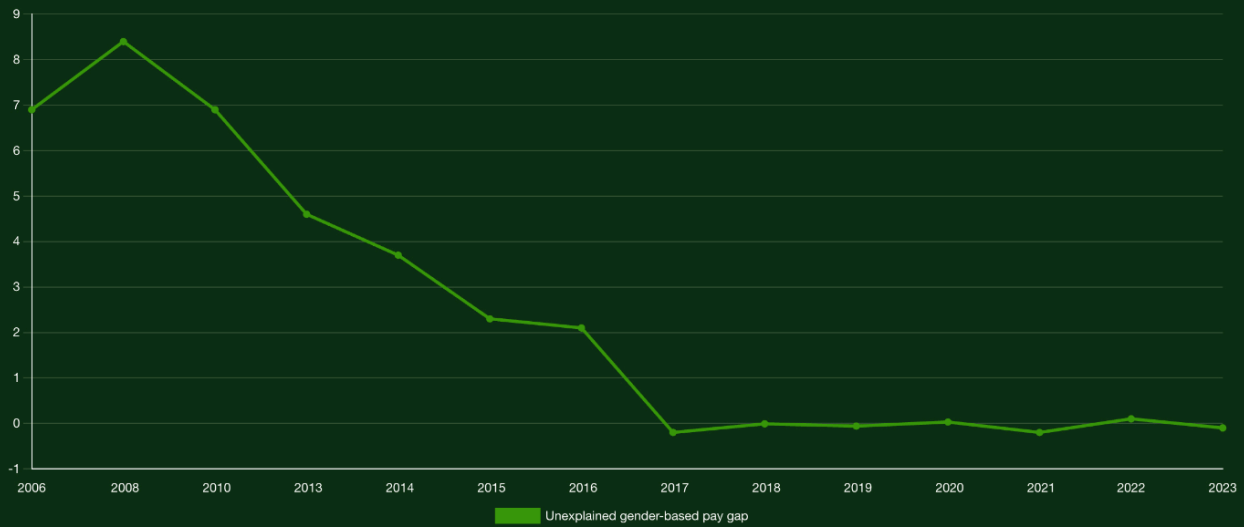


Reykjavík Energy is a member of the United Nations Convention on Gender Equality and, in 2023, earned an award for equality from *Rise and Lead Women*. This award recognised the company's accomplishments in addressing equal pay.

Progress through innovation

In 2017, Reykjavík Energy adopted a new model that analyses the impact of every wage decision on gender-based wage differences. This enabled the company to eliminate the unexplained gender-based pay gap. This milestone was achieved in 2017, and since then, unexplained gender-based wage differences have been statistically insignificant.

Unexplained gender-based pay gap at Reykjavík Energy 2006-2023



In the graph above, the number 0 represents that men and women get the same wages for equally valuable jobs. Numbers higher than 0 depict wage differences in favour of men, and numbers lower than 0 depict wage differences in favour of women.

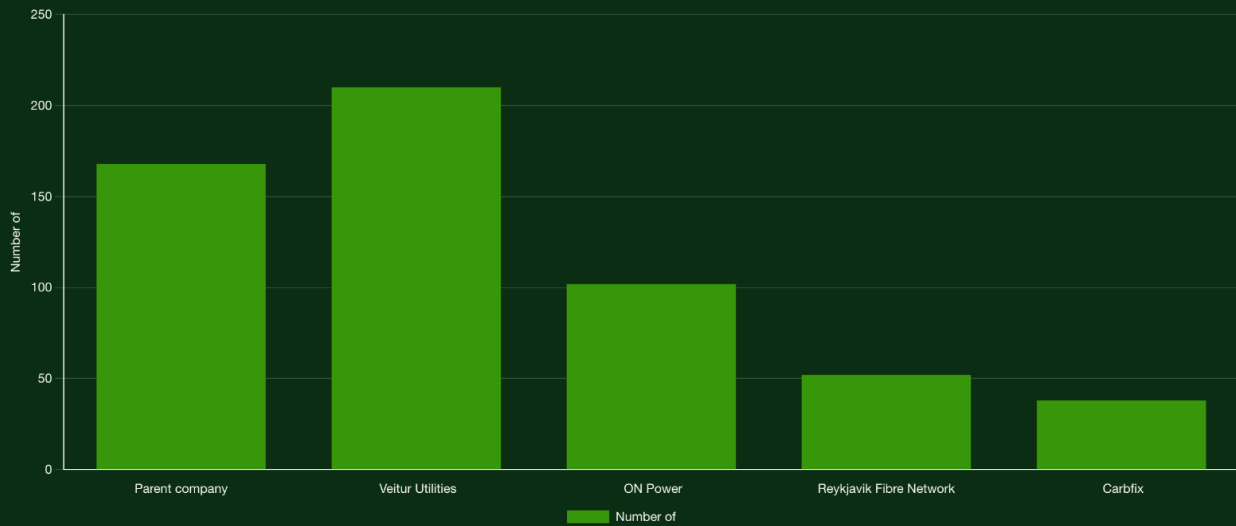
Equal Pay Certificate

Reykjavík Energy's equal pay system received equal pay certification in 2018. That certification means that the system implemented meets the provisions of Act no. 56/2017 on equal pay certification. The system is used to ensure that RE does not discriminate against employees based on their gender.



S3 Employee Turnover

Number of permanent employees at end of 2023



Reykjavík Energy closely monitors staff turnover in the company with regard to, among other things, age and gender. There has been a correlation between the economic situation and staff turnover, so the number of people changing jobs decreases in times of crisis.

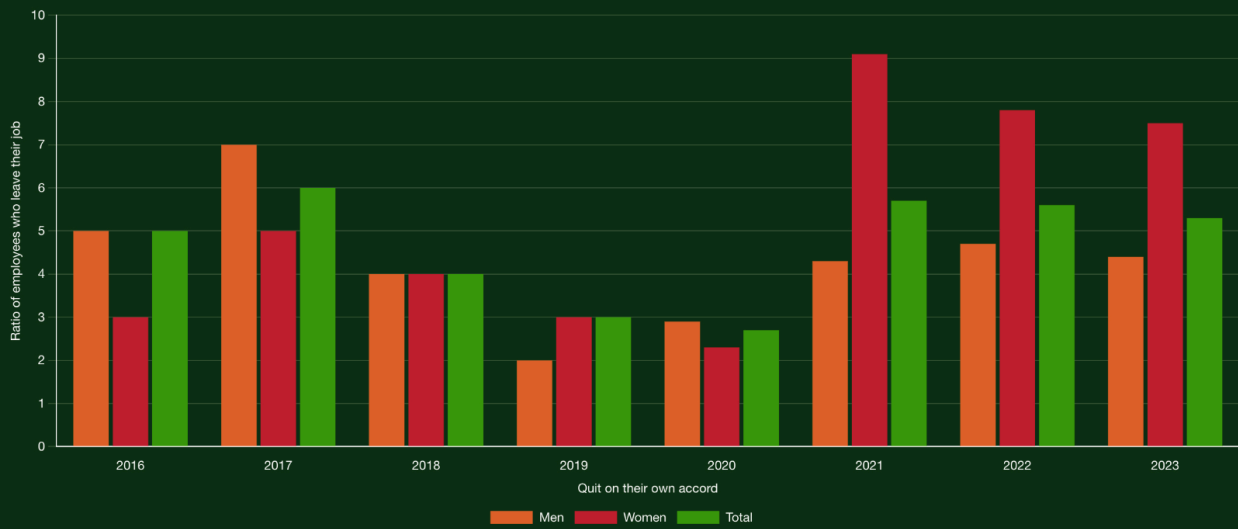
Employee turnover in 2023 increased slightly from the previous year. It decreased among women but increased among men. In the first half of the year, the joint service division of the companies in the group, including the shared service centre, was discontinued, and the individual companies took over the operations. This change resulted in a reduction in the total number of jobs, which affected the employee turnover for the year.

A negligible part of Reykjavík Energy employees are less than 100% employed. Therefore, staff turnover is not explicitly calculated for that group.

Employee turnover, all terminations



Employee turnover, quit on their own accord



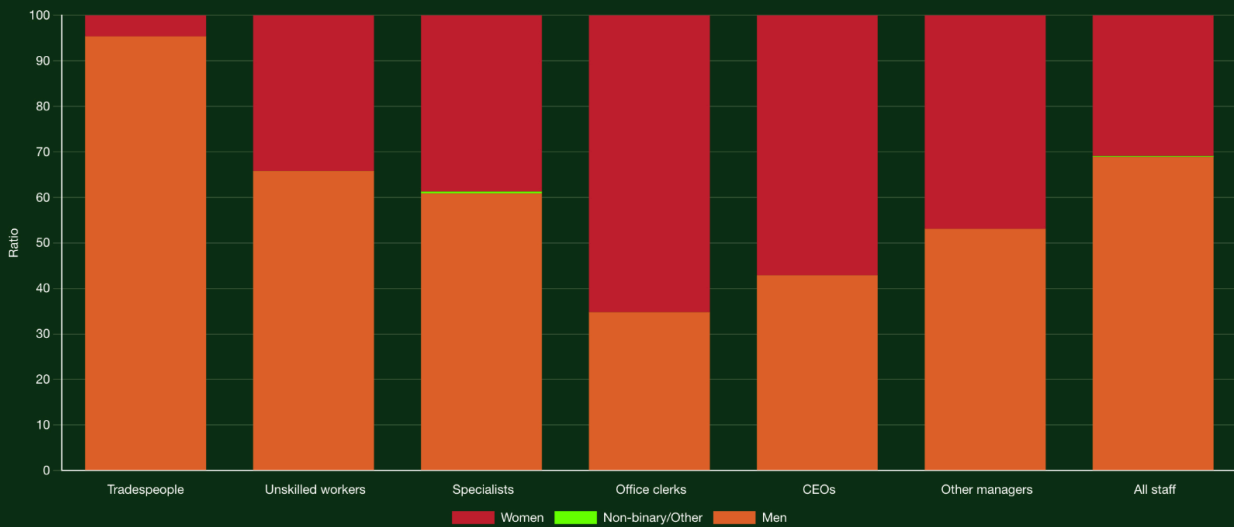
S4 Gender Diversity

Promotes UN's Sustainable Development Goals



Reykjavík Energy has traditionally been a male-dominated workplace, and efforts are being made to increase diversity within job categories. For the second consecutive year, Reykjavík Energy's Annual Report showcases a detailed breakdown of gender representation, categorizing employees as women, men, and non-binary/other. At the management level, gender equality has prevailed since 2015. RE does not have figures on gender distribution among its contractors.

Gender diversity per job category



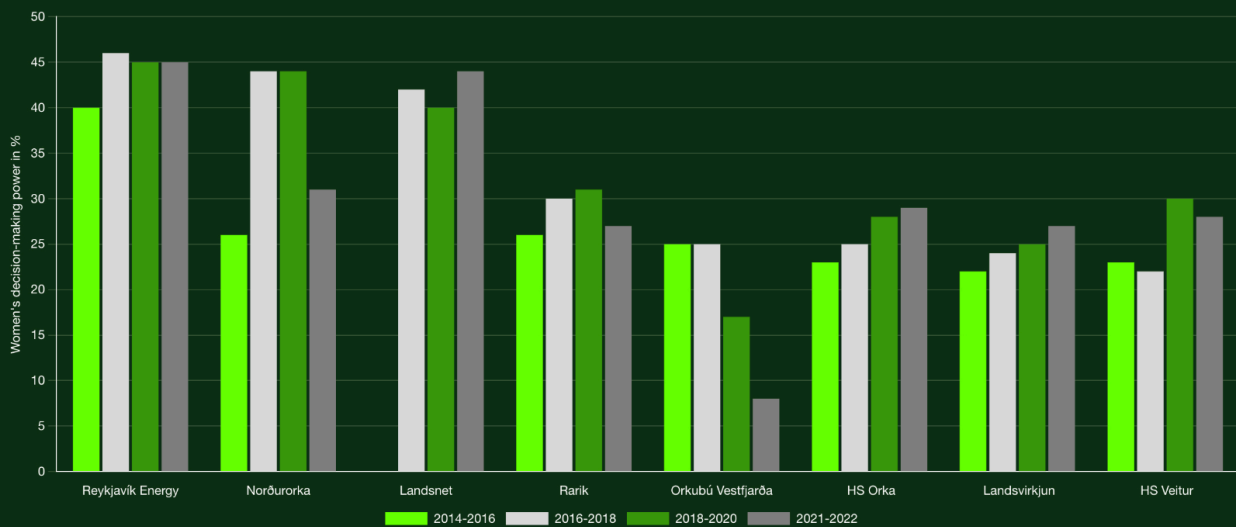
The Equality Scale

All companies within Reykjavík Energy have endorsed the Equality Scale declaration of intent. In 2023, Ljósleiðarinn was added to the list of companies within RE recognized with the Equality Scale award, a recognition by the Association of Business Women in Iceland for those companies that have expressed their commitment to making Iceland a leader in gender equality.

The greatest influence of women on management

According to the fourth report, prepared by Ernst & Young for the association Women in Energy, published in September 2023, the influence of women within the energy sector is greatest at Reykjavík Energy. That has been the result of all four reports by the association. They are published every other year and the next one forthcoming in 2025.

Influence of women with Icelandic energy and utility companies



S5 Temporary Worker Ratio

Promotes UN's Sustainable Development Goals

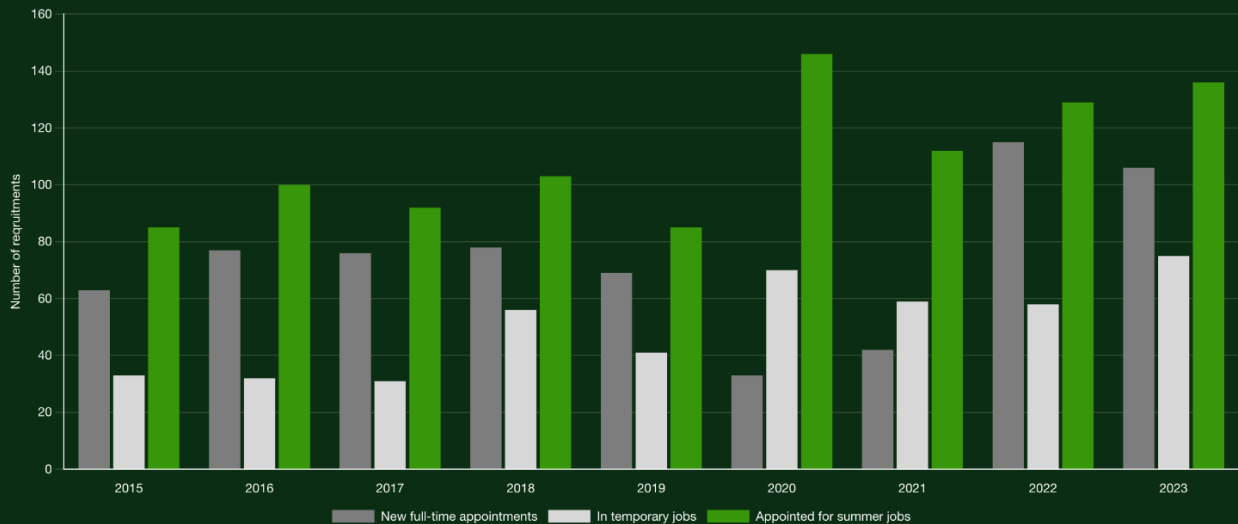


Utility companies have a long-established tradition of hiring young adults for summer jobs beyond the need for temp jobs. This is in part due to the fact that the utilities own extensive infrastructure and sites that require maintenance best done in the summer.

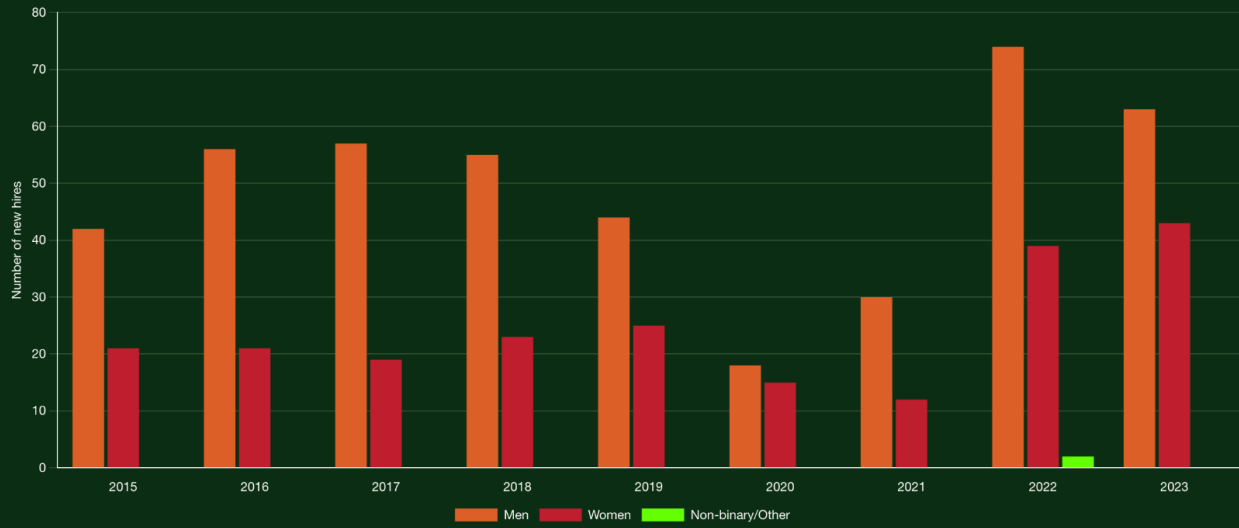
Moreover, Reykjavík Energy believes that employing young adults in summer positions, offers them valuable insights and knowledge about its operations, thereby fostering their interest in pursuing future employment opportunities with the company.

RE and its subsidiaries buy a substantial amount of services from large companies, such as engineering firms and building contractors. Some employees, from both large and small contractors, work for the most part for RE or one of its subsidiaries. That segment of employees has not been defined, and Reykjavík Energy has no numerical data on its composition.

Temporary Worker Ratio



New full-time appointments by gender



S6 Non-Discrimination

Promotes UN's Sustainable Development Goals

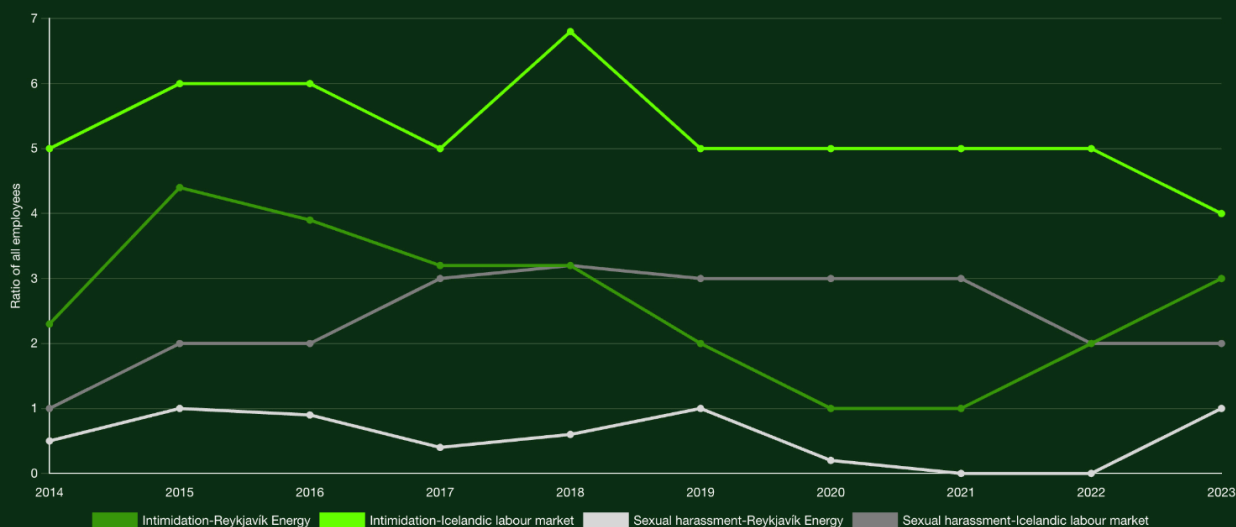


In the annual workplace assessment, employees are asked if they have suffered bullying, sexual harassment, or gender-based violence.

Previously, there was a year-on-year decrease in cases, but now there is an increase between years. The company's policy remains unchanged; such behaviour is not tolerated.

In 2021, the proportion of those who said they had been sexually harassed in the workplace in the last 12 months for the first time dropped to 0. Although the ratio was 0, two respondents said they had experienced such harassment. The same result came for 2022. In 2023, the number of respondents who had experienced such harassment increased by one, from two to three, bringing the percentage to 1%. Participation in the workplace assessment among employees was 94%.

Percentage of staff who say they have been subject to intimidation or sexual harassment



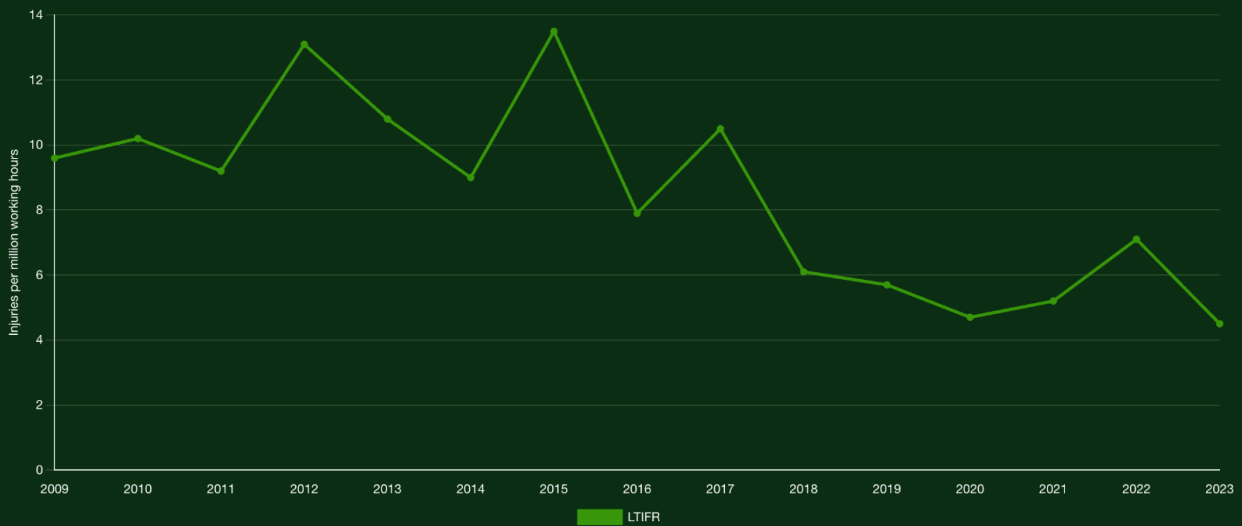
Crafts and technology

In 2023, work also continued on the Idnir - vocational project; Industry and technology with children of all genders from Árbæjarskóli. Young people attend the optional course, which aims to arouse students' interest in industrial and technical jobs and introduce them to the diverse jobs and career opportunities that industrial and technical education offers. The program is varied and based on education, field trips and practical exercises. All companies within Reykjavik Energy participate in the project and the staff in teaching and preparation group is about 40.

S7 Injury Rate

The Lost Time Injury Frequency Rate (LTIFR) is an international measurement unit for the rate of occupational injuries. It is calculated as the number of injuries per million working hours. The term injury is used if a person is absent from work for at least one day. There were five injuries at Reykjavik Energy in 2023, two less than the previous year. Working hours were 1,096,039. The number of working hours is calculated by using working hours at the workplace and recorded working hours during telecommuting.

Absence accidents per million working hours



Reykjavík Energy considers no job so important that the safety of its staff should be compromised during its execution. The company's safety and health policy is reviewed annually by the boards of the companies within the group, aiming for a workplace without accidents.

RE makes clear demands regarding safety in all tenders and requires contractors on construction projects to follow safety rules for contractors. The company has published a Safety Handbook that has been available to RE's staff and contractors for years. Contractors' staff are required to attend an accredited course in safety matters.

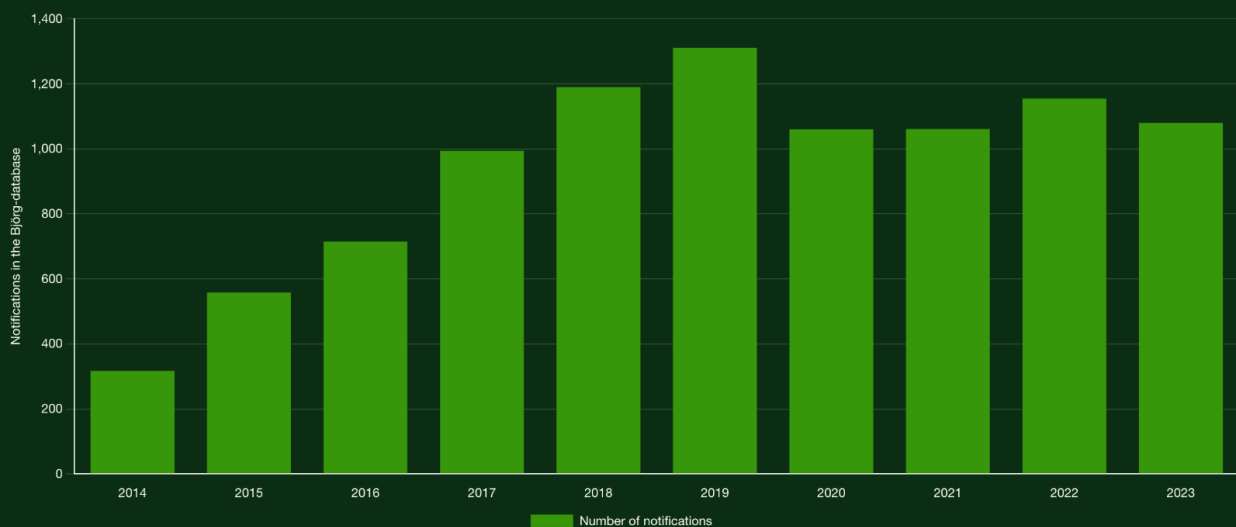
In Reykjavík Energy's suppliers' code of conduct, there is a general requirement that the work environment for staff be healthy, safe, and in compliance with laws, and that the supplier works systematically and continuously on the safety and health matters of their staff.

Björg - A Notification Database

Reykjavík Energy operates a reporting database where staff can log incidents and suggestions for improvement opportunities. These registrations are the foundation of improvement work in safety and health matters. Each report is examined, and it must be confirmed that its resolution is completed. The significant amount of telecommuting by staff during the coronavirus pandemic explains the decrease in recorded hazards faced by staff during work hours.

RE has set a goal that 80% of reports should be closed within a specified deadline. This goal has not been achieved by all companies.

Notifications in the safety and health database



S8 Global Health and Safety

Promotes UN's Sustainable Development Goals



Reykjavík Energy has a policy on safety and health matters that is reviewed annually by the board. This policy extends to the promotion of employee health.

In September 2023, a special safety and health week was held to raise staff awareness on the issue. Lectures were given, and activities such as a photo contest and a quiz competition were organized, among other things.

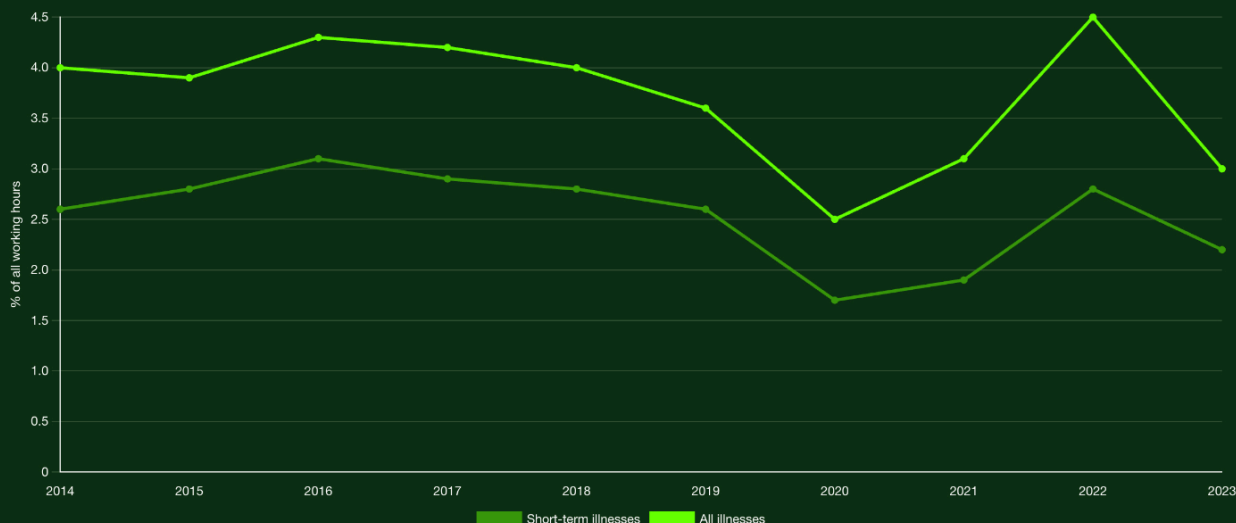


KARITAS – Reykjavík Energy's Center for Well-being

KARITAS, which was launched in late 2022, represents an innovation in employee services towards improved well-being, where the companies within the group offer their staff free access to licensed health and welfare specialists. Employees can book a certain number of hours per year at the company's expense, without the intermediation of a manager or others.

In 2023, the diversity of services offered expanded in line with staff wishes. Employee use of the welfare portal has steadily increased as the year has progressed. The most common service utilized is psychological counseling, followed by massage and physiotherapy.

Staff illness



The absence of staff due to sickness significantly decreased in 2023. In 2022, short-term sickness absence had increased, a year when a severe flu coincided with the widespread presence of the coronavirus in Iceland. There was also a significant reduction in long-term illnesses year-over-year. Long-term illnesses are recorded if they last longer than 30 days, typically stemming from serious diseases, whether mental or physical. It is hoped that the welfare services provided to staff contributed to the reduction in long-term illnesses in 2023.

Safety and Health Committees

Within Reykjavík Energy, there are now five safety and health committees, one within each company in the group. Their roles are to:

- Oversee the safety and health matters of the company
- Work with the Safety and Health team of the group
- Promote the topic, acting as leaders and advocates for progress
- Make decisions to ensure an improved working environment

The CEO and executive directors of the companies in the group are members of their respective company's committee, lending additional importance to their roles.

Access to Fitness Facilities

In Reykjavík Energy's premises at Bæjarháls, there is a gym facility that staff can use free of charge. The building also offers health and fitness classes, such as yoga, strength training, and cross-fit. Staff are allowed to use two hours of their work week to engage in physical fitness activities.

S9 Child and Forced Labour

Promotes UN's
Sustainable Development Goals



Reykjavík Energy endeavours to operate in accordance with Icelandic labour laws, and the company's policy on Environment, Health and Safety (EHS) issues, and its terms of employment go further than the law dictates in these areas. Reykjavík Energy is aware of the risk that contractors, or sub-contractors on their behalf, do not comply with the rules. In response to this, Reykjavík Energy has, among other things, taken the following precautionary measures:

- Required that tender documents include clauses regarding Child's & Forced Labour.
- Imposed provisions that authorise termination of contracts with contractors who break Icelandic labour market regulations.
- Imposed a requirement that invoices for outsourced labour may not include longer work periods than seven hours per day unless licensed to do so by Reykjavík Energy (such a licence has not been issued).
- Imposed a requirement that work contracts, wages, and insurance payments must comply with Icelandic law.

No cases requiring measures to be taken under these provisions arose in 2023.

International certification system against children's or forced labour does not exist. Thus, Reykjavík Energy cannot easily confirm that this does not happen within the value chain, e.g. when procuring products. Should that be proven, provisions that authorise termination of contracts can be found in all tender documents by Reykjavík Energy. Furthermore, suppliers' Code of Conduct, and a recorded violation, can also lead to termination of business with the respective supplier.

S10 Human Rights

Promotes UN's Sustainable Development Goals



Reykjavík Energy's Non-Discrimination Policy addresses human rights according to the aspects specified in the Constitution of Iceland. The company's code of conduct also includes a special chapter dedicated to human rights and equality, with regular education on the subject. In the spring of 2018, RE led workshops with mandatory participation of all staff on the #metoo movement and its significance for the corporate culture of the group. In 2019, workshops were held with staff in preparation for a new Communication Charter for Reykjavík Energy, which was issued in 2020.

A six-part online course on equality and diversity in the workplace is available for staff.

Reykjavík Energy has established procedures to respond if staff or contractors' employees feel they are subjected to inappropriate behavior or communication at the workplace. These procedures clarify the communication channels and the remedies RE offers to those affected. This procedure, which is introduced to the staff, refers to a response plan for bullying, violence, sexual or gender-based harassment. See chapter S6 on Non-Discrimination for results of an annual survey on intimidation and sexual harassment.

Supplier Code of Conduct

In 2021, the company issued a code of conduct for Reykjavík Energy's suppliers, based on the procurement policy and the ten fundamental principles of the Global Compact, which RE is a member of. Concurrently, a procedure was developed for the company's response to reports of deviations.

Requirements corresponding to the code of conduct are found in the terms of all of Reykjavík Energy's tenders, and the company's objective with issuing the code is that the sustainability requirements made in tenders also extend to smaller suppliers.

Reykjavík Energy's suppliers are required to impose corresponding demands on their respective suppliers.

By the end of 2023, 121 suppliers had confirmed their compliance with the code of conduct.

In 2023, 57% of RE's purchases were made without tendering. The corresponding figure was 59% in 2022, 56% in 2021, and 61% in 2020.

Dissemination of Knowledge

Promotes UN's Sustainable Development Goals



In Reykjavík Energy's operations, a wide range of knowledge is generated that can be useful to others. This is due in part to:

- The leadership of ON Power and Veitur Utilities in the utilization of geothermal energy,
- Veitur Utilities being the largest company of its kind in the country,
- Reykjavík Fibre Network having the most extensive fiber optic network in the country, and
- The number of innovation projects carried out within the company, with Carbfix being one of the most prominent.

Orkuveitan sees it as its role to share its experience and knowledge with others who can benefit from it.



Elliðaárdarstöð - Overview of the area under development.

Elliðaárdarstöð

The development of Elliðaárdarstöð, a new destination by the old power plant of Elliðaár, progressed well in 2023. Completion included the construction of a water playground on the site, the opening of *The Home of the Utilities* to school groups and other visitors, the erection of the old steam-powered drilling rig *Dofri*, and the opening of the restaurant *At the Bistro* following Orkuveitan's tender for the facility.

Geothermal Exhibition

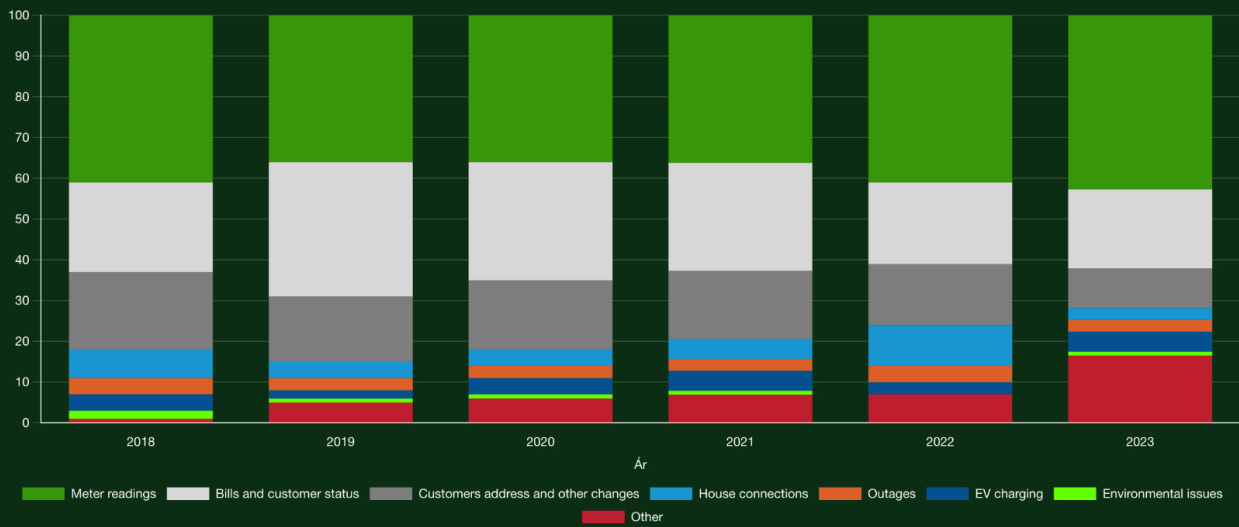
The operation of the Geothermal Exhibition at Hellisheiði Power Station was transferred in 2023 from ON Power, which produces electricity and hot water at the power station, to Reykjavík Energy's parent company. There, the operation is in the same unit as Elliðaárdarstöð. The activities are similar, albeit different, and the experience from operating one educational center is useful for the operations of the other. In 2023, the number of visitors to the Geothermal Exhibition rebounded after the coronavirus years, with the vast majority of visitors being from abroad.

Queries to Service Desk

Early in 2023, a change was made so that customer service representatives in the shared service center of Reykjavík Energy were directly transferred to the subsidiaries, where they are in closer contact with the needs of each of their customers. As in previous years, the majority of inquiries to the service centers were related to meter readings for moves or other reasons. However, such inquiries are expected to decrease as the roll-out of smart meters progresses, as these meters automatically send information about energy consumption.

The total number of registered inquiries to the service centers in 2023 was nearly 240,000, which represents about a doubling from the previous year. A caveat must be made when comparing between years due to the aforementioned changes. Similarly, the companies have developed their own classification of inquiries, so comparisons between years are also made with a caveat.

Queries to service desk



Gentle debt collection yields results

Improvements in the collection of trade receivables have resulted in a significant reduction in disconnections due to arrears. The focus is on assisting people who fall into arrears to get out of them. The range of solutions available to service representatives for resolving issues has been expanded, and the entire collection process has been refined. This has contributed to a decrease in arrears and a reduction in disconnections due to arrears.

However, a third of all disconnections in 2022 and a fifth in 2023 were due to a change in procedure regarding supplier changes. Electric utilities are now required to use disconnections to press customers to choose an electricity supplier. This number is not included in the figures in the graph below, and the total number of disconnections for 2022 has been adjusted accordingly. In the 2022 Annual Report, these disconnections were included with the arrears disconnections.

Closures due to arrears 2006-2023





Governance

Reykjavík Energy's corporate governance strategy ensures professionalism, efficiency, cost-effectiveness, transparency, and responsible management. The principal operations of Reykjavík Energy are governed by Act no.136/2013. In 2014, its owners renewed the Partnership Agreement on operations, which was renewed by the company's owners, as well as revised the ownership strategy, dictating its corporate governance. The drafting of these documents, which apply to all the subsidiaries and provide rules of procedure for all the boards, was done in accordance with account guidelines, as established by the Chamber of Commerce in collaboration with the Confederation of Icelandic Enterprise (SA) and Nasdaq.

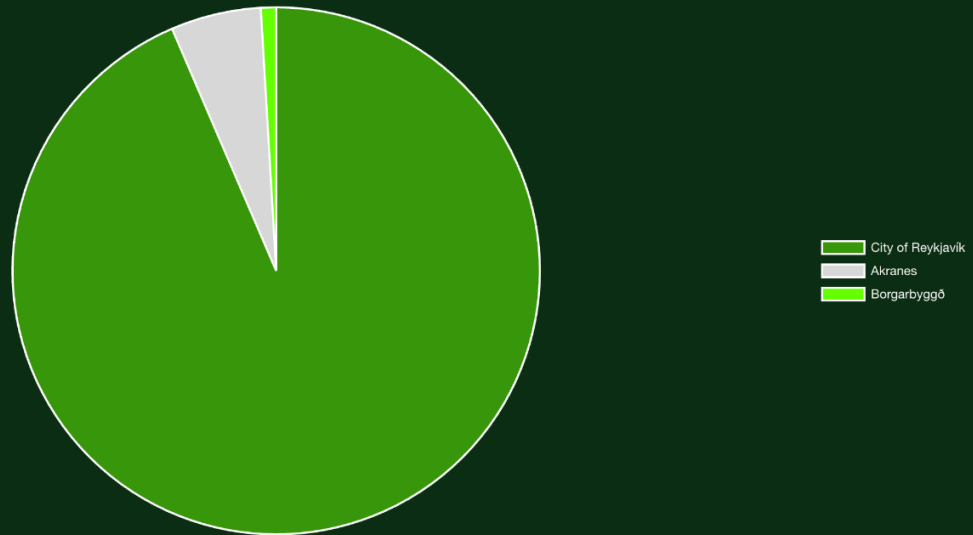
Reykjavík Energy's corporate governance strategy is considered to be in compliance with these guidelines.

In 2022, the City of Reykjavík, the largest owner of Reykjavík Energy, adopted a general ownership strategy that considers the OECD's guidelines for the governance of publicly owned entities.

The City of Reykjavík is leading the implementation of its policy regarding Reykjavík Energy. Several management changes occurred during this period.

In relation to the preparation for the capital increase of Ljósleiðarinn, which had been underway for several months, in 2023, the boards of Ljósleiðarinn and Reykjavík Energy requested an examination by the Internal Audit. This examination focused on handling confidential information presented to Reykjavík Energy's board and aligning Ljósleiðarinn's operations with Reykjavík Energy's ownership policy. The internal auditor's report, complete with observations and recommendations, was submitted to the boards in December 2023. By then, some of the issues identified in the report had already been rectified, and further actions were announced to address the remaining recommendations.

Ownership of Reykjavík Energy



The basic structure of Reykjavík Energy



Orkuveitan

Veitur Utilities operates electric, heating, potable water, and sewerage utilities; mainly exclusively licenced operations. ON Power generates electricity and heat in power plants, and sells electricity in a competitive market. Reykjavík Fibre Network operates a fibre optic telecommunications network, serving homes and businesses. Carbfix is a start-up company, established to expand its carbon dioxide mineralisation technology. The parent company – Reykjavík Energy – is a serving parent company, supporting the subsidiaries with various central services.

G1 Board Diversity

Promotes UN's Sustainable Development Goals

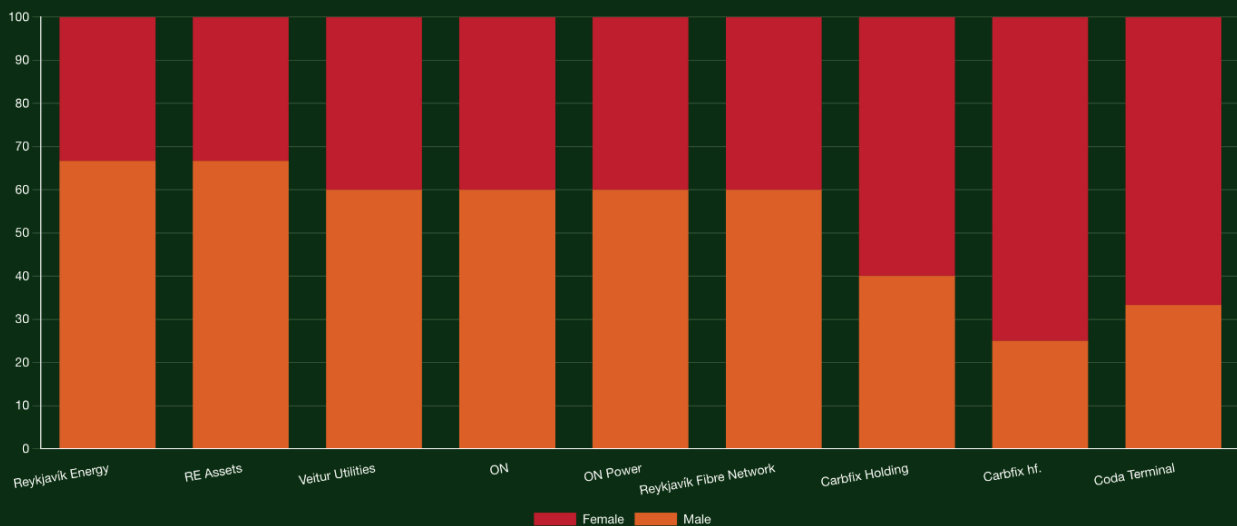


Reykjavík Energy comprises nine companies, each governed by a Board of Directors. Reykjavík Energy's Board members are required, among other things, to possess the knowledge, skills, and experience necessary for performing their duties. Members of the Boards of Directors of the company's subsidiaries are also expected to fulfil equivalent requirements.

Reykjavík Energy's Board commissions two committees: the Compensation Committee and the Audit Committee. The Compensation Committee's chairperson is female. The Audit Committee is joint with Reykjavík City, and the Board of Reykjavík Energy appoints a female representative for the committee.

There are a total of 44 seats on various boards of the group. The Boards of Reykjavík Energy and Reykjavík Energy Assets (Eignir), ON and ON Power, are appointed the same representatives. Appointed for these 44 seats are 21 women and 23 men. Women act as Chairpersons in seven of nine boards: the Board of Veitur Utilities, ON, and thereby ON Power, Carbfix, Carbfix Holding and Coda Terminal and the chairperson of Reykjavík Fibre Network is female. Two observers are appointed to the Board of Reykjavík Energy, both are female.

Gender diversity on boards of directors within Reykjavík Energy



G2 Board Independence

In 2022, the City of Reykjavík introduced a new arrangement to elect Reykjavík Energy's board of directors, where special attention is paid to choosing a certain percentage of independent representatives. This documented a practice that has been followed since 2010 regarding selecting representatives on Reykjavík Energy's board by the City of Reykjavík.

The board of Reykjavík Energy consists of six members. Five, including the chairman and deputy chairman, are elected by the Reykjavík city council and one by the Akraness municipal council. The municipal council of Borgarbyggð appoints an observer member to the board and another to the association of Reykjavík Energy employees.

The chairman of the board of Reykjavík Energy may not take on other duties for the company.

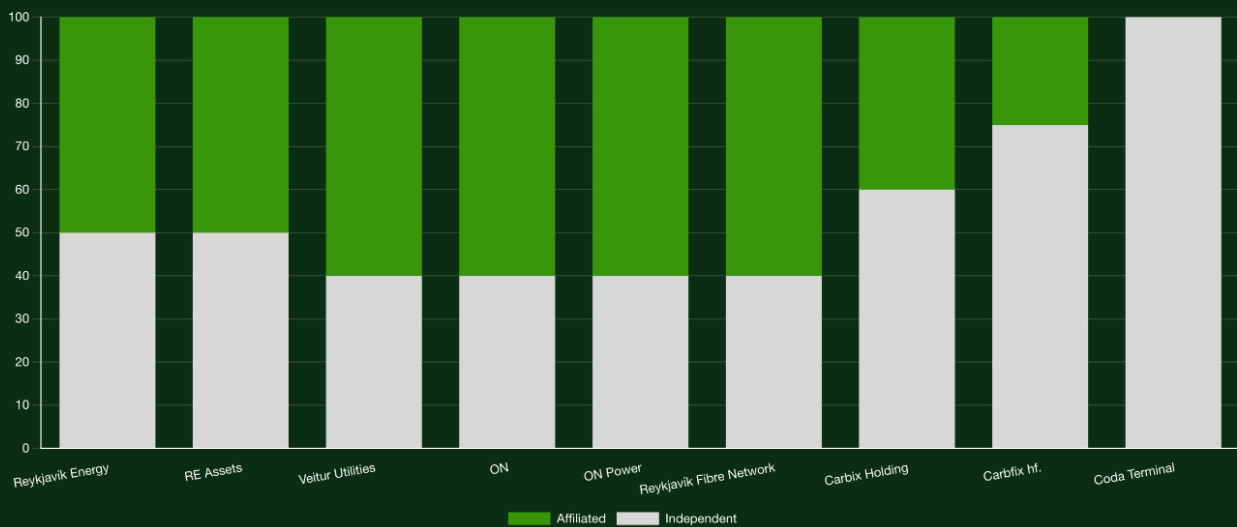
The board appoints the company's CEO, drafts his job description and completes his retirement. The CEO handles all day-to-day operations of the company and manages holdings in Reykjavík Energy's subsidiaries. The CEO of Reykjavík Energy may not be on the board of Reykjavík Energy, and board members of Reykjavík Energy may not sit on the board of a subsidiary company.

The division of duties between the CEO and the board is stipulated in the board's rules of procedure and the CEO's job description, but the CEO does not sit on board committees.

The CEO of Reykjavík Energy does not sit on the boards of subsidiaries, but in them, three representatives must be employees of Reykjavík Energy, of which at least one of Reykjavík Energy's management team. All boards of Reykjavík Energy's subsidiaries comprise five members, three from the Reykjavík Energy group's staff and two external experts in the relevant company's field of work.

Here it is understood that people who sit on the local councils of the owner municipalities are not independent, and the same applies to the group's staff who sit on the boards of subsidiaries.

Board members independent of the company or its owners





Reykjavík Energy's Board of directors in January 2023, from left: Skúli Helgason, Valgarður Lyngdal Jónsson, Þórður Gunnarsson, Ragnhildur Alda Vilhjálmssdóttir, Gylfi Magnússon, Vala Valtýsdóttir, Guðveig Lind Eyglóardóttir.

In January 2023, these sat on Reykjavík Energy's Board of Directors:

- Dr. Gylfi Magnússon, chairman, professor of economics and finances at the University of Iceland.
- Vala Valtýsdóttir, vice-chair and chair of compensation committee, lawyer and specialist in corporate law.
- Ragnhildur Alda Vilhjálmssdóttir, city councillor from Reykjavík, BS in psychology and a master's degree in service management.
- Skúli Helgason, a city councillor from Reykjavík and political scientist.
- Valgarður Lyngdal Jónsson, municipal councillor from Akranes and secondary school teacher.
- Þórður Gunnarsson, resource economist.

Borgarbyggð Municipality and Reykjavík Energy's Employee Organisation have observers at board meetings. These are:

- Guðveig Lind Eyglóardóttir, municipal councillor from Borgarbyggð.
- Unnur Líndal Karlsdóttir, chairwoman of Reykjavík Energy's Employee Organisation.

The Board of Directors of Reykjavík Energy emphasizes transparency. The minutes from Board meetings and meeting documents, which are not confidential, can be accessed by the public on Reykjavík Energy's website. The minutes from Board meetings contain a record of all the decisions made by the Board, and Board members have the right to have their positions on specific issues briefly noted in the minutes.

G3 Incentivized Pay

Promotes UN's Sustainable Development Goals



Employment agreements between Reykjavík Energy and management or employees do not include provisions for a direct correlation between salaries and specific yardsticks in operations, financial or otherwise. Reykjavík Energy believes that such arrangements could possibly favour short-term objectives while jeopardising long-term ones, but the company's beacon is always on long-term objectives.

The ownership strategy of Reykjavík Energy stipulates that management compensation should be on par with other comparable businesses, but consider that the company is in public ownership. The compensation of management and other employees at Reykjavík Energy should be competitive, not leading.

Compensation for Board members, the CEO, and other top executives, is specified in Reykjavík Energy Consolidated Financial Statements.

G4 Collective Bargaining

Promotes UN's Sustainable Development Goals

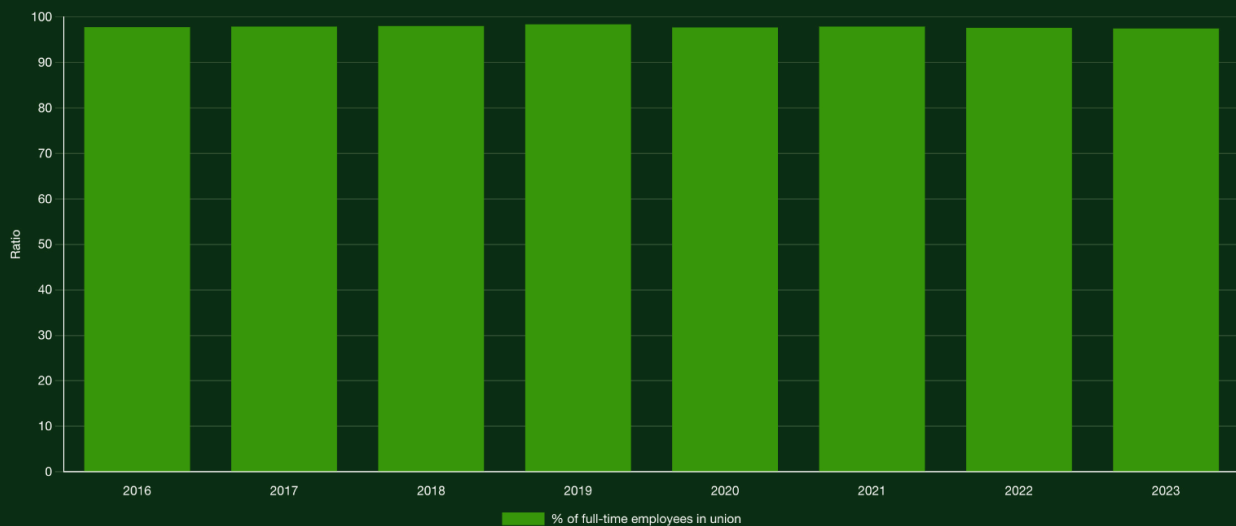


Reykjavík Energy is a member of the SA Confederation of Icelandic Enterprise through its membership of Samorka, the Federation of Energy and Utility Companies in Iceland. Reykjavík Energy negotiates directly with labour unions in collaboration with SA and has a continuous dialogue with them. According to labour market regulations, employees are members of a labour union of their choice or can opt not to join a union.

The company makes individual employment contracts with all its full-time employees based on collective wage agreements with unions. The contracts specify salaries, among other things.

Reykjavík Energy is a comprehensive buyer of products and services from numerous companies of various sizes.

Union membership



G5 Supplier Code of Conduct

Promotes UN's Sustainable Development Goals



Reykjavík Energy's policy is to:

- Utilize open bidding processes for the acquisition of goods, services, and construction projects, ensuring that sustainability considerations are accounted for and that the most favourable bid is selected. If this is not possible, alternative procurement strategies should be employed, adhering to the relevant laws and regulations.
- Maintain procurement rules and methodologies that are both clear and transparent.
- Uphold principles of equality, transparency, and cost-effectiveness in all procurement activities.
- Incorporate sustainability considerations, including aspects related to quality, health, human rights, environment, information security, and safety, into the procurement process and during the management of contracts.

Supplier Code of Conduct

Further emphasis was placed on the sustainability goals of this policy in 2020, and in 2021, the company issued a code of conduct for suppliers based on the procurement policy and the United Nations Global Compact's ten basic principles, which Reykjavík Energy adheres to. Concurrently, a work procedure was established concerning reactions in case of noncompliance information.

Reykjavík Energy's calls for tenders contain requirements that are at least equivalent to the Code of Conduct for Suppliers. The company's goal in issuing these ethical guidelines is to ensure that the sustainability criteria specified in tenders are applied to both large and small suppliers.

At the end of 2023, 121 suppliers had confirmed their abidance to the Code. Additionally, a direct reference to the Code is now a part of all tendering by Reykjavík Energy.

In 2023, 57% of all the company's purchases followed tendering. That portion was 59% in 2022, 56% in 2021, and 61% in 2020.

WE SUPPORT



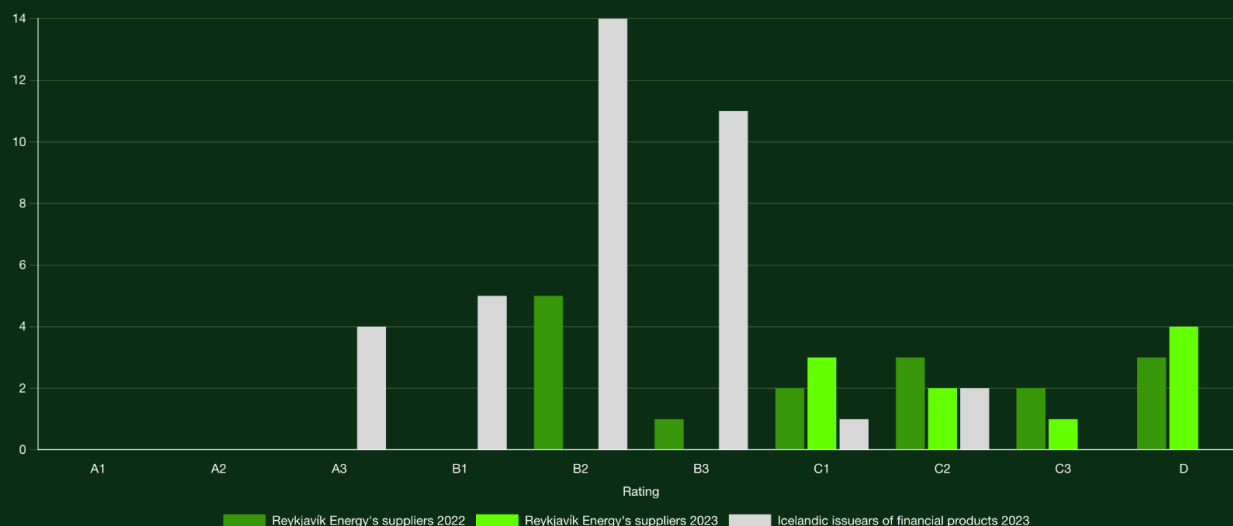
Sustainability assessment of Reykjavík Energy's suppliers

Along with Reitun's sustainability assessment of Reykjavík Energy 2022 and 2023, the company asked Reitun to evaluate the status of the company's suppliers based on the company's evaluation model. The sample of the suppliers was chosen both with regard to the volume of business and the variety of products and services purchased from them. The aim of the assessment was to obtain a measurement of how suppliers stand up to sustainability measurements.

As the graph below shows, the spread of performance is considerable. In general, larger suppliers, most of which were assessed in 2022, outperformed smaller ones. A small number of contracting companies came out worst in the assessment.

In 2023, a meeting with suppliers was convened to discuss the comprehensive outcomes of the evaluation and outline Reykjavík Energy's expectations. During this meeting, suppliers and their associated manufacturers indicated that considerable efforts were being devoted to sustainability, focusing on climate change initiatives.

Spread of ratings in Reitun's 2022 and 2023 sustainability assessment



Carbon footprint of purchased goods and services

When evaluating offers, Reykjavík Energy takes into account more factors than price, and in accordance with Orkuveitan's work on climate issues, special emphasis is placed on calling for the carbon footprint of the purchased product or service. This work is discussed in more detail in chapter E1 [Greenhouse Gas Emissions](#).

Joint liability

Reykjavík Energy has established joint liability in its work contracts to protect the rights of contractors' employees and subcontractors. Contractors are evaluated based on their performance on safety and environmental issues, as well as the quality of their work and reporting. If a contractor's performance is deemed unsatisfactory in the evaluation, business with them is halted, at least temporarily.

In 2023, no offer was rejected due to suspicion of an abusive change of social security number.

G6 Ethics & Anti-Corruption

Promotes UN's Sustainable Development Goals



The Code of Conduct of Reykjavík Energy is founded on integrity, which is one of the company's values. The Code of Conduct is registered and public and should help employees be governed by integrity, respect, and non-discrimination, with regard to customers, colleagues, management, contractors, or other stakeholders. This list is not exhaustive and does not exonerate employees from the responsibility of following their own conscience when ethical issues arise.

In 2020, Reykjavík Energy issued a Communication Charter for its staff.

The management of Reykjavík Energy established the Code of Conduct in 2000. The Code was assessed, reviewed and approved by the Board of Directors of Reykjavík Energy in 2017. The Board regularly reviews the Code, the last time in March 2022. It forms part of the Board's Rules of Procedure. The Code of Conduct is presented to new employees, accessible to all staff, and is primarily referred to in employment contracts, which are signed by employees. At least one-half of the company's employees have signed the code through their contracts.

If an employee thinks that the Code of Conduct has been breached, or is confronted with an ethical issue, he/she can approach a supervisor, or a colleague he/she trusts. If an employee thinks there has been a violation of the Code, such as bullying or harassment, he/she can also directly approach an external counsellor, and the established procedure will then take over, anonymously, if requested.

At Reykjavík Energy, procedures are registered for complaints processing, if an employee or executive allegedly violated company rules or committed fraud at work. The rules of procedure are accessible to all employees. Suspected violations should be made known to the next supervisor, or internal auditor of the company, who has the responsibility to report the subject matter. The information is treated as confidential to protect the anonymity of the informer. The internal auditor reports directly to the board, ensuring independence from both the management team and the employees of the companies within the group.

There were no instances in 2023 where suspicion arose regarding possible fraud.

The management of Reykjavík Energy, Managing Directors, and Managers are responsible for the internal supervision of their specific divisions. Quality Control is responsible for ensuring that Reykjavík Energy's internal monitoring system is effective. Reykjavík Energy's quality control system is independently certified by external entities. Reykjavík Energy complies with the standards of the Institute of Internal Auditors when conducting internal audits. The Internal Audit Division of the City Council of Reykjavík acts as internal auditors of Reykjavík Energy. Within the company, compliance officers supervise the disclosure of information to the Iceland Stock Exchange (ICEX), and the Financial Supervisory Authority.

G7 Data Privacy

In the autumn of 2023, Reykjavík Energy notified the Icelandic Data Protection Authority (DPA) about a security breach in its web system, resulting in unauthorised access to the energy bills of about 5,000 Veitur Utilities customers. Most of the incidents occurred over three days in March 2021, during which the same individual systematically accessed other customers' bills.

RE's response also included immediately shutting down the service and alerting the service provider of the web solution, Origo, given the seriousness with which the matter was regarded.

The case was also reported to the police. Early in 2024, RE received information that the case had been referred to the police's prosecution department.

Furthermore, a mistake was made in sending a statement to a customer that included sensitive personal information about other customers' transactions in the dispatch. Upon realising the mistake, contact was made with the recipient to prevent further distribution. The DPA was also notified, and the case is currently being processed there. Procedures were changed subsequently.

Since the new data protection laws came into effect in 2018, no ruling in a data protection case has been unfavourable to the companies within the RE group, although a complaint from 2020 is still being processed by the DPA.

In 2021, Veitur Utilities sought the opinion of the DPA following a request from Statistics Iceland for customer data for use in the National Census. The data was handed over following the DPA's conclusion.

Due to the ongoing roll-out of smart metering by Veitur Utilities, representatives of the company held a presentation on their plans in 2022 for the staff at the DPA.

G8 ESG Reporting

Promotes UN's
Sustainable Development Goals



In this integrated Annual Report for the OR Group, an account is given of the status and development of the sustainability factors that can be found in the ESG Reporting Guidelines of Nasdaq and the Chamber of Commerce, as well as factors that OR also considers important. OR therefore considers each year's Annual Report as the company's sustainability report.

This report is published alongside Reykjavík Energy's Consolidated Annual Financial Statements. On the websites of the companies within the group, you can also find various information on environmental, financial and staff issues, which are updated more frequently than annually.

In addition to the Annual Report, RE submits a variety of data to public regulators in accordance with the operating licenses held by the companies in the group. There is the most extensive data on resource utilisation for each year. By participating in various collaborations, RE also delivers public reports on various sustainability aspects of its operations. These include:

- Reports on climate issues relating to Science Based Targets initiative.
- Impact Reports in connection with the issuance of green bonds
- Reports to the Climate Disclosure Project
- Interim reports on the Group's UN's SDGs, listed on sdgs.un.org/goals
- Reports to Global Compact

ESG risk assessment

Two rating companies evaluate the performance of Reykjavík Energy's ESG risks. Such an assessment is part of Moody's credit rating, and Icelandic investors have obtained the rating company Reitun to make such an assessment of the group's performance.

Reitun's result in 2023 was that "Reykjavík Energy excels in the ESG evaluation by Reitun, just as in previous years."

G9 Disclosure Practices

This Reykjavik Energy's sustainability report is prepared in accordance with guidelines from Nasdaq in Iceland and the Nordic Countries, published in March 2017, and updated in May 2019. These instructions are based on recommendations from the United Nations, the Sustainable Stock Exchange Initiative, and a steering group at the World Federation of Exchanges. In addition, a reference to the United Nations' Sustainable Development Goals (SDG's), and changes in directives regarding annual financial statements, No. 3/2006, with later amendments.

The Board of Directors of Reykjavik Energy has decided to place emphasis on six of the UN Sustainable Development Goals. The presentation of the SDG's in this report is based on their highlights. The goals are:

- #5 Gender Equality.
- #6 Clean Water and Sanitation.
- #7 Sustainable Energy.
- #12 Responsible Consumption and Production.
- #13 Climate Action.
- #15 Life on Land.

The main authors of Reykjavik Energy's Annual Report of 2023 are:

Eiríkur Hjálmarsson Head of Sustainability, Hólmfríður Sigurðardóttir Head of Environmental Affairs, Þorsteinn Ari Þorgeirsson geoscientist, Snorri Jökull Egilsson and Emma Soffía Elkjær Emilsdóttir, specialists in environmental and climate affairs, Ása Björk Jónsdóttir analysis specialist, Lilja Björk Hauksdóttir communications specialist and Magnús Þór Brink Róbertsson, financial specialist.

Web design: Overcast

G10 External Audit



This Annual Report is certified by RE's BoD.

The social and governance components in this Annual Report were audited by Versa vottun, per attached certificate, signed by Gná Guðjónsdóttir.

The environmental components in this Annual Report were audited by VSÓ Consulting, per attached certificate, signed by Guðjón Jónsson.

Grant Thornton are external auditors of Reykjavik Energy Group.



Finances

Efficiency is one of Reykjavík Energy's core values and one that is particularly applicable to the company's finances. Efforts are directed towards financial goals that promote RE and its subsidiaries to:

- maintain a robust financial standing,
- operate with acceptable risk,
- offer services at a fair price,
- and be able to distribute dividends to its owners.

Reykjavík Energy, wholly owned by municipalities, views that the company's financial strength generally supports the United Nations' Sustainable Development Goal number 11 concerning sustainable cities and communities.

EU Taxonomy Regulation

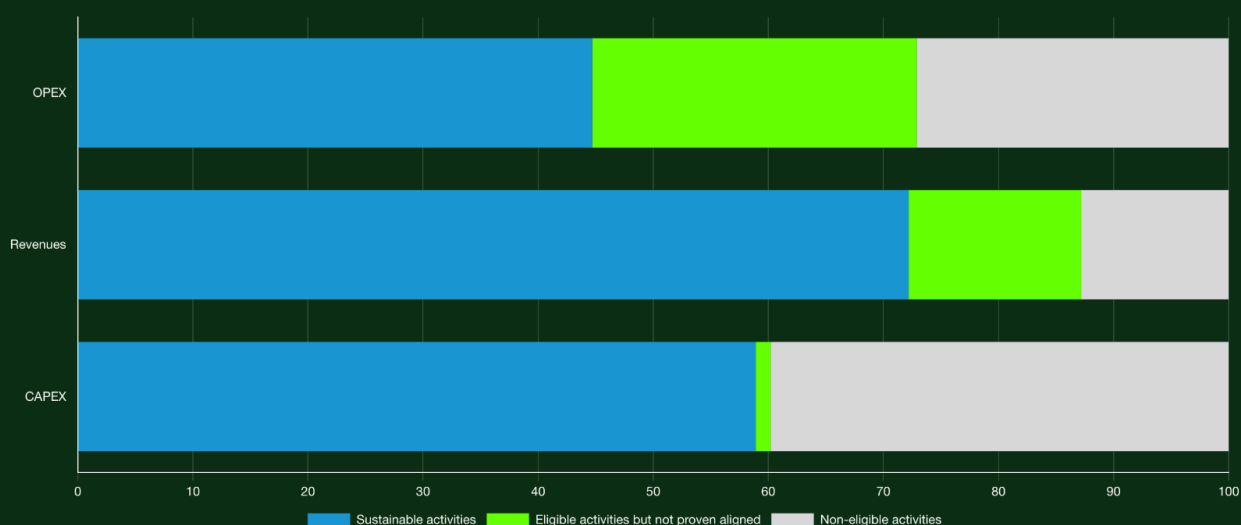
For the first time, RE is disclosing financial information in accordance with the EU Taxonomy Regulation, which became effective in this country on June 1, 2023, under law number 25/2023. The regulation aims to assess, with unified environmental and climate benchmarks, which activities are considered sustainable. To meet these benchmarks, the activity in question must be considered a significant contribution to one of the following environmental objectives without causing significant harm to the other objectives:

- Climate change mitigation
- Climate change adaptation
- Sustainable use and protection of water and marine resources
- Pollution prevention and control
- Transition to a circular economy
- Protection and restoration of biodiversity and ecosystems

In this initial application of the taxonomy, RE's activities are only assessed based on the climate change mitigation benchmark. If the activity, such as energy production from renewable sources, was assessed to potentially harm other objectives, it was evaluated accordingly. In the next implementation phase by the RE, activities will also be baseline assessed against other environmental criteria.

From the specified activities in the taxonomy regulation, ten operational elements practiced within the Utility Company conglomerate were identified as classification eligible. The figure below provides an overview of the proportion of investments, expenses, and revenues of the RE group concerning whether it aligns with the taxonomy regulation, is eligible but is not proven to meet its assessment criteria (eligible but not aligned), or falls outside the taxonomy regulation's activity categories, is non-eligible.

Classification of RE activities according to EU Taxonomy



Tax Footprint

KPMG has compiled Reykjavík Energy's tax footprint for the year 2023. The tax footprint consists of taxes that are charged to RE's operations and the taxes that its subsidiaries collect and pay to the state, municipalities, and pension funds.

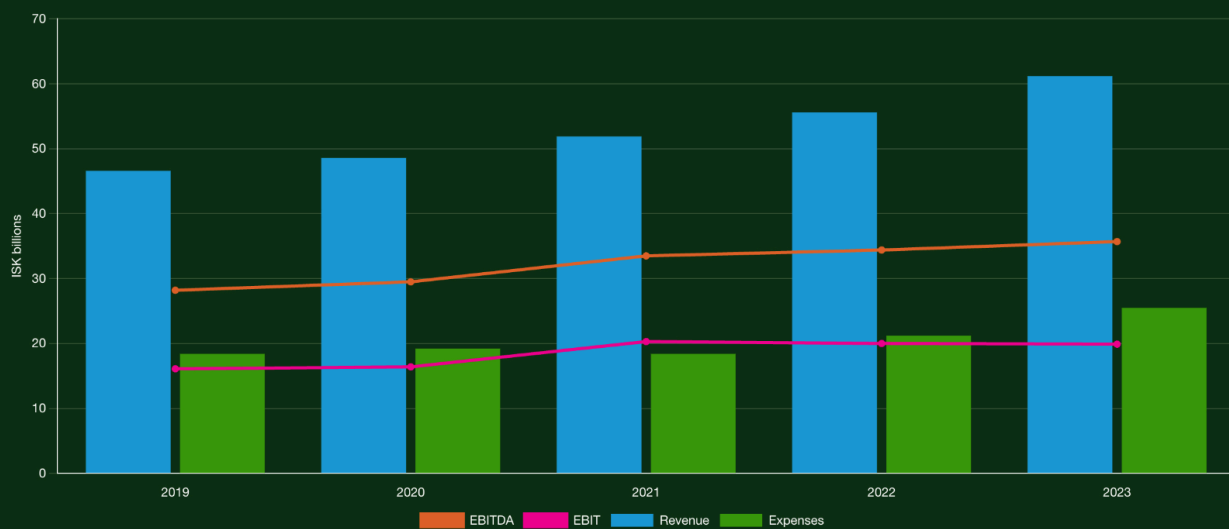
In the year 2023, Reykjavík Energy's tax footprint amounted to ISK 10,522 million. KPMG's report is attached here below (IS), in which it is also stated that RE's value creation amounted to ISK 61.7 billion in 2023.

Revenue, Expenses, EBITDA and EBIT

Stability characterises the main metrics in Reykjavík Energy's finances over the past few years.

EBITDA stands for earnings before interest, taxes, depreciation and amortisation. EBIT stands for earnings before interest and taxes.

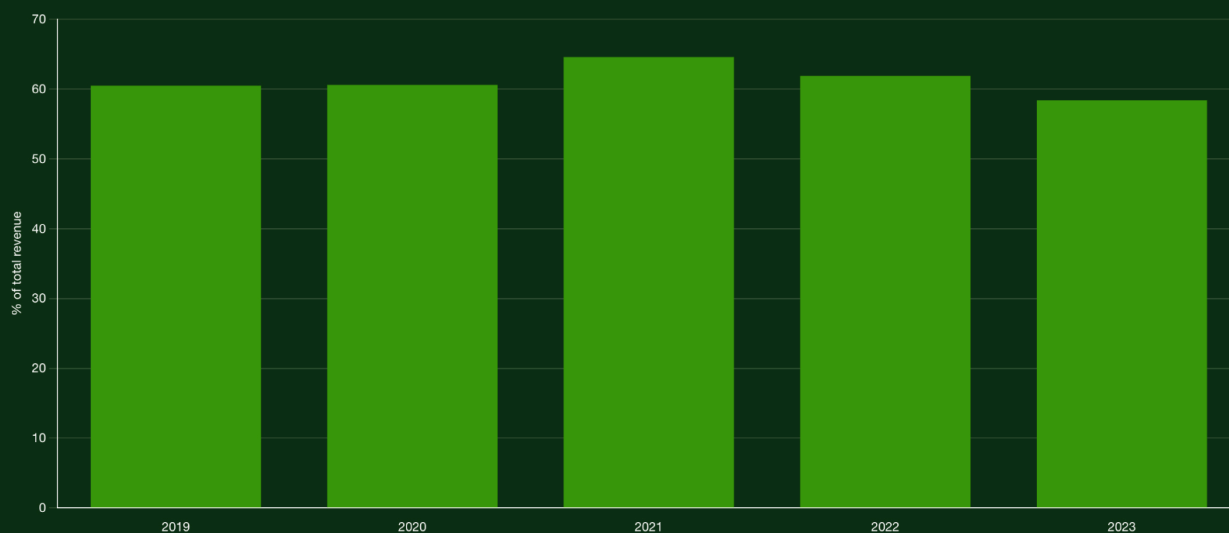
Revenue, Expenses, EBITDA and EBIT



EBITDA margin

Reykjavík Energy's operational margin has been stable and sound over the past years. The operational margin must, among other things, support investments by RE's subsidiaries and servicing of loans. Operations require substantial investments to be able to maintain the utility systems and power plants, tend to new customers, and meet increased demands placed on operations. Here the margin is shown as a percentage of total revenue.

EBITDA margin

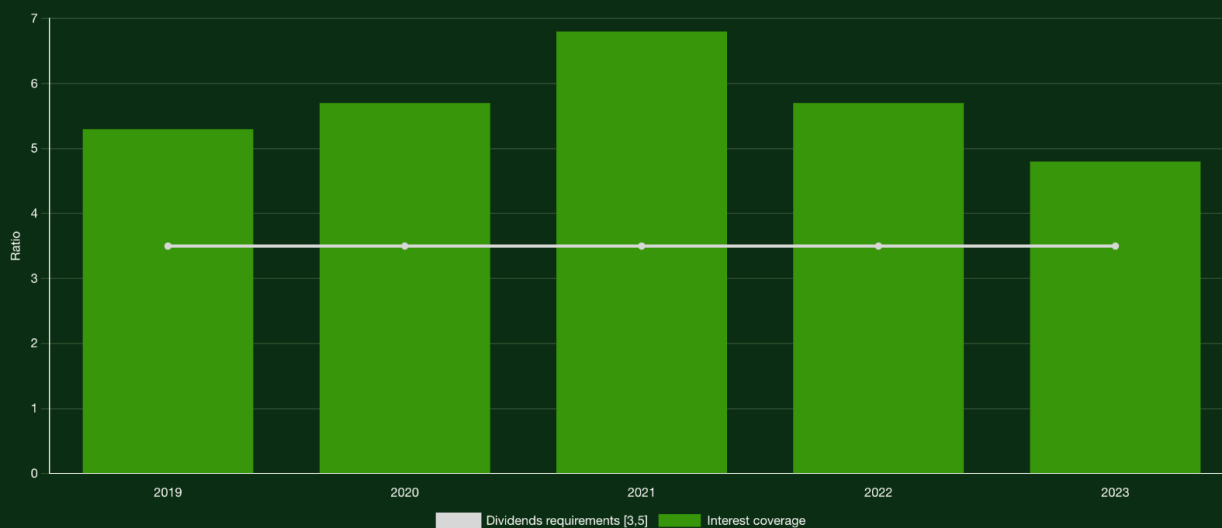


Interest coverage

Interest coverage is a performance indicator that demonstrates how capable the company is of honoring its interest expense obligations. RE's owners have stipulated as conditions for dividends to be paid to them, that cash from operations, plus interest income, shall be at least 3.5 times higher than interest expenses. Reykjavík Energy fell short of that target in the immediate aftermath of the financial crisis, but has exceeded it from 2010 and onwards.

*Interest paid due to the settlement of currency contracts is excluded from Net cash from operating activities

Interest coverage



Net debt

Net debt is interest-bearing debt excluding interest-bearing assets.

The heaviest debt load was at the end of 2009. At that time, net debt amounted to ISK 226.4 billion. By year end 2023, net debt had been reduced by ISK 62.5 billion. Increased investments in recent years have primarily been financed by issuance of ISK denominated bonds. That decreases currency risk, but indexation affects the principle amount of these financial obligations.

Net debt

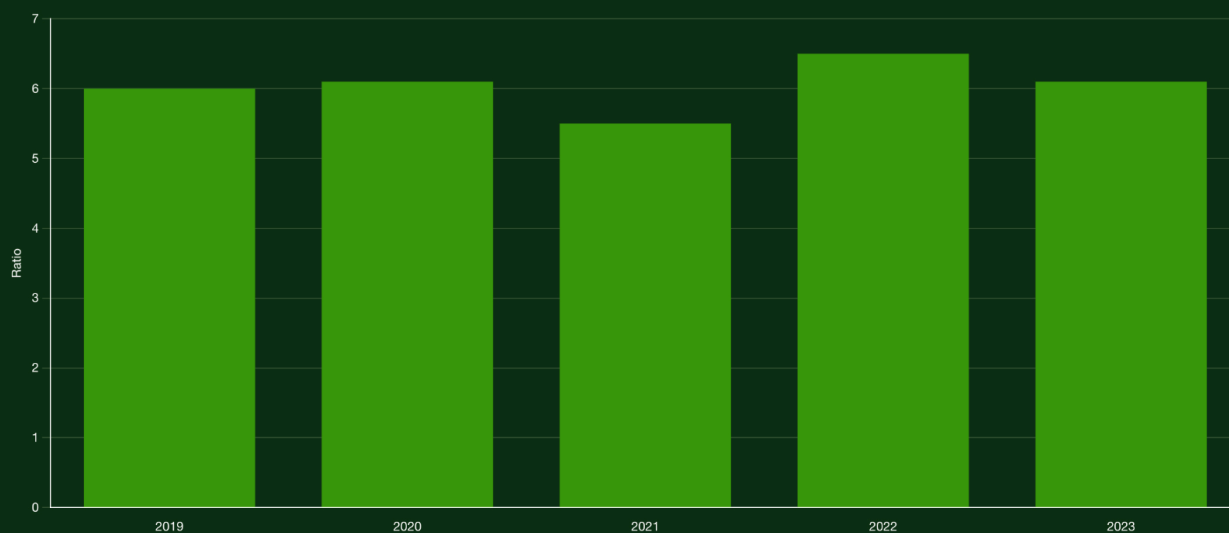


Net Debt / Net Cash from Operating Activities

This performance indicator shows the ratio between net debt and cash at hand, at the end of the year. The indicator shows how many years it would take for the company to pay net debt with cash at hand, if it were only used to reduce debt. This metric is stable in Reykjavík Energy's finances.

*Interest paid due to the settlement of currency contracts is excluded from Net cash from operating activities

Net Debt / Net Cash from Operating Activities

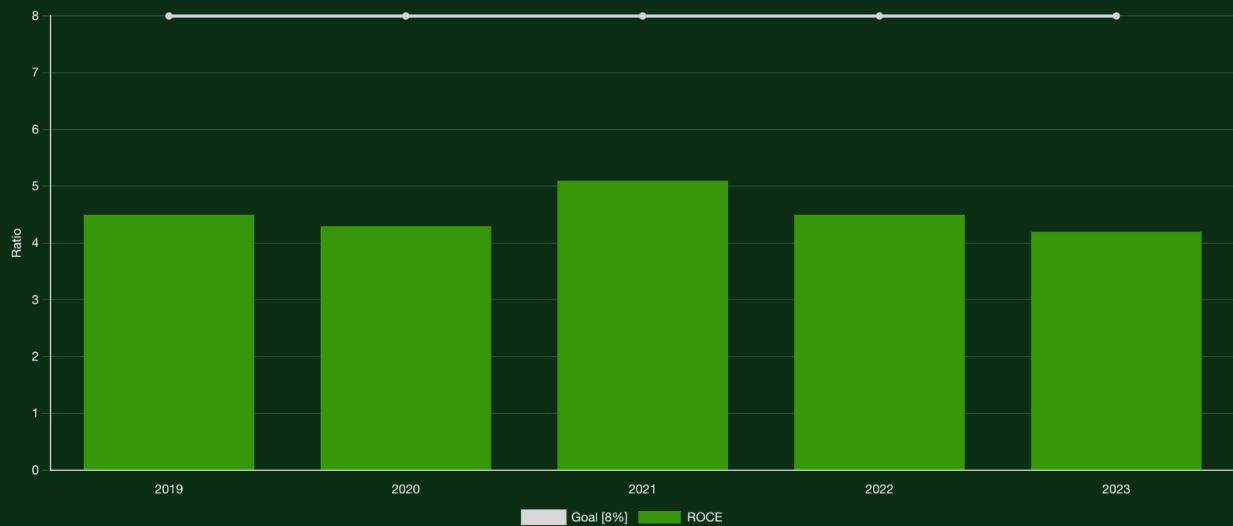


ROCE

Reykjavík Energy's Ownership Policy dictates implementation of yardsticks that display returns on the capital employed by owners (ROCE). At minimum, it should exceed the cost of borrowing, plus a reasonable risk premium.

In October 2018, the Board of Directors of RE approved a policy on ROCE, which was ratified at an owners' meeting in November 2018.

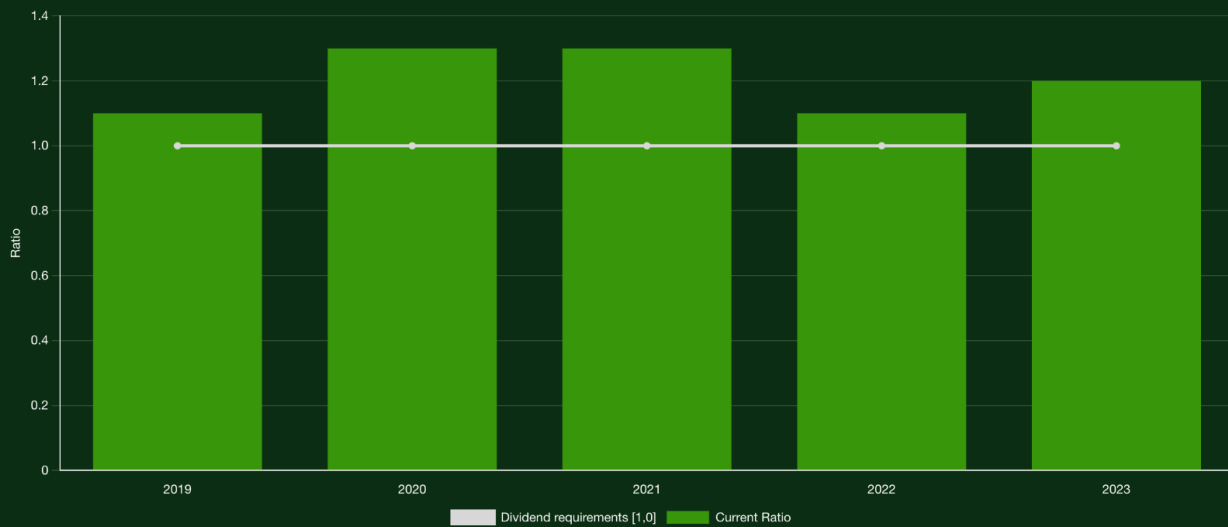
ROCE



Current Ratio

One of Reykjavík Energy's conditions for dividends to be paid, is to have a current ratio no lower than 1. This means that RE must have sufficient cash on hand to meet obligations for the next 12 months.

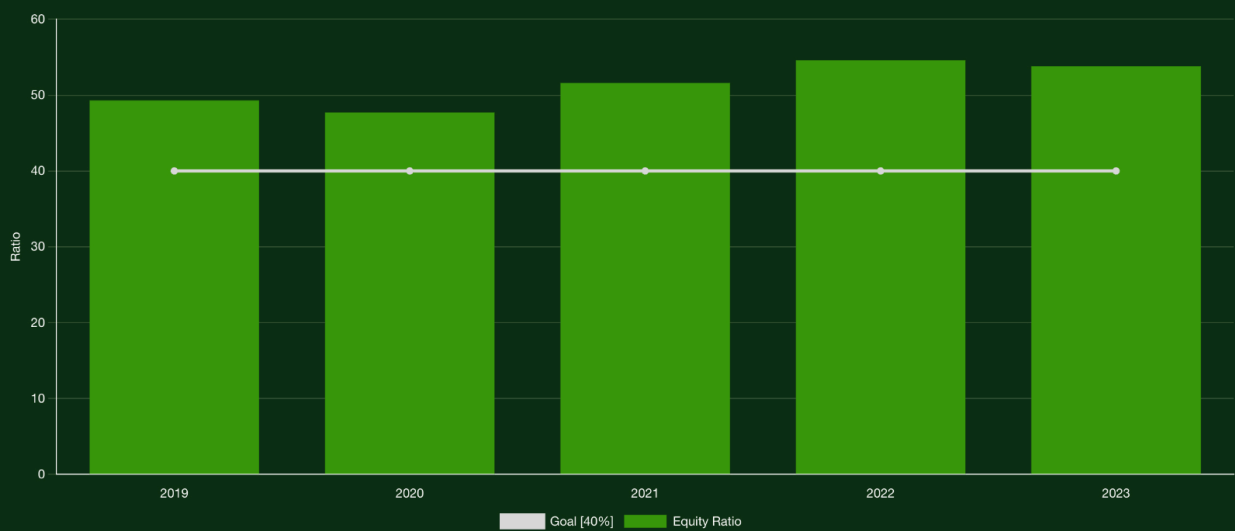
Current Ratio



Equity Ratio

The equity ratio indicates how much debt a company has compared to its assets. Total assets of Reykjavík Energy were valued at ISK 481.3 billion at the end of 2023. Reykjavík Energy's objective is to ensure that the equity ratio does not go below 40%.

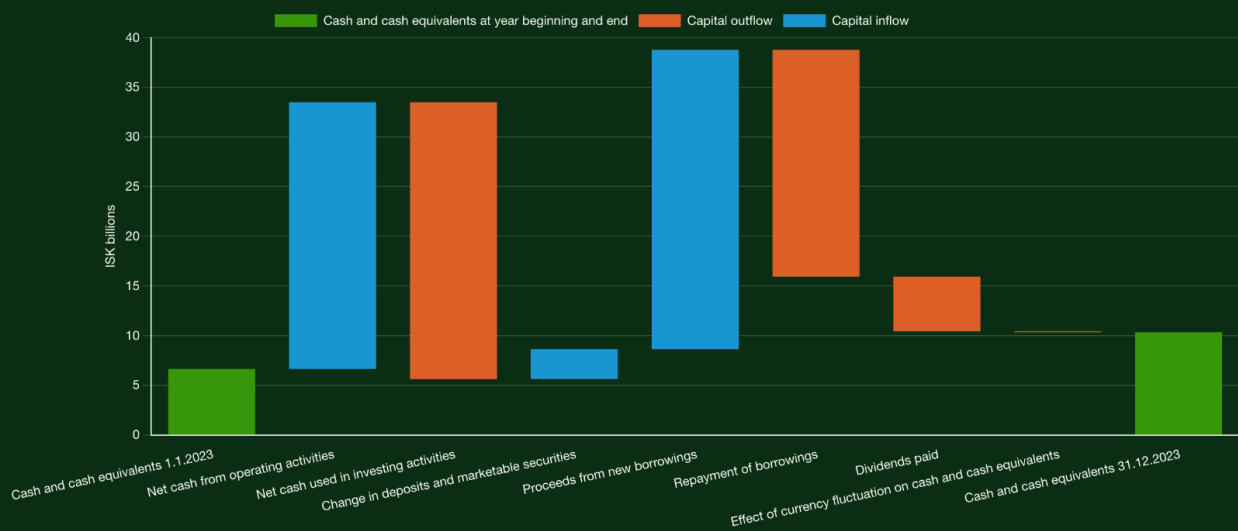
Equity Ratio



Cash Flow

In the income statement and balance sheet of each company contain many calculated figures, intended to give a clear picture of its operations during a specific period and financial position at the end of it. However, the cash flow statement provides a clearer view of the real cash flow, and which factors have an impact on the company's cash position in the period. Cash at hand, at the beginning of 2023, is on the left, and the year end position to the right.

Cash Flow



Credit Rating



Credit rating is important for companies that do business with international financial institutions and are publicly traded. The purpose of the rating is to give creditors an objective assessment of a company's financial standing and future prospects. The credit rating of Reykjavík Energy, and other Icelandic companies, can never surpass the sovereign rating of Iceland.

	Moody's	Fitch
Long-Term Issuer	Baa3	BBB-
Outlook	Stable	Stable
Validation	December 2023	February 2024

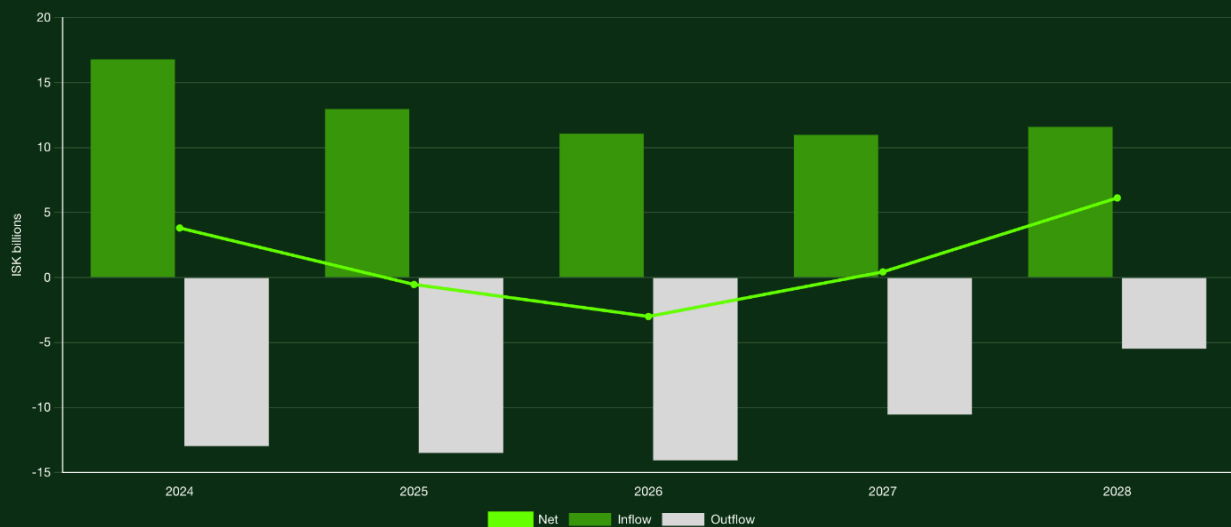
Currency risk



Currency risk

Reykjavík Energy's currency risk is mainly due to borrowing in foreign currencies and foreign revenues from Reykjavík Energy's subsidiary, ON Power, due to electric sales in USD. RE's Risk Policy includes limits on possible currency imbalance in the income statement and the balance sheet. Forward contracts are used to reduce the risk from unfavourable exchange rate fluctuations. The graph shows the estimated cash flows of foreign currencies for the next few years.

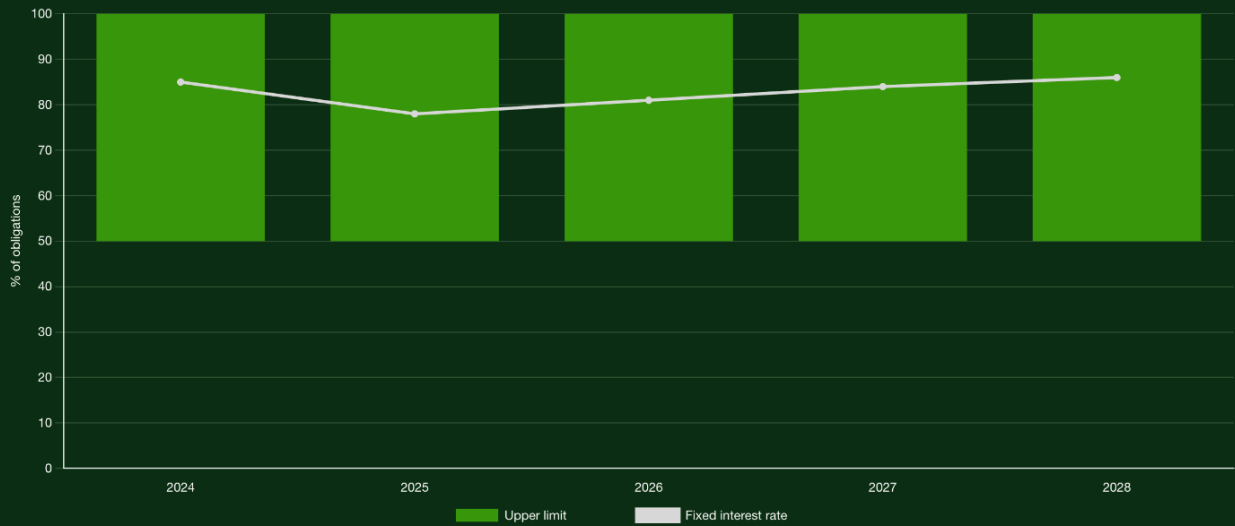
Estimated currency flow



Interest rate risk

Higher interest rates pose a risk for Reykjavík Energy's operations and balance sheet. This risk has been mitigated in the past few years by fixing interest rates with interest rate swaps. The columns show to what degree the overall liabilities for each year have fixed rates. RE's risk of higher interest is now insubstantial.

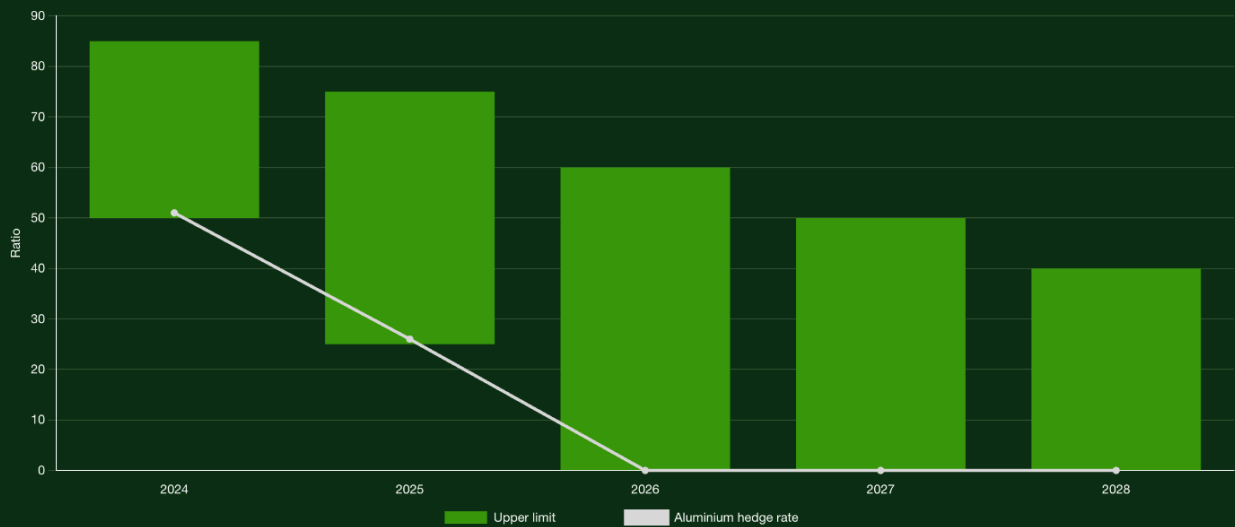
Interest rate risk



Aluminium price risk

Reykjavík Energy executes aluminium hedge contracts to hedge aluminium linked revenues against sharp declines in aluminium prices. Hedges are executed for a few years ahead and the graph shows to what extent revenues have been hedged. RE's Board of Directors decides the upper and lower limit of the aluminium hedge ratio.

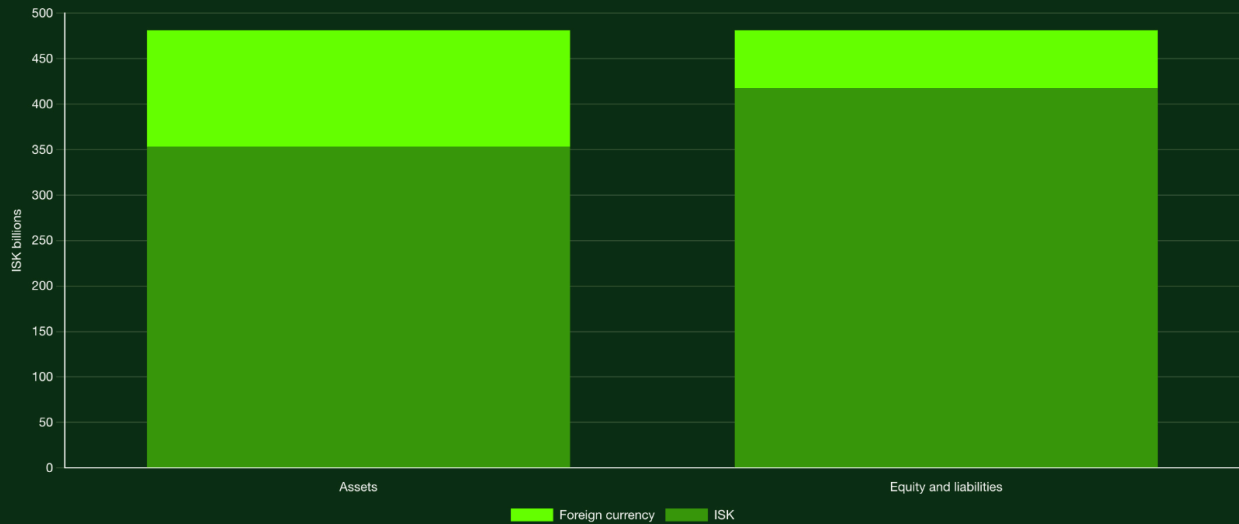
Aluminium price risk



Currency risk on balance sheet

Reykjavík Energy's foreign assets exceeded the company's foreign debt at year end 2023. The reason is that the operational currency of RE's subsidiary, ON Power, is in USD. ON Power assets are greater than all RE's liabilities in foreign currency.

Currency risk on balance sheet

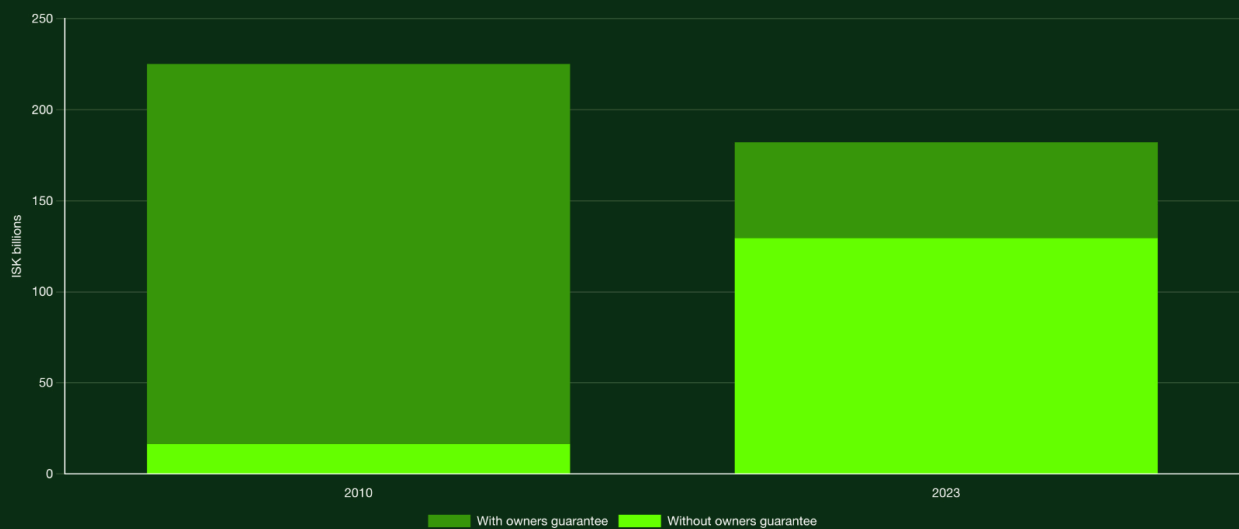


Owner Guaranteed Loans

With Reykjavík Energy's strengthened finances, loans for investments or refinancing, without owners' guarantees, have become more readily available to RE. This reduces the risk from ownership to the municipalities that own RE - the City of Reykjavík, and the municipalities of Akranes and Borgarbyggð.

From the end of 2010 to the end of 2023, the ratio of RE's outstanding loan obligations, with owners' guarantee, has decreased from 93% to 29%, and the amount from ISK 209 billion to ISK 53 billion, which is a 75% drop.

Owner Guaranteed Loans



United Nations Sustainable Development Goals

In accordance with the guidelines of the United Nations and Icelandic authorities, Reykjavík Energy has prioritised the Sustainable Development Goals and places special emphasis on six of them in the group's operations.

The respective goals were initially prioritised in such a way that four workshops were held; with managers within the group, two with staff, and one with external stakeholders. In the latter, representatives from public institutions, major goods and service suppliers, major customers, contractors, and a labour union, among others, participated.

In 2023, Reykjavík Energy's policy on corporate social responsibility was merged into the group's environmental and resource policy under the banner of a new *Sustainability policy*. In this policy formulation by RE's BoD, an additional focus goal was added, Sustainable Development Goal 15 - Life on land. The regular review by RE's board of all the group's joint policy documents takes these emphases into account.





5 Gender equality

Gender equality is a human rights issue that aims to value individuals on merit, which is fundamental for sustainable operations.



6 Clean water and sanitation

Acquisition and distribution of water for consumption, fire fighting and the operation of sewerage are part of Reykjavik Energy's core activities.



7 Affordable and clean energy

Sustainable generation and distribution of electricity and heat are part of Reykjavik Energy's core activities.



12 Responsible consumption and production

Responsible procurement and reduction of waste are crucial for Reykjavik Energy to be able to fulfil its core activities.



13 Climate action

Focused climate action is an essential part of all business activities.



15 Life on land

The operations of Reykjavik Energy involve the utilisation of natural resources, not least of which is extensive land use. This must take into account the maintenance and enhancement of biological diversity.

Strategic Initiatives

The main focuses and shifts in emphasis in the operations of Reykjavik Energy are reflected in its strategic initiatives. These initiatives develop the companies within the group for the future and are the driving force behind changes in operations. They can extend to more than one company within the group, and it is specifically tracked whether these projects support the United Nations Sustainable Development Goals, one or more.

In 2023, work was carried out on seven strategic initiatives related to Sustainable Development Goals 7 and 13, five support SDGs 7 and 12, three are related to goal 11, two to goals 3, 5, and 17, and one project is related to each of goals 8 and 14.

Subsidiaries' prioritisation

All boards of directors within the OR Group have prioritised the UN's SDGs with respect to each company's operations.

ON Power

- #5 Gender Equality.
- #7 Affordable and Clean Energy.
- #9 Industry, Innovation and Infrastructure.
- #11 Sustainable Cities and Communities.
- #12 Responsible Consumption and Production.
- #13 Climate Action.

Carbfix

- #3 Good Health and Well-being.
- #5 Gender Equality.
- #9 Industry, Innovation, and Infrastructure.
- #13 Climate Action.
- #17 Partnerships for the Goals.

Veitur Utilities

- #5 Gender Equality.
- #6 Clean water and sanitation
- #7 Affordable and Clean Energy.
- #9 Industry, Innovation, and Infrastructure.
- #11 Sustainable Cities and Communities.
- #12 Responsible Consumption and Production.
- #13 Climate Action.
- #14 Life below water

Reykjavík Fibre Network

- #5 Gender Equality.
- #9 Industry, Innovation, and Infrastructure.
- #11 Sustainable Cities and Communities.
- #13 Climate Action.

Goal 3 | Good health and well-being

• 3.4

Reykjavik Energy works to promote SDG 3's Target 3.4, which is: By 2030, reduce by one third premature mortality from non-communicable diseases through prevention and treatment and promote mental health and well-being. This indicator is prioritized by the Icelandic government..

◦ 3.4.1

Probability of dying of cardiovascular disease, cancer, diabetes, or chronic respiratory disease

- [Society | S8 Global Health and Safety](#)
- [Governance | G6 Ethics & Anti-Corruption](#)

Goal 4 | Quality Education

- 4.1

Reykjavik Energy works to promote SDG 4's Target 4.1, which is: By 2030, ensure that all girls and boys complete free, equitable and quality primary and secondary education leading to relevant and effective learning outcomes. This indicator is prioritized by the Icelandic government..

- 4.1.1

Percentage of children/young people at the end of each level of education achieving at least a minimum proficiency level in (a) reading and (b) mathematics. (Disaggregations: sex, location, wealth (and others where data are available))

- [Society | S9 Child and Forced Labour](#)

- 4.4

Reykjavik Energy works to promote SDG 4's Target 4.4, which is: By 2030, substantially increase the number of youth and adults who have relevant skills, including technical and vocational skills, for employment, decent jobs and entrepreneurship. This indicator is prioritized by the Icelandic government..

- 4.4.1

Percentage of youth/adults with ICT skills by type of skill

- [Environment | Reclamation of the Elliðaárdalur Valley](#)
- [Society | S5 Temporary Worker Ratio](#)
- [Society | S9 Child and Forced Labour](#)
- [Society | Dissemination of Knowledge](#)

Goal 5 | Gender equality

- 5.1

Reykjavik Energy works to promote SDG 5's Target 5.1, which is: End all forms of discrimination against all women and girls everywhere. This indicator is prioritized by the Icelandic government..

- 5.1.1

Whether or not legal frameworks are in place to promote equality and non-discrimination on the basis of sex

- [Society | S6 Non-Discrimination](#)
- [Society | S9 Child and Forced Labour](#)
- [Society | S10 Human Rights](#)

- 5.5

Reykjavik Energy works to promote SDG 5's Target 5.5, which is: Ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making in political, economic and public life. This indicator is prioritized by the Icelandic government..

- 5.5.1

Proportion of seats held by women in national parliaments and local governments

- [Society | S4 Gender Diversity](#)

- 5.5.2

Proportion of women in managerial positions

- [Society | S4 Gender Diversity](#)
- [Governance | G1 Board Diversity](#)

- 5.c

Reykjavik Energy works to promote SDG 5's Target 5.c, which is: Adopt and strengthen sound policies and enforceable legislation for the promotion of gender equality and the empowerment of all women and girls at all levels.

- 5.c.1

Percentage of countries with systems to track and make public allocations for gender equality and women's empowerment

- [Society | S2 Gender-based Pay Ratio](#)
- [Society | Dissemination of Knowledge](#)
- [Governance | G3 Incentivized Pay](#)

Goal 6 | Clean water and sanitation

- 6.1

Reykjavik Energy works to promote SDG 6's Target 6.1, which is: By 2030, achieve universal and equitable access to safe and affordable drinking water for all. This indicator is prioritized by the Icelandic government..

- 6.1.1

Percentage of population using safely managed drinking water services

- [Environment | Water Protection and Water Management](#)
- [Environment | U7 Environmental Operations](#)

Goal 7 | Affordable and clean energy

- 7.1

Reykjavik Energy works to promote SDG 7's Target 7.1, which is: By 2030, ensure universal access to affordable, reliable and modern energy services.

- 7.1.1

Percentage of population with electricity access (%)

- [Climate | E1 Greenhouse Gas Emissions](#)

- 7.2

Reykjavik Energy works to promote SDG 7's Target 7.2, which is: By 2030, increase substantially the share of renewable energy in the global energy mix. This indicator is prioritized by the Icelandic government..

- 7.2.1

Renewable energy share in the total final energy consumption (%); or Renewable energy share in the total primary energy consumption (%)

- [Climate | E2 Emission Intensity](#)
- [Climate | E3 Energy Usage](#)
- [Climate | E4 Energy Intensity](#)
- [Climate | E5 Energy Mix](#)
- [Environment | U7 Environmental Operations](#)
- [Environment | Restoration of Disturbed Areas and biodiversity](#)
- [Environment | Responsible Management and Production at Low-Temperature Fields](#)
- [Environment | Responsible Management and Production at High-Temperature Fields](#)
- [Society | Dissemination of Knowledge](#)

Goal 8 | Decent work and economic growth

- 8.5

Reykjavik Energy works to promote SDG 8's Target 8.5, which is: By 2030, achieve full and productive employment and decent work for all women and men, including for young people and persons with disabilities, and equal pay for work of equal value. This indicator is prioritized by the Icelandic government..

- 8.5.1

Average hourly earnings of female and male employees by occupations (Wages/Gender wage gap)

- [Society | S2 Gender-based Pay Ratio](#)

- 8.8

Reykjavik Energy works to promote SDG 8's Target 8.8, which is: Protect labour rights and promote safe and secure working environments for all workers, including migrant workers, in particular women migrants, and those in precarious employment.

- 8.8.2

Number of ILO conventions ratified by type of convention

- [Governance | G4 Collective Bargaining](#)

Goal 9 | Industry, innovation and infrastructure

- 9.4

Reykjavik Energy works to promote SDG 9's Target 9.4, which is: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, with increased resource-use efficiency and greater adoption of clean and environmentally sound technologies and industrial processes, with all countries taking action in accordance with their respective capabilities.

- 9.4.1

Carbon emission per unit of value added

- [Climate | E1 Greenhouse Gas Emissions](#)
 - [Climate | E2 Emission Intensity](#)
 - [Climate | E3 Energy Usage](#)
 - [Climate | E4 Energy Intensity](#)
 - [Climate | E5 Energy Mix](#)
 - [Climate | Electrification of Transport](#)
 - [Environment | Responsible Management and Production at Low-Temperature Fields](#)
 - [Environment | Responsible Management and Production at High-Temperature Fields](#)

- 9.5

Reykjavik Energy works to promote SDG 9's Target 9.5, which is: Enhance scientific research, upgrade the technological capabilities of industrial sectors in all countries, in particular developing countries, including, by 2030, encouraging innovation and substantially increasing the number of research and development workers per 1 million people and public and private research and development spending. This indicator is prioritized by the Icelandic government..

- 9.5.1

R&D expenditure as a percentage of GDP

- [Society | Dissemination of Knowledge](#)

Goal 10 | Reduced inequalities

- 10.1

Reykjavik Energy works to promote SDG 10's Target 10.1, which is: By 2030, progressively achieve and sustain income growth of the bottom 40 per cent of the population at a rate higher than the national average.

- 10.1.1

Growth rates of household expenditure or income per capita among the bottom 40 percent of the population and the total population

- [Governance | G3 Incentivized Pay](#)

- 10.2

Reykjavik Energy works to promote SDG 10's Target 10.2, which is: By 2030, empower and promote the social, economic and political inclusion of all, irrespective of age, sex, disability, race, ethnicity, origin, religion or economic or other status. This indicator is prioritized by the Icelandic government..

- 10.2.1

Proportion of people living below 50% of median income disaggregated by age and sex

- [Society | S2 Gender-based Pay Ratio](#)
 - [Society | S9 Child and Forced Labour](#)
 - [Society | S10 Human Rights](#)

Goal 11 | Sustainable cities and communities

- 11.6

Reykjavik Energy works to promote SDG 11's Target 11.6, which is: By 2030, reduce the adverse per capita environmental impact of cities, including by paying special attention to air quality and municipal and other waste management. This indicator is prioritized by the Icelandic government..

- 11.6.1

Percentage of urban solid waste regularly collected and with adequate final discharge with regards to the total waste generated by the city.

- [Climate | E3 Energy Usage](#)
 - [Climate | E4 Energy Intensity](#)
 - [Climate | E5 Energy Mix](#)

- 11.6.2

Annual mean levels of fine particulate matter (i.e. PM2.5 and PM10) in cities (population weighted)

- [Society | Dissemination of Knowledge](#)

- 11.a

Reykjavik Energy works to promote SDG 11's Target 11.a, which is: Support positive economic, social and environmental links between urban, per-urban and rural areas by strengthening national and regional development planning. This indicator is prioritized by the Icelandic government..

- 11.a.1

Cities with more than 100,000 inhabitants that implement urban and regional development plans integrating population projections and resource needs

- [Environment | Responsible Management and Production at Low-Temperature Fields](#)
 - [Environment | Responsible Management and Production at High-Temperature Fields](#)

Goal 12 | Responsible consumption and production

- 12.1

Reykjavik Energy works to promote SDG 12's Target 12.1, which is: Implement the 10-year framework of programmes on sustainable consumption and production, all countries taking action, with developed countries taking the lead, taking into account the development and capabilities of developing countries. This indicator is prioritized by the Icelandic government..

- 12.1.1

Number of countries with SCP National Actions Plans or SCP mainstreamed as a priority or target into national policies, poverty reduction strategies and sustainable development strategies

- [Environment | U7 Environmental Operations](#)

- 12.5

Reykjavik Energy works to promote SDG 12's Target 12.5, which is: By 2030, substantially reduce waste generation through prevention, reduction, recycling and reuse.

- 12.5.1

National recycling rate, tonnes of material recycled

- [Environment | Geothermal Park at Hellisheiði](#)

- 12.6

Reykjavik Energy works to promote SDG 12's Target 12.6, which is: Encourage companies, especially large and transnational companies, to adopt sustainable practices and to integrate sustainability information into their reporting cycle.

- 12.6.1

Number of companies publishing sustainability reports

- [Governance | G8 ESG Reporting](#)

- 12.7

Reykjavik Energy works to promote SDG 12's Target 12.7, which is: Promote public procurement practices that are sustainable, in accordance with national policies and priorities. This indicator is prioritized by the Icelandic government..

- 12.7.1

Number of countries implementing Sustainable Public Procurement policies and action plans

- [Society | S9 Child and Forced Labour](#)
 - [Society | S10 Human Rights](#)
 - [Governance | G5 Supplier Code of Conduct](#)

Goal 13 | Climate action

- 13.1

Reykjavik Energy works to promote SDG 13's Target 13.1, which is: Strengthen resilience and adaptive capacity to climate-related hazards and natural disasters in all countries.

- 13.1.1

Number of deaths, missing people, injured, relocated or evacuated due to disasters per 100,000 people.

- [Climate | E10 Climate Risk Mitigation](#)
 - [Environment | U7 Environmental Operations](#)
 - [Society | Dissemination of Knowledge](#)

- 13.2

Reykjavik Energy works to promote SDG 13's Target 13.2, which is: Integrate climate change measures into national policies, strategies and planning. This indicator is prioritized by the Icelandic government..

- **13.2.1**

Number of countries that have formally communicated the establishment of integrated low-carbon, climate-resilient, disaster risk reduction development strategies (e.g. a national adaptation plan process, national policies and measures to promote transition to environmentally-friendly substances and technologies).

- [Climate | E1 Greenhouse Gas Emissions](#)
- [Climate | E2 Emission Intensity](#)
- [Climate | E3 Energy Usage](#)
- [Climate | E4 Energy Intensity](#)
- [Climate | E5 Energy Mix](#)
- [Climate | E8 Climate Risk Supervision / BoD](#)
- [Climate | Electrification of Transport](#)
- [Environment | Responsible Management and Production at Low-Temperature Fields](#)
- [Environment | Responsible Management and Production at High-Temperature Fields](#)
- [Society | Dissemination of Knowledge](#)

- **13.3**

Reykjavik Energy works to promote SDG 13's Target 13.3, which is: Improve education, awareness-raising and human and institutional capacity on climate change mitigation, adaptation, impact reduction and early warning.

- **13.3.1**

Number of countries that have integrated mitigation, adaptation, impact reduction and early warning into primary, secondary and tertiary curricula

- [Climate | E10 Climate Risk Mitigation](#)

Goal 14 | Life below water

- **14.1**

Reykjavik Energy works to promote SDG 14's Target 14.1, which is: By 2025, prevent and significantly reduce marine pollution of all kinds, in particular from land-based activities, including marine debris and nutrient pollution. This indicator is prioritized by the Icelandic government..

- **14.1.1**

Nitrogen use efficiency composite indicator

- [Climate | Environmental and Climate Innovations](#)
- [Environment | U7 Environmental Operations](#)
- [Environment | Wastewater Discharge](#)
- [Environment | Hazardous Substances](#)

Goal 15 | Life on land

- 15.1

Reykjavik Energy works to promote SDG 15's Target 15.1, which is: By 2020, ensure the conservation, restoration and sustainable use of terrestrial and inland freshwater ecosystems and their services, in particular forests, wetlands, mountains and drylands, in line with obligations under international agreements. This indicator is prioritized by the Icelandic government..

- 15.1.1

Forest area as a percentage of total land area

- [Environment | Water Protection and Water Management](#)
- [Environment | U7 Environmental Operations](#)
- [Environment | Reclamation of the Elliðaárdalur Valley](#)

- 15.3

Reykjavik Energy works to promote SDG 15's Target 15.3, which is: By 2030, combat desertification, restore degraded land and soil, including land affected by desertification, drought and floods, and strive to achieve a land degradation-neutral world. This indicator is prioritized by the Icelandic government..

- 15.3.1

Percentage of land that is degraded over total land area

- [Climate | E1 Greenhouse Gas Emissions](#)
- [Climate | Environmental and Climate Innovations](#)
- [Environment | Restoration of Disturbed Areas and biodiversity](#)
- [Environment | Hazardous Substances](#)

Goal 17 | Partnerships for the goals

- 17.6

Reykjavik Energy works to promote SDG 17's Target 17.6, which is: Enhance North-South, South-South and triangular regional and international cooperation on and access to science, technology and innovation and enhance knowledge sharing on mutually agreed terms, including through improved coordination among existing mechanisms, in particular at the United Nations level, and through a global technology facilitation mechanism.

- 17.6.1

Access to patent information (WIPO Patent Database) and use of the international IP system

- [Climate | Environmental and Climate Innovations](#)
- [Society | Dissemination of Knowledge](#)