



# Sustainability Report 2022

Powering a changing  
society – and making  
green energy  
accessible to all

**N<sup>o</sup>RDION ENERGI**

COMPRISING FALBYGDENS ENERGI • SWEDEGAS • WEUM

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Page indexing for Nordion Energi's statutory sustainability report in accordance with the Swedish

## Annual Accounts Act (1995:1554)

Area	Policy including the execution of the same	Outcome of the policy	Risks and risk management	Performance indicators
Environmental issues	6, 7, 16	7, 12, 16-17	6, 8-9, 16-17, 29, 31	7
Personnel	6, 7, 23-24	7, 23-24	6, 23-24, 29, 31	7
Social conditions	6, 7, 19-20	7, 18-21	6, 10, 18-21, 29-30, 31	7
Human rights	26, 28	26, 28	6, 26, 28, 29-30, 31	7
Anti-corruption	26	26	6, 26, 29, 31	7

See page 2 for a description of Nordion Energi's business model



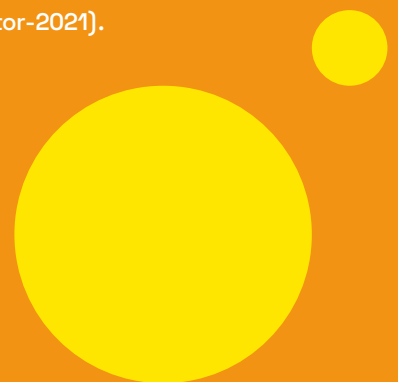
## About the Sustainability Report

This is Nordion Energi's fourth Sustainability Report. It is the statutory sustainability report for operations within Nordion Energi AB, 556976-3765, headquartered in Malmö, which includes the operations of Swedegas AB, 556181-1034, Weum Gas Aktiebolag, 556015-9492 and Falbygdens Energi Nät AB, 556407-5165. Nordion Energi Transformation AB, which was acquired in December 2022, had no operations in 2022 and is not included in the reporting. Thus there have been no changes affecting the reporting in comparison with 2021.

The report summarises the sustainability work conducted during the period 1 January - 31 December 2021 and is based on the sustainability topics identified in the updated materiality analysis conducted in 2022. Find out more on pages 31-32.

The report has been prepared in accordance with the Global Reporting Initiative (GRI) Universal Standards 2021 with the specific sector protocol for Oil and Gas (GRI-11-Oil-and-Gas-Sector-2021).

Find out more about our sustainability work at [www.weum.se](http://www.weum.se), [www.swedegas.se](http://www.swedegas.se), [www.falbygdensenergi.se](http://www.falbygdensenergi.se) and [www.nordionenergi.se](http://www.nordionenergi.se)



# About Nordion Energi

Nordion Energi specialises in energy infrastructure and is driven by a clear purpose: to help drive the transition to 100% green energy. Our core priority is to increase the availability and use of green energy. We are channelling all our efforts into creating a sustainable, flexible energy system that is fit for the future, linking the systems for electricity, gas and heat. The focus throughout is on innovation and strategic partnerships.

Nordion Energi AB was formed in 2020 by merging the operations of Swedegas AB and Weum Gas Aktiebolag. Swedegas is TSO (Transmission System Operator) for the Swedish transmission grid for gas and sells transmission, storage and system balance services. The transmission grid for gas, also called the gas backbone, transports gas to distributors and directly connected customers. See map on page 19.

Since 2013, Swedegas is system balance responsibility for the Swedish gas grid. This means that Swedegas is responsible for maintaining the short-term balance between input and output in the Swedish gas system. In a crisis, Swedegas has to implement measures ordered by the Swedish Energy Agency to ensure that gas is supplied to protected customers. Weum operates Sweden's largest gas distribution network, which is connected to the transmission grid for gas. Two more acquisitions have been made since the merger. Falbygdens Energi Nät AB, with electricity network operations in Falköping and the surrounding area, was acquired in January 2021, followed by Nordion Energi Transformation AB in December 2022.

Gas operations have around 20,000 customers and electricity network operations around 17,500 customers in industry, municipalities, CHP (Combined Heat and Power) plants, households, commercial properties, restaurants, etc. Nordion Energi has 106 employees and sales of SEK 824.5 million, of which electricity network operations employ about 30 employees and have sales of just over SEK 150 million.

## REGULATORY FRAMEWORK

As an owner of critical energy infrastructure, Nordion Energi's business is subject to an extensive regulatory system in Sweden and the EU. Energy infrastructure is highly capital-intensive and has therefore been granted monopoly status. Sweden, like other EU countries, has legal provisions in place governing the separation of trading, production and transmission, in order to reduce the risk of anti-competitive practices. As an independent operator, we neither produce nor trade in gas or electricity ourselves. Our responsibility is to

ensure unrestricted access to our systems and security of supply.

Access to the transmission grid for gas requires a licence, and Swedegas holds licences for all the operating areas that require them. Falbygdens Energi has an area concession for the 0.4–20 kV electricity network in the municipality of Falköping and parts of four adjacent municipalities.

## NETWORK CHARGES FOR GAS NETWORK OPERATORS

Revenues for transfer and storage services sold are regulated and monitored by the Swedish Energy Markets Inspectorate (Ei). Regulation of network charges has been applied since 2015 whereby a revenue framework is decided in advance for each gas network operator. This framework regulates the total fees that companies can charge their customers over the years in a given period. Gas network operators are then free to set their own charges for gas supply within the framework. The purpose of the revenue framework is to ensure that operations are conducted efficiently with good quality, and that customers pay a reasonable price for the various services, while the gas company should receive reasonable coverage for its costs, be able to make investments and receive a reasonable return on the capital required to run the operations.

Ei decided on the revenue frameworks for natural gas companies at the end of 2022. The authority decided to change the methodology for the valuation of the capital base, a change that has major implications. Nordion Energi, like other gas network companies in Sweden, has appealed the decision.

## OWNERS

Nordion Energi is owned by the European Diversified Infrastructure Fund II (EDIF II) managed by Igneo Infrastructure Partners, a global fund manager with almost 30 years' experience of infrastructure investments. EDIF II, in which investors are primarily European pension funds, focuses on long-term investments in European infrastructure companies.

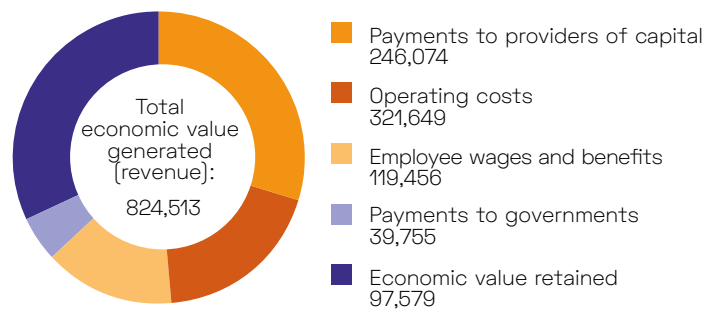
# Net sales and profit

The majority of Nordion Energi’s net sales revenue is derived from the provision of gas and electricity transportation services. Good profitability is vital for continued investment in new and existing energy infrastructure and, our revenues for transfer and storage services sold to customers are regulated and monitored by the Swedish Energy Markets Inspectorate (Ei).

## RESULTS, NORDION ENERGI 2022 (TSEK)

	2022	2021
Net sales	824,513	969,111
Operating result before interest, tax, depreciation and amortisation**	522,279	619,622
Investments in fixed assets	133,591	83,000
Net debt	5,563,067	5,573,260
Total assets	11,522,644	11,949,584
Equity	1,149,765	1,394,446

## NORDION ENERGI’S ECONOMIC CONTRIBUTION TO SOCIETY\* (TSEK)



\* The contribution of the organisation to sustainability from a broader economic perspective: direct economic value generated and delivered, including revenue, operating costs, remuneration to employees, retained earnings, and payments to funding bodies and the public sector. Nordion Energi as an energy company also makes a significant indirect contribution to society.

\*\* Adjustment includes costs for integration activities, acquisitions and divestments.

## SIGNIFICANT EVENTS IN 2022, UP TO AND INCLUDING MARCH 2023

- It has been possible to maintain gas deliveries to customers throughout the year, despite world events resulting in great uncertainty throughout Europe regarding the energy supply of gas.
- We launched two large-scale projects to develop hydrogen economies in Northern Europe: Nordic Hydrogen Route and Baltic Sea Collector.
- Nordion Energi has signed a strategic partnership agreement with Danish Nature Energi regarding opportunities for large-scale biogas production in connection to the gas network.
- Nordion Energi increased its preparedness and vigilance due to the security situation in Sweden. We also intensified the dialogue with responsible authorities and other stakeholders in neighbouring countries and the rest of Europe.
- We set a Net Zero emissions target for own operations by 2030, which includes scope 1 and 2.
- In December, a judgement was issued invalidating the European Commission’s decision to approve Sweden’s tax exemption for biogas and bio-LPG. Nordion Energi has, since the beginning of 2023, been working together with the industry to restore full tax exemption.
- Nordion Energi received the “IJGlobal ESG Corporate Transition – Energy award” at the IJGlobal ESG Awards 2022 in London in October for its efforts towards a sustainable energy system. The judges referred to the activities we carry out today as well as the innovative projects we are investing in for the future.
- Gaskoll.se was launched by Energigas Sverige, with Nordion Energi and others contributing to the site, which aims to inspire and increase knowledge about biogas.
- Falbygdens Energi provided support to Julhjälpen Skaraborg, which helps families in need in the local area by providing Christmas presents and food. Gift vouchers from Aktiv Handel were also donated for the third consecutive year to support local businesses.
- Nordion Energi’s cooperation with Fryshuset, which offers young people meaningful leisure activities in areas such as sports, culture and creative work, continued throughout the year.
- Falbygdens Energi continued to weatherproof the electricity network by converting existing overhead lines to underground cables. New technologies are being deployed for faster and safer fault clearance in the network.

# Steady course in turbulent times

For Nordion Energi, like many other organisations, this has been an unusual year. External pressures have created a great deal of uncertainty. At the same time, the year has been another clear step towards our vision of powering a changing society and making green energy accessible for all. The importance of the transition has become clear to all of us. At Nordion Energi, we are trying to turn external pressures into opportunities.

Security of supply and the price of electricity and gas have taken centre stage throughout the year. Prices rose dramatically as the Asian economies picked up after the pandemic; and then prices increased further with Russia's invasion of Ukraine. It became clear that Europe's dependence on Russia for its energy supply had created a strained situation. Much has been done to curb price developments in the EU. Ceiling prices have been introduced, for example, and joint negotiations are ongoing. This has allowed the price of gas to be reduced significantly. However, there is still some uncertainty regarding the security of energy supply.

Uncertainty in terms of both the availability and the price of gas has created major challenges for our customers. This affects the competitiveness of individual companies in particular, and Sweden as a country. The volume of gas in the West Swedish gas network in December was 30 percent lower than in the same month in 2021. Volumes fell by almost a quarter for the year as a whole. It is therefore gratifying to see

present, but we are following developments closely and are engaged in dialogue with Swedish and European stakeholders in order to secure the gas supply in the entire system.

Unfortunately, when prices are high, there is always a risk of green values being called into question. We are already seeing examples of companies in southern Sweden that are moving their operations out of the country to secure both prices and access to energy, but this energy is often produced from more carbon intensive fossil fuels and results in higher greenhouse gas emissions. A strong and clear strategy is needed from the government to ensure a continued competitive industry based on green energy in southern Sweden.

## EU'S GREEN INITIATIVE TO PROMOTE HYDROGEN CONTINUES

Despite external events, the EU continued its Green Deal programme during the year to ensure a competitive Europe with green values. This identifies hydrogen and biogas as key elements of the future energy system. This is very gratifying, and confirms that our position is the right one. Nordion Energi was created with emphasis on being part of the energy transition in society.

This is also why we are involved in several innovative, large-scale hydrogen projects. We have the ability to invest heavily in these initiatives when they become reality in the next stage. We launched the **Nordic Hydrogen Route** initiative with Gasgrid Finland during the year. Together, we are planning to build a hydrogen infrastructure in the Bay of Bothnia region and create an open, reliable and secure hydrogen market by 2030. This solution could make the Nordic region self-sufficient in hydrogen. This is crucial for the climate, but also for Sweden's energy independence and continued competitiveness.

The Nordic Hydrogen Route is one of five routes identified within the **European Hydrogen Backbone (EHB) initiative**. This initiative aims to accelerate Europe's ability to meet its emissions targets by enabling hydro-



**“Nordion Energi was created with emphasis on being part of the energy transition in society.”**

that the government finally granted gas price support to household customers, in a similar way to electricity price support. However, this should be urgently extended to include industries, restaurants and other consumers as well. Gas supply in Sweden is robust at

gen transport infrastructure across Europe. The routes will initially link domestic local supply and demand for hydrogen. The idea is to connect European regions and neighbouring countries in the final stage.

The new cooperation project known as **Baltic Sea Hydrogen Collector (BHC)** was also launched in 2022. Nordion Energi cooperates with Gasgrid Finland, OX2 and Copenhagen Infrastructure Partners. Together, we are exploring the possibility of developing a new large-scale offshore infrastructure for the collection and distribution of green hydrogen around the Baltic Sea region, between Finland, Sweden, Åland, Denmark and Central Europe. This is an important project as it would ensure the availability of hydrogen for 2030 and strengthen energy self-sufficiency.

The demand for electricity will increase significantly due to the production of hydrogen. At the same time, future electricity use throughout the entire community is expected to be even higher than previously assumed. This emphasises the need to co-plan electricity and hydrogen networks going forward.

The proportion of biogas in the gas network has continued to increase, although the rate of increase has slowed slightly during the year. In 2022, 37.5 percent of the total gas traded in the western Swedish gas network was biogas, compared to just 7,6 percent in 2016. We have maintained a close dialogue with current and potential producers and users of biogas in order to continue developing the biogas market in Sweden.

#### **TOWARDS NET ZERO EMISSIONS IN OWN OPERATIONS BY 2030**

As part of driving the transition in society, we set ourselves a target to reach net zero emissions in our own operations, scopes 1 and 2, by 2030. Our particular emphasis – for several years – on reducing our methane emissions has also paid off. Through various initiatives, we have reduced methane emissions by 50 percent between 2019 and 2022 and are now implementing new initiatives to reduce emissions further.

#### **OUTSTANDING EFFORTS BY ALL OUR STAFF DURING THE YEAR**

2022 was also a year of high pressure for our staff. This was particularly noticeable in customer service, where high energy prices caused great concern and uncertainty among our customers. We also saw how different stakeholders – both national and international – cooperated exceptionally well to secure the supply of gas. We also had to focus on an upcoming lawsuit

as a result of the Swedish Energy Markets Inspectorate's decision regarding changes to the regulatory framework. At the same time, we have not reduced our efforts in our innovation projects, where we continue to push for a green transition. Despite the challenging year, we have achieved good results in our internal surveys. Our Employee Satisfaction Index, a measure of satisfaction and engagement, was above the available industry benchmark. This shows that all of us at Nordion Energi, are putting all our efforts into creating a climate-neutral and flexible energy system that ensures continued prosperity and well-being.

Malmö, April 2023

**Hans Kreisel**

Chief Executive Officer



# Sustainability is our mission

The energy industry has a key role to play in facilitating a more sustainable society in a number of ways. Nordion Energi was formed to secure a stable energy supply for its present and future customers and to drive the transition towards a fossil-free society.

Our stakeholders have high expectations and make stringent demands on our business, and we have to meet these. Our business ethics form the basis, with zero tolerance of any form of corruption and anti-competitive behaviour.

For us, sustainability is an integral part of our core business. Our integrated policy for health, safety, quality and the environment guides our work and meets the policy requirements set out in ISO 9001:2015, ISO

14001:2015 and ISO 45001:2018. High standards and accountability are at the heart of our management system when it comes to safety, health, quality, the environment, customer focus and profitability. This also ensures that sustainability is included in planning, implementation and monitoring. We comply with laws, regulations and industry guidelines, and no violations have occurred during the year.

**OUR PRIORITY SUSTAINABILITY TOPICS ARE:**

1. Actively driving the transition to net zero emissions
2. Reliable and flexible infrastructure as a platform for security of supply of energy and raw materials
3. A safe work environment for all those who perform work for Nordion Energi
4. Equal and inclusive energy company
5. Business ethics throughout the value chain

“Powering a changing society – and making green energy accessible to all”

## NORDION ENERGI’S CONTRIBUTION TO THE SUSTAINABLE DEVELOPMENT GOALS



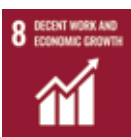
**GOAL 5 GENDER EQUALITY**

Nordion Energi endeavours to strike a balance between the number of women and men at all levels and within all occupations.



**GOAL 7.2 AFFORDABLE AND CLEAN ENERGY**

Nordion Energi plays its part by pushing for a significant increase in the share of renewable energy available.



**GOAL 8.8 DECENT WORK AND ECONOMIC GROWTH**

The work environment must be safe for everyone who performs work for Nordion Energi.

**GOAL 8.7**

Our Supplier Code of Conduct aims to reduce the risks of forced labour, child labour, modern slavery and human trafficking throughout the value chain.



**GOAL 10 REDUCED INEQUALITIES**

Nordion Energi believes that workplaces characterised by gender equality and diversity form a basis for creativity and innovation. No form of discrimination is accepted. Our Code of Conduct sets out principles expected of all employees.



**GOAL 13 CLIMATE ACTION**

All investments made by Nordion Energi are aimed at supporting a renewable agenda in order to reach agreed climate targets. All our projects aim to reduce greenhouse gas emissions and improve the local environment.



**GOAL 9.1 INDUSTRY, INNOVATION AND INFRASTRUCTURE**

We contribute by building reliable, sustainable and resilient infrastructure in order to ensure security of supply.



**GOAL 17.16 PARTNERSHIPS FOR THE GOALS**

Nordion Energi actively seeks collaborations and partnerships with various actors and stakeholders in order to drive the sustainable agenda.



# Nordion Energi's sustainability topics, targets and outcomes

AREA	NORDION ENERGI – TARGETS	OUTCOME 2022 (2021 DATA IN BRACKETS FOR COMPARISON)
Actively driving the transition to net zero emissions	100% green gas in all gas infrastructure	37.5 (34.4) % throughout the western Swedish gas network
Actively driving the transition to net zero emissions – Own emissions	Net zero emissions in own operations 2030, scope 1 and 2 + By 2023, to reduce own methane emissions by 35% compared with total emissions for 2019 + 100% of electricity bearing the Good Environmental Choice label covers energy losses in the electricity network	906.2 tonnes CO <sub>2</sub> e (1,250). Decrease by 27.5 % from 2021 to 2022  Reduction of 50 (31) % (compared to 2019)  100% electricity labelled Good Environmental Choice
Reliable and flexible infrastructure as a platform for security of supply of energy and raw materials	Swedegas: zero unplanned outages to customers + Weum: available gas supply to customers + FENAB SAIDI: < 38 minutes <sup>1)</sup> CEMI4: < 1,200 customers <sup>2)</sup>	Swedegas: 2 (0) unplanned outages to customers  Weum: 99.999 (99.999) % available gas supply to customers with 5 (7) unplanned outages  FENAB SAIDI: 43.9 (67.1) minutes CEMI4: 3 (1,414) customers
A safe work environment for all those who perform work for Nordion Energi	Zero lost-time injuries (LTIs)	LTIs: 2 (0)
Committed employees	Employee index in line with benchmark <sup>3)</sup>	Employee index: 77 (79) (Benchmark 74)
Equal and inclusive energy company	Better gender balance than the energy sector <sup>4)</sup> on average, all employees + Equal leadership opportunities for men and women <sup>4)</sup> + Diversity and inclusion index in line with benchmark	25 (23) % women and 75 (77) % men (Industry comparison 27% / 73%)  24 (31) % women and 76 (69) % men in leadership roles (Industry comparison 29% / 71%)  90 (92) (Benchmark 90)
Business ethics throughout the value chain	All major or business-critical suppliers must have signed the Supplier Code of Conduct	100 (75) % of the total number of active supplier contracts have signed the Supplier Code of Conduct

1) SAIDI (System Average Interruption Duration Index), a customer-weighted availability index where the unit used is outage per customer per year.

2) CEMI4 (Customers Experiencing Multiple Interruptions) shows how many customers have had more than 3 outages.

3) The employee index is a measure of engagement and satisfaction. A total of 20 index questions are retrieved from the index areas that together form the employee index (EI). Benchmark according to Quichsearch 2022.

4) Based on the 2022 Nyckeltalsinstitutet industry report for Electricity and Energy.

# Green energy accessible to all

Nordion Energi is actively driving the transition to a climate-neutral society and industry in Sweden and Europe today. Green energy must be accessible to all.

We make it possible for our existing and new potential customers to reduce greenhouse gas emissions, help reduce local air pollution and secure future competitiveness. At the same time, we are exploring opportunities to develop infrastructure to increase the share of renewable energy and to transport, capture and store carbon dioxide (CCS). We have also set targets ourselves to achieve net zero emissions in our own operations by 2030. We are particularly active in reducing our methane emissions. Our work is guided by our policy for health, safety, quality and the environment, along with our business plan.

## INTEREST IN GREEN GASES GROWING

More and more customers are demanding green gas, and we are striving to increase the supply and availability of gas with no impact on the climate. Biogas is currently the most in demand of the green gases. Biogas will continue to play an important role as a cost-effective solution for the transition to a sustainable society. Domestic production of biogas by anaerobic digestion also contributes to Sweden's transition to a circular economy. Waste and residual products are converted into resources through refinement, while at the same time cutting carbon emissions and recycling plant nutrients. The existing gas network in south-western Sweden is designed to cope with an increased volume of biogas in the long term as demand increases. The independent study entitled "The role of gas and gas infrastructure in Swedish decarbonisation pathways 2020–2045" (the Pathway Study), presented in 2021 by Energiforsk\* together with several stakeholders including Nordion Energi, highlights the future need for a combination of green gases in the energy system. For biogas, it is estimated that the demand across Sweden will increase to 14–29 TWh per year in 2045.

An even greater role will be played by hydrogen, which will be crucial for the transformation of industry and transport. A completely new infrastructure for hydrogen is required in Sweden, and this could be one

of the largest infrastructure investments ever made in Sweden. A report by Swedenergy at the beginning of 2023 shows that the demand for electricity is expected to increase significantly, from the current level of approximately 130 TWh up to 330 TWh/year in 2045. A large amount is needed to produce and meet the country's estimated demand for hydrogen. Co-planning is therefore needed for the deployment of both electricity and hydrogen networks. This will create greater opportunities for storage and capacity utilisation as there are synergies between the hydrogen infrastructure and existing and future electricity networks. Hydrogen production, for example, can take advantage of cheap electricity generation and relieve bottlenecks in the electricity network. The Pathway study also showed that Sweden can become self-sufficient in hydrogen, increasing the country's energy independence. The infrastructure should also be linked to the Nordic and European energy networks currently being built for the development of a green, competitive hydrogen economy and increased resilience.

All gas may also play an increasing role as a complementary back-up power source as it can be planned.

## THE SHARE OF RENEWABLE ELECTRICITY IS RISING SHARPLY

There is already a great deal of renewable electricity production connected to Falbygden Energi's electricity network, and our investments in the network makes us prepared for even more wind and solar power. As an independent and non-discriminatory electricity distributor, we cannot influence which producers choose to connect to our network. The number of solar panels in the network has continued to increase in 2022. Of the total transmission volume in 2022, 40.9 percent was local renewable electricity generation consisting of fossil-free CHP, wind, hydro and solar.

The ongoing transition will require an increasing number of backbone, regional and local electricity transmission networks. In particular, new infrastructure will be needed to connect new wind farms, both

\* Energiforsk is a Swedish research and knowledge company that runs and coordinates energy research.

onshore and offshore, to electricity consumers. The increasing share of renewable electricity from large and small-scale solar and wind power also places new and higher demands on the electricity network. The Swedish system is built to handle predictable electricity generation from a limited number of large plants based on hydropower, nuclear power and CHP. The electricity system now has to become more flexible and cope with an uneven flow of rapid and sharp variations in electricity production from energy sources such as solar and wind. Major investments will also be required for existing electricity networks.

#### PROJECT WITH POTENTIAL TO SIGNIFICANTLY REDUCE CO<sub>2</sub> EMISSIONS

All investments we make must support an infrastructure for a renewable and climate-neutral agenda. Nordion Energi is making major investments as described in later chapters of this report. There is great potential to reduce CO<sub>2</sub> emissions if all projects can be realised and scaled up.



*A sustainable transition is one of the greatest challenges of our time. It requires interaction between different types of production and energy systems. The ability to flexibly transmit and store energy will be crucial.*

# Great societal benefits from biogas

Biogas is more than a fuel – it is a circular economy system and a cost-effective solution for the transition to a sustainable society. Domestic production of biogas also increases the security of supply of both energy and food, as well as a range of other socially critical services and goods in our country. Nordion Energi takes a very active role in developing the biogas market in Sweden in dialogue with current and potential producers and users of biogas.

Biogas is of renewable origin and thus classified as a renewable fuel. It is a circular economy system and a cost-effective solution for the transition to a sustainable society. Waste from sewage, food waste and manure, as well as residual products from forests and industry, are dealt with while also being turned into valuable products – renewable energy and fertilisers. The digestates from biogas production can be returned to agriculture as organic bio-fertiliser. Essential nutrients are then returned to agriculture and the cycle is closed.

Using biogas as a fuel also helps to significantly improve air quality in cities. Biogas-fuelled vehicles reduce both nitrogen oxides (NOX) and harmful particles, thus contributing to reduced negative impact on health and the environment. Moreover, emissions of sulphur oxides (SOX), which lead to soil and water acidification, are almost zero from biogas, as for natural gas.

## CUSTOMERS CAN CHOOSE BIOGAS TODAY

It is already possible today for customers to make a gradual transition to renewable gas as both natural gas and biogas are supplied in the same gas network, just as fossil electricity and renewable electricity are supplied in the same electricity network. In 2022, the percentage of biogas was 37.5 (34.4) percent in the entire western Swedish gas network, including the distribution networks. This has happened at the same time as the total volume of gas traded has fallen, showing that the demand for biogas is very strong.

Almost all our household customers currently use biogas for heating and cooking. Industries are also increasingly opting for biogas. The food industry, for example, has largely replaced natural gas with biogas in its production. Even more of major gas consum-

ers would switch to biogas if there were large-scale production that could guarantee supply. In 2022, 33 (70) new connections were built for customers who requested biogas. The increased interest in converting from oil to biogas is also evident from the backup power plants, which are needed to meet both electricity and heat needs during periods of peak demand.

The rules for EU emissions trading changed from 1 January 2022, so that biogas traded over the network is no longer subject to emissions trading. This increases the incentive to switch. The rising cost of emission allowances and the removal of the previous reduction in energy taxation in 2022 are also increasing interest in biogas.

## ACCESS CRUCIAL FOR CUSTOMERS

For customers, access to biogas is the most important issue, followed by the desire for a less complex regulatory framework and the need for new business models where the price of biogas is no longer linked to the price of natural gas. Nordion Energi has technical application specialists who can help customers to examine the feasibility of switching to biogas. As piped gas is a safer alternative to LPG, pipelines have also been extended in urban environments dense with restaurants.

Facilitating the transition to biogas requires securing demand from customers while also stimulating production. This has to be done in parallel and in dialogue between the parties. There has been weak development of new biogas production plants in Sweden. Most of our biogas comes from Denmark at the moment. There is an enormous need for new plants in Sweden, particularly large-scale production plants located close to the gas network, so that the biogas produced can readily be made available to customers.

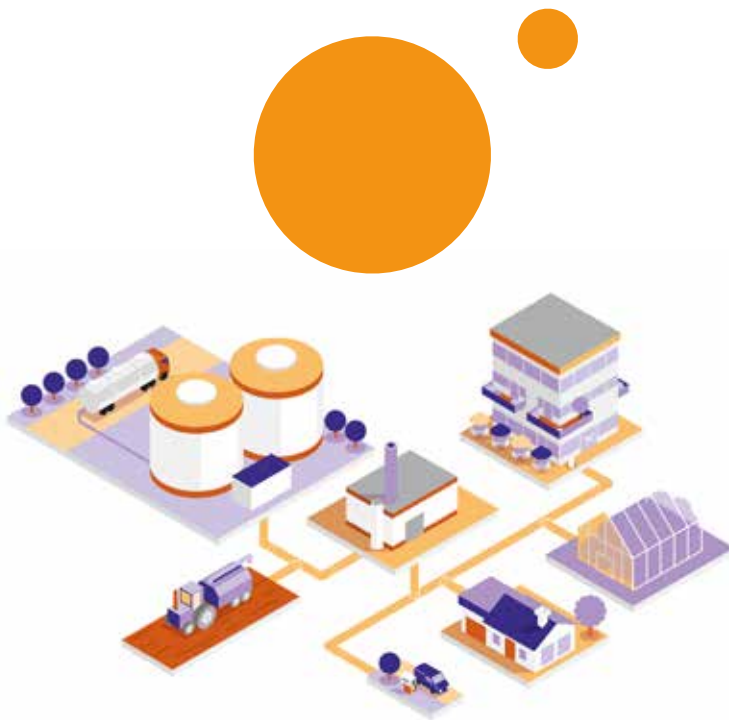
### PARTNERSHIPS DRIVE DEVELOPMENT

The gas infrastructure needs to be developed if the biogas market is to grow. Nordion Energi plays an active part in the dialogue to facilitate faster expansion of biogas, and we cooperate with various stakeholders. Access to a gas pipeline network means a reliable outlet for biogas, access to a larger market, and eco-friendly and energy-efficient transport of gas. Unlike electricity networks, where electricity generally has to be consumed immediately when it is produced, gas pipeline networks can also be used to store the gas so that it can be used at a later date. This allows for more flexible use and production of biogas.

The long-term support for biogas production until 2040 that the Swedish Parliament decided on in 2021 will be of great importance for the development of the Swedish biogas market.

### MAJOR BENEFITS IN SHIPPING AND TRANSPORT

Heavy road transport and maritime transport are currently heavily reliant on fossil fuels, which is why renewable gas can make a big difference to the climate here and now. There is also a growing interest in green gas in these areas, not least with more and more orders being placed for gas-powered vessels. Large new green volumes, particularly of liquefied biogas (LBG), the cleanest marine fuel available at present, are needed to make this transition. Nordion Energi is running an innovation project planning a liquefaction plant at the Port of Gothenburg for conversion of biogas from the gas network into liquid biogas. The plant may be ready to become operational in 2025, and if so it will be the first of its kind to be directly connected to the western Swedish gas network.



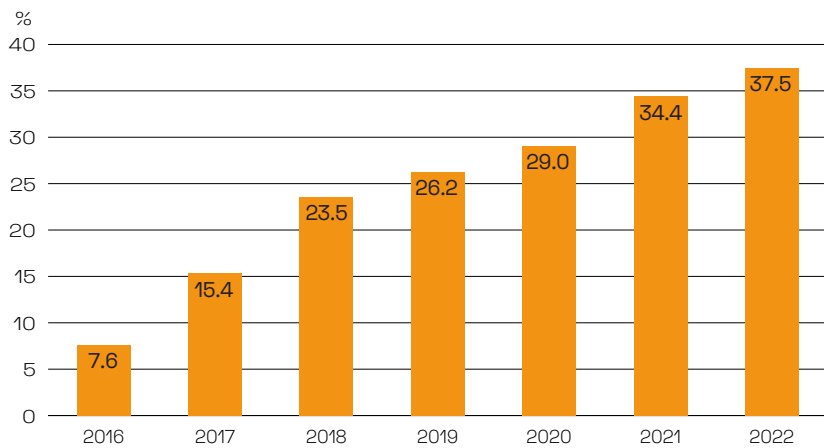
*A circular society with biogas*

Actively driving the transition to net zero emissions

# Gas Barometer – Biogas share 37.5%

The Gas Barometer was launched in 2016 as a Swedegas initiative, together with the companies that trade gas in the western Swedish gas network. Statistics are produced four times a year on how much biogas is transported and used in the network. The Gas Barometer tracks the proportion of biogas in relation to the total volume of gas traded.

**GAS BAROMETER: PROPORTION OF BIOGAS TRADED IN THE GAS NETWORK, 2016–2022**



# 37.5%

Percentage of biogas in the entire western Swedish gas network, 2022

■ The entire western Swedish gas network (transmission gas grid and distribution network)

In recent years, the share of traded biogas in the network has increased steadily due to increased imports, mainly from Denmark.

In 2022, the total amount of traded gas in the network fell by 26.4 percent compared to 2021. This means

that the amount of biogas also decreased, but only by 19.8 percent. As a result, the share of biogas in the network is also up from 34.4 percent to 37.5 percent.

# Hydrogen – key to transition

Hydrogen is seen as crucial to the EU's commitment to achieve carbon neutrality by 2050, and the transition to the hydrogen economy has started. Hydrogen offers a solution for phasing out fossil fuels in industrial processes and sectors in which cutting carbon emissions is both urgent and challenging through other alternative climate actions.

Hydrogen makes it possible for many sectors of society, such as industry and aviation, to meet their climate targets, as hydrogen can be used as a raw material, a fuel and/or an energy carrier, and it has many potential applications in the industrial, transport and energy sectors. The European Commission's hydrogen strategy for a climate-neutral Europe also recognises the crucial role of hydrogen in the necessary transition. The Nordic Region can be an enabler here. With our long coasts, we have a huge asset compared to other countries in Northern Europe that will help us to utilise offshore wind power.

Nordion Energi is involved in the creation of the hydrogen economy in Sweden with close links to all of Europe. We have several innovative, large-scale projects and have the ability to invest heavily in these ventures when they can be realised in the next stage.

## EUROPE'S FIRST LARGE-SCALE AND CROSS-BORDER HYDROGEN INFRASTRUCTURE

During the year, Nordion Energi and Gasgrid Finland launched the Nordic Hydrogen Route initiative, which aims at green industrialisation, market development and strengthening energy self-sufficiency. By building a hydrogen infrastructure in the Bay of Bothnia region and an open hydrogen market by 2030, the Nordic Hydrogen Route is accelerating the transition towards becoming globally leading hydrogen and climate-positive economies, creating new conditions for new investments and increasing access to green and competitive energy.

Together with Gasgrid Finland, we plan to develop an underground pipeline infrastructure that can efficiently transport energy from producers to consumers in order to ensure access to an open, reliable and secure hydrogen market. An integrated energy infrastructure can connect customers across the region, from hydrogen and e-fuel producers to steel manufacturers, who are keen to create new value chains

and products and reduce carbon dioxide emissions in their operations. This is crucial for the climate, but also for Sweden's energy independence and continued competitiveness. The Nordic region could also become self-sufficient in hydrogen with this solution.

## MAJOR INCREASE IN REGIONAL DEMAND

The regional demand for hydrogen is projected to exceed 30 TWh in 2030 and be around 65 TWh in 2040. Much of this hydrogen is expected to be produced by well built-out onshore and offshore wind turbines in the Bay of Bothnia region. This production will enable the expansion of around 48 GW of wind power capacity. The Nordic Hydrogen Route connects production to users' facilities via a network of pipelines following the coastline of the Bay of Bothnia, with important branches to expected demand centres such as Gällivare or Kiruna. The aim is for the infrastructure to be operational by 2030, with a final length of around 1,000 kilometres. The concept is being developed together with stakeholders along the value chain.

## FIVE POTENTIAL HYDROGEN ROUTES CONTRIBUTE TO EUROPE'S 2030 HYDROGEN TARGET

**The European Hydrogen Backbone (EHB)** aims to accelerate Europe's transition to climate neutrality by investigating and demonstrating the crucial role of hydrogen infrastructure in the development of a competitive common European market for green hydrogen. The Nordic Hydrogen Route, Nordion Energi and Gasgrid Finland's joint initiative, is part of this vision and one of five identified hydrogen routes planned by the EHB to achieve the 2030 targets and fulfil the supply and demand of hydrogen identified in the REPowerEU plan. These routes will initially link domestic local supply and demand for hydrogen. This will cover domestic demand in the first instance. There is potential to export hydrogen in the longer term, as the idea going forward is to extend this hydrogen route to connect European

Actively driving the transition to net zero emissions

regions and neighbouring countries. This will contribute to European energy independence and security of supply. The EHB has also identified 12 Mt (~400 TWh) of potential hydrogen supply in the EU, exceeding the domestic REPowerEU target of 10 Mt of green hydrogen by 2030. To ensure the development of these corridors by 2030, the EHB believes that speed is of essence and action is needed now.

**NEW COOPERATION PROJECT FOR OFFSHORE HYDROGEN INFRASTRUCTURE IN THE BALTIC SEA REGION**

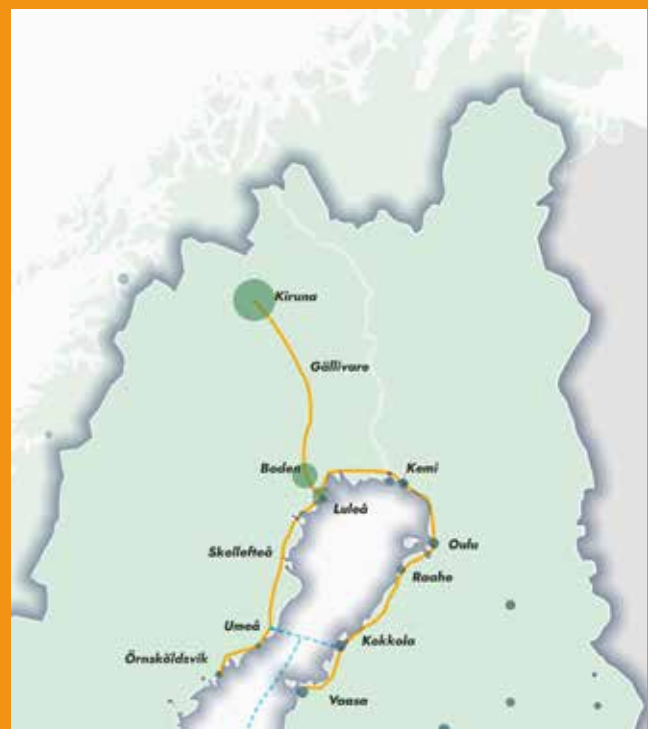
A new cooperation project, **Baltic Sea Hydrogen Collector (BHC)**, was launched in 2022. Nordion Energi is involved in this together with Gasgrid Finland, OX2 and Copenhagen Infrastructure Partners. This project aims to investigate the possibility of developing a new large-scale offshore infrastructure for the collection and distribution of green hydrogen around the Baltic Sea region, between Finland, Sweden, Åland, Denmark and Central Europe. The aim of this is to strengthen energy self-sufficiency and ensure access to an open,

reliable and secure hydrogen market and contribute to achieving the REPowerEU targets by 2030.

The very favourable conditions for both onshore and offshore wind power create major potential for hydrogen production around the Baltic Sea region. With investments in infrastructure, renewable energy and hydrogen production, up to 55 percent of clean hydrogen can be produced in the area – which is the goal of the REPowerEU plan.

THE OBJECTIVES OF THE PROJECTS ARE TO HELP CREATE A MARKET FOR HYDROGEN AND LINK SUPPLY AND DEMAND WITHIN AND BETWEEN REGIONS.

PLANNED PIPELINE ROUTES FOR THE BALTIC SEA HYDROGEN COLLECTOR AND THE NORDIC HYDROGEN ROUTE





# Carbon capture infrastructure

Nordion Energi's purpose is to contribute to the energy transition. That is why we participate in various initiatives and projects where our infrastructure and expertise can be used as a basis for creating climate benefits. One such area is carbon capture and storage (CCS). CCS is one of many tools that Sweden is investing in with a view to achieving its climate goals. When the captured carbon dioxide is of biogenic origin, commonly referred to as bio-CCS, then even negative emissions are created.

Since 2020, Nordion Energi has been participating in the CinfraCap – Carbon Infrastructure Capture – project in a unique collaborative project together with Göteborg Energi, Renova, the Port of Gothenburg, Preem and St1. Work was in progress on an in-depth feasibility study in 2022, focusing on refining the technical design and developing the business model. This project will enable the Port of Gothenburg to become one of the first in the world with a shared large-scale infrastructure for the transport and intermediate storage of liquid carbon dioxide separated from the flue gases of various process industries and CHP's in Gothenburg and other parts of Sweden.

## **SOUTH SWEDEN PROJECT STARTED DURING THE YEAR**

A new collaborative project on infrastructure solutions for the transport and permanent storage of captured

carbon dioxide has been in progress since September 2022. Nordion Energi is one of the stakeholders in the project, called CNetSS (Carbon Network South Sweden), which is headed by Växjö Energi and will help create sustainable and cost-effective solutions for a regional carbon infrastructure in southern Sweden. Besides Växjö Energi and Nordion Energi, the following stakeholders are also involved in the project: Copenhagen Malmö Port, E.ON, Höganäs, Kemira, Kraftringen, Stora Enso, Sysav and Öresundskraft. Several companies have already scheduled plans for carbon capture. Together, they have the potential to capture and store more than 2 million tonnes of carbon dioxide annually. The Swedish Energy Agency is of the opinion that the project may be an important step towards realising the value chain for bio-CCS (biogenic Carbon Capture and Storage).



Actively driving the transition to net zero emissions

# Towards net zero emissions in own operations

Our day-to-day work focuses on minimising the environmental impact of our operations, such as emissions to air, energy use, odours and other environmental impact.

We have the opportunity and responsibility to help reduce impacts on the climate in everything we do. Our policies for health, safety, quality and the environment guide our work, as do our targets. In early 2022, we set a target to reach net zero emissions in our own operations, scope 1 and 2, by 2030. Our own emissions occur in a number of different ways. We focus in particular on minimising methane emissions, as this is the largest source of our scope 1 emissions. The organisation also uses utility vehicles for various work-related travel, which is the second largest source of emissions within own operations. Most of the utility vehicles are leased through a contracted leasing company. A specific procedure for own transport, including our utility vehicles, was adopted in 2022. This stipulates that all our vehicles should have the least possible negative environmental impact. With the participation of Swedegas, we have committed to Fossil Free Sweden’s Transport Challenge concerning fossil free road transport by 2030.

Purchased electricity and heating are other sources of emissions (scope 2). The gas transported in the high-pressure system, unlike the gas in the distribution network, needs to be heated using boiler gas. Since 2019, the boiler system has run on certified sustainable biogas. Running the transmission gas grid in particular also consumes electricity in order to power pumps and compressors at the stations. We purchase renewable electricity and are part of Fossil Free Sweden’s Solar Challenge initiative through the Swedegas commitment.

Energy losses in the electricity network also need to be compensated. All supporting electricity purchased bears the Good Environmental Choice label. SF6 gas, which has a global warming effect significantly higher than carbon dioxide, is used as an insulating gas in a number of switchgear and circuit breakers in the electricity network. SF6 gas will be phased out gradually, which means that we avoid SF6 gas wherever possible when procuring new switchgear and switching equipment.

### OTHER EMISSIONS

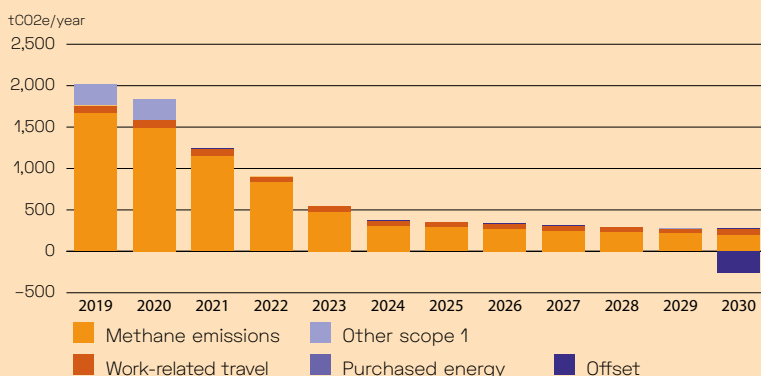
Nordion Energi also monitors emissions from certain scope 3 categories, including those emissions arising from business travel by air and rail among other scope 3 elements. Our instruction is to provide transport opportunities that offer a high level of safety with a low environmental load.

### NEW EU REQUIREMENTS TO REDUCE METHANE EMISSIONS

Though gas generates lower carbon emissions than oil and coal during combustion, it still has an adverse impact on the climate; and methane has a global warming effect many times higher than carbon dioxide. There is a risk of methane emissions during the production and distribution of both natural gas and biogas.

In December 2022, the Council of the European Union reached an agreement on a proposal to track and reduce methane emissions in the energy sector. This proposal introduces new requirements with the highest

TOWARDS NET ZERO EMISSIONS, SCOPE 1 AND 2, BY 2030



Net zero emissions in own operations, scope 1 and 2, by 2030. A small amount of carbon offsetting is planned by 2030 for any residual emissions that cannot be avoided.

standards for the gas sector and others to measure, report and verify methane emissions. Operators will need to track emissions and take appropriate mitigation measures to prevent and minimise methane emissions from their operations. A final text is expected following the Council's negotiations with Parliament. The Commission presented the proposal for a regulation on reducing methane emissions in the energy sector in December 2021, as the second part of the legislative proposals under the fit for 55 package aimed at implementing the European Green Deal to achieve climate neutrality in the Union by 2050. The European Climate Act makes the attainment of the EU's climate target – to reduce EU emissions by at least 55% by 2030 compared to 1990 – a legal obligation. The proposal builds on the strategic vision set out in the EU Methane Strategy 2020.

Nordion Energi focuses on minimising methane emissions. Our management system includes control activities, procedures and training aiming to systematically prevent the occurrence of emissions. This is accompanied by a preventive maintenance plan. During our regular maintenance and inspection rounds, small direct emissions are possible. Such emissions are minimised by using temporary bypass pipelines to make whole sections gas-free. Where emissions are unavoidable, the remaining gas is flared. All gas emissions are logged. Gas losses can also arise as a consequence of system

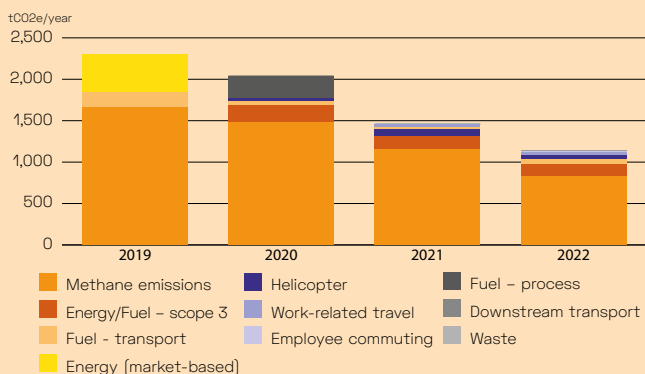
Actively driving the transition to net zero emissions

leaks, known as diffuse emissions. Measurements at the metering and regulation stations have been carried out since 2017 to identify and quantify any leaks. Leaks discovered during inspection rounds are actioned in conjunction with these. Measurements are also carried out on Weum's distribution network since 2019.

Nordion Energi's goal was to reduce its own methane emissions by 35 percent by 2023 compared with emissions for the base year 2019. Methane emissions have been reduced by 50 (31) percent from 2019 to 2022. Find out more on page 20 about how our presence in third-party excavations in the field has reduced the number of excavations and thus reduced methane emissions. Transmission losses, i.e. methane leaks, amounted to approximately 0.01 percent of the total transmitted volume, matching the figure for the previous year.

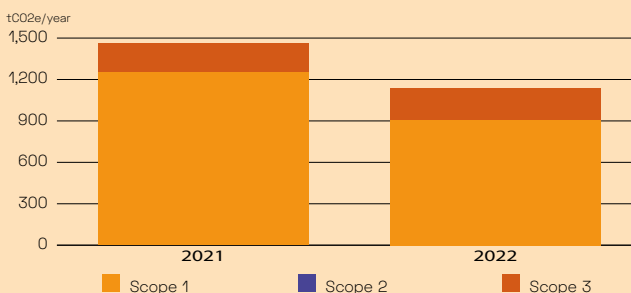
Our emphasis on reducing our adverse impact on the climate also includes broader efforts to minimise our overall environmental impact. Nordion Energi is constantly striving for continuous improvement of our operations, and we comply with legislation, environmental requirements and energy system requirements. We use the most eco-friendly and energy-efficient technologies possible and ensure efficient maintenance work. We are also increasing our understanding of the life cycle impact of our products and using this information in our improvement work.

TOTAL EMISSIONS BREAKDOWN BY GROUP



2019 was set as the base year according to previous decisions, but this has now been adjusted to 2021. This is because Nordion Energi expanded its activities in 2021, and also as a result of a general development of calculations as expertise in the field increases, in both the organisation and the industry. Comparison with 2019 estimates already shows emissions halved mainly due to the phasing-out of natural gas, the updated vehicle fleet and reduced system losses as a result of improved procedures. The trend is still decreasing, despite the expansion of activities and the inclusion of more categories. Waste and hotel nights were included for the first time in the calculations for 2021, and employees' commuting to and from the workplace and downstream transport are also added for 2022, increasing scope 3 by 8 percent. Nevertheless, total emissions are down by around 22 percent, from 1,464 tonnes of carbon dioxide equivalent in 2021 to 1,137 tonnes in 2022. Methane emissions have been reduced by 50 percent, from 1,662.8 tonnes CO<sub>2</sub>e in 2019 to 830.4 tonnes CO<sub>2</sub>e in 2022.

TOTAL EMISSIONS BY SCOPE



EMISSIONS PER SCOPE

Nordion Energi calculates and reports its climate impact according to the Greenhouse Gas Protocol Corporate Standard. **Scope 1** includes emissions that can be controlled within the company. This includes transport in own vehicles, back-up power, gas use for own use and system losses in the form of flaring, venting, leakage and excavations. **Scope 2** includes indirect emissions from purchased electricity, heating and cooling. **Scope 3** includes the categories energy/fuel scope 3, downstream transport, waste, business travel, commuting and hired service for pipeline inspection by helicopter. Downstream transport is new for this year and includes waste transport and round-trip transport of cable drums and commuting, which was estimated by means of a survey of the organisation's employees.

# Security of supply of energy and raw materials

Modern society depends on an effective energy supply. Disruptions and outages in the supply of both gas and electricity can have serious consequences for individuals, businesses and key functions in society. That is why security of supply is key to our national security. It is also crucial for maintaining the competitiveness of Sweden and Europe, as well as for preserving our social welfare society. That is why stringent demands are made of the reliability of energy systems.

Highly efficient infrastructure forms the basis for Nordion Energi's contribution to society. Our assurance to customers is that they can expect an electricity and gas supply at all times, without disruption or outages. Security of energy supply is ensured primarily by effective energy markets. These are increasingly international. Robust supply chains increase the ability to prevent and mitigate disruptions and shortages. It also involves investment in infrastructure and a well-planned ability to deal with everyday incidents, as well as during crises and states of alert. Nordion Energi has a far-reaching responsibility to prevent and mitigate any disruptions and outages that may occur.

## **GAS SUPPLY SECURED DURING THE YEAR**

In Sweden, natural gas and biogas are mainly used as process fuel and raw material in industry, for power and district heating production, as fuel for vehicles, and in households that use gas for heating and cooking. That is why the supply of gas has a major impact on the economy and society. At present, gas accounts for about three percent of the total energy supply in Sweden. But natural gas and biogas make up a significant part of the energy mix in Skåne, Halland, Västra Götaland and western Jönköping (county). Gas use there accounts for about 20 percent of the energy supply, as well as being an important commodity for industrial processes.

In 2022, the emphasis has been on security of supply. Nordion Energi has prioritised efforts to secure the daily supply of gas to Sweden since the Russian invasion of Ukraine. General uncertainty in Sweden and the rest of Europe was also increased by the sabotage of Nord Stream 1 and 2. We have monitored developments closely and working in close consultation with

the Swedish Energy Agency and other actors in the Swedish and European markets. Gas supplies to customers in Sweden were secured during the year.

We also maintain ongoing dialogue with our major industrial customers to support them in their energy saving efforts; which is good for the customer and also for the network as a whole, as periods of high load can be managed more effectively through collaboration.

The Swedish and Danish systems have been part of a common market, known as the Joint Balancing Zone (JBZ), since 2020. A new balancing model from 2021 has increased security still further. Thanks to the single market, end customers will have access to more suppliers, not least suppliers of biogas. The rest of Europe has a common interconnected gas infrastructure with multiple supply points. The Baltic Pipe, which will carry Norwegian gas to Europe via Denmark, was also operational by the end of 2022. This further strengthens and secures energy supply. During the year, traded biogas – which is produced mainly in Denmark and Sweden – amounted to 37.5 percent of the total amount of gas in the western Swedish network.

## **GAS STORAGE INCREASES SAFETY**

Swedegas also owns the Skallen gas storage site near Halmstad, which is connected to the gas network and can supply customers with gas when consumption variations occur or when there are disruptions in supply. There were new requirements for storage and stocking, besides the target to reduce gas consumption by 15 percent in the EU and Sweden. All gas stores were filled as required.



The gas network covers a total of 601 km, including branch pipelines from Dragør in Denmark to Stenungsund in the north. Along the gas network there are approximately 40 metering and regulation stations (MR-stations) where gas pressure is regulated, and the volume is metered. After these stations, the distribution network is connected to transport the gas to the end customer. Weum's distribution network is over 2,000 kilometres in length.

Swedegas also owns pipeline infrastructure in the Port of Gothenburg that enables shipping to bunker liquid gas as fuel.

Falbygdens Energi's electricity network is 2,260 kilometres long and reaches over 17,000 customers.

- Distribution grid for electricity
- Distribution grid for gas ≤4 bar
- Transmission grid for gas, ≤80 bar
- MR-stations, gas

**MAINTENANCE AND SECURITY PROTECTION**

Secure maintenance and development of the infrastructure in our gas and electricity networks are crucial to our delivery undertaking, which is guided by our policy for health, safety, quality and the environment and our management system. We are constantly strengthening and developing our security protection work in the fields of information and IT security. Security protection and preparedness have been a particularly high priority in 2022. An attack on energy systems can have dire consequences. We are also working in parallel to strengthen physical security in line with the Protective Security Act.

Nordion Energi has increased its preparedness and vigilance due to the security policy situation in Sweden, especially for the transmission grid for gas. Three crisis levels have been defined; early warning, preparedness and crisis. In the event of a crisis, Swedegas can work on behalf of the Swedish Energy Agency to

order distributors or directly connected customers to reduce their consumption in order to secure supplies to protected customers. We have also intensified our dialogue with the responsible authorities and other relevant bodies. This includes exchanging information with other gas infrastructure operators and other parties in neighbouring countries and the rest of Europe.

**SECURITY OF ENERGY SUPPLY IS THE GOAL**

Nordion Energi has common, continuous alarm management with contingency for the entire network. Nordion Energi operates in accordance with the standard for effective asset management even though the company is not certified to the ISO 55001 asset management standard. All checks are documented, and non-conformances are reported for rectification. Our maintenance strategy sets clear priorities with relevant key performance indicators regarding interruptions in deliveries to customers.

## Reliable and flexible infrastructure as a platform for security of supply of energy and raw materials

Within the Falbygden Energi electricity network, we use SAIDI (System Average Interruption Duration Index), a customer-weighted availability index where the unit used is outage per customer per year. The goal is to keep the average interruption time, SAIDI, below 38 minutes. The interruption time was 43.9 [67.1] minutes in 2022, which is low compared to the industry. The CEM14 metric is also monitored, which shows how many customers have had four or more outages. In 2022, there were 3 [1,414] customers with four or more outages, compared to the target of 1,200. The drop in CEM14 is a result of the investments we are making to weather-proof the network and increase its operational reliability. Nor have we had any lines with multiple sources of error that could not be identified at the first attempt at troubleshooting. Around 12% of the electric network consist of overhead lines and 88% of underground cables.

We continuously monitor the number of hours of unscheduled unavailability to customers for the transmission grid for gas. There were 2 [0] unplanned outages affecting customers within the transmission grid for gas in 2022. These outages lasted a total of five hours. The number of unplanned outages and the availability of gas to customers are monitored in the distribution network. The distribution network suffered 5 [7] unplanned outages. However, delivery reliability in 2022 was as high as the previous year, with an available gas delivery to customers of 99.999 [99.999] percent.

### PRESENCE REDUCES EXCAVATION

Availability is primarily affected by accidental pipeline ruptures resulting from excavation incidents caused by a third party. Efforts to reduce the risk of excavation work have continued in 2022. As a result, excavations could be reduced from 19 affecting 140 customers in 2020, to 7 affecting 67 customers in 2021 and just 5 affecting 12 customers in 2022. From previously sending out instructions and maps to contractors and others who were to carry out excavation work, this was supplemented in 2022 with an increased presence of Nordion Energi in the field. Before any excavation work begins, a site visit takes place where – in dialogue with the company that will be carrying out the excavation work – we clearly mark the location of the gas pipelines by spraying the ground while providing more information on regulations and other support. The additional resources

this entails will lead to greater security of supply for our customers, reduce the risk of serious accidents among contractors during excavation work, and increase the safety of neighbours and others in the vicinity of the work. This also reduces emissions of the green house gas methane. Investigations have been conducted into all incidents that occurred during the year.

Nordion Energi, with its subsidiaries Weum and Swe-degas, is certified according to the ISO 14001 standard for environmental management systems. Nordion Energi carries out regular maintenance and inspection rounds (patrols) in order to maintain the gas infrastructure and ensure that security of supply remains consistently high. Weekly checks are made to ensure rounds have taken place according to plan. An aerial inspection of the transmission pipeline is carried out six times a year.

### INVISIBLE UNDERGROUND GAS PIPELINES

The whole of the gas network is concealed underground and has been adapted to the landscape. The land above can be used more or less as usual, which reduces the impact on land use. Nature and environmental interests are taken into account when planning pipeline locations and necessary permits are always in place. The method used to build gas pipelines depends on the prevailing ground conditions. The majority of new gas pipelines are built within the distribution grid and within paved areas. For agricultural land, the land must always be restored so that it can be used in the same way as before the pipeline was built underground. Gas infrastructure is a very eco-friendly, cost-effective means of transmitting large volumes of energy without any visual impact and with minimal consequences for activities taking place in the vicinity. This also means that gas networks have no significant adverse impact on biodiversity.

Industrial companies that connect to a gas network get efficient, climate-friendly transport that is independent of the weather. Having a pipeline directly into the plant also minimises the need for land and various safety measures.

### MODERNISATION OF THE ELECTRICITY NETWORK

One of our most important jobs is to build, maintain and renew the electricity network so that all our customers get the electricity they need, with minimum

HERE, 12,000 OF THE WORLD'S MOST IMPORTANT CREATURES IN TERMS OF BIODIVERSITY ARE BUZZING AROUND AT ONE OF NORDION ENERGI'S MEASUREMENT AND CONTROL STATIONS.

Beehives have been sited at one of Nordion Energi's measuring and control stations since last spring. This initiative is a collaboration between beekeeping company Maries Bihantverk and Nordion Energi, in an attempt to contribute to the biodiversity of the local area. This place is home to thousands of bees that pollinate a perimeter of 1–10 kilometres and help to encourage the growth of lots of beautiful flowers.

"Bee pollination results in more flowers, which means more endangered plants can survive. A third of the food we eat is also reliant on the presence of bees and insects that pollinate plants," says Marie Backman of Maries Bihantverk.

The hives are maintained once a fortnight in order to maximise the growth of the bee population and the honey they produce, and to prevent swarming.

The investment in the hives not only provides a taste of golden honey, but is also a way to help raise awareness about nature and create interest and commitment for Nordion Energi's employees and customers.



disruption. Major investments are made in weather-proofing, renewal and preventive maintenance. We are also investing in modernising our electricity network in order to meet the future demands on account of electric cars, new technologies and digitalisation. A new generation of electricity meters was installed during the year, which provide increased support for the integration of renewable electricity production, provide customers with the opportunity to connect to the meter and view near real-time metering data, and provide support for localising faults in the electricity network.

High electricity trading prices during the year led to increased purchase costs for the electricity network's transmission losses, also known as network losses. Network losses mean that a small amount of electricity is lost as it travels through the network, which is a natural part of transmission and occurs when lines get hot. The regulatory framework allows the costs of network losses to be passed on directly to customers, and so this led to an increase in electricity network charges.

For electricity operations, maintenance and periodic inspection of the facilities are carried out at set

intervals according to the maintenance schedule. Our high-security receiving stations in the urban area of Falköping are inspected weekly, while those in the countryside are inspected monthly. Some overhead lines are patrolled annually and all overhead lines are inspected thoroughly at eight-year intervals. The substations and cable cabinets are inspected every eight years, which is also the clearing interval in power line corridors. All findings and rectifications are documented by means of system support. Work is in progress on including electricity network operations in the Nordion Energi certificates ISO 9001, 14001 and 45001 in 2023. Our contingency organisation is ready to respond every hour of the year.

Electricity networks are vulnerable to high winds, storms and snow, which are also expected to increase as a result of climate change. We are implementing underground cabling, i.e. burying most of the electricity network underground to reduce the risk of outages. We are also clearing the power line corridors around the overhead lines to reduce the risk of damage to the overhead lines.

## Reliable and flexible infrastructure as a platform for security of supply of energy and raw materials

Falbygdens Energi Nät launched a project on digital solutions in 2022 in collaboration with Plexigrid. One challenge at present is that network connection requests take a long time to handle due to limitations among other network owners that are beyond the control of Falbygdens Energi Nät. New connections of electricity-intensive industry, renewable energy production and electric car chargers may have to wait a long time before being given permission to connect. The electricity network becomes a de facto bottleneck for the energy transition. Digital solutions make connecting to the network easier and faster. Falbygdens Energi Nät also finds out more about the situation in the electricity network by utilising the existing electricity network more intelligently and using data from the new generation of electricity meters, which all customers have.

Plexigrid technology is helping users to visualise, simulate and forecast energy flows in electricity networks in greater detail, and this is important given the increasing amount of wind power, solar panels, electric car chargers and heat pumps in the electricity network. The system can also be used to develop better long-term plans to future-proof the electricity network so that it can cope with the energy transition and help keep costs down for consumers. The project, which will continue for eighteen months, is partly funded by the Swedish Energy Agency as the results and experiences from it are deemed to have good potential to contribute to the transition of the energy system by means of increased flexibility and more efficient utilisation of Swedish electricity networks.

### THE GAS THAT COMES INTO SWEDEN

The gas entering Sweden consists of a mixture of natural gas and biogas. Biogas is mainly produced in Denmark and Sweden. This biogas is certified and traceable between countries.

Sweden has no natural gas production of its own and is reliant on imports. Natural gas has historically come from the Danish part of the North Sea. The Swedish-Danish gas system has surplus production in normal years and exports to other European countries. The Danish Tyra platform has been undergoing renovation since 2019. Natural gas has come from other sources via the European gas

network during the renovation period. REPowerEU stipulates the diversification of gas supply to Europe. This has also been achieved during the year. Supply comes from gas fields in the North Sea and North Africa, and LNG from the US. The share of gas from Russia decreased during the year, from around 40 percent of the total volume at the beginning of the year to only about 5–6 percent at the end.

The Baltic Pipe was taken into operation in 2022 and Norwegian natural gas is now entering the system as well, which in practice is the gas that is now

reaching Sweden. The gas system is also supplied by biogas and natural gas production from the Netherlands and Germany, for example. Tyra is expected to be renovated by the winter of 2023/2024, at which point Sweden will once again receive Danish gas. The natural gas traded on the European market is not origin-labelled and Nordion Energi has no insight into which gas is traded. We are obliged by law to keep the system open to anyone who wants to trade in gas.



# Culture of safety, engagement and innovation

A good work environment is safe, welcoming, inclusive and free from any form of discrimination for all employees. We are also absolutely certain that diversity makes us better. Differences give us access to more perspectives, which creates a better work environment and gives us the energy we need to fulfil our purpose – powering a changing society.

We are maintaining a long-term approach in order to ensure a safe and secure work environment in which all our employees have equal opportunities to enjoy their work, develop and feel good. Our core values help us to maintain a culture where we put safety first.

The company had 106 [105] employees at the end of the year, about half of whom worked on the operation and maintenance of existing infrastructure, while the others were mainly involved in customer service, marketing, finance, communications, innovation and business development.

We developed our new core values in an inclusive process in 2021 and gave them specific content at the beginning of 2022. Our core values were also the theme of our kick-off as well as our Leadership Forum, where the emphasis was on leadership steered by values. During the year, we have begun to integrate these perspectives in procedures, communication and decision-making documents, for example, and in the planning of activities.

## SAFETY FIRST

Nordion Energi's operations must always maintain a very high level in terms of safety and risk management. Our systematic work environment management is the basis for preventing and managing risks of accidents and ill health, for all employees, contractors and others who carry out work for Nordion Energi. The handling of both electricity and gas, and where the gas is classi-

fied as flammable, is critical and must be done safely to ensure that the risk of serious accidents is minimised. All employees must be observant in the work environment and immediately report any risks in our deviation reporting system. The company's integrated policy for health, safety, quality and the environment governs how, safely and in a predetermined manner, we can ensure the safety and security of individuals, facilities, the environment and the gas and electricity supply. The policy is based on binding requirements set out in current EU regulations, Swedish legislation, regulations and industry guidelines. This fulfils the policy requirements of ISO 9001, ISO 14001 and ISO 45000. During the year, 2 [0] accidents involving sick leave occurred in our operations. In both cases, we conducted a thorough investigation to understand the root cause of the incident, identify ways the incident could have been avoided, and implement mitigation measures to help prevent the issue from reoccurring. Lessons learned were also communicated to all employees. The first case, which involved an employee cutting the hand while peeling a cable, was raised at a safety meeting, and the action taken included purchasing gloves to protect against cuts. In the second case, which involved heavy manual handling of equipment, plastic pallets have been replaced with wooden pallets. The risk assessment for tasks involving heavy manual handling has also been completed.

Our systematic work environment management is carried out in accordance with the management system certified in accordance with ISO 45001 in order to reduce work environment risks, ensure that ill health and accidents are prevented and that a satisfactory work environment is achieved. This provides the basis for a safe and secure work environment, and efforts to improve the work environment are ongoing. The Board-level HSSEQ committee is part of our systematic work environment management and is key to the cooperation between employees and employer. The HSSEQ committee is the organisation's safety or work environment committee, but is not limited to the work environ-

## OUR CORE VALUES

INNOVATION

COMMITMENT

TOGETHER

SAFETY

## A safe work environment for all in an equal and inclusive energy company

ment. The committee primarily deals with issues relating to protection against ill health and accidents and how Nordion Energi can promote a safe and secure work environment and good working conditions in general. Other issues may also be raised, such as the external environment, safety and quality.

Nordion Energi also is working to raise awareness of the importance of prevention of accidents. Early reporting of risk observations and thereby eliminating risks is crucial. 40 risk observations were reported in 2022.

### DIVERSITY AND INCLUSION FOR MORE PERSPECTIVES

Nordion Energi works actively to create a diverse culture offering equal opportunities for all. Diversity of perspectives allows us to reinforce one another's skills, experiences and ways of working, creating a greater sense of commitment and a stronger company. We welcome diversity in areas such as gender, transgender identity or expression, ethnicity, religion, disability, sexual orientation and age. Our culture involves treating one another with respect and dignity. Maintaining a zero tolerance approach allows us to act quickly and forcefully against any discrimination, harassment or other victimisation. We follow a diversity and inclusion index that includes questions on diversity and inclusion and whether the work environment is free from discrimination, harassment and victimisation – questions which are put to all employees in our annual anonymous employee engagement survey. The result during the year was at 90 (92), out of 100, the same level as the previous year. This is in line with the benchmark against which we compare ourselves.

### CONTINUED HIGH LEVELS OF EMPLOYEE ENGAGEMENT

Nordion Energi has been following the employee index, a survey of employee satisfaction and commitment, since 2021. The result for 2022, 77 (79) out of 100, is in line with the comparison available for the industry, 74 (74). From the spring of 2023, Nordion Energi will switch to more frequent and interactive measurements with the possibility of monitoring the results in real time, which will allow for faster and more accurate action when needed.

### HYBRID WORKING MODEL HERE TO STAY

Nordion Energi has been offering a hybrid working model since 2021 that allows employees to work from home for a number of days per week, provided that the work environment at home is well functioning. This model was evaluated in 2022. Many of our employees stated that they felt this flexibility had helped them to achieve a better work-life balance. At the same time, it was confirmed that attendance in the workplace is important for cohesion and cooperation. Overall, the evaluation showed

that the hybrid model works well, and it is now part of the normal way of working. The model was adjusted after the evaluation to include two days of working from home per week, instead of the previous three days.

### WE STRIVE TO ACHIEVE BALANCE BETWEEN WOMEN AND MEN

Nordion Energi strives to achieve balance between women and men at all levels and in all professional areas in order to create a good work environment that is highly efficient. We have clear action plans in place to ensure that both genders are represented equally. The total percentage of female employees at the end of December stood at 25 (23) percent, the same level as before. The proportion of women must increase in order to achieve the same proportion as in the energy sector as a whole, 27 (27) percent. Equally important are opportunities for influence through leadership for both men and women. The proportion of female managers currently stands at 24 (31) percent. The Board of Directors consists of eight ordinary members, five of whom are elected by the company's shareholders at the general meeting and three are employee representatives. The board consists of two women and six men.

An annual payroll mapping is carried out to ensure that there are no unreasonable differences in pay. This also includes monitoring a gender pay index, which shows how both the mean and the median salary compares between men and women. Any unjustified differences in pay are addressed.

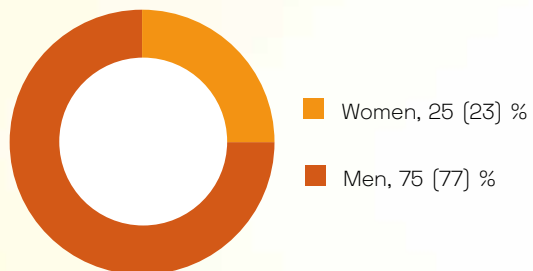
### INNOVATION PART OF CORE BUSINESS

For Nordion Energi, the ability to attract and retain cutting-edge expertise is crucial to its continued success. We want to be at the forefront of the development of future energy systems. Future solutions include new technologies, new business models and new markets. This requires a variety of skills, all at very high levels. Nordion Energi is working to continuously secure the skills of our employees by conducting development conversations and ensuring individual development plans as well as offering leadership training. We are cooperating with external partners to meet the need for complementary expertise.

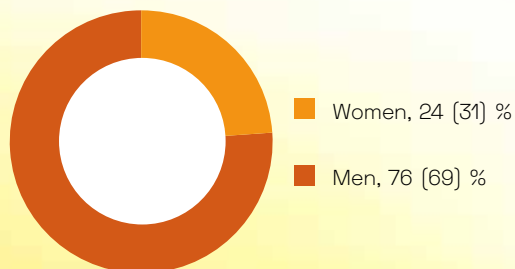
### FOCUS ON HEALTH

Nordion Energi focuses on employee health, and various forms of activities and initiatives to promote health are offered. A private health insurance is taken out for all employees at the start of the employment. All employees are also offered a wellness allowance and have access to a benefits portal offering wellness activities. Employees are also offered health checks every two years.

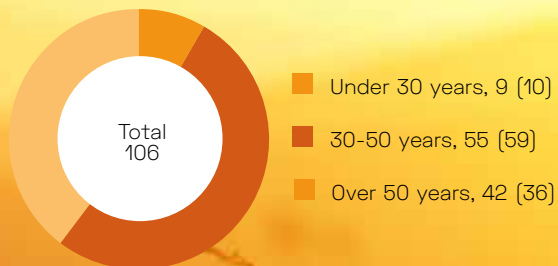
### GENDER DISTRIBUTION



### PROPORTION OF FEMALE AND MALE MANAGERS



### AGE DISTRIBUTION



### FORMS OF EMPLOYMENT



Nordion Energi is a member of Energiföretagens Arbetsgivarförbundet and has two applicable collective agreements, Branschavtal Energi and Kraftverksavtalet. All employees are covered by one of these collective agreements.

# High ethical standards in critical operations

At Nordion Energi, we act responsibly and in accordance with a sound ethical framework in all our processes, business transactions and day-to-day operations.

Running an essential service makes stringent demands of quality and compliance. An unethical business culture would jeopardise trust in us as a company and also risk putting our employees, business partners and society at large at risk. Nordion Energi strives constantly to improve the quality of its activities and prioritise the needs and expectations of customers. We are committed to complying with all laws and regulations that apply to what we do. The company's purchases and procurement procedures must be compliant with applicable procurement rules, and we always assess the risk of corruption when cooperating with our critical business partners.

Nordion Energi does not discriminate against its customers: we apply prices for all equivalent customers in the same way in accordance with the Natural Gas Act and the Electricity Act. All our tariffs must be public, objective and comply with the Swedish Energy Markets Inspectorate's method approval and the European network codes for the formulation of tariffs. We want our pricing to be characterised by openness, transparency and a long-term approach.

The quality of operations and compliance is evaluated continuously by means of internal audits, and also by external parties such as certification bodies.

## CODE OF CONDUCT SETS OUT EXPECTATIONS FOR OURSELVES AND OTHERS

Our Code of Conduct explains what we expect from ourselves and what others can expect from us. It is ultimately a matter of building trust – and continuing to earn it. The Code of Conduct applies to all employees of all Group companies and others who carry out any form of work for or represent Nordion Energi, such as Board members and consultants. The Code of Conduct also describes what is expected of people who work with us or represent us. A special version of the Code of Conduct has been developed for Nordion Energi's suppliers. Our Code of Conduct is guided by the ten principles of the UN Global Compact, such as good working conditions, human rights and the environment,

and the application of strict ethical and moral business principles. We do not compromise on these principles, either among colleagues or in our business relationships.

Nordion Energi employees must act to prevent corruption and bribery and ensure that personal relationships do not compromise business activities.

Our approach is based on Swedish law, but our processes and procedures are also compliant with the requirements of the UK Bribery Act 2010 and the U.S. Foreign Corrupt Practices Act 1979.

## COMPLIANCE IS BUSINESS-CRITICAL

We are committed to our corporate culture and core values, and so we take non-compliance very seriously. We endeavour to conduct our business in a transparent manner, guided by sound business ethics, and therefore welcome any deviations from the Code of Conduct by employees, consultants, Board members and suppliers that are brought to our attention by employees and others. Nordion Energi does not tolerate reprisals or other types of punishment against anyone who reports misconduct in good faith.

We encourage our employees to report misconduct in the way and through the channels with which they feel most comfortable. This may, for example, involve their line manager, HR manager or the company lawyer. Anyone wishing to report a matter completely anonymously can do this through the Nordion Energi whistleblower system, which can be found on our intranet.

We investigate non-compliance issues objectively and fairly. Failure to comply with our Code of Conduct may result in disciplinary action, such as dismissal or cancellation of the contractual relationship.

Our policies, Code of Conduct, Supplier Code of Conduct and Privacy Policy are available to view at [www.nordionenergi.se](http://www.nordionenergi.se)

## WE PROTECT OUR ASSETS AND SENSITIVE DATA

Nordion Energi is obliged to keep its own and its business partners' business secrets confidential. IT secu-

Security is a priority issue for Nordion Energi, and we work actively to prevent intrusions into our IT systems and maintain our IT equipment. Nordion Energi's instructions for the secure handling of IT equipment govern this area. In 2021, we conducted an analysis together with external IT security expertise, to review our policy, routines, systems and working methods from an IT security perspective. The conclusions from this analysis have been part of the improvement work in 2022. For example, we have changed the supplier of the SCADA system in the gas operations, as well as the system's architecture. We have also formed an official security organization with a focus on IT security and information security.

We respect and protect the personal data of our employees and other stakeholders in accordance with applicable regulations and good data protection practices. A Privacy Policy was adopted during the year.



# Human rights

Respect for human rights is part of our Code of Conduct and permeates the entire organisation, and also includes requirements and expectations of suppliers and partners.

We respect human rights, workers' rights and international labour law, and we expect our suppliers, business partners and other partners to respect human rights in the same way. 100 percent of our suppliers have signed and agree to follow our Supplier Code of Conduct, which includes commitments to respect human rights.

The concept of human rights covers civil and political rights, labour rights, social and cultural rights and the rights of particularly vulnerable groups. Risk analysis and due diligence of human rights impacts in our value chain allow us to see that customers, suppliers, contractors and other partners, employees including consultants, landowners, local residents, as well as others affected at our sites are groups that are – or could potentially be – affected by our operations, our innovation projects and acquisitions, and owners.

Nordion Energi basically fulfils the requirements set out in the regulatory framework, primarily through our Code of Conduct, which is based on the UN Global Compact's ten principles, of which human rights are an important part. We also comply with Swedish legislation in this regard. The risk of violation of human rights in our operations is generally deemed to be low. We have identified the fact that the greatest risk at present is in our supply chain, where hazardous work is carried out at our sites in both our gas and electricity network operations. Nordion Energi focuses strongly on workplace safety. We aim to achieve zero serious accidents and work with our contractors with prevention in mind to achieve this goal. Human rights are an important part of our monitoring of our relationships as suppliers, contractors and other partners in order to ensure compliance.

Safety and security of energy supply is also directly linked to human rights, as the welfare society relies on

access to affordable energy. It is also a prerequisite for continued competitiveness, and thereby forms a basis for continued economic stability.

The local acceptance of new infrastructure to enable the green transition will be a key issue when it comes to expanding the energy system. Dialogues and other forms of consultation with local residents and other stakeholders become important as our innovation projects enter new phases.

Gas extraction carries a risk of gas leaks, noise disruption for local communities and environmentally hazardous emissions to groundwater and soil. There is also a risk of other human rights infringements and increased health and safety risks. Nordion Energi does not trade in gas, but is required by the regulatory framework to ensure that the system is available to everyone. Sweden has no natural gas extraction of its own. Nordion Energi works actively to enable increased production and use of renewable gas.

People are becoming increasingly aware of the importance of corporate human rights work, and Nordion Energi intends to implement clear due diligence processes in 2023 for all operations, including in innovation projects and potential acquisitions. Breaches can now be reported via our whistleblower system and in other ways. There were no cases that could be regarded as human rights violations in 2022. More information about how we define targets and monitor key performance indicators can be found in the section on safe workplace, delivery reliability, reduced climate impact and supplier monitoring.



# Our value chain

Nordion Energi owns and invests in infrastructure for electricity and gas. Our direct value chain extends from the purchases we make to maintain, redevelop and expand the infrastructure, through to customers and end users. We also do our best to play an active part in societal development and therefore participate in the public dialogue, cooperate with a number of stakeholders and contribute our expertise to the preparation of political and legislative decision-making where appropriate. Nordion Energi never makes contributions to political parties.

Purchases made by Nordion Energi from suppliers mainly comprise materials for the electricity and gas networks as well as contracting and consulting assignments relating to groundwork or construction and civil engineering projects. The majority of the purchases are made from Swedish suppliers. The part of Nordion Energi that manages Swedegas operations and Falbygdens Energi Nät is covered by the Procurement within the Water, Energy, Transport and Postal Services Sectors Act (LUF), which imposes specific demands on our purchasing procedures. Nordion Energi's purchasing policy demands that all parties that make purchases on behalf of Nordion Energi must do so using the five basic EU public procurement principles as a starting point. The principles are non-discrimination, equality of treatment, transparency, proportionality, and mutual recognition. The competition principle must also be complied with. This applies to purchases of goods and services as well as construction and civil engineering projects. The purchasing function provides support in all procurement, purchasing and contract-related issues.

Recent years have seen many world developments that have affected the global economy. On the one hand, many production and logistics chains stopped working during the pandemic, with longer delivery times on account of capacity shortages among suppliers; and on the other, Russia's invasion of Ukraine has led to increased prices for some of the goods purchased by Nordion Energi. This is particularly true for the goods we purchase most frequently, such as pipelines, where the rate of inflation has been even higher than the general rate of increase.

## UPDATED REQUIREMENTS

During the year, Nordion Energi has taken into account the requirements for a security-adapted procurement

model according to Swedish National Agency for Public Procurement guidelines. We have tightened up the requirements for sustainable purchasing, including strict environmental requirements and follow-up of social and ethical requirements, by updating our Code of Conduct for Suppliers. This aims to mitigate risks associated with the environment, health and safety, terms of employment, business ethics, taxation, money laundering and corruption at suppliers and their sub-suppliers. These risks could in turn damage trust in our own brand. The Code of Conduct is based on the UN Global Compact and we are only involved in commercial operations that comply fully with its principles relating to social standards, such as respect for human rights and assurance of suitable working conditions for employees, environmental standards aimed at minimising environmental impact, and corporate governance standards that involve the application of strict ethical and moral rules to ensure compliance with prevailing law. Suppliers sign the Code of Conduct in conjunction with new procurements and in doing so undertake to fully observe its standards. This gives us the option of performing follow-ups and audits. Dialogue and self-assessment are part of the follow-up work with our major suppliers. If necessary, Nordion Energi can work together with suppliers to ensure compliance with the standards set out in the Code of Conduct. Nordion Energi reserves the right to terminate an agreement in the event of non-compliance with the Code of Conduct. The goal is for all major business-critical suppliers to sign the code.

The Group has 210 active supplier contracts in total, and all suppliers have signed the Code of Conduct for Suppliers. Ten desktop audits were carried out in 2022. 14 procurement procedures were also carried out during the year, with no major non-conformances.

## Business ethics throughout the value chain

Security protection in procurement and business contracts has also been implemented in accordance with the legislation.

### CUSTOMER LEVEL AND END USER

Nordion Energi also has an impact at the customer level, with the end user and in wider society. The majority of the gas that is distributed in the Swedegas system is supplied to energy companies (distributors). These companies, including Weum, distribute the gas to industrial enterprises, households, vehicle gas filling stations, and CHP (Combined Heat and Power) plants in southern and western Sweden. In addition, a number of large industrial customers are connected directly to the northern

part of the Swedegas network. Falbygdens Energi distributes electricity through its operations to customers in Falköping and the surrounding area. The main impact on the customer is to ensure uninterrupted supply of electricity and gas to industry, municipalities and households. Interruptions in supply pose a significant risk of financial and other harm to customers.

Use of natural gas has an adverse impact on the climate. There is also a risk of leaks, primarily of methane, during the distribution of gas. Nordion Energi is actively driving to achieve the climate goals by working to increase the proportion of renewable gas, cut leaks and support innovative new projects to reduce any negative climate impact.





# Material topics and sustainability management

Nordion Energi's sustainability work is based on regular analyses and reviews of material topics in order to respond to changes in the world and in our own operations, as well as changing expectations and desires among key stakeholders.

By maintaining a proactive approach, we can effectively identify and manage our actual and potential environmental and social impacts, including human rights impacts. We include our entire value chain, including our partners. The analysis also includes identifying sustainability topics that have or may have an impact on the company's financial position. This process involves both several internal functions and units within Nordion Energi and may also include various external stakeholders as well as industry associations, experts on issues and other partners who can assist Nordion Energi with quality assurance of the analysis. Nordion Energi also determines the content of the reporting on this basis.

## UPDATED MATERIALITY ANALYSIS IN 2022

In 2022, a review was conducted on the basis of external events and known changes in the organisation's own operations. The organisation's impact was then analysed, as well as the impact on the organisation. One starting point was to align the materiality analysis with the updated requirements of the GRI Universal Standards 2021, which also included analysing all areas of the GRI sector-specific protocol for Oil and Gas. There is also the fulfilment of other new regulatory requirements in order to manage material impacts. These insights were then used to update our material topics, strategy and risk assessment with a view to addressing the areas identified as most significant to our business. Material topics identified were decided upon by the management team and confirmed by the Board. [Find out more at www.nordionenergi.se](http://www.nordionenergi.se)

The following topics were identified as material on the basis of the analysis of the impact of the company's operations on the environment, society and people, including human rights.

- (E) Reduce climate impact / GHG emissions
- (E) Climate change adaptation and resilience

- (S) Energy security / Safety and security of energy supply
- (S) Health and safety at work
- (S) Inclusion (non-discrimination), equality and diversity
- (G) High business ethics throughout the value chain, including corresponding requirements for suppliers and other key partners.

The following topics were identified as material on the basis of the analysis of the actual or potential impact on the company's financial position:

- **Resilient gas and electricity infrastructure:** Physical threats, such as extreme weather events, are increasing due to climate change. They are also increasing due to the heightened risk of cyberattacks.
- **Health and safety at work:** A strong safety culture to ensure adequate working conditions for everyone working for Nordion Energi is essential, as there is a risk of serious injury in some parts of the operations. This is also linked to ensuring security of supply, maintaining licences for operations and managing potential risks of regulatory penalties.
- **Greenhouse gas emissions:** Difficulties in reducing greenhouse gas emissions could result in significant adverse impacts on future returns in the form of asset impairments, carbon costs or other costs.
- **Energy security and the price of energy:** Access to affordable energy is a critical business issue when it comes to maintaining (and increasing) the number of customers, building intangible asset value and creating opportunities for investments and returns.
- **Talented people:** A high degree of competition for highly qualified people to lead and run innovation projects. Representation of women in the sector is also low.
- **Anti-competitive practices:** In a sector where market neutrality is key, this can cause financial harm and impact upon the necessary licences to operate.

## Material topics and sustainability management

### SLIGHTLY REWORDED MATERIAL TOPICS

Nordion Energi was able to confirm the previous material topics as a result of the review, but with slightly different content for each topic. Safe and secure energy supply in particular has become more prominent, as have our high standards of ethical behaviour in everything we do. Our revised material topics can be found on page 6.

### ONGOING STAKEHOLDER DIALOGUES DURING THE YEAR

Nordion Energi also conducts ongoing dialogues with our key stakeholders, and these have continued during the year. Which stakeholders are deemed “key” is defined by how they are affected by our operations, and how Nordion Energi is affected by the stakeholder and its needs. We maintained close dialogue with our private and corporate customers in many different ways during the year. The security of supply has been one major issue, in particular the availability of gas. We are also in close contact with our largest suppliers and contractors, where factors such as a safe work environment are always in focus. We also engage in dialogues with decision-makers and authorities, with plenty of focus on energy security during the year. Nordion Energi also acts together with others in industry organisations, at both national and EU level, to drive the green energy transition and secure the supply of energy and raw materials, not least with innovative new projects together with partners. The important dialogue with employees during the year has focused on the continued building of our culture as we grow and gets a more diversified business.

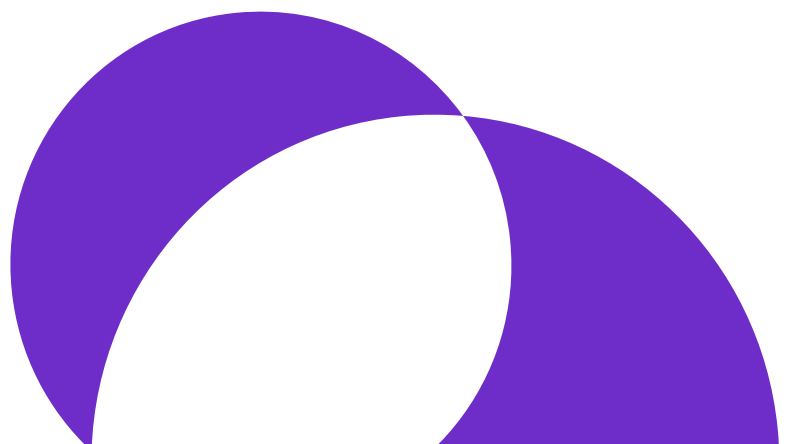
### GOVERNANCE FOR AMBITIOUS TARGETS

The Board of Directors holds ultimate responsibility for Nordion Energi’s sustainability work. Igneo Infrastructure Partners, owner of Nordion Energi, sets high sustainability standards for all its holdings. All companies must work towards clear targets that include zero serious accidents in their operations, reduced emissions

of greenhouse gases with climate impact towards net zero, and targets for increased diversity, equality and inclusion. The requirements also include risk management, where risks of forced labour in the value chain – for example – have to be analysed, as well as risks of vulnerability in IT and cybersecurity. There are also requirements to conduct both customer and employee surveys on a regular basis. The results are monitored and reported back to the Board. This follow-up also includes all topics identified as material for Nordion Energi. It also evaluates the work and reviews the targets to ensure that they are relevant and help the company to achieve all its targets. The Board decides on policies, including Nordion Energi’s Code of Conduct and Privacy Policy, which relate to Swedish legislation and also include best-practice requirements on an international level. The annual sustainability report is approved by the Board of Directors.

The requirements also cover the Board and its work. These include requirements for independent Board members, fulfilment of certain standards and certain qualifications, including sustainability. The owner’s representative has specific expertise in sustainability. The composition of the Board can be found at [www.nordionenergi.se](http://www.nordionenergi.se)

The Board delegates the management of sustainability efforts to the CEO. This responsibility is further distributed to all members of the management team, and in particular to the Head of HR, the Head of Operations, the Head of Marketing and the Head of Communication. Follow-up and further development of sustainability work is decided by the management team. The targets are further anchored by each manager throughout the organisation and followed up with all employees at various meetings during the year. Active involvement and initiative among all is encouraged.



# Membership of associations

## EUROPEAN HYDROGEN BACKBONE

Nordion Energi is part of the European Hydrogen Backbone (EHB), which aims to accelerate Europe's emission targets by defining the role of hydrogen infrastructure – based on existing and new pipelines – to enable the development of a competitive European market for renewable and green hydrogen. This initiative aims to promote market competition, security of supply and cross-border cooperation between European countries and their neighbours. The EHB initiative will continue to discuss its vision with stakeholders, including decision-makers, companies and initiatives along the hydrogen value chain.

## GAS FOR CLIMATE

Nordion Energi is involved in Gas for Climate, a European initiative involving ten leading gas infrastructure companies (Enagás, Energinet, Fluxys, Gasunie, GRTgaz, ONTRAS, Open Grid Europe, Snam, Swedegas/Nordion Energi and Teréga) and two renewable gas industry organisations (Consortio Italiano Biogas and European Biogas Association).

Gas for Climate is committed to achieving net zero greenhouse gas emissions in the EU by 2050 and advocates a solution involving a combination of renewable electricity and renewable gas. Gas for Climate is convinced that renewable gas is a key component in achieving the target in an economically viable way. Gas for Climate is also working to enable the implementation of hydrogen in Europe in a cost-effective manner. In this context, the initiative has produced a report analysing and presenting a hydrogen infrastructure solution. The European Hydrogen Backbone report is available to download here:

<https://gasforclimate2050.eu/wp-content/uploads/2022/04/EHB-A-European-hydrogen-infrastructure-vision-covering-28-countries.pdf>

## NORDION ENERGI'S INTERNATIONAL INVOLVEMENT


**CEN** (European Committee for Standardization/Comité Européen de Normalisation) – one of three European standardisation organisations, CEN publishes European standards (EN). Products that fulfil the requirements of any such standard may bear the CE mark. The European standards applicable in Sweden are designated SS-EN. Sweden's member organisation in CEN is SIS, the Swedish Standards Institute. Swedegas is a member of SIS. Swedegas monitors and contributes to the development of standards for Gas Systems and Infrastructure Transmission within CEN/SIS.

**ENTSOG** (European Network for Transmission System Operators of Gas) – an organisation of transmission system operators (TSOs) formed to facilitate the harmonisation of the EU's internal energy market. ENTSOG, in consultation with the corresponding European regulatory authority, is working on formulating network codes that will eventually become text prescribed by law. Swedegas is the Swedish representative.

**GIE** (Gas Infrastructure Europe) – an organisation that coordinates infrastructure issues for natural gas companies in Europe in respect of transmission, storage and terminals. Swedegas is a member.

**GEODE** – a trade association for independent electricity and gas distribution companies in Europe. Hans Kreisel, CEO of Nordion Energi, is the chairman of the organisation.

**IGU** (International Gas Union) – Swedegas is represented through Energigas Sverige in the IGU, which is a global organisation bringing together the worldwide gas industry in fields such as extraction and production, transmission, LNG, distribution and end-user issues.



Society is facing dramatic changes, and climate change is at the heart of it all. This is a huge task, and if we are to succeed we need to think innovatively and act swiftly.

Nordion Energi specialises in infrastructure, a key factor when it comes to creating a sustainable society. We are channelling our efforts into creating a sustainable, flexible energy system that is fit for the future, linking the systems for electricity, gas and heat.

We are embarking on an exciting journey together with our customers and other partners who share our objective: 100% green energy.

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