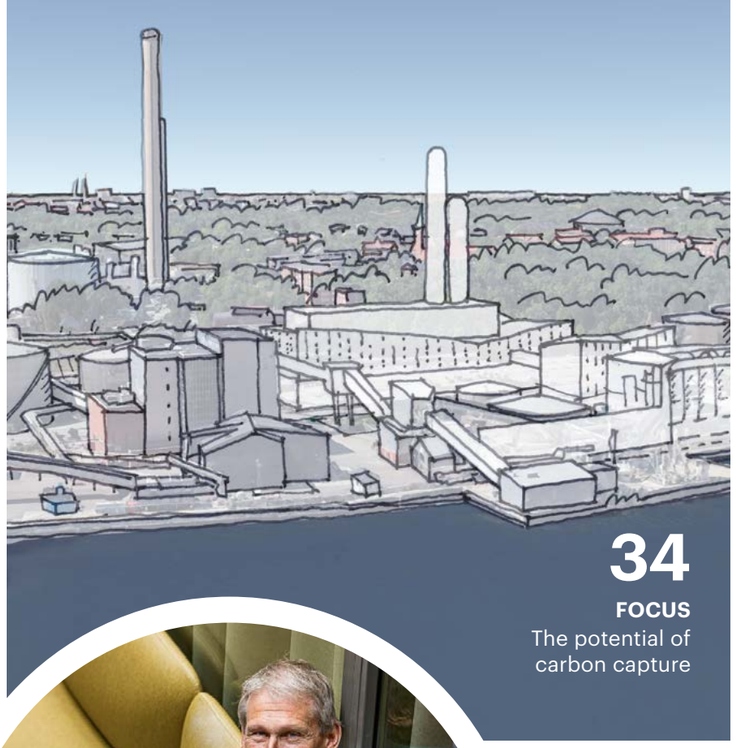
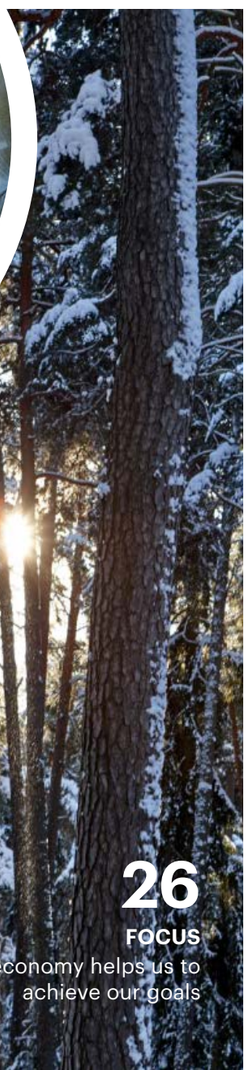
stockholm exergi

Annual and Sustainability Report

Stockholm Exergi 2022





Contents

About this annual and sustainability report 2022

This version of the report is an English translation of Stockholm Exergi Holdings official Swedish Annual and Sustainability Report for 2022. In the event of any discrepancies between the two versions, the Swedish is to take precedence. The English version as such has not been reviewed by the auditors.

Stockholm Exergi Holding AB (publ.) is the parent company of the Stockholm Exergi Group. In this annual and sustainability report, we refer to the Group as "Stockholm Exergi".

Stockholm Exergi's consolidated financial statements have been prepared since 2013 in accordance with International Financial Reporting Standards (IFRS).

Stockholm Exergi has published a sustainability report every year since 2014 in accordance with the Global Reporting Initiative (GRI) guidelines for sustainability reporting Stockholm Exergi reports according to GRI Standards 2021 to the requirements in the Swedish Annual Accounts Act. The scope of the sustainability report is defined by he GRI index presented on pages 123-125 of this report.

The sustainability report is part of the annual report and is released annually. The latest report was published in March 2022. This year's sustainability report refers to 2022 and includes Stockholm Exergi Holding AB (publ.) and its subsidiaries unless otherwise stated. The sustainability report has been reviewed by the auditing firm Deloitte AB.

This report was published on 24 March 2023 and is available on our website at: **stockholmexergi.se/arsredovisning**

Addresses
Visiting address: Jägmästargatan 2
Postal address: 115 77 Stockholm
Seat Stockholm, org.nr: 556040-6034

+46 (0) 20 31 31 51
kundservice@stockholmexergi.se
www.stockholmexergi.se

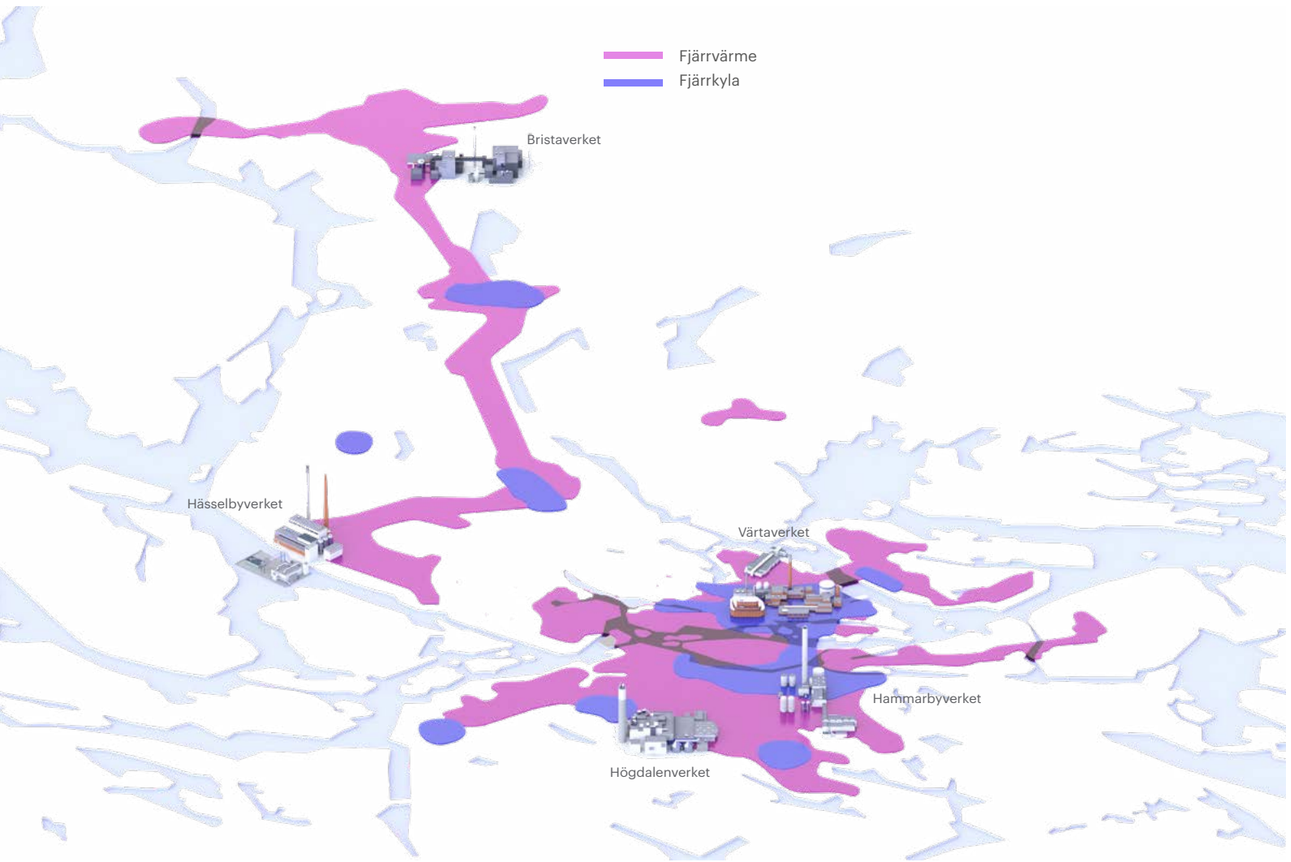
Contact details
Urban Felth, Head of Accounting and External Reporting
+46 (0) 20 31 31 51
urban.felth@stockholmexergi.se

Ulf Wikström, Sustainability Director
+46 (0) 20 31 31 51
ulf.wikstrom@stockholmexergi.se

This is Stockholm Exergi

Stockholm Exergi is Stockholm's energy provider. Using resource-efficient solutions, we ensure that the growing Stockholm region has access to electricity, heating, cooling and waste services. We provide heat to more than 800,000 Stockholmers and our 3,000-kilometre-long district heating network forms the basis for the societal benefits that we create together with our customers and partners. We are owned by the City of Stockholm and Ankhiale and our 700 employees work every day to reduce Stockholmers' climate impact. By developing carbon capture technologies, we are committed to making zero emissions a reality.

Owners: City of Stockholm (50%) and Ankhiale (50%)
Area we heat: 73 million square metres
Proportion of renewable or recycled energy used in the district heating network: 97%



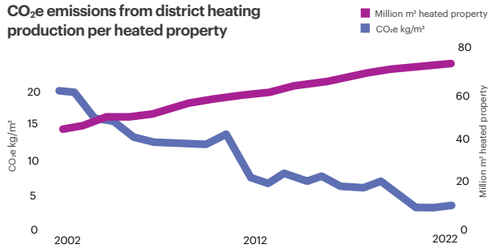
NET SALES
(MSEK)
7,996
(7,294)

SALES
(GWh)
9,276
(9,609*)
* Of which 8,309 (7,224) GWh was heat

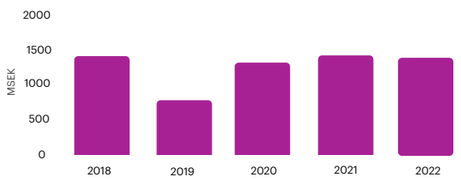
OPERATING PROFIT
(MSEK)
1,412
(1,424)

PROFIT AFTER TAX
(MSEK)
948
(970)

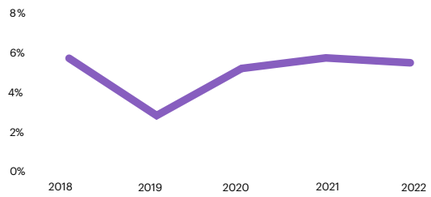
CO_2e emissions from district heating production per heated property



Operating profit [1)]



Return on capital employed [1)]



[1)] Operating profit in 2019 included a write-down of MSEK 582 attributable to the decision to close the last coal-fired boiler in Värtan.

Highlights of the year

- **In February,** Stockholm Exergi presented a new study that showed Bio-CCS has the potential to become a new industry segment with positive economic outcomes for Sweden.
- The EU Innovation Fund decided to provide support for Stockholm Exergi's bio-CCS project and in April it was announced that this support amounted to EUR 180 million.
- **In April,** Stockholm Exergi welcomed the President of the European Commission, Ursula von der Leyen, and the then Swedish Prime Minister, Magdalena Andersson, to Värtaverket in Stockholm.
- **In May,** Stockholm Exergi issued new green bonds with a total value of SEK 1.5 billion.
- **In August,** Stockholm Exergi began a consultation process with local residents and affected members of the public with the aim of building a full-scale bio-CCS plant at Värtaverket. The consultation is a key part of the process to obtain permission to build the facility.
- **In September,** Kraftkvinnorna, together with Stockholm Exergi, organised an energy policy debate at Värtaverket. The energy crisis and gender equality in the energy industry topped the agenda.
- **In October,** Stockholm Exergi welcomed the Netherlands' King Willem-Alexander and Queen Máxima together with Sweden's King Carl XVI Gustaf and Queen Silvia to Värtaverket. The visit was part of a three-day state visit which, among other things, focused on green innovation.
- **In November,** Stockholm Exergi participated in COP27 in Egypt. Carbon dioxide capture and negative emissions were on the agenda and there was considerable international interest in the opportunities that Stockholm Exergi's development of bio-CCS offers.
- **In November,** Värtaverket was to host the European Parliament's Conference of Presidents. The meeting was a preparation for the Swedish EU Presidency.
- **In December,** Stockholm Exergi announced that it would appeal the Land and Environment Court's rejection of its application to build a new cogeneration plant in Lövsta in western Stockholm.
- New sales of district heating for the year amounted to just more than 73GWh.

An eventful and challenging year

Unfortunately, 2022 will be remembered as the year Russia invaded Ukraine and started a horrific war. A war of aggression that has created enormous humanitarian suffering and has made millions of people homeless. A war that has created severe geopolitical and energy challenges for Europe, and that has demonstrated how there is no future in fossil fuel dependence.

Russia's war on Ukraine has a direct impact on Sweden's energy supply. A large proportion of energy imports from Russia to Europe has been cut off, which has had far-reaching impacts on Europe.

These acute geopolitical and economic conditions, and the inflationary pressures that they have created, have impacted Stockholm Exergi. We have seen spiralling prices in the wider economy and sharply rising prices for the majority of our inputs such as fuel, operational and maintenance materials, and wildly fluctuating electricity prices. At times, we have also faced the threat of electricity shortages in Sweden, something which, among other things, has led to greater focus on the role of locally produced cogeneration and district heating in the immediate future.

Cogeneration and the necessary conditions for its wider use are a primary focus of the Swedish government's new strategy, known as the Tidö Agreement, which includes explicit support for bio-CCS and trade in negative emissions. Irrespective of the government in office, it is important to have clearly stated support for our actions when we have to make major investment decisions, especially in a troubled world.

For several years, Stockholm Exergi has studied ways it can contribute to improving Stockholm's energy mix by building a cogeneration plant in Lövsta. Stockholm's energy mix is currently under pressure, and increased occupancy and increased electrification could make power shortages more likely. Despite planned investment in capacity and flexibility of the electricity grid, Sweden's national grid is under strain. Extensive environmental investment by industry is driving substantial increases in electricity demand. It is therefore important to maintain and develop our capacity to produce electricity with cogeneration in areas with district heating networks.

On November 28 2022, the Land and Environment Court rejected Stockholm Exergi's application to build a new cogeneration plant in Lövsta, west of Stockholm. We have appealed the decision because we want to help remediate the land and lake bottom around Lövsta and ensure that Stockholm will have a safe supply of electricity and heat now and in the future.

In November, I visited the COP27 climate summit in Sharm el Sheik in Egypt. This was an important visit for Stockholm Exergi during which we had the opportunity to share details of our change journey. However, the outcome of the meeting left a bitter aftertaste: the meeting's final talks failed to even produce a written statement on ending fossil fuel subsidies.

"The war in Ukraine and my visit to COP27 have made me even more convinced that what Stockholm Exergi is doing is right and that we must move faster."

Stockholm Exergi has a major responsibility to contribute to sustainable development. We manage waste and recycle precious resources and we have set the ambitious goal of creating significant carbon dioxide sinks from 2025 onwards. Given that the introduction of support systems and necessary frameworks is taking longer than expected, we now believe that 2026 is a more realistic start date. Confirmation that we are on the right track came when the entire Swedish government visited Stockholm Exergi in conjunction with the European Parliament's Conference of Presidents in November. The entire Swedish government rarely gathers away from Parliament; it has never gathered away from Parliament at a business premises – proof that the change journey we started is more urgent than ever. Stockholm Exergy and bio-CCS is important for Sweden and vital for the world.

2022 was an eventful year for Stockholm Exergi in challenging geopolitical and economic conditions. Once again, the business was able to demonstrate its stability and its ability to withstand major fluctuations. We now look ahead and continue our journey to become Europe's leading expert in carbon capture as early as 2026.

Vd, Stockholm Exergi

Our value chain defines our focus

We typically describe our business operations in terms of our value chain. In our annual and sustainability report, we outline our sustainability issues according to each step of the value chain. In each section of this report, you can read more about our impact in particular areas, the nature of the challenges we face and how we are working to find solutions.

Our impact on sustainability

We provide services that are critical to society and have considerable responsibility to contribute to sustainable development. Therefore, we regularly analyse where our impacts are greatest and which sustainability issues are most important to those affected by our operations. These assessments are known as materiality analyses, and we carried out the most recent such analysis in 2020. The aim of these analyses is to gather the opinions of those who are affected by or affect our business on what we should focus on and how we can improve and develop. This creates a key basis for our company's development and for our business planning processes. You will find the results of the materiality analysis and our most important questions on the following page and on pages 64-67. We must also create economic value for our owners, customers, suppliers, employees and society to know that we can continue operating for the long term and so that we can afford to continue investing in the development of Stockholm's energy system.

Results and relevance to the UN Sustainability Development Goals

We also strive to help meet the UN Sustainability Development Goals (SDGs); work that you can read about in each section of this report. The SDGs below are those that we prioritise the most, based on our materiality analysis. At the end of each section of this report, we describe which goals are relevant for each part of the value chain and how we contribute to these goals.

Critical objectives:

Important objectives:

Our most important sustainability issues linked to our value chain

Customers and society
- Responsible actions in line with Stockholm Exergi's position on the heating market
- A comprehensive offering of sustainable products and services
- Recruitment with a focus on excluded groups

Society's residual products
- Waste treatment incorporating energy recycling

Suppliers
- Anti-corruption
- Renewable fuels
- Sustainable purchases and investments
- Transports
- Extraction of resources

Production
- Waste from operations
- Disruption in the immediate vicinity of production facilities
- Emissions to air and climate impact
- Emissions to water

Distribution
- Disruption in the immediate vicinity of operations

Employees
- Healthcare and health
- Diversity and inclusion
- Safe working environment

CUSTOMERS AND SOCIETY

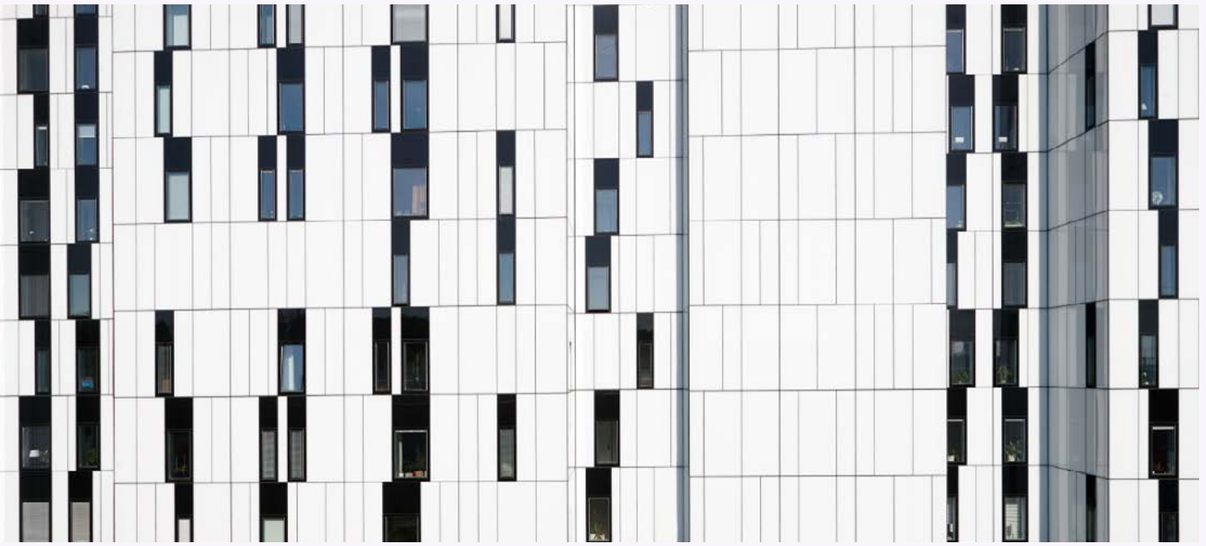
DIGITAL SOLUTIONS ARE MEETING OUR CUSTOMERS' NEEDS

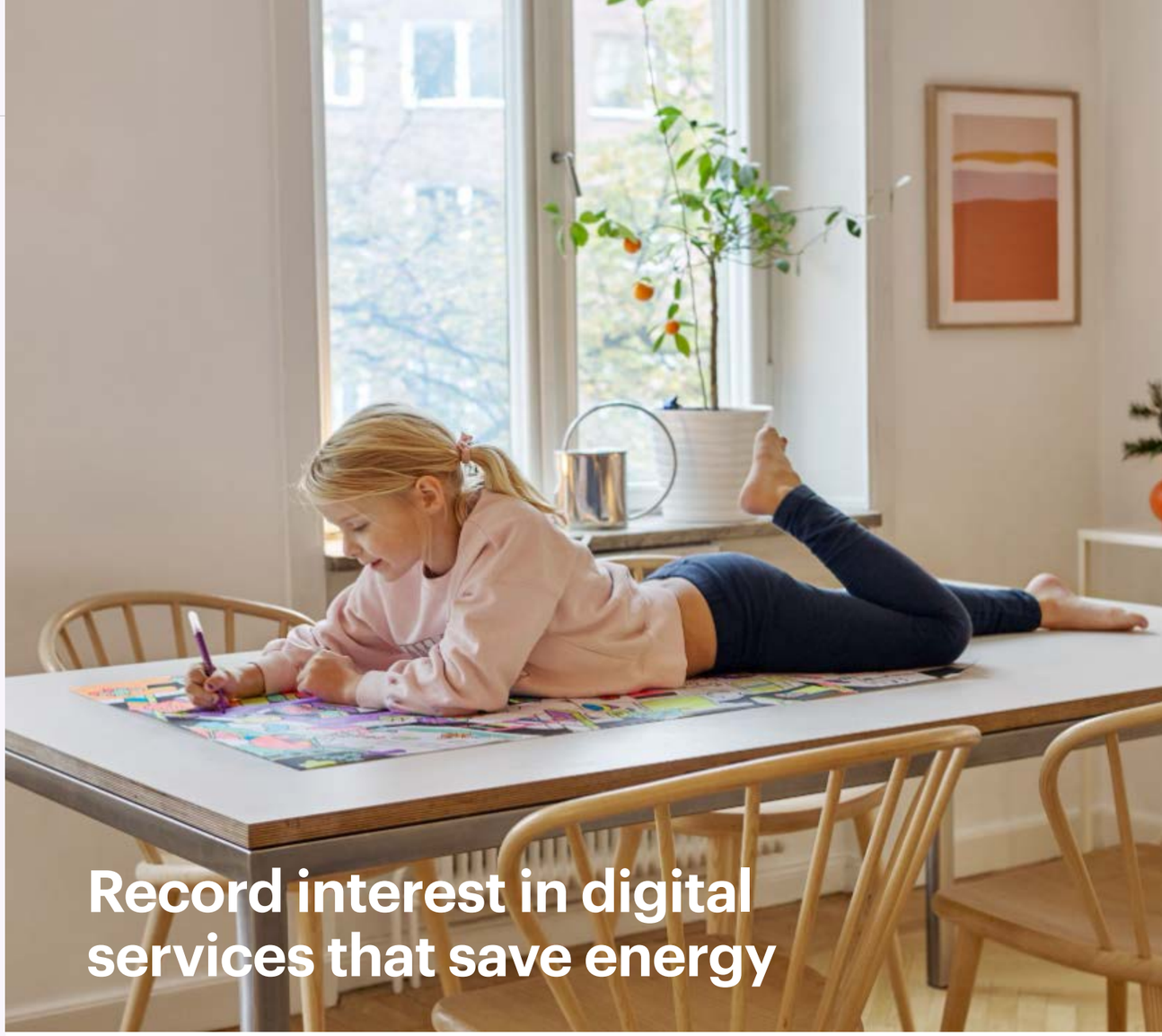
Our tens of thousands of customers have a multitude of different needs – but they all want it to be simple, affordable, and sustainable to use district heating. Stockholm Exergi addresses this expectation while at the same time improving our customer offering with increased digitalisation. It is vital that we can help our customers stay warm or keep cool because they need comprehensive solutions that work.

1,000
TOTAL NUMBER OF PROPERTIES WITH "HEAT OPTIMISATION START"

NUMBER OF NEW AGREEMENTS FOR DIGITAL SERVICES SIGNED IN 2022:
600

70%
PROPORTION OF CUSTOMERS WHO USE "MY PAGES"





Record interest in digital services that save energy

Stockholm Exergi has developed its Intelligy digital platform for a number of years with a view to offering digital solutions to our customers. We believe that our customers should be able to control and optimise their property's energy consumption in smart ways.

Connecting devices in apartments and properties' district heating centres, gives property owners access to digital services. Thanks to its investment in digital services, Stockholm Exergi is well positioned to offer customers digital solutions that are adapted to customers' needs. In 2022, sales of our digital energy services reached a record of more than 600 new service agreements. The energy crisis dramatically increased customers' interest in heating. Demand for our Heating Optimisation service was particularly significant because it optimises energy consumption and thus reduces costs. For example, home builder Stockholmshem installed Heat Optimisation in 10,000 of its apartments in 2022.

Heat Optimisation involves installing indoor sensors in selected apartments in properties and setting target temperatures using a user-friendly digital interface. The sensors monitor temperatures in properties and optimise heat supply. This makes it possible to achieve desired indoor temperatures with minimal energy input. A lowered indoor temperature is a good basis for energy savings and the smart control of the system automatically ensures that unnecessary heat peaks are avoided.

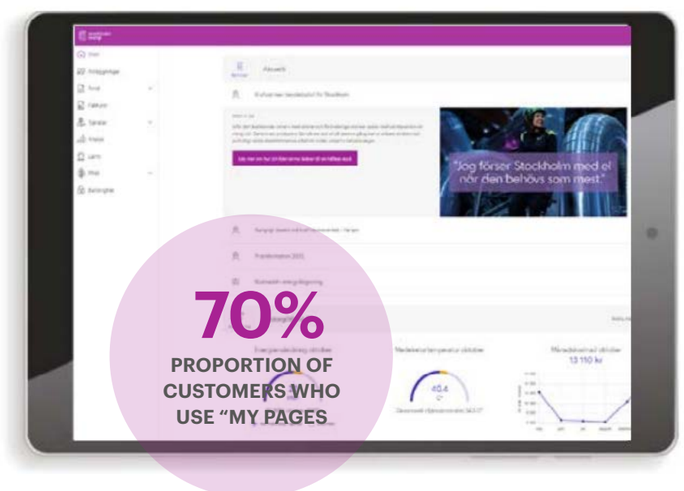
Stockholmshem installed Heat Optimisation in 10,000 of its apartments in 2022.

Price Dialogue: a key pricing forum

2022 was an exceptionally turbulent year in many ways. The energy market was no exception, and this affected the pricing of district heating for 2023.

The Price Dialogue – an established forum for protecting customers' rights and transparent pricing with stable and predictable prices – had to be adjusted in 2022 to reflect changes on the energy market. We held three customer meetings instead of the usual two in 2022, and price decisions for 2023 were announced in September rather than June due to market uncertainty. Stockholm Exergi saw greater need to conduct analysis due to the uncertainty, and explain the role of factors such as sharply rising market electricity prices, increased interest rates, higher inflation and increased biofuel prices that are behind it the price level for 2023.

Stockholm Exergi's price increase for 2023 is 8.1 per cent. For Stockholm Exergi, this is an unusually large price increase compared to previous years, but it is not that large given inflationary pressures and projected development costs of alternative types of heating.



Growing numbers of customers use the digital My Pages solution

Growing numbers of our customers are using our digital services and the self-service functionality we offer on My Pages. The proportion of users continued to increase steadily in 2022 and was exceeded 70 per cent of our customers by the end of the year. Increased interest in the energy issue in general and curiosity about the 2022 Price Dialogue are two of the driving forces behind increased use of digital services.

Multiple initiatives and increased activity on social sustainability

In 2022 and in the wake of the pandemic, Stockholm Exergi was once again able to increase its level of activity within social sustainability.

Many projects and initiatives are ongoing. During the year, we increased our involvement in Diversity Charter, an international diversity network. The purpose of our involvement is to gain increased knowledge about diversity and inclusion issues and ensure that we continue to develop in these areas.

In May, we participated in European Diversity Month which aims to highlight the importance of inclusion and diversity in the workplace. We did this, among other things, by offering our employees various knowledge-enhancing seminars and training courses on these issues. We continued our collaboration with industry body Swedenergy, the City of Stockholm and other relevant actors to facilitate efforts to educate and validate knowledge among new arrivals to Sweden and benefit from the technical competence that new Stockholmers offer. We also joined Swedenergy's mentorship programme – Energibuddys – a programme in which energy industry professionals are matched with educated newcomers with the aim of giving trainees a path into the industry and help to find a job. The collaboration is an important part in recruiting skills that are in short supply while also contributing to our diversity goals.

The goal of "warm-up jobs" is to help reduce youth unemployment and to help more young people to find work or study.

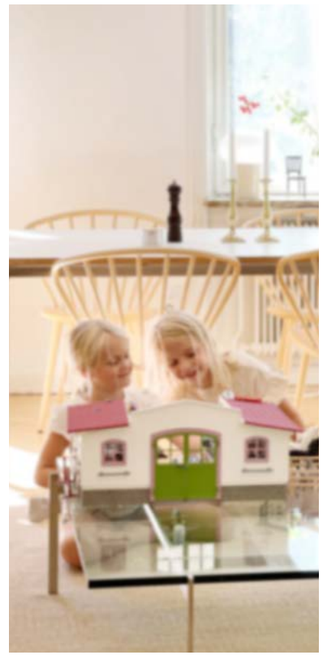
Our collaboration with the City of Stockholm on so-called "warm-up jobs" continued in 2022 and we employed nine young people under the scheme. We also continued to work with our mentorship programme for a more equal workplace where we match female students with an employee within the company. We also continued with class coaching programmes through My Dream Now. Since we first participated in the programme in 2017, 53 colleagues have become class coaches. Being a class coach involves regularly meeting a primary school class in an area with social challenges to inspire young people in different ways to set goals and action plans for their future. Through our various initiatives, we contribute to increased inclusion in society. Through our various initiatives, we contribute to greater inclusion in society.

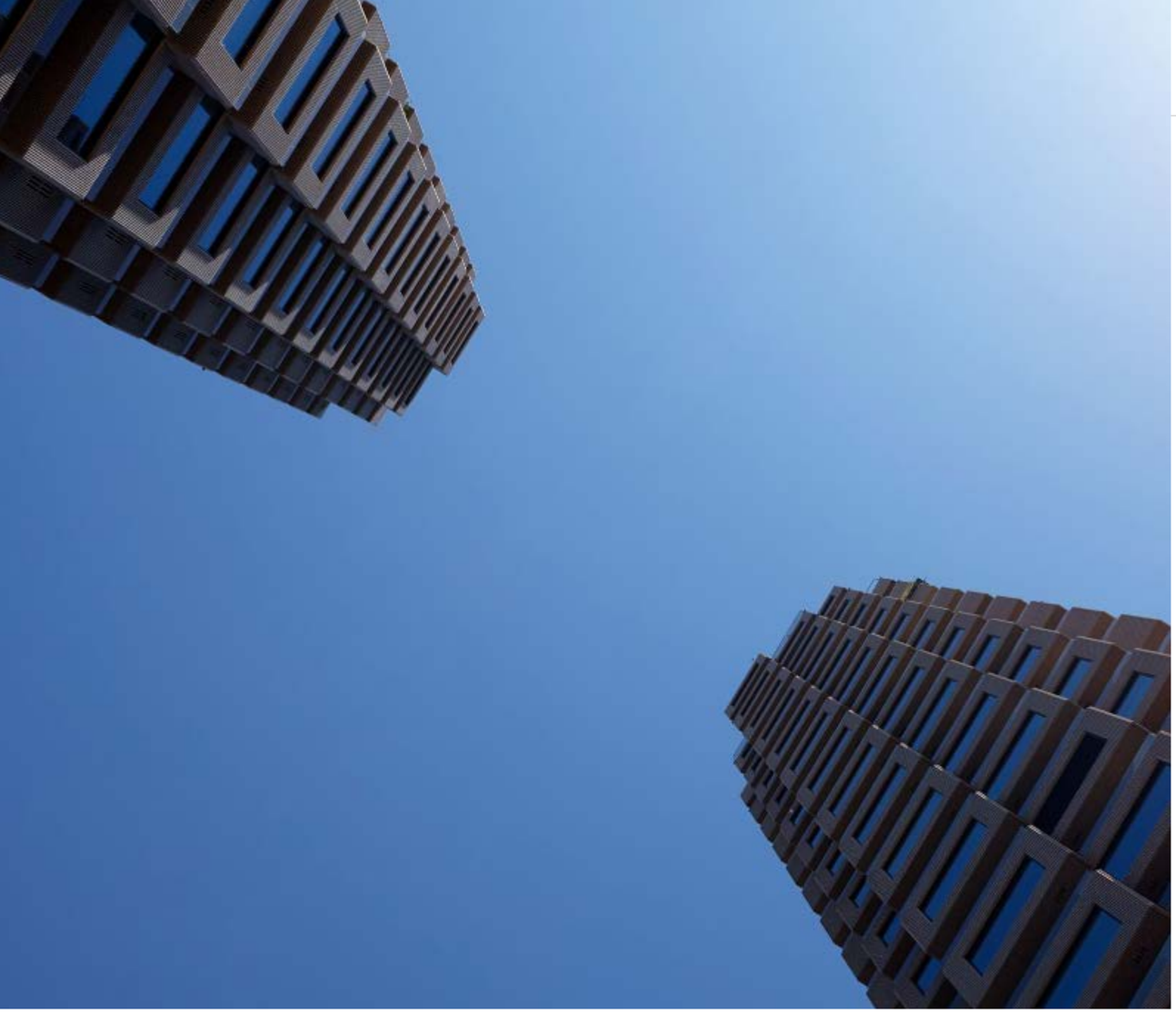
An inclusive corporate culture with a diversity of perspectives results in a good working environment, increased safety, better decisions, increased ability to recruit and retain the right people, and we become better at understanding our customers.

CUSTOMER SATISFACTION INDEX 2022:

71.8

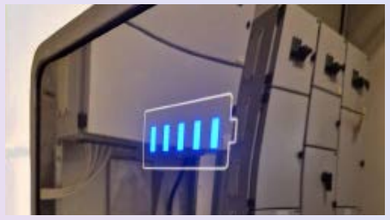
Our strong CSI (customer satisfaction index) numbers continued in 2022. The overall result was slightly down on 2021, from 72.4 to 71.8 in 2022. However, given customer satisfaction levels across the energy industry have declined sharply, likely due to the turbulent energy situation, Stockholm Exergi performed extremely well as an individual company.





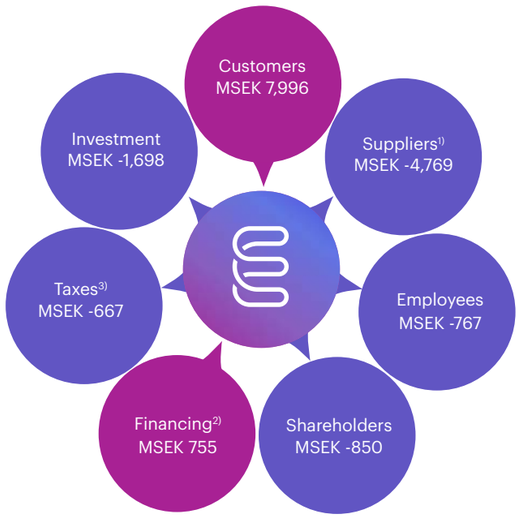
Storage and batteries: aspects of an optimised the energy system

2022, we have put into operation two smaller property batteries which cooperate with each other. the purpose is to develop solutions for the storage of electricity which part of Stockholm Exergi's future customer offer and also be able to offer support services to the authority responsible for the system Svenska kraftnät. During 2023, the goal is to implement several together with customers market tests where the customer's flexible resources contribute to supporting the electricity system and at the same time as the customer's local electricity use is optimized.



Increased enonomic value

Stockholm Exergi invests a significant proportion of its revenues in the development of sustainable business, for example new production plants, expansion of the distribution network, and smarter energy solutions. These investments in turn contribute to the development of society.



[1] Purchase of goods and services excluding investment.

[2] Net of borrowing, financial items and changes in cash and cash equivalents.

[3] Production tax MSEK -410, corporation, employment and property tax MSEK -257.

Continued development of power management

In a typical Swedish winter, Stockholm Exergi is able to supply sufficient heat to customers, but we also need to be able to cope with extreme situations due to technical disturbances in our production system or society in general. We are constantly ready to react to such events. We have carried out an extensive technical upgrade and improved power management in the district heating system. In the event of an extreme disturbance, available heat from the district heating system is distributed using a digital solution that makes it possible to avoid or mitigate disruption to customers. In 2022, we developed the same type of solution for our district cooling customers to strengthen delivery security in similar extreme situations. This will come on line from summer 2023.

Customers and society:

Our sustainability issues

Responsible actions based on Stockholm Exergi's position on the heating market. The vast majority of Stockholmers get their heating from Stockholm Exergi. This gives us considerable responsibility to set prices in an open and fair way.

An offering of sustainable products and services. Our customers have high expectations of continuous improvement and more sustainable products and services.

Employment focused on marginalised groups. As a major employer in Stockholm, we have a responsibility to employ and include people who tend to be outside the labour market.

CUSTOMER SATISFACTION INDEX: 71.8

TARGET FOR CURRENT BUSINESS CYCLE: 76

NUMBER OF PROPERTIES WITH THE SERVICE "HEAT OPTIMISATION":

415

How we contribute to the UN's sustainability goals

Sub-goal 8.6: To substantially reduce the proportion of young people not in employment, education or training by 2030. We invest in "warm-up jobs", where people outside the labour market get a first work experience and we have a class coaching program where our employees coach young people to the labour market.

Sub-goal 10.2: Empower and enable the inclusion of all in social and economic life by 2030. As part of our efforts to increase diversity and inclusion, we run initiatives to become a more inclusive company.

Sub-goal 13.2: Integrate climate change measures into national policies and strategies. We invest in technologies with the aim of achieving negative emissions and bio-CCS and maintain dialogue with political leaders to drive progress forward.

Sales Director Carl Lidholm

"Customer deliveries have been our top priority during the energy crisis"

Everyone was talking about electricity prices and the energy crisis in 2022, and as Sales Director at Stockholm Exergi, Carl Lidholm dealt with this increased concern on a daily basis.

2022 was an extremely turbulent year in terms of energy. In its daily contact with customers, Stockholm Exergi has encountered concern about the situation at the same time as customers are more informed than ever before and are looking to reduce their energy use.

"Knowledge about energy among our customers has increased significantly and they have a clear desire to find solutions that address the issues created by the crisis. Thanks to our digital energy services, we've been able to meet the wishes of many customers and improve their heating solution," says Lidholm.

Customers who are connected to Stockholm Exergi's digital platform have been able to choose from several different solutions to optimise their energy use and thereby reduce their costs. Stockholm Exergi's energy experts also report that more customers are being increasingly careful with their maintenance plans now than in the past and want to find long-term solutions. For example, installing solar panels, changing ventilation systems, or how batteries can be part of a property's energy system. Stockholm Exergi's ambition is to be customers' energy partner and offer a variety of solutions.
The energy crisis has also meant that more people, who are not currently Stockholm Exergi customers, have discovered district heating as a safe and stable form of heating.

"In 2022, we connected more customers and added more capacity to our district heating network than we did since 2017, and we have many more customers waiting to be connected. This shows how competitive district heating is," says Lidholm.

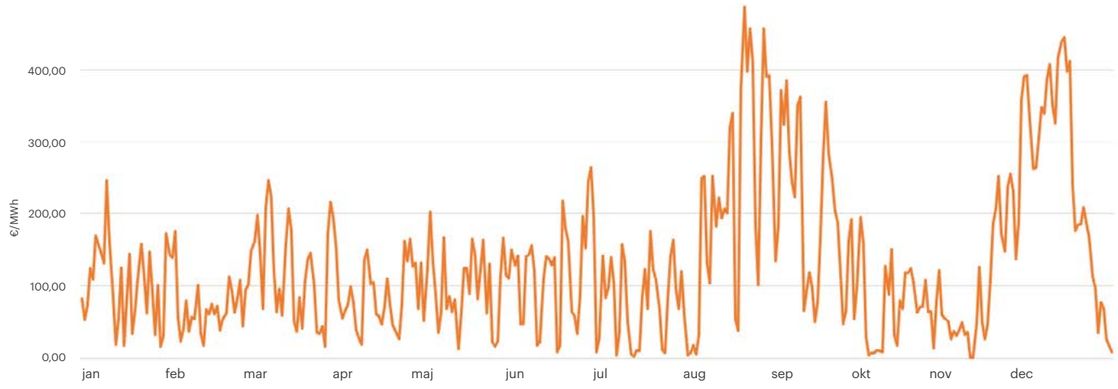
According to Lidholm, those who get in touch who are not customers are concerned about the energy situation and are looking for advice. They often get in touch because they believe that district heating is safe and reliable in terms of delivery and predictable in terms of price.

"We adjust the district heating price once a year, while the electricity price changes every hour, so there's no doubt that district heating is reliable and predictable compared to many other energy solutions. Our customer survey suggests that existing customers' increasingly see district heating as being affordable," says Lidholm.

Stockholm Exergi has worked hard to maintain customer deliveries throughout the energy crisis. The EU rapidly introduced a raft of sanctions in response to Russia's invasion of Ukraine, which fundamentally changed market conditions. Although Stockholm Exergi was not buying biofuel from Russia when the sanctions were introduced, the sanctions affected the fuel market significantly. The landscape changed overnight, and there was considerable pressure to source heat deliveries at the same time as prices increased sharply: a dual challenge to deal with.

"Heating was typically thought of as an uninteresting product, but it was anything but in 2022."

"It's an extremely challenging period – old truths no longer apply. However, we managed to source the winter season's fuels early on, although the costs involved were markedly different from what we had budgeted for. As a business, it's vital to do everything we can to respond to our customers' needs in these troubled times. Customer deliveries have been our top priority during the energy crisis," says Lidholm.



Electricity prices fluctuated wildly in 2022
The price of electricity was extremely volatile in 2022. It peaked in September due to considerable uncertainty about the European supply outlook and in early December due to concern over a cold winter. In December, the price swung between just over SEK 7/kWh to SEK 0/kWh, reflecting extreme price variations on the electricity market.

SOCIETY'S WASTE PRODUCTS

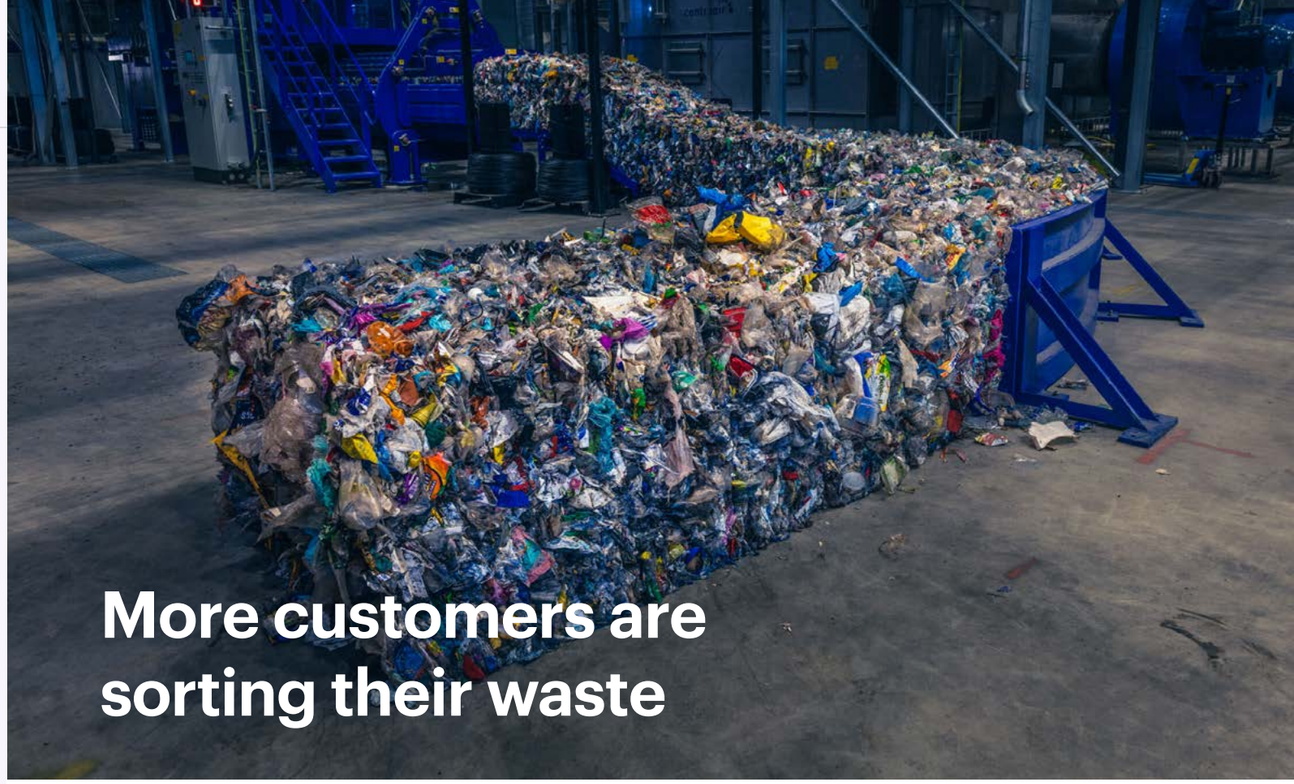
WE MEET SOCIETY'S NEED FOR WASTE TREATMENT

We provide a societal service that processes residual waste that is left over when society has finished sorting it – and we do this in a resource-efficient way. We produce electricity and heat by incinerating residual waste, so-called energy recovery. Incineration removes substances from the cycle from that we want to remove, for example heavy metals.

THE BEST WASTE IS NO WASTE AT ALL

CCS

CARBON CAPTURE AND STORAGE IS A NATURAL EXTENSION OF WASTE TREATMENT



More customers are sorting their waste

More waste needs to be sorted. Today, large amounts of waste that could be reused rather than incinerated in our facilities is thrown away. Awareness of this issue is growing. In 2022, we entered into agreements with more customers who want to sort their household waste at our Brista plant.

In conjunction with our combined heat and power plant in Brista in northern Stockholm, and in collaboration with recycling company SÖRAB, we have developed a waste sorting operation that will complement household sorting. In this way, we want to recover even more recyclable materials before waste incineration and energy recovery takes place. In 2022, we started collaborations with Ekerö municipality and Stockholm Vatten och Avfall on sorting waste at the Brista plant. We already have a similar agreement with Örebro municipality.

In 2021, Stockholm Exergi and SÖRAB inaugurated a sorting plant – a significant step towards increased material recycling and reduced carbon dioxide emissions. The state-of-the-art facility mechanically sorts organic food waste, plastic, and metal from waste. Plastic is sorted using infrared beams that identify different types of plastic and metal is sorted using a magnet and eddy current separator.

Sorting is a vital way of producing heat and electricity without negative climate impact.

New waste treatment customers

In 2022, it was confirmed that from 2023 we would provide our waste treatment services with energy recovery to new customers in Norway, supplementing existing demand in the UK. During the year, we also started development work on more flexible deliveries, with the aim of increasing opportunities to manage incoming residual waste in the event of downtime.

FOCUS: PLASTIC

PLASTIC: A CRITICAL ISSUE FOR THE WHOLE OF SOCIETY

Stockholm Exergi does not want to incinerate recyclable plastic, but because residual waste contains large amounts of plastic, it does happen. Spot testing of residual waste shows that 18 to 20 per cent of the waste by weight that we process and recover energy from to produce heat and electricity is plastic. The problem is that when the plastic is burned, fossils and carbon dioxide are released.

Total amount of material recycled in 2020

122,000 tonnes of plastic waste

which is about 10 per cent of the plastic that was placed on the market.

Source: Swedish Environmental Protection Agency

Because plastic mainly consists of fossil materials, carbon dioxide is formed when plastic is burned. These emissions create waste treatment costs as these emissions are subject to EU emissions rights trading. Emissions are also recorded from the energy recovered from combustion and these emissions currently make up the majority of carbon dioxide emissions that remain in district heating. To reduce emissions from waste management, two practical steps are necessary: increased sorting and material recycling as well separation of carbon dioxide from flue gases for permanent storage, so-called CCS.

With current approaches, we will not remove emissions; rather, responsibility for residual fossil waste, such as plastic, needs to be moved earlier in the life cycle – for producers and consumers – because by the time waste comes to us, it is too late. We made progress on this in 2022 with the introduction of differentiated pricing related to the proportion of plastic in waste that we process. The less plastic, the lower the cost. Stockholm Exergi has publicly expressed its view that waste sorting must increase to enable more material recycling and less burning of fossil fuel materials such as plastic. Our task should be to process residual waste that cannot or should not be materially recycled. To do this, there have to be better incentives and rules to increase the amount of plastic being sorted and used as a raw material in the production of new plastic products. We also need to create the necessary conditions for introducing CCS technology. This needs to be reviewed urgently.

Another initiative we have taken to better communicate our emissions is that from 2022 we provide our waste customers with a report that shows, among other things, what carbon dioxide emissions the incineration of their waste has created in the previous year. Visibility is important and to reduce total emissions, all actors need to take their responsibility and exert their influence where possible.

We have participated in a number of projects in 2022, all of which are based on how we can increase the sorting of plastics, (see box on opposite page). Key issues include how information changes behaviour and whether people are more inclined to sort materials from plastic if it is made easier.

Carbon capture and storage (CCS) is part of the waste solution

Making society's residual waste entirely free from plastic and other fossil materials will be difficult to achieve in the near future. Stockholm Exergi therefore sees the capture and storage of carbon dioxide (CCS) as a natural step. It should also be possible to process separated carbon dioxide into a new secondary raw material: carbon capture and utilisation (CCU).

In 2022, we conducted preliminary CCS studies at our Högdalen and Brista cogeneration waste management and energy recovery plants, which demonstrated that CCS is technically and logistically possible with at these plants. The studies also included use of captured carbon dioxide.

It is currently unclear how waste CCS could be financed, but CCS is set to have a key role to play. Sweden should review how CCS/US technology could be introduced.

Plastic sorting initiative

The following collaborations started in 2022; all of which sought to inform the people of Stockholm about the importance of sorting plastic from their residual waste.

- **Svenska Bostäder, Stockholms hem och Stockholm Vatten och avfall**
- **Stena fastigheter**
- **Medborgarinitiativet Elektricity och Vinnova**
- **HEBA**
- **Atrium Ljungberg**
- **Folksam och Newsec**

Högdal plant ready to process sludge

In 2022, we were granted permission to treat wastewater sludge no longer fit for agricultural use at our Högdalen plant. Since 2020, sludge has been used at the combined heat and power plant in Brista. Wastewater sludge is what remains after water treatment, biogas digestion and dewatering. It contains sought-after and finite substances, but sometimes also excessively high concentrations of environmental toxins and heavy metals that should not remain in circulation. We remove these during incineration. During the year, we started a collaboration under which we receive sludge from water company Gestrikevatten at the same time that recycling company PreZero receives slag ash for use in construction such as building roads.

Stockholm Exergi appeals Land and Environment Court's rejection of Lövsta cogeneration plant

We are planning a new cogeneration plant in western Stockholm where we will be able to recover energy and produce electricity and heat from sorted residual waste and biofuel. In the autumn of 2022, the Land and Environmental Court decided not to grant an environmental permit for the new plant. Stockholm Exergi has chosen to proceed with the permit process and appealed the decision at the end of the year.

A cogeneration plant in Lövsta would play a key role in the energy supply of the Stockholm region and means that our Hässelby plant can be closed to make way for new homes. The project is also aimed at separating carbon dioxide for permanent storage or processing into new secondary raw materials.

Granules accelerate the return of nutrients to forests

Ashes from burning biofuel such as branches and offcuts of trees contain nutrients that are necessary for the preservation of forests' long-term production capacity. Stockholm Exergi is developing a concept involving ash granules to simplify the management and return of bio ash to forests and reduce costs compared to conventional ash return. In 2022, we successfully conducted a pilot scheme involving the dispersion of granules in forests.

Society's waste products:

Our sustainability issues

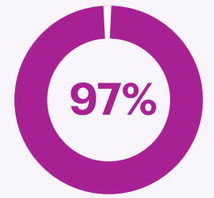
Waste treatment with energy recovery. The best waste is no waste at all, but it is not always possible to prevent waste from being generated. When waste is generated, reuse, recycling, and then waste treatment with energy recovery, for example with efficient incineration, are alternatives that responsibly manage the Earth's resources.

2022 RESULTS:

441

KG CO_2 PER TONNE PROCESSED WASTE

PROPORTION OF RENEWABLE OR RECOVERED ENERGY



How we contribute to the UN's sustainability goals

Sub-goal 11.6: Reduce the adverse per capita environmental impact of cities by 2030 through management of municipal and other waste. We process waste and capture energy from it to produce electricity and heat.

Sub-goal 12.5: To substantially reduce waste generation through prevention, reduction, recycling and reuse. In partnership with SÖRAB, we have established an operation for sorting residual waste in conjunction with our Brista cogeneration plant.

SUPPLIERS

SUPPLIERS BECOME PART OF OUR SUSTAINABLE VALUE CHAIN

Our choice of suppliers is crucial in our work to establish sustainable value chains. We focus our follow-up on areas where sustainability risks are greatest, and our ambition is to develop together with our suppliers. We take responsibility and manage risks in the value chain by auditing our suppliers.

15 (2)

REVIEWS OF FUEL SUPPLIERS ACCORDING TO RED 2022

New conditions on the fuel market create challenges

2022 was an exceptional year in the fuel market, during which Stockholm Exergi faced multiple supply-side challenges.

2022 was an exceptional year in the fuel market, during which Stockholm Exergi faced multiple supply-side challenges.

Russia's invasion of Ukraine was the single most powerful factor that affected the biofuel market in 2022, fundamentally reducing the choice and supply of biofuel. At the same time as the war changed market conditions, actors in the biofuel market adapted to RED, the EU's new renewables directive. This has resulted in far-reaching changes to the market and a challenge for Stockholm Exergi has been that not all EU countries have introduced the new requirements in national legislation. Neither has the EU Commission completed its approval process of the free systems intended to demonstrate RED compliance.

Demand for RED inspectors with the necessary skills outstripped supply in 2022, resulting in lengthy waiting times in some places. To ensure that our auditors have the necessary competences, we worked closely with independent examiners to develop audit criteria and review templates. The auditors have also increased their knowledge of Stockholm Exergi's Code of Conduct and our approach to purchasing biofuels.

Stockholm Exergi's biofuel portfolio mainly consists of actors that have a sustainability statement and/or that are certified according to one of the EU Commission's approved systems. If a supplier has not had time to obtain their voluntary certificate, we have conducted independent RED audits, (amounting to 13 of the 15 audits carried out in 2022). This was before the European Commission approved the Sustainable Biomass Programme (SBP) as a certification system in September 2022. We also require our forestry suppliers to be forest certified. Forestry certificates are an extra level of security in our fuel supply chain that helps us ensure that we have sustainability requirements in place that go beyond RED, such as labour law and social issues. Despite having navigated a highly complex fuel market in 2022, approximately 95% of purchased volume has this requirement.

EU Renewables Energy Directive (RED)

The EU's updated Renewables Energy Directive (REDII) came into effect in the second half of 2021, but it was only in 2022 that the directive was enforced and since 1 January 2022 it has been linked to the system for emissions trading, EU-ETS.

This means that sustainability notification and fulfilment of RED is a requirement for biofuel to be classified as sustainable and that combustion emissions are counted as "0" for emissions rights trading. Compliance with the new requirements in the EU meant Stockholm Exergi conducted more reviews in 2022 than ever before to ensure that the RED requirements were met.

Reviews shows quality with suppliers

In 2022, we carried out 15 (2) RED audits, including two audits with a focus on EUTR and four on Stockholm Exergy Supplier Code of Conduct reviews. All audits were conducted by independent auditors with expertise in their respective fields. We have also performed eight supplier dialogues with the purpose of improving suppliers' sustainability performance and the future development of sustainability initiatives. The review processes resulted in one supplier being judged to have failed to have met our requirements and we ended our contract. Another had to work on its RED work and implementation of requirements relating to residues from agricultural land. Overall, the results from the reviews were of an extremely high standard which we believe is a result of suppliers already being certified according to forestry standards and being used to working with forestry requirements and social and labour law requirements.

SUPPLIERS

We require sustainability

Our Code of Conduct and business ethics guidelines help ensure that business relationships we have with suppliers and other partners are conducted ethically and legally. We have a specific code of conduct for our suppliers based on the principles of the UN Global Compact on human rights, labour rights, the environment and anti-corruption.

To assess the extent to which our fuel suppliers comply with the Code of Conduct, suppliers are required to complete a self-evaluation as part of procurement processes, which are updated every three years. These form the basis of further sustainability checks. Before supply deals are agreed, we conduct additional business ethics checks. This involves checking that suppliers are not subject to sanctions or have any other negative associations. If we uncover evidence of this, we conduct a more in-depth review with an audit or we choose not to proceed with the supplier in question; we do this in consultation with our risk manager and general counsel.

Based on our risk assessments, we focus our resources on areas and suppliers where we see the greatest risks. In concrete terms, we engage in dialogue, limited and comprehensive audits with the help of independent reviewers who have local knowledge and understanding of specific fuels.

For goods and services, we look at risks associated with extended supply chains, purchase volumes, geographical origin, environmental and labour environment risks and our previous experience. High-risk labour situations and extended supply chains are two key priority areas. Before an order is placed, tendering suppliers must fulfil a number of basic requirements, (credit control, ethical, quality, environment and specific legal requirements), and must agree to our Code of Conduct. For fuels, we assess risk based on fuel type, country of origin, and our past experience of specific supplier categories. Challenges include the risk of illegal logging, poor labour conditions, corruption and poor control of supply chains. We mitigate such risks by requiring certifications that ensure traceability and that supply chains are audited annually by authorised auditors.

FSC® vital to the sustainability of biofuel

We are certified by the Forest Stewardship Council® standard for traceability (certificate no.: FSC-C126045). This means that every year, FSC® conducts an audit in which we have to demonstrate that we meet the FSC® standard. We aim to continuously increase the proportion of our forest fuel that is FSC®-certified. In addition, 100 per cent of our forest fuels must meet requirements for the FSC® Controlled Wood standard or equivalent in addition to requirements of the EU's Renewable Energy Directive.

New initiative for reduced carbon dioxide emissions in maritime transport

Stockholm Exergi joined the Green Fleet initiative in 2022 under the auspices of the Responsible Shipping Initiative (RSI). In collaboration with Den Norske Veritas, the project is developing a commercial framework for new-build ships to reduce carbon dioxide emissions from maritime transport. The project also analyses members' ship logistics and makes suggestions for improvements in terms of routes and vessel types. The six shipping lines of the Green Fleet aim to reduce their Scope 3 emissions to meet sustainability targets in response to growing market demands and statutory reporting requirements on environmental performance throughout the value chain.

RSI audits reveal minor deviations

In 2019, Stockholm Exergi was one of the co-founders of the non-profit Responsible Shipping Initiative (RSI), which seeks to promote responsible shipping in the Baltic Sea and North Sea with a focus on bulk transport. RSI members, which are major buyers of shipping services, audit their suppliers against a common sustainability standard that includes employment conditions, working environment, safety and environmental issues.

In 2022, a total of 21 audits were carried out by independent inspectors under the auspices of the RSI.

A positive finding made by the inspectors was that some shipping companies are doing serious work on root cause analysis, and taking measures and preventive steps to reduce the risk of recurring deviations. A negative finding, however, was that the RSI has had to issue one or more reminders to other shipping companies to adress or comment on deviations.

FOCUS: THE BIOECONOMY

THE BIOECONOMY WILL HELP US ACHIEVE CLIMATE GOALS

The potential of the bioeconomy has probably never been more relevant. With the world facing a climate crisis, a bioeconomy, rather than a fossil economy, will be necessary to achieve climate goals. Society needs carbon atoms – they are the basis for many of humanity's products – but the use of fossil carbon atoms is disrupting the balance of carbon dioxide in the atmosphere. Therefore, the fossil economy must be replaced by the bioeconomy, in which carbon atoms become part of natural cycles.

The sustainable city district made from wood heated by its own waste

In collaboration with house builder Folkhem, we have calculated the climate benefit of the bioeconomy in a fictitious district where building frames are made of wood. The climate footprint of the construction phase can be virtually halved by replacing commonly used climate-impacting building materials with wood. In addition, significant amounts of biogenic carbon are bound in buildings, in so-called durable products. When planks of wood, wooden beams and other wooden building materials are produced, the creation of residues is unavoidable, these include branches, off-cuts, bark and sawdust. Leaving these residues in the forest means that they rot and break down into carbon dioxide. If you instead use the residues as biofuel in a cogeneration plant to produce electricity and heat, construction residues become the equivalent of many years' district heating and electricity. So, this energy is produced completely without fossil fuels. When the forest grows again, carbon dioxide is once again bound. Combining this energy production with a bio-CCS plant creates an additional technical and permanent carbon sink, making the climate benefit even greater. The district could become climate positive.

Building in wood thus offers several advantages. The climate impact in the construction phase is reduced, biogenic carbon is bound into long-lived products, and residues that cannot become building materials can supply the district with energy while another permanent carbon sink is added through bio-CCS.

This is just one example of how the bioeconomy works. Several sectors of society can simultaneously benefit from renewable raw materials, which in this case are produced by forests.

Formas, a Swedish government research council for sustainable development, defines bioeconomy as "the sustainable production of biomass to enable growth in its use within a number of different social sectors. The objective is to reduce climate effects and the use of fossil-based raw materials. Increased added value for biomass materials, together with a reduction in energy consumption, and recovery of nutrients and energy from end-products. The objective is to optimise the value and contribution of ecosystem services to the economy."

In other words, bioeconomy is about seeing the potential of what biomass can contribute to the economy and thereby reduce climate impacts. Stockholm Exergi contributes to the bioeconomy by using bioenergy, a renewable energy source produced from biomass. We use bioenergy, which mainly consists of forestry residues, to produce heat (bioheat) and electricity (biopower) at our biopower plants. In line with our vision of resource efficiency, we therefore conserve energy that would otherwise be lost.

Bioenergy is important to society. It provides around a quarter of all Sweden's energy needs and has a key role in combating global climate change. A view backed by the UN IPCC and the IEAE, for example. Using biofuel for the production of district heating is simply taking advantage of an opportunity that is good for the climate. About 40 per cent of energy used in Swedish district heating consists of biofuels, which is mainly made up of forestry residues. This offers climate-neutral and sustainable production of electricity and heat.

Instead of leaving forestry residues created by logging to rot and release carbon dioxide through natural decomposition, we use these materials to produce heat and electricity, without increasing overall climate impact. The same amount of carbon dioxide is generated, but the difference is that in our cogeneration plants we simultaneously produce renewable energy and have been able to phase out fossil fuels. The fundamental difference is obvious – we extract energy from a natural cycle where at least as much carbon is constantly bound into plants through photosynthesis, while fossil fuels involve a one-way flow of carbon from the Earth's crust to the atmosphere in the form of carbon dioxide.

Forestry's economic engine and driving force is society's demand for processed wood products, building materials, furniture and similar products, as well as paper pulp for hygiene products, books and packaging with shorter lifespans. Our biofuels consist of low-value residues and materials that do not meet the quality requirements of the wood industry. The more renewable carbon that can be bound in products with longer lifecycles the better – it just makes sense. But there may be times when we need to use small amounts of biofuel consisting of materials other than pure forest residues. Society must be able to trust us to deliver heat and electricity even in times of crisis. Furthermore, forest owners are not always able to provide their materials for example, pulp mills for various reasons, and in such cases bioenergy is a good alternative.

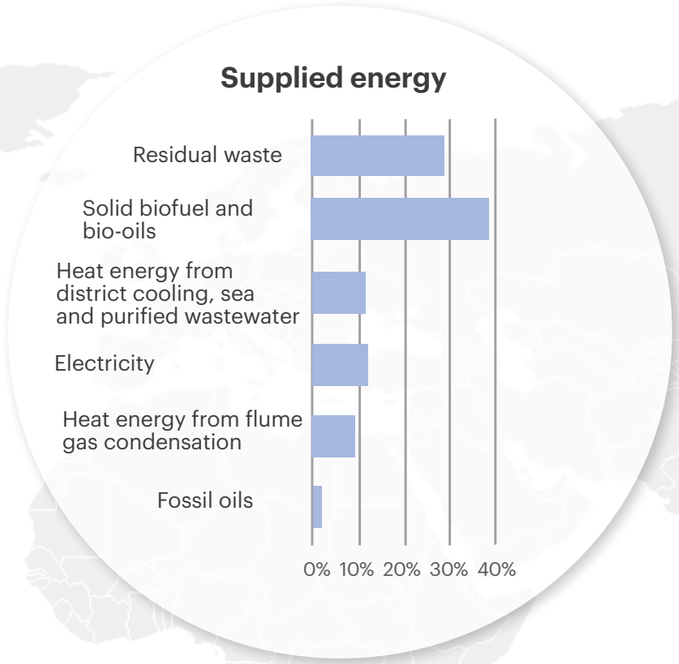
Being part of the bioeconomy also means taking responsibility for the extraction of bioenergy within a framework that is ecologically and socially sustainable. This is now a legal requirement throughout the EU under the Renewable Energy Directive, which has been implemented in Swedish legislation. Stockholm Exergi takes responsibility for the sustainable development of the bioeconomy and works actively to ensure that the renewable energy we produce is sustainable. Our requirement for all procurement of biofuels is that they must be certified as sustainable and checked or verified by a third party.

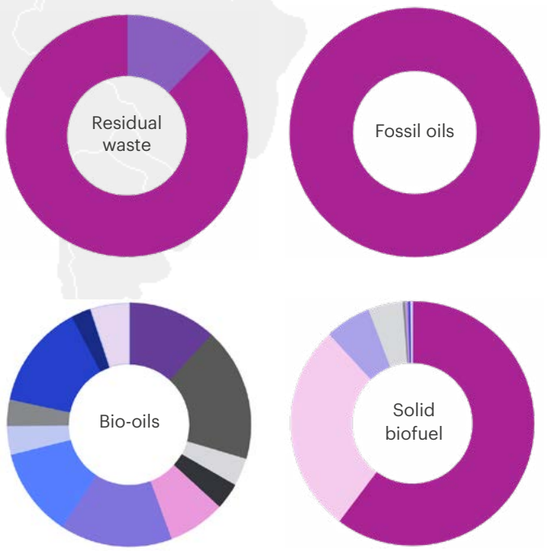
Sustainable biofuel

The bar chart on the right shows our added energy: 97 per cent comes from solid and liquid biofuels and residual waste, while 3 per cent comes from fossil fuels. A significant proportion of energy comes from local sources, such as waste heat from treated wastewater and sea heat. We treat residual waste to recover energy and purchase biofuels.

Fuel sources
Unless otherwise stated, the charts below illustrate where we purchased our fuel in 2022 and what percentage of each fuel type originates in a specific country. Around 94 per cent* of solid biofuel originated from Sweden and the Baltic countries, and 100% of residual waste was from Sweden and the UK. Fossil fuel oil is produced in Sweden, but crude oil originates in the North Sea and West Africa.

*A delivery from Russia at the beginning of January 2022, but after Russia's invasion of Ukraine has all agreements and deliveries terminated.





Suppliers:
Our sustainability issues

Anti-corruption. We make substantial purchases from different types of suppliers in different parts of the world. The risk of irregularities exists when purchasing goods, services and fuel.

Sustainable purchases and investments. We make substantial purchases and investments that may have positive and negative impacts on sustainable development. Many of our purchases are made from industries and countries with social and environmental risks. Our supply chains are often long and complex and this leads to major challenges in controlling suppliers and their sub-suppliers.

Extraction of the Earth's resources. Our operations consume fuels and other goods, which consumes the Earth's limited resources. Renewable fuels from biomass help us to become fossil-free. However, challenges remain with the production of these fuels. This may relate to unauthorised felling of trees in forests with high natural values or insufficient safety standards for hazardous work. For that reason, we welcome the revised Renewable Energy Directive which now also includes forest biofuels and sets requirements to meet sustainability criteria.

Transports. Fuel and goods are transported to our facilities by ship, train and truck. This creates impacts in terms of emissions to air and water of various substances that damage the environment. It also relates to people who perform transports doing so safely and under fair employment conditions.

2022 RESULTS:

94%

OF USED WOOD CHIP AND PELLETS CAME FROM SWEDEN AND THE BALTICS

AUDITS OF SUPPLIERS AND GOODS, SERVICES AND FUEL 2022 RESULTS:

24

(OF WHICH, 15 FUEL)

How we contribute to the UN's sustainability goals

Sub-goal 15.2: Promote the sustainable management of forests and stop deforestation. We set requirements for the procurement of solid biofuels so that they must be certified according to one of the EU Commission's voluntary system or have a Swedish sustainable health certificate in place and that the fuel is at least checked or certified by third parties (FSC® and PEFC).

Sub-goal 16.5: To reduce all forms of corruption and bribery. We work actively on anti-corruption. We run an e-training on our Code of Conduct that all employees are required to take and have a code of conduct for all our suppliers. We also carry out targeted training for certain vulnerable groups.

PRODUCTION

DEMAND FOR SUSTAINABLE ENERGY DRIVES US FORWARD

Our efficient and flexible production processes meet Stockholm's heating, electricity and cooling needs. Stockholm Exergi has around 30 production plants which, in co-ordination with each other and our partners' plants, ensure that Greater Stockholm is supplied with cost-effective and sustainable energy regardless of weather conditions and temperatures.

MODERN GAS TURBINES GENERATE

88 MW

BIO-CCS WITH THE POTENTIAL TO CAPTURE 800,000 TONNES OF CO_2 A YEAR

94%

OF REQUESTED TIME FACILITIES HAVE FUNCTIONED AS INTENDED

Global changes create complex demands on our production processes

Energy markets have changed drastically in recent years with jumps in electricity prices, increasing volatility and rising fuel prices being some of the most obvious consequences of these changes. Russia's war in Ukraine has complicated the market further, although many of the trends we see today started before the invasion.

These new circumstances mean that Stockholm Exergi needs to be better at analysing the outside world and changes in energy markets to be able to adapt production in the short and long term: what does demand look like and how can we respond most effectively?

In our long-term analyses, we look primarily at investment, electricity positions and fuel contracts; while out short-term analysis is mainly based on electricity price projections, the weather and the availability of our and our partners' plants. Success is based on being responsive to demand and at the same time having flexible fuel storage options to optimise production. This is complex and the right decision at the right time creates the most resource-efficient operations.

Production planning is becoming increasingly automated and data-driven. We now have greater scope to collaborate and share information with district heating companies that are connected to our distribution networks across the Stockholm region, as well as local control rooms. This enables us to work together and create greater benefit than if we had acted independently.

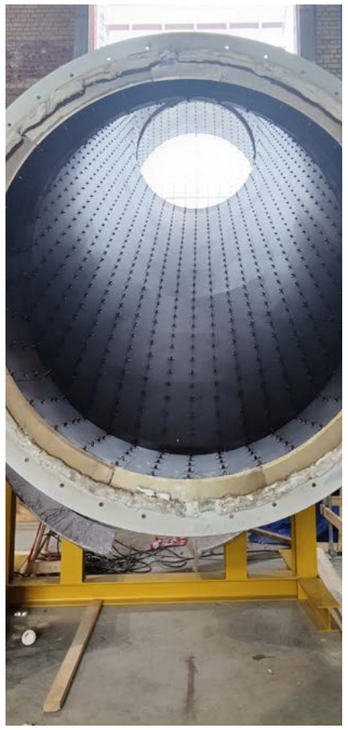
Stockholm Exergi has the confidence to plan the interconnected distribution networks to take advantage of that benefit. In 2022, our planning accuracy, i.e., how close actual performance was to optimal performance, was a few percentage points below 100. We work continuously to involve the entire company and contribute to optimising production planning, because this is the key to making district heating a competitive product.

Availability of our core production is increasing

2021 marked the start of a long-term development programme that will increase the availability of the boilers that form the base of Stockholm Exergi's production. The background to the initiative is that previous availability levels failed to meet expectations. The programme is aimed at establishing sustainable working methods, developing leadership and competences, and adopting new forms of co-operation to focus on the issue and identify areas for improvement. The initiative delivered results in 2022 with an overall increase in our boiler availability at our Brista plant's two boilers (B1 and B2), Högdalen's four boilers (P3, P4, P6 and P8), and the Värta bio-cogeneration plant (KVV8). Availability increased from 88 percent in 2021 to 94 percent in 2022.

Modernised gas turbines improve electricity supply

Stockholm Exergi's efforts to modernise gas turbines G3 and G5 took important steps forward in 2022 to being able to contribute to Stockholm's electricity supply. G5 was tested during the year and was ready for full operation at the end of 2022. Work on G3 is underway and the turbine is scheduled to enter service in 2023. Together, these two gas turbines produce an output of 88MW. Currently, they are powered by fossil fuels but will gradually be converted to run on bio-oil.



Increased output at the KVV8 bio-cogeneration plant

Our bio-cogeneration plant in Hjorthagen,KVV8, had an exceptionally strong 2022. In 2021, a project was carried out with the aim of increasing its boiler output from 345 to 365MW and thereby increase annual energy production from the plant.

2022 was the first full year this could be evaluated, and the results were positive. In addition, a major overhaul of the turbine was carried out during the year, and this has contributed to additional output of approximately 1-2MW. The plant has thus received a higher alpha value, which is the relations hip between electricity and heat in a cogeneration plant. Availability of the plant in 2022 increased by two percentage points on the previous year to 96 per cent. The increased availability is partly due to effective responses to disturbances that arise.

In the spring of 2022, we obtained an amendment to our permit to burn reclaimed wood material, so-called RT-chips, at KVV8. The plant is now classified as a co-combustion boiler and RT chips can be used as a complementary fuel.

We also conducted combustion tests where we completely or partially replaced the existing base material with ilmenite. The tests indicated smoother and more efficient combustion in the boiler, which in turn contributes to several positive effects for the operation and maintenance of the plant.

BOILER CAQPACITY SUCCESSFULLY INCREASED FROM 345 MW TO

365 MW

New Open District Heating collaborations

Through its world-leading Open District Heating business model, Stockholm Exergi has bought surplus heat from small and large businesses throughout Stockholm since 2014. In 2022, we signed an agreement with the City of Stockholm's Cemetery Committee and doubled capacity from Ericsson's Rosersberg server hall.

Since 2017, we have a well-established collaboration with several actors that we call Stockholm Data Parks.

Together, we want to attract large-scale data centre investments and in 2022 we worked to find a new partner for the last premises in the Kista area of Stockholm.

Our energy comes from four sources

Humanity uses more of the Earth's resources than the planet can handle. We want to contribute to the planet being enough for everyone. We do this primarily by using waste heat and recycled energy from the treatment of residual waste. Secondly, we use renewable energy from residues and seawater. We do not fell trees to generate energy for district heating – we use the biomass that is left over from forestry activities. Ninety-seven per cent of the district heating we provide is produced from recycled or renewable energy with limited economic value.

Residual heat and electricity
We use the heat in Stockholm's wastewater, residual heat from data centres and supermarkets and any heat created by district cooling. Wastewater we obtain from Henriksdal's treatment plant is, for example, one of our most important sources of energy. Using it, we produced 924 GWh heat, which is enough to keep about 92,000 flats warm and cosy. Electricity required for operating heat pumps and other electricity consumed in production is source-marked and renewable.

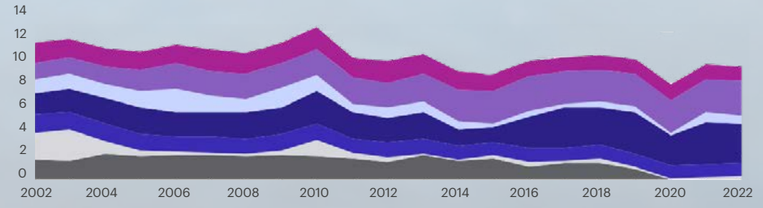
Waste treatment with energy recovery
In total, residual waste accounted for 2,230 GWh of our production of district heating and electricity in 2022. This heat corresponds to the annual consumption of approximately 18,000 flats. In total, we recycled almost 428,000 tonnes of municipal residual waste and 458,000 tonnes of residual waste from businesses. In addition, twelve (eleven) per cent of our waste-based fuel came from Norway and the UK.

Renewable fuels
We use renewable biofuels from forestry and industry, such as wood chips and bio-oils, to generate energy. Biofuels accounted for 3,369 GWh of heat and electricity, enough district heating for approximately 247,000 flats.

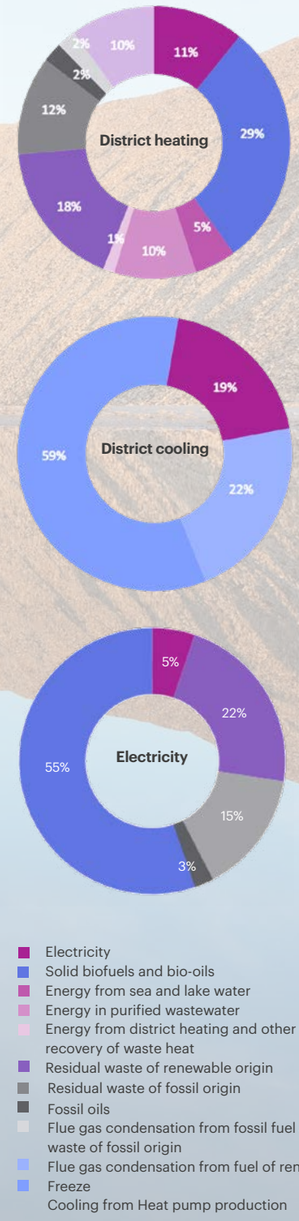
Fossil fuels
We use a certain amount of fossil oils partly to start and stop plants, and partly in plants that we mainly use during severe cold periods. We now only have coal on standby to guarantee the supply of heat and electricity to Stockholmers in the event of a crisis situation. This fallback was not used in 2022. Fossil oils provided 209 GWh of heat and electricity in 2022, with heat corresponding to the annual consumption of approximately 17,000 flats.

A key measure for Stockholm Exergi is the so-called primary energy factor for our district heating. Primary energy is the energy that exists as a natural resource before it has been transformed or used by humans. Trees in forests, hydropower, coal and oil are examples of primary energy. Our primary energy factor for district heating in 2022 was 0,06 (0,06). We used 0,06 kwh of primary energy for every kwh of heat that we supplied to our customers. This ratio is determined by the weather and other temporary factors that to some extent control which fuels we use. Therefore, it varies slightly from season to season.

Supplied energy



Products' energy mix

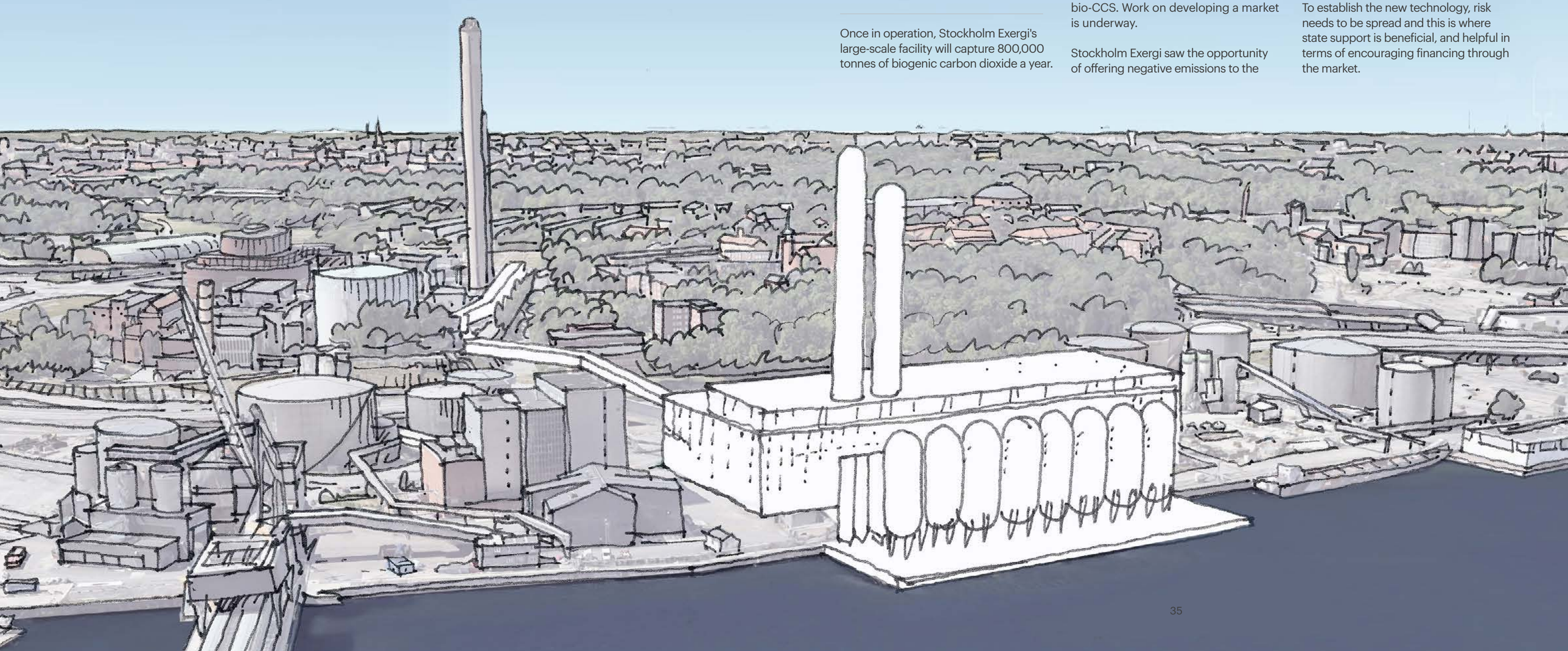


PRODUCTION

FOCUS - CARBON CAPTURE AND STORAGE

THE POTENTIAL TO CREATE A NEW SWEDISH INDUSTRY

During 2022, Stockholm Exergi continued its target-based efforts to develop Bio Energy Carbon Capture and Storage (bio-CCS) at its bio-power plant in Värtan with the goal of having a large-scale carbon capture facility in operation in 2026. Bio-CCS offers Sweden the potential to create an entirely new industry.



The UN IPCC has demonstrated that it is not enough to simply reduce carbon dioxide emissions to counteract climate change and limit the global average temperature rise to 1.5 degrees. The IPCC has analysed almost 300 scenarios and in each one they come to the conclusion that in addition to massive reductions in emissions of greenhouse gases, it will also be necessary to capture and store carbon dioxide from the atmosphere. This assumes bio-CCS.

By 2050, approximately 600 plants of a similar size to the one Stockholm Exergi plans will need to be built all around the world.

Once in operation, Stockholm Exergi's large-scale facility will capture 800,000 tonnes of biogenic carbon dioxide a year.

Stockholm Exergi's bio-CCS plant is based on the premise that the biofuel it uses will be produced sustainably. You can read about how we are working to do this in the chapter on suppliers in this report.

One of the challenges facing Stockholm Exergi to build a large-scale facility of this kind is financing, and this was where much of our focus was in 2022. Stockholm Exergi believes that financing will be derived from three sources: EU support, national state support, and a market for negative emissions. We have received a grant of euros 180 million from the EU Innovation Fund and the Swedish government has added funding to the national budget so that a so-called reverse auction can be held in 2023 to attract support or bio-CCS. Work on developing a market is underway.

Stockholm Exergi saw the opportunity of offering negative emissions to the market early on and it is now a part of our business plan that as a future producer of negative emissions, we can offer them to companies that need them. This may relate to the last fraction of emissions reduction that companies are unable to achieve or that they want to offset their historical emissions to reach net-to-zero emissions. Many companies are already interested in contributing to slowing climate change by buying negative emissions and growing numbers of companies are setting ambitious climate targets and plan to reach net-zero emissions before legally required to do so. These companies constitute a growing commercial market for negative emissions. However, the market is currently not large enough to finance the establishment of bio-CCS.

To establish the new technology, risk needs to be spread and this is where state support is beneficial, and helpful in terms of encouraging financing through the market.

Consultations on a new facility

During the autumn of 2022, we conducted consultations on the large-scale bio-CCS facility that we plan to build at Värtaverket in Stockholm. We invited local residents and other affected stakeholders to an event during which we provided information about the project. A key part of the consultation process was to obtain information and opinions that we have incorporated into the permit application process for the plant and environmental impact statement.

Ceremony marking EU-Stockholm Exergi agreement

On April 1, 2022, Stockholm Exergi and the EU Innovation Fund signed an agreement that provides 180 million euros of support for our bio-CCS project.

We organised the signing ceremony in collaboration with the European Commission and steel producer HYBRIT, which also receives support from the EU Innovation Fund. Frans Timmermans, Executive Vice President of the European Commission, Patrik Kolar, Head of Department at CINEA, Christian Holzleitner, Head of the EU's Directorate General for Climate Action, and Sweden's then Minister of Economic Affairs Karl-Petter Thorwaldsson were also in attendance.

How we create negative emissions

Bio-CCS refers to the process when biogenic carbon dioxide from burning biofuel is separated from flue gases and then stored permanently in bedrock. Since the carbon dioxide that is separated from the flue gases was previously captured from the air by plants through photosynthesis, the concentration of carbon dioxide in the atmosphere is reduced. The result: negative emissions.

Wanted: political decisions, national and international

For Sweden and Stockholm Exergi to become world leaders in bio-CCS and to trade in negative emissions, several regulatory changes are needed. Among other things, a government auction for negative emissions needs to be established in a way that allows co-financing between government and businesses and which also allows the option of selling negative emissions to other businesses. The shipping and storing of carbon dioxide in other countries must also be allowed. The tax on electricity consumed in bio-CCS facilities needs to be lower so that these plants can be designed in such a way to maintain the ability to produce electricity for the grid while removing carbon dioxide. A lower tax rate is crucial for bio-CCS cogeneration plants to be able to support the electricity grid at times of shortage.

Bio-CCS set to drive economic growth in Sweden

Bio-CCS has the potential to become a new industry for Sweden with positive economic effects. That is the key finding of a 2022 study that Stockholm Exergi commissioned from consulting company Implement. If Sweden were to take advantage of the entire country's potential and capture and store 30 million tonnes of carbon dioxide a year, it would create 11,500 direct jobs and a total of 28,000 jobs and contribute SEK 24 billion to Swedish GDP. Sweden has unique opportunities to enable development and thereby accelerate and scale up the introduction of bio-CCS technology in Europe.

PRODUCTION

Energy from production to consumption

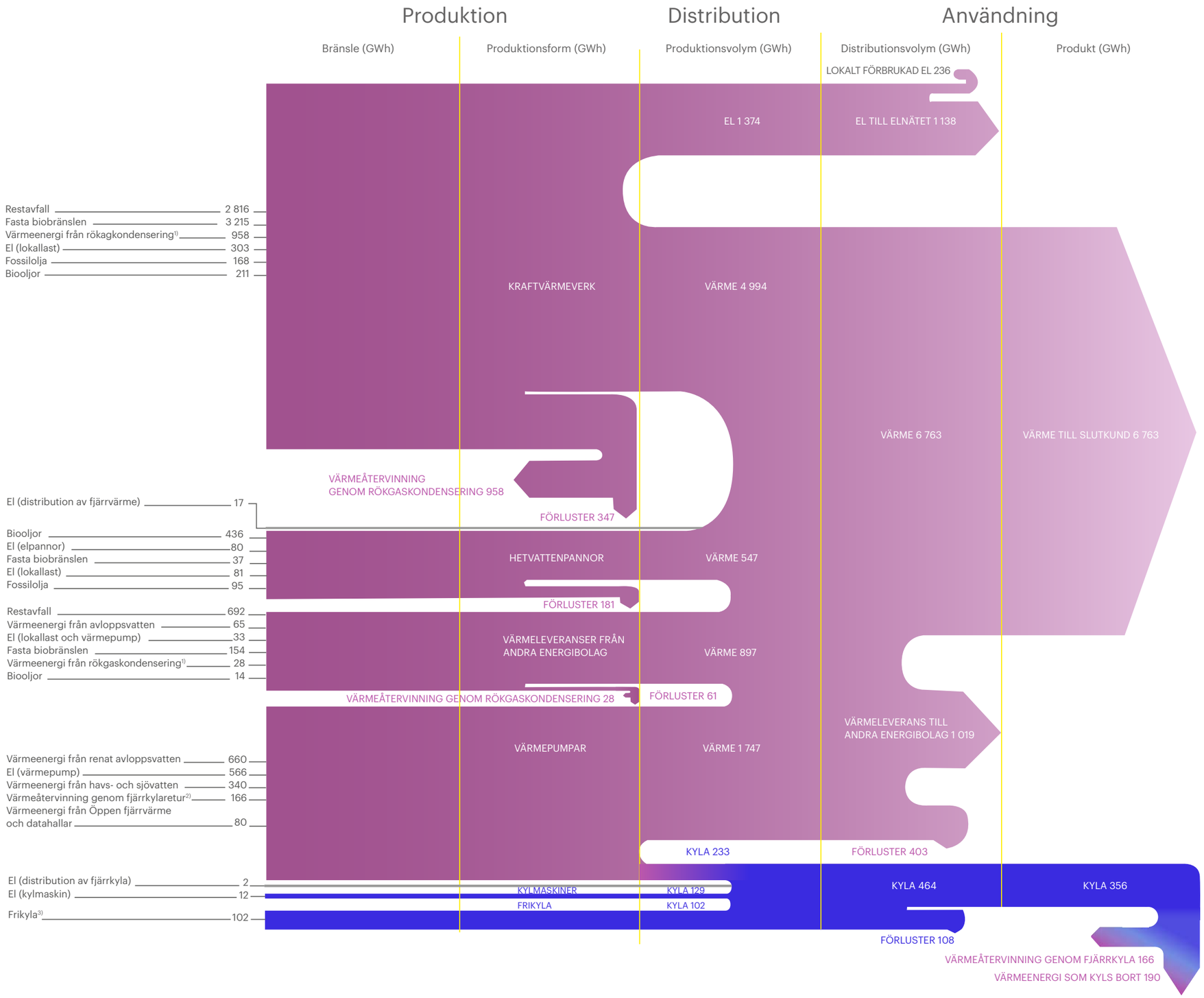
The diagram to the right shows how Stockholm Exergi, together with its partners, processes various energy sources into district heating, district cooling, and electricity. We do this with the help of different forms of production, especially cogeneration and heat pumps.

The diagram also shows where the energy losses occur. In addition to the energy volumes in the diagram, 23GWh of biogas has also been produced in a plant that we lease and sold.

For electricity that is used to produce district heating and cooling, Stockholm Exergi buys origin-labelled electricity from renewable energy sources.

Distribution refers to the type of plant, not the form of energy. The supplied energy is further distributed in the diagram depending on the type of facility that transforms the energy for district heating or district cooling. For example fuels are allocated to the production form cogeneration plant, even if the fuel was used for so-called direct heat production without simultaneous electricity production.

The diagram has not been translated to English.



1) Rökgaskondensering från produktionsanläggningen
2) Varav 62 GWh genom Öppen Fjärrvärme
3) Varav 0,5 GWh genom Öppen Fjärrvärme

We are determined to reduce our environmental impact

Our total emissions are influenced to a significant extent by weather and prevailing temperatures because these determine production demand. However, other factors are also at work.

Emissions of greenhouse gases per kWh of district heating in 2022 were 50 grams, which is an increase on the two previous years, and implies that we do not achieve the target of 45 grams. The increase is mainly due to the fact that the share of district heating based on waste treatment increased compared to the previous year and that the share of plastic in residual waste increased. Another reason is that the share of fossil fuels in our energy mix increased from 2 to 3%. Fossil oil is normally used as a backup fuel in the event of technical disturbances or if daily temperatures become extremely cold, and to start and stop cogeneration plants. During the unseasonably cold December, one of our oil-fired cogeneration plants operated more than had been planned. The powerful steam turbine continuously supplied more than 170MW of electricity – and for brief periods up to 190MW – to the Stockholm grid when it was needed most. The cogeneration plant is normally powered by bio-oils, but due to technical limitations, a certain amount of fossil oil was also used.

The proportion of plastic increased

The fact that emissions from waste treatment have increased is a challenge. This happened because the proportion of plastic in residual waste has increased, despite society's efforts to increase sorting. Amounts of waste must be reduced and the sorting of recyclable plastics needs to be improved. But this is not enough. Carbon dioxide capture is necessary as a final purification step. With carbon dioxide separation, emissions from waste incineration would be reduced by 90%. We see this as a necessary development that must begin in the early 2030s. In 2022, we also worked on our long-term plan for successive phasing out of fossil oils, which are used when starting and stopping plants and on really cold days.

Other emissions to air and water

We work continuously to limit other emissions to air and water. Among the most important substances that we remediate from the flue gases and waste water are nitrogen oxides and sulphur dioxide, which would otherwise contribute to eutrophication and acidification, and dust which is a health risk, and heavy metals and dioxins, which are toxic to humans and the environment. Our suppliers' transports also account for a significant proportion of our emissions. Read more under GRI note 305-7 on emissions to air on page 133 and in our environmental reports for individual plants.

Environmental incidents in 2022

Despite our continued focus on environmental issues, we failed to achieve our goal of a maximum of five significant environmental incidents in 2022. A total of 7 (12) serious environmental incidents were reported. The most severe incidents were two major leaks of fuel oil in December. When significant environmental incidents occur, a root cause analysis is always carried out and measures are taken to reduce the risk of such incidents reoccurring. In 2022, we received 3 (6) complaints from local residents. The most common reasons for complaints were noise. Similar to environmental incidents, complaints are investigated to determine the cause and to prevent them from reoccurring.

Production:

Our sustainability issues

Emissions to air and climate impact. Combustion produces smoke gases that contain over-fertilizing, acidifying or toxic substances which in large quantities can have negative impacts on the environment. Greenhouse gas emissions that have negative impacts on the climate are also caused. Several of our activities produce carbon dioxide emissions, with incinerated plastic in our waste treatment activities being the most significant. There is also potential, and a long-term plan, to phase out fossil oils used when starting and stopping our plants and on extremely cold days when we need to rely on our peak production capacity. Our suppliers' transports also accounts for a significant proportion of our carbon dioxide emissions. If something goes wrong in our production processes, environmental disturbances may arise in the form of temporary emissions into the air.

Emissions to water. During production processes at our facilities, various types of wastewater arise which may contain fertilizing or toxic substances. There is also a risk of accidental release of chemicals and fuels to water and land in the event of technical faults at our plants.

Waste from operations. Our production generates large quantities waste. This is waste that occurs during operations and maintenance of our plants and the ash and slag formed during combustion. Waste amounts to the consumption of the Earth's finite resources and the risk of toxic substances spreading if waste is not handled properly.

Incidents in the vicinity of production plants. Many of our production plants are located close to residential areas. Production faults can cause disruptive noise and odours, for example.

50g

CO_2e/DELIVERED KWH DISTRICT HEATING*

2022 TARGET: 45g CO_2e

*corresponding key figure taking into account special agreements, so-called residual mix, is 54 grams Co_2e/kWh

7

NUMBER OF MAJOR ENVIRONMENTAL INCIDENTS

2022 TARGET: MAX. 5

How we contribute to the UN's sustainability goals

Sub-goal 6.3: To improve water quality by reducing pollution, minimising emissions of hazardous chemicals and significantly increasing recycling by 2030.

Target 14.1: By 2025 prevent and significantly reduce all types of marine pollution, in particular from land-based activities, including marine debris and nutrient pollution. We are actively developing our efforts related to safe chemical handling, and we carry out maintenance measures to reduce the risk of breakdowns that result in the oil leakages. We use advanced water treatment technologies to reduce emissions to water.

Sub-goal 7.2: To significantly increase the share of renewable energy in the global energy mix by 2030. We follow a long-term plan for the successive phasing out of fossil oils.

Sub-goal 7.3: To significantly increase energy efficiency by 2030. Our most important way to contribute to increased energy efficiency is to take advantage of energy that would otherwise be lost. We do this primarily by using waste heat or recycled energy from waste.

Sub-goal 7.A: To strengthen international co-operation by 2030 to support access to and research and technology in clean energy. We are leading progress towards creating negative emissions with a test facility for carbon dioxide separation at our Värtan biopower plant with a full-scale facility scheduled to open in 2026. A key aspect of the project and a condition for support from the EU Investment Fund is that we share the knowledge and technology that flows from the project.

Sub-goal 9.1: To develop reliable, sustainable and resilient nfrastructure.

Sub-goal 9.4: By 2030, upgrade infrastructure and retrofit industries to make them sustainable, more resource-efficient, and use more environmentally sound technologies. We maintain and expand our production and distribution system on an ongoing basis with cutting-edge technologies. For example, our bio-cogeneration plant in Värtan, our investment in carbon dioxide separation, bio-CCS, and the use of digitalisation for the optimisation of the district heating system.

Henrik Engdal, Director, Business Area Electricity

"We continually strive to support the electrical grid."

The climate. This is where Henrik Engdahl, Director of Business Area Electricity at Stockholm Exergi, starts as he describes the company's importance to the supply of electricity. Increasing the use of electricity to reduce reliance on fossil fuels in parts of society is necessary if Sweden is to achieve its climate goals. And this is where Stockholm Exergi plays a key role.

"We're seeing a huge transition in which society's need for electricity is increasing significantly; all projections of future electricity use point steeply upwards. We're in a situation in which we need to expand electricity production, use energy in smarter ways, and at the same time use existing resources more efficiently," says Engdahl.

He highlights the genius of cogeneration. The resource efficiency of cogeneration is pronounced because electricity and heat are produced at the same time and whatever is needed most at any given time can be made available. If more electricity is needed, Stockholm Exergi can meet that demand by increasing electricity production in cogeneration plants – and the opposite when demand for heat increases. Local cogeneration electricity production is particularly important at peak times and heat production is critical to reduce pressure on the grid, because if heating can be provided through district heating, electricity can be used for other purposes.

"I'm proud to work for a company that makes a real difference."

Stockholm Exergi already makes a substantial contribution to the electrical supply, but want to do more. The company's performance as a business is intrinsically linked to society's changing needs for heat and electricity.

A concrete example of this is our biopower plant in Hjorthagen, KVV8, which is approved to provide support services (see box on opposite page); and another Stockholm Exergi's participation on the Sthlmflex power market. The heat pumps that Stockholm Exergi use is another improvement, which, in combination with battery storage, could rapidly and efficiently increase the amount of electrical power available to the grid at times of peak demand. However, to perform as a business, Stockholm Exergi also needs incentives. Engdahl is seeking changes to the electricity market that the grid so obviously needs.

"First, a clear and government-backed goal is needed in terms of what the capacity of the electrical grid should be. Secondly, incentives are needed to encourage steps towards fulfilling these goals. Based on this, we need to have market conditions that lead to investment in long-term, sustainable solutions. The characteristics needed for the electrical grid to function stably, for example predictability, must receive reasonable compensation," he says.

Cogeneration: how it works

- **Stockholm Exergi's largest facilities** produce electricity and district heating at the same time, in a process known as cogeneration. This is an efficient way to make use of the energy from society's residual waste and forestry residues.
- **In cogeneration plants steam** is produced which drives a turbine, which in turn drives a generator that produces electricity. The remaining energy in the steam is used as district heating.
- **Electricity production from cogeneration** has attracted considerable interest in recent years. One reason for this is that several Swedish cities, including Stockholm, lack sufficient transmission capacity in the power grid.
- **Stockholm Exergi's cogeneration plants,** located in the central parts of the city, supplies electricity to the grid close to electricity consumers without electricity needing to be routed via those parts of the grid that are under significant pressure.
- **The fact that cogeneration can be planned** is also valuable. It creates stability in the grid and compensates for the increasing the proportion of unplanned electricity production, such as wind. Cogeneration also reduces pressure on the grid to a greater extent when properties are heated by district heating instead of electricity.
- **Due in part to the war in Ukraine,** cogeneration has recently has also been recognised as important for the security of supply and preparedness in times of crisis and war. Cogeneration also has an important role in supplying cities with electricity and heat if supplies are disrupted.

Bio-cogeneration promises a more stable electricity grid

As the electricity grid changes, new solutions are needed to ensure the stable supply of electricity. One solution is known as support services and as one of the first cogeneration plants in Sweden, Stockholm Exergi's KVV8 has been approved to provide some of these vital support services.

Electricity production from the plant can be used to ensure that the frequency in the grid is correct. This is a fully automated function that is built into the control system of the plant and that reacts to the frequency in the electricity grid.

We refrain from using electricity when it is needed elsewhere

Stockholm Exergi supports flexible electricity use by refraining from using electricity for brief periods and being paid for doing so. Stockholm Exergi is one of the main members of the SthlmFlex market place that brings together grid owners Svenska kraftnät, Ellevio and Vattenfall. Offering not to use electricity frees up capacity elsewhere on the grid.

DISTRIBUTION

THE DISTRICT HEATING NETWORK: A HUB FOR CIRCULAR SOLUTIONS

We pump hot water from our production facilities into a network of pipes that connects thousands of properties all over greater Stockholm. Our facilities and customers are connected in large and flexible networks, which enable us to optimise operations more effectively. Today, we have two large networks: one that covers central and southern greater Stockholm and one that covers north-western greater Stockholm. Laid end-to-end, Stockholm Exergi's district heating networks are approximately 3,000 kilometres long.

3,060
(KM) LENGTH OF OUR DISTRICT HEATING NETWORK

APPROX. 3,000
NUMBER OF SPOT CHECKS CONDUCTED IN 2022

MSEK
200
INVESTMENT IN NETWORK RENEWAL IN 2022

Distribution networks: a business platform for sustainable urban development

Waste management, water purification and energy supply are examples of key societal benefits.

Providing waste management, water purification and energy supply services individually is costly. However, by enabling their respective infrastructures work together with our combined heat and power and our "smart grid" distribution systems, we create a resource- and cost-effective system. Stockholm Exergi works strategically to create resource-efficient systems as a central part of developing a sustainable Stockholm region with circular solutions.

In 2022, we took significant steps to further develop low-temperature networks to strengthen sustainable urban development. We have developed a concept based on a local district heating networks with a lower temperature than typical district heating networks. The lower temperature makes it possible for excess heat from waste heat to be used directly by other customers without having to first use a heat pump to obtain the right temperature. So, this means that heat that has been used in one property can be reused immediately as underfloor heating in another property. Local low-temperature networks are built for specific districts, thereby complementing district heating's high-temperature networks. Developing a corresponding solution for cooling is a fundamental step in the development of this system.

Stockholm Exergi has come a long way with this concept and in 2022 was able to submit a proposal to build the low-temperature network in a new district planned in southern Stockholm. The low-temperature grid is part of Stockholm Exergi's efforts to proactively achieve the City of Stockholm's 2024 energy plan and the regional development plan for Stockholm (RUFS 2050).

Modernised network creates energy savings

Stockholm Exergi has been involved in the structured renewal of the network for nine years, with 0.5-1 per cent of the total network being replaced every year. Investment in renewal has amounted to under SEK 200 million a year and continued at that level in 2022. New networks have improved thermal insulation which reduces energy losses. At the same time, we repair leaks and increase capacity in the network where it previously may have been under pressure, which improves operational efficiency.

Methodical troubleshooting keeps the network in good shape

Our roughly 3,000-kilometre-long network needs constant maintenance to minimise water leaks. We conduct between 2,000 and 3,000 spot checks a year. Alarm systems in the network provide alerts when checks are needed, we use thermal cameras, we carry out aerial thermography and we receive help from the general public who contact us in the event of faults.

In 2022, we started to upgrade the mobile network our alarm system uses. Methodical troubleshooting allows us to prioritise our work to maintain the district heating network.

Finding “flow thieves” in the network to improve resource efficiency

To tackle what are referred to as “flow thieves” and minor energy losses that arise at substations in the network, Stockholm Exergi launched a comprehensive and structured programme of measures in 2022. These initiatives should result in a more resource-efficient system by reducing the amount of energy used to pump district heating water, thereby making the system more efficient. Substations function as a sort of short circuit in the district heating network which, among other things, are needed to keep warm. However, many substations are aging, or their regulators have stopped working, causing unnecessarily high water flows which cause energy losses.

To identify older and faulty substations, we conduct physical inspections of sites. We also use digital analysis tools, customer measurement data for measuring return temperatures, water flows in relation to energy consumption to identify and prioritise measures and have dialogue with our customers to support troubleshooting and maintenance.

Distribution:

Our sustainability issues

Disturbances in the immediate vicinity of operations. Maintenance and expansion of our distribution networks involves construction work which causes greenhouse gas emissions, noise, and reduced traffic access, which can affect nearby residents and businesses. We use aerial thermography to identify leaks which leads to emissions of greenhouse gases and can cause noise disturbances.

SAIDI DISTRICT HEATING (min): 69

SAIDI DISTRICT COOLING (min): 42

SAIDI 2021

SAIDI stands for System Average Interruption Duration Index and is a way of measuring average interruption time per customer. SAIDI increased in 2022 from 2021, but the average outage time for district heating customers remains low. The increase is mainly due to two specific major planned interruptions related to the connection of new district heating systems in Södermalm, where it has not been possible to supply customers with temporary heat supply. The larger interruptions were therefore carried out during the summer when the demand for heat is low and therefore did not cause significant inconvenience for customers.

SAIDI may vary from year to year depending on the extent of renewal of the network and the number of new customer connections, which usually involves service interruptions. In 2022, 72 percent of outage time was related to SAIDI.

How we contribute to the UN’s sustainability goals

Sub-goal 9.1: Develop reliable, sustainable and resilient infrastructure.

Sub-goal 9.4: Equip infrastructure and adapt industry to become cleaner, more resource-efficient and use more environmentally friendly technology by 2030. We conduct ongoing maintenance and expansion of our district heating network. We use the best and most efficient technologies available to minimise energy loss and we continuously monitor technological development. Our control room also ensures that network temperatures are no higher than required around the clock, which contributes to resource-efficient use.

EMPLOYEES

WE'RE FOCUSED ON DEVELOPING SUSTAINABLE SOLUTIONS

Stockholm Exergi is Stockholm's energy company, and our employees have a multitude of competences and responsibilities. We share a common aim of reducing climate impact.

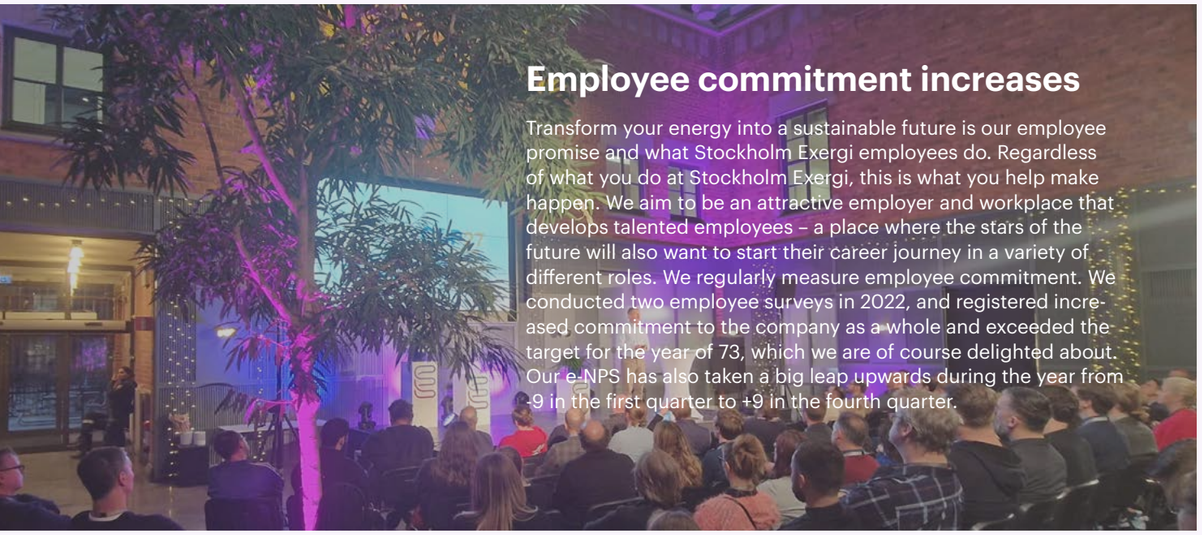
NUMBER OF SAFETY WALKS IN 2022:

1,722

WE CARRIED OUT THE MIGRATION OF 70 APPLICATIONS IN 2022

0

NUMBER OF SERIOUS ACCIDENTS IN 2022



Employee commitment increases

Transform your energy into a sustainable future is our employee promise and what Stockholm Exergi employees do. Regardless of what you do at Stockholm Exergi, this is what you help make happen. We aim to be an attractive employer and workplace that develops talented employees – a place where the stars of the future will also want to start their career journey in a variety of different roles. We regularly measure employee commitment. We conducted two employee surveys in 2022, and registered increased commitment to the company as a whole and exceeded the target for the year of 73, which we are of course delighted about. Our e-NPS has also taken a big leap upwards during the year from -9 in the first quarter to +9 in the fourth quarter.

New routines reduce the risk of ill health

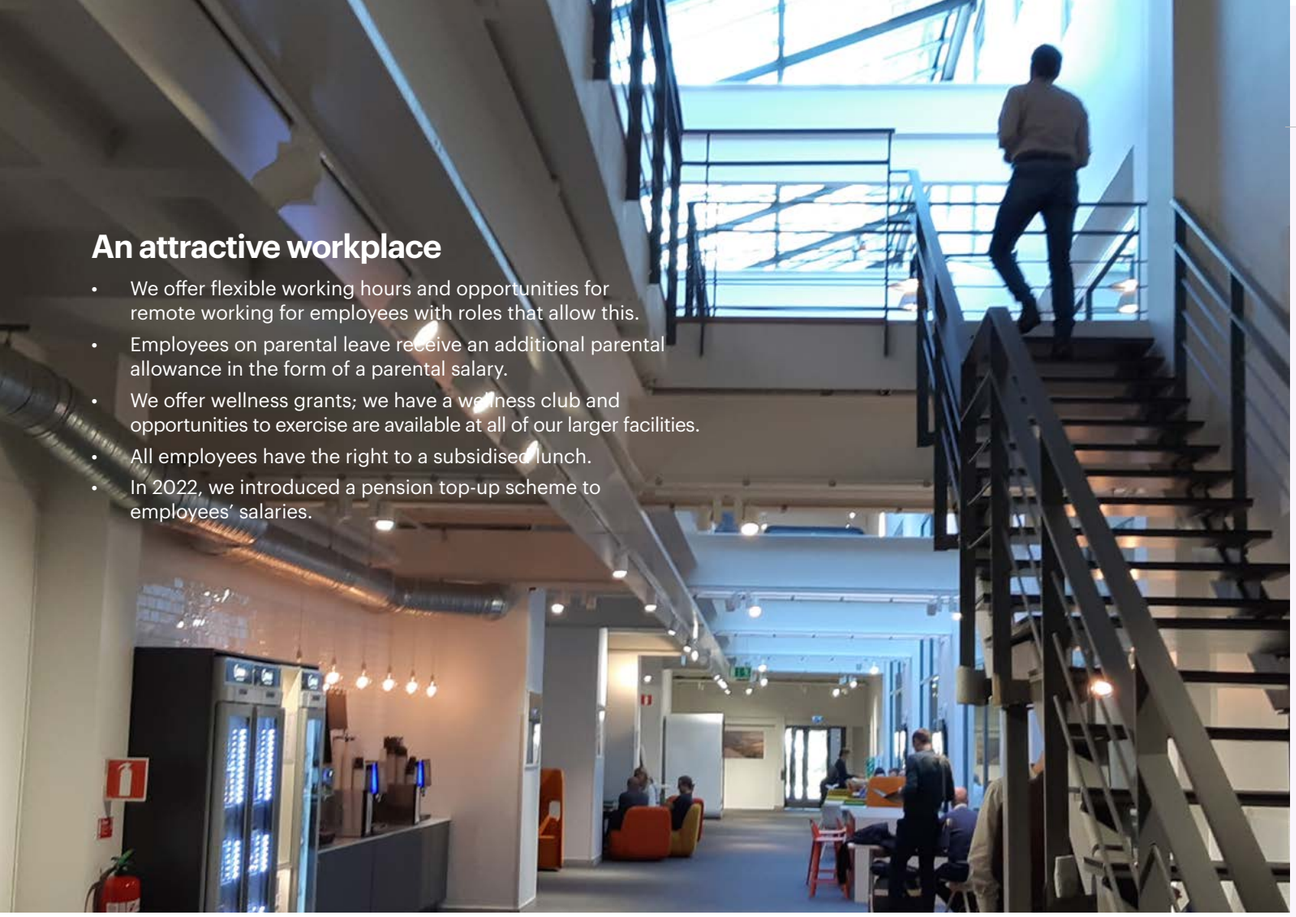
"We work safely or not at all." Working preventively to minimise risk is a natural part of everything we do at Stockholm Exergi, and we have a stated long-term vision of zero accidents and serious incidents.

As part of our path towards an improved safety culture, in the autumn of 2021 we introduced new working routines aimed at identifying and focusing on safe behaviours. This should involve everyone in the company and in practice means that each individual should know how he or she contributes in practical ways to working safely or not at all. The approach is based on behavioural science research but is not complex in itself. We believe that it should be easy to improve safety at work. In 2022, we continued work on training and then introducing the approach to parts of our operations, work that will continue in 2023. This is a long-term process, and the goal is for the whole of Stockholm Exergito have this awareness of a safe working environment. In parallel with the development of safe behaviours, in 2022 we continued to work systematically to encourage and increase understanding about reporting risk incidents as a key part of our proactive work towards zero accidents. We monitor these efforts through several key indicators, including the number of risk reports in relation to the actual number of accidents, and the number of Safety Walks undertaken. Safety Walks is our name for observation tours that focus on communicating risks, working methods and safe and unsafe behaviours. They play a vital role in preventing future accidents. In 2022, 1,580 Safety Walks were carried out by managers and employees. Ten times the number of risk observations were reported than accidents that occurred, which is a marked increase on 2021.

Entrepreneurs are overrepresented in terms of accidents that result in sick leave. They often work in high-risk jobs in temporary workplaces. Our focus is therefore on co-operation regarding safety with our contractors through dialogue and follow-up. For example, we conduct audits of our contractors to ensure they comply with our code of conduct. Together with entrepreneurs, we work long-term to ensure that safe behaviours permeate everything we do, which is an important way to improve the safety culture throughout the entire company.

Zero tolerance of discrimination and harassment

Naturally, we have a zero tolerance policy towards discrimination and harassment. This is clearly set out in our code of conduct and employees can report discrimination and harassment either to their immediate manager, directly to our HR function or with the help of our whistleblower function. In 2022, wehad less than 5 cases, in line with previous years. Results from our latest work force survey show that 4.7 percent experienced that they have been exposed to harassment during the year. We are working prevention in our mandatory work environment training as well training and support for managers.



An attractive workplace

- We offer flexible working hours and opportunities for remote working for employees with roles that allow this.
- Employees on parental leave receive an additional parental allowance in the form of a parental salary.
- We offer wellness grants; we have a wellness club and opportunities to exercise are available at all of our larger facilities.
- All employees have the right to a subsidised lunch.
- In 2022, we introduced a pension top-up scheme to employees' salaries.

Working to increase the number of female employees

That 79 per cent of Stockholm Exergi employees are men, 21 per cent are women and this ratio is roughly the same among our managerial staff. We aim to increase the number of women in the company and achieve an even gender distribution. At the end of 2022, the company's management team consisted of eight men and two women, and our board of eight male and four female members was elected by the annual general meeting. Data from Statistics Sweden shows that we registered a slight increase in the proportion of employees with non-Swedish backgrounds to 25 per cent at the end of the year. Sick leave during the year was 3.2 per cent (2021: 3.0).

79%-21%

THE RATIO OF MALE AND FEMALE EMPLOYEES

Stockholm Exergi closer to obtaining in-house IT capability

Stockholm Exergi's extensive programme to move away from our former partner Fortum's service platforms and IT environment took several important steps in 2022. The most significant of which was in November when we carried out the migration of 70 applications and 1,200 users to our new IT environment, with all employees receiving new computers and smartphones, and IT processes run by Stockholm Exergi's. The overall aim is to implement smart system solutions, common company processes and modern working routines that make it easier for us to monitor our activities, make better decisions, create efficiencies, and support the implementation of our strategy. Work on our new IT capability is due to be completed in the first half of 2023.

Employees:

Our sustainability issues

Diversity and inclusion. An inclusive corporate culture with a diversity of perspectives creates a good working environment, improved safety, better decision making, increased ability to recruit and retain the right skills, and increased productivity. Stockholm Exergi wants to be an inclusive employer where we benefit from different perspectives and where all our employees can be themselves and feel a high degree of belonging. We want to reflect the diversity of the society in which we operate and strive for a more even balance between men and women and an increased representation of people with foreign backgrounds.

Wellness and health. For Stockholm Exergi to be an attractive workplace, employees need to feel good inside and out. We have wellness grants, a wellness club and gyms at all our major facilities. We monitor key indicators on perceived health in our employee survey several times a year. The average for the organisation in terms of feeling healthy and energetic is 70 on a 100-point scale.

Safe working environment. In our industry, there are work environment risks that can lead to serious accidents if they are not addressed correctly. The basis for safe work is built into our systematic work environment initiatives, with identification, assessment and management of risks as the basis for preventing ill health and accidents. Another important factor is that everyone knows and understands their responsibility in the work environment. We work continuously on follow-up and communicate about these issues. The working environment must always top our agenda. We work safely or not at all.

LONG-TERM GOALS:

- Zero accidents
- Recognised as an attractive employer

COMMITMENT INDEX RESULT:

74

2022 TARGET: 73

LWIF RESULT:

5.1

2022 TARGET: 3.8

(LWIF=Lost Workday Injury Frequency)

How we contribute to the UN's sustainability goals

Target 5.1: Eliminate all forms of discrimination against all women and girls everywhere. We expect all employees, contractors, consultants and suppliers to comply with the requirements of our code of conduct. Our policies and code of conduct clearly state that we have a zero-tolerance approach to harassment and bullying. We treat everyone equally.

Sub-goal 5.5: To ensure women's full and effective participation and equal opportunities for leadership at all levels of decision-making. We work for diversity and inclusion by aiming for a more even gender distribution. We are trying to create space for a more inclusive corporate culture by using competence-based recruitment, training working groups on the issue and creating mentoring programmes with female students.

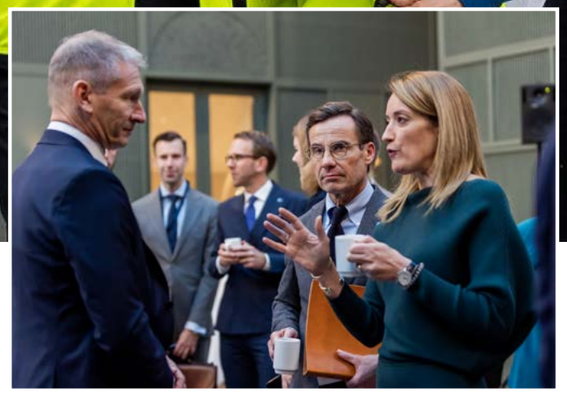
Sub-goal 8.8: To protect workers' rights and promote a safe and secure working environment. We work actively and purposefully with our physical and social work environment.

Subgoal 10.2: To enable and work for all people to be included in social and economic life by 2030 at the latest. In our efforts to improve diversity and inclusion, we run activities designed to encourage Stockholm Exergi to become a more inclusive company.

“Our bio-CCS project has become a catalyst for interest in the company’s journey away from fossil fuels to now using almost exclusively renewable or recycled energy with the goal of creating negative emissions in a few years.”

Charlotte Lindevall, Head of Strategic Communications

”A lot of people are expecting us to succeed.”



Stockholm Exergi’s transformation is attracting attention – not only in Sweden but also internationally.

Stockholm Exergi is a long way ahead in its development of technology to capture and store biogenic carbon dioxide and thus create negative emissions, so-called bio-CCS. The goal is for a large-scale facility capable of capturing 800,000 tonnes of carbon dioxide every year to be in place by 2026. How the technology works and why we as a business want to do this is attracting considerable interest all over the world. In 2022, we had more than 100 visits from a large number of different countries.

“Visitors range from university students and researchers to politicians, businesses and our customers. National and international news media have also shown great interest in our journey towards creating negative emissions. I think the broad interest shows the societal importance of our business, and a lot of people are expecting us to succeed,” says Charlotte Lindevall, Head of Strategic Communications at Stockholm Exergi.

Following the announcement in the spring that Stockholm Exergi was to receive support from the EU Innovation Fund, international interest has intensified significantly, explains Lindevall, who believes that the EU’s support in many ways acts as a guarantee that the project is reliable and well planned.

Some visits have attracted particular interest from the outside world. In April, Sweden’s former Prime Minister Magdalena Andersson welcomed the President of the European Commission, Ursula von der Leyen, and held a press conference at Värtaverket. In October, the Swedish royal family visited Stockholm Exergi during a state visit from the Netherlands, and in November the entire Swedish government hosted the EU Conference of Presidents ahead of Sweden’s EU presidency. The government again chose to hold a press conference at Värtaverket.

“It’s incredibly valuable for us as a business when we’re highlighted as a key part of the Swedish green transition in these international political contexts,” says Lindevall.

Similarly, Stockholm Exergi’s participation at COP27 in Egypt was also very significant. There is considerable international interest in how Stockholm Exergi is working towards creating negative emissions.

“Our bio-CCS project is at the cutting edge, and given that we’re the first, we also face many challenges. How we work and how we address these challenges interests the outside world,” says Lindevall and continues: “For us, it’s important to be transparent and tell the world about our journey and how we’re gradually taking important steps towards building a large-scale facility for carbon dioxide capture. We welcome a large number of visitors every year and we attend seminars and meetings to take advantage of the opportunity to share our knowledge and our experiences so that others can follow us. More of us will need to develop carbon dioxide capture if we’re to achieve the 1.5-degree target under the Paris Agreement.”

Clockwise from main image: President of the European Commission Ursula von der Leyen and former Swedish prime minister Magdalena Andersson, Sweden's current prime minister Ulf Kristersson and Speaker of the European Parliament Roberta Metsola, the Swedish and Dutch royal families, and Swedish energy minister Ebba Busch were among visitors to Värtaverket in 2022.

Management

Anders Egelrud

Born: 1965
Employed since: 2002
Title: CEO

Anders has extensive experience in the energy sector and has been responsible for building and developing businesses in a number of senior positions. He has been CEO of Stockholm Exergi since 2006 and has served as a board member in several industry organisations and companies.

Anna Leander

Born: 1976
Employed since: 2019
Title: HR and Sustainability Director

Anna joined Stockholm Exergi in January 2019 and has extensive HR experience, including several executive positions at international companies. In her previous roles, she was primarily responsible for sustainability, specialising in issues such as the working environment and social responsibility.

Jimmy Renström

Born: 1973
Employed since: 2020
Title: IT Director/CIO

Jimmy has been head of Stockholm Exergi's IT function since the autumn of 2018. A common thread in Jimmy's career has been leadership of change journeys with particular focus on data, digitalisation and information technology.

Andreas Söderkvist

Born: 1976
Employed since: 2001
Title: Distribution Director

Andreas joined the company in 2001. He has broad management experience in areas such as production, distribution and technology development. Since 2020, he has been responsible for Stockholm Exergi's distribution unit; he also represents the company on Swedenergy's heating and cooling distribution committee.

Carl Lidholm

Born: 1979
Employed since: 2021
Title: Sales Director

Carl has extensive experience in the energy sector and of B2B sales. He provides clear leadership with focus on the customer, digitalisation and change in the customer interface. The goal is to ensure that Stockholm Exergi provides Stockholmers with the very best in customer service.

Emma Rönnmark

Born: 1972
Employed: Left the company January 2023
Title: CFO

Emma joined Stockholm Exergi in the spring of 2020. She has extensive international experience as a CFO in the energy sector. Emma has also held senior positions in telecom, construction and industry. She has wide-ranging experience of driving transformation, standardisation, and digitalisation in global listed companies and private equity companies.

Per Ytterberg

Born: 1971
Employed since: 1996
Title: Business Development Director

Per has extensive experience at Stockholm Exergi where he has held several operational and strategic roles, including senior positions in project management, fuel supply and system development issues.

Per Ljung

Born: 1967
Employed since: 2020
Title: Production Director

Per joined Stockholm Exergi in August 2020. He has 24 years' experience in the production and district heating segments where he has held several senior positions. He has held positions in various parts of the value chain in roles where he has primarily focused on production and optimisation; customer focus and safety are two other areas that are close to Per's heart.

Thomas Gibson

Born: 1965
Employed since: 2017
Title: Communication Director

Thomas has a proven track record in the advertising industry where he has worked nationally and internationally in management roles at several of Sweden's leading advertising agencies.

Agneta Cohen

Born: 1958
Employed since: 2007
Title: Assistant to the CEO

Agneta has a background, mainly as a manager and CEO assistant at a number of different companies as well as project management in communication and events.

Shamsher Khan

Born: 1966
Employed since: 2009
Title: Energy Trading Director

Shamsher has a background as Head of Environmental Value Trading and Head of Forecasting and Pricing at Fortum.

Board of Directors

Stockholm Exergi is owned in equal parts by Ankhiale, (which consists of APG, Alecta, PGGM, Keva and Axa), and Stockholms Stadshus AB. The Board of Directors consists of eight members elected by the Annual General Meeting and two appointed employee representatives with deputies.

Jonas Abrahamsson

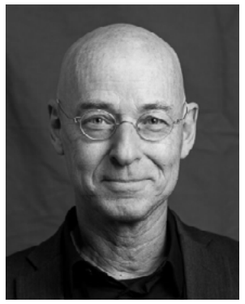
Född: 1967
Elected: 2021
Title: Chairman

Jonas Abrahamsson has an MSc in Business and Economics from Lunds University and has been president and CEO of Sweden's main airports operator Swedavia since 2017. Previously, he had worked in the energy sector for 25 years, including as CEO of E.ON. He has an extensive leadership background and experience of managing large infrastructure investments in Sweden and internationally.

Alexandra Grimfors

Born: 1983
Elected: 2018
Title: Deputy Chairman

Alexandra Grimfors (Moderate Party) has an MSc in engineering and extensive experience as a consultant specialising in management, governance and efficiency. Today, she works as head of a Swedish government agency. She has held several positions at the City of Stockholm, including as a member of the City Council and the City Development



Fredrik Adolfsson

Born: 1965
Elected: 2019
Title: Board member

Fredrik Adolfsson (Centre Party) has a Master's in Business Administration. His professional experience includes roles such as CEO and global sustainability manager for IKEA, deputy head of the Swedish Society for Nature Conservation, and regional development director of Sweden's Västra Götaland region. He has several political assignments as an elected representative of the City of Stockholm and the Stockholm Region. Fredrik currently works as a mentor and management consultant.

Lotta Brändström

Born: 1966
Elected: 2022
Title: Board member

Lotta Brändström has an MSc in engineering and has broad experience in the energy sector where she has worked at E.ON and most recently as CEO of Göteborg Energi AB, one of Sweden's largest municipally-owned companies. Today, Lotta works at Peab as Business Area Manager for Plant in the Nordic region and sits on the Peab Group Management team. Lotta also has an assignment on behalf of the board of Stena Recycling AB.

Petra Engman

Born: 1964
Elected: 2020
Title: Board member

Petra Engman (Social Democratic Party) is a trained mathematician and has worked with IT issues for most of her professional life, in the private and public sectors. She has held several assignments in Region Stockholm, including as a member of the committee and the board of AB Storstockholms Lokaltrafik, (the region's public transport provider). Petra is currently working as a consultant in the defence sector.

Irina A. Frolova

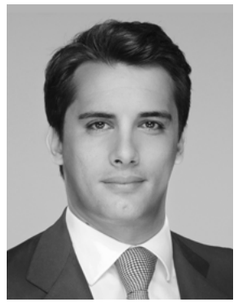
Born: 1971
Elected: 2021
Title: Board member

Irina A. Frolova is an INSEAD-certified board member and holds a Master degree in business administration and economics. She has more than 20 years international experience in investing and financing of energy and infrastructure companies. She is now a professional board member and senior advisor to the investment committees. She serves on the boards and on the audit committees of a number on international companies in energy, transportation and agriculture sectors.

Rikard Hjort- Warlenius

Born: 1970
Elected: 2019
Titel: Board member

Rikard Hjort-Warlenius (Left Party) is a senior lecturer in human ecology and a researcher in climate and energy issues. He is also a member of Stockholm City Council and vice chairman of its Transport Committee.



Carlo Maddalena

Born: 1987
Elected: 2021
Title: Board member

Carlo Maddalena is a senior portfolio manager on APG's investment team, and specialises in the infrastructure sector. He has held several senior positions in portfolio companies and has also served on the boards of large companies in Europe that are active in energy, transport and telecommunications.

Tobias Alvaeus

Born: 1969
Elected: 2023
Title: Employee representative

Tobias Alvaeus started in the energy industry in 1987 when he worked at Vattenfall for one year, then process engineer at Carlsberg for 16 years. Tobias has worked at Stockholm Exergi since 2004. First as an operations engineer, then as a shift manager in operations.

Reine Lorenz

Born: 1972
Elected: 2022
Title: Employee representative

Reine Lorenz is a high school engineer in electrical/telecommunications. He is since 2005 employed as an environmental analysis instrument technician at Stockhom Exergi, Högdalenverket.

Jan Lindgren

Born: 1979
Elected: 2021
Title: Deputy employee representative

Jan Lindgren started as a consultant in 2010 and today works as a Construction Technical Documentation Manager. He has a degree in electrical engineering and has also worked as a production analyst.

Patrik Tapper

Born: 1988
Elected: 2020
Title: Deputy employee representative

Patrik Tapper has worked at Stockholm Exergi for six years and currently works as a leading maintenance technician in the mechanical workshop at Hammarbyverket. He has previously worked as a warehouse worker and ombudsman and has been active in associations for the past 15 years.

Governance

Corporate governance statement

Stockholm Exergi Holding AB (publ) is a Swedish public limited company with a bonds programme listed on Nasdaq Stockholm. The Board hereby submits the 2022 corporate governance statement.

General information about Stockholm Exergi Holding AB's corporate governance and operations

Stockholm Exergi Holding AB (publ) is a Swedish public company, and its registered office is in Stockholm. The Board consists partly of shareholder representatives elected by the general meeting, and partly of employee representatives elected by the trade unions. The Board in turn appoints the CEO, who manages the day-to-day administration according to the Board's guidelines and instructions. The Company's operations involve owning shares in the operating company Stockholm Exergi AB, and also standing responsible for the Group's financing solutions.

Regulations

External regulations

- Swedish law and EU law, in particular the Swedish Companies Act and the Annual Accounts Act, the Market Abuse Regulation and the Act on penalties for market abuse in the securities market
- Stock exchange rules and regulations: The Company operates in compliance with the rules for companies with interest-bearing instruments listed on
- Nasdaq Stockholm

Internal regulations

- Articles of Association
- The Board's rules of procedure, including the
- CEO's instructions and instructions on
- reporting to the Board
- Code of conduct established by the Board
- Internal delegation and decision-making rules, policies and instructions established by the Board

Ownership structure

Stockholm Exergi Holding AB (publ) is subsequently half-owned by Ankhiale Bidco AB and Stockholms Stadshus AB. All shares are ordinary shares and provide entitlement to an equal number of votes and an equal share of dividends. The owners regulate their co-ownership through a consortium agreement.

Annual General Meeting

The Annual General Meeting of Stockholm Exergi Holding AB (publ) shall be held annually within six months after the end of the financial year. The Annual General Meeting elects the Board of Directors (except for employee representatives) and the auditors and decides on their remuneration, adopts the income statement and balance sheet, decides on the appropriation of the Company's profit, decides on the discharge from liability of the Board of Directors and the CEO, and decides on other matters in accordance with the law and the Articles of Association. The Company held its Annual General Meeting on 21 April 2022. No items were discussed other than those appearing on the standing agenda in accordance with the Articles of Association.

The Board

Composition of the Board of Directors

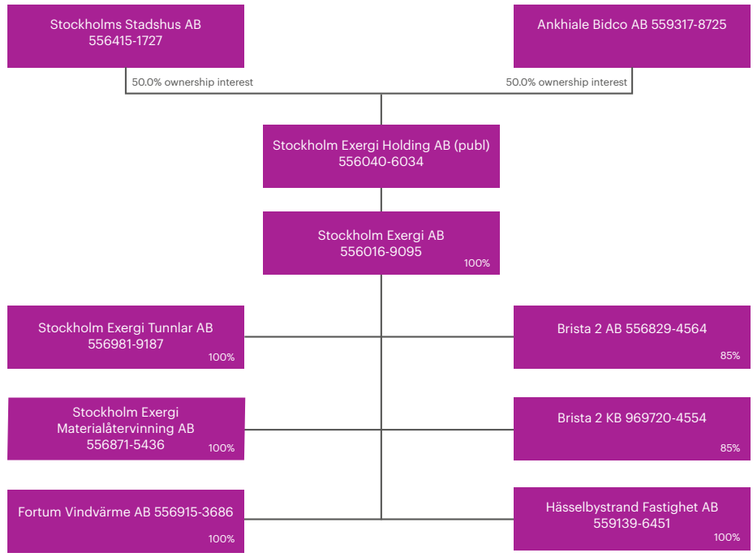
According to the Articles of Association, the Board of Directors, to the extent appointed by the Annual General Meeting, shall consist of eight directors without deputy directors. The members of the Board of Directors are elected annually at the Annual General Meeting for the period until the end of the next Annual General Meeting. The Chair of the Board does not have a casting vote. The trade unions shall appoint two full-time employee representatives and two deputies in a specific order. The trade unions inform the Company of the representatives elected at the Annual General Meeting.

At the 2022 Annual General Meeting, the following Board members were nominated by Stockholms Stadshus AB: Alexandra Grimfors (re-elected), Fredrik Adolfsson (re-elected), Rickard Hjorth Warlenius (re-elected) and Petra Engman (re-elected). The following Board members nominated by Ankhiale Bidco AB were elected: Jonas Abrahamsson(re-elected), Irina Frolova (re-elected), Carlo Maddalena (re-elected) and Charlotta Sandving Brändström (re-elected). The trade unions appointed the following employee representatives: Mehrdad Keshtkar (full member, re-elected), Reine Lorenz (full member, elected), Jan Lindgren (deputy, re-elected) and Patrik Tapper (deputy, re-elected). In January 2023, Mehrdad Keshtkar resigned as full member of the board and was replaced by Tobias Alvaeus.

Duties of the Board of Directors

The basic duties of the Board are set out in the Companies Act. The Board adopts rules of procedure and a set of instructions every year. The rules of procedure and the instructions regulate matters such as reporting to the Board, the division of labour between the Board and the CEO, the duties of the Chair, the format of Board meetings and the format for evaluation of the work of the Board and the CEO.

Group structure



The rules also states forms and requirements for reporting other engagements that constitute or may constitute a conflict of interest with the board assignment.

The rules of procedure state that the Board shall approve the goals of the Company and the Group, significant policies, strategic plans and major investments. The rules of procedure of the Board also include instructions for the Board's Audit and Remuneration Committees (see below).

Board meetings

The board holds its consituent meeting directly in connection to the annual general meeting. The board has during 2022, in addition to the constitual meeting after the annual general meeting, held 10 board meetings

The board committee

The board's overall responsibility cannot be delegated, but the board has established an audit committee and a remuneration committee. These committees prepare, monitor and evaluate issues in their respective areas before consideration by the board. The committee members are appointed at the constituent board meeting and they work in line with board rules of procedure and instructions.

Audit Committee

The Audit Committee prepares matters in the areas of audit, internal control and financial reporting for the board's consideration.

The Audit Committee is also tasked with monitoring financial reporting and the effectiveness of the company's internal controls, internal audit and risk management. Additionally, the Audit Committee shall evaluate external audit work, inform the owners of the results and assist in drawing up proposals for the auditor. The Audit Committee shall also review and monitor auditor impartiality and independence.

The Audit Committee meets before each reporting occasion and additionally if necessary.

The Audit Committee comprised board members Irina Frolova (chair of the committee) and Alexandra Grimfors. The members of the committee have special expertise and experience in financial and accounting matters. The CEO and CFO also participate in the meetings. The Audit Committee reports its work to the board on a regular basis. The committee met 7 times in 2022.

The Remuneration Committee

The Remuneration Committee prepares matters regarding remuneration and other terms of employment for the CEO for the board's consideration. On the proposal of the CEO, the committee also approves remuneration and other terms of employment for group management. The committee further develops proposals for remuneration principles for the CEO and group management, which the board then resolves on. The application of the guidelines plus current remuneration structures and remuneration levels in the company are also monitored by the committee.

Remuneration to group management is reported in note 10. The Remuneration Committee reports its work to the board on a regular basis. Until September, the Remuneration Committee comprised Carlo Maddalena (chair of the committee) and Alexandra Grimfors.

The CEO and HR director also participate in the meetings. The committee held 7 meetings in 2022.

Evaluation of the performance of the board and CEO

The board evaluates the performance of the board and CEO once a year with the aim of developing and streamlining work and decision-making procedures. The 2022 evaluation did not result in any changes to current procedures and working methods.

Organisation and group management

The group operating company, Stockholm Exergi AB, is organised into four core functions based on the value chain: sales, supply, production and distribution.

There are a number of support functions for core activities, that manage, control and support business operations. The company also has a business development unit. The company CEO, who is also Group CEO, is responsible for day-to-day management in accordance with the Swedish Companies Act. The CEO has established decision-making bodies for the management of the company and makes decisions independently or with the support of these decision-making bodies. The most important of which is group management.

Auditors

According to the Articles of Association, the company must have one or two auditors with or without deputy auditors. At the 2022 Annual General Meeting, Deloitte AB, with authorised auditor Daniel Wassberg, was elected as the company auditor for a period of three years, i.e. for the period until the end of the 2024 Annual General Meeting.

The auditor reported his audit of the financial statements for 2022 at the board meeting of 23 February 2023.

Financial reporting, internal control and risk management

The board is ultimately responsible for ensuring that there is good internal control within the Stockholm Exergi Group in accordance with applicable directives, laws and regulations. The company is not subject to the requirements of the Swedish Corporate Governance Code.

Internal control work is carried out within the group, which aims to ensure that operations are carried out in an appropriate, safe, and efficient manner. Internal control of financial reporting aims to ensure that the group prepares reliable financial accounts and reports and complies with applicable laws and regulations. Internal control is conducted in accordance with the risk policy resolved on by the board. The risk policy is based on the principles set out by the Committee of Sponsoring Organisations of the Treadway Commission (COSO).

Risk assessment and control environment

The CEO is responsible for the preparation of internal control and financial reporting matters for the board. Control work is based on the division of responsibilities between the board and the CEO as established in the CEO's instructions and from the reporting requirements set by the board.

The board and CEO work in a structured annual cycle for strategic business planning and operational supervision. The process is based on the group vision and operating concept, which in turn is based on the owners' consortium agreement. Work within the group is performed in accordance with board resolved codes of conduct and values; curiosity, initiative and taking responsibility.

Risk management is an integrated and ongoing part of group business planning, development, and performance management.

For each risk category, risk management follows the following steps: identification, assessment, management, control and monitoring. The board resolves on risk policy and the CEO's risk mandate. Risk management and its processes are continuously developed and adapted to changing market conditions and changes in the business.

Governing documents and routines

There are policies and delegation arrangements for the group's various areas of operation. These are determined and revised on an ongoing basis by the board. In addition, there are various steering documents that are established and revised on an ongoing basis by the CEO, as well as various manuals and routine descriptions that are established and revised by the respective operational manager. Overall, these internal regulations effectively cover all relevant areas of operation.

Review

The group's risk management is being continuously developed and the internal audit continuously reviews operations. The Audit Committee also reviews internal audit work as well as risk management and internal controls. Read more about risks and risk management on pages 68-71.

The auditor's report on the corporate governance statement

To the general meeting of the shareholders in Stockholm Exergi Holding AB (publ) corporate identity number 556040-6034

Engagement and responsibility

It is the board of directors who is responsible for the corporate governance statement for the financial year 2022-01-01 - 2022-12-31 on pages 59-61 and that it has been prepared in accordance with the Annual Accounts Act

The scope of the audit

Our examination has been conducted in accordance with FAR's standard RevR 16 The auditor's examination of the corporate governance statement. This means that our examination of the corporate governance statement is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden. We believe that the examination has provided us with sufficient basis for our opinions.

Opinions

A corporate governance statement has been prepared. Disclosures in accordance with chapter 6 section 6 the second paragraph points 2-6 the Annual Accounts Act and chapter 7 section 31 the second paragraph the same law are consistent with the annual accounts and the consolidated accounts and are in accordance with the Annual Accounts Act.

Stockholm 23 March 2023

Deloitte AB

Daniel Wassberg
Authorised Public Accountant

Sustainability management

Stockholm Exergi's vision and long-term business goals describe the Company's direction towards sustainable development. These goals are presented in each section of the value chain.

Our business plan, which is decided by the Board of Directors, breaks down the long-term business goals into medium and short-term goals with associated action plans and key performance indicators. These are followed up by the Board and management on a monthly basis. All business operations are examined at the annual management review.

The Board's work on sustainability issues

Stockholm Exergi's sustainability policy, which covers the environment, health and safety, quality, social responsibility and HR, is decided by the Board and adopted annually. This also applies to the supplier code of conduct and the Company's internal code of conduct. The sustainability policy also integrates requirements in respect of human rights, and these are operationalised in the codes of conduct. The governance documents are reviewed once a year and revised as necessary. The codes of conduct were last updated in 2020. The Board approves the sustainability report, as well as the materiality analysis when it is updated. The Board's rules of procedure are reviewed and revised once a year.

The Company's risk analysis is reported each year to the Board, which involves review of sustainability risks, including climate-related risks and human rights risks, opportunities and actions. Significant deviations and actions related to sustainability work are reported to the Board of Directors if they occur. No such material deviations occurred during the year.

Delegation of responsibility

The CEO is ultimately responsible for the Company's work on sustainability issues. Director HR and Sustainability reports to the CEO, and the Sustainability Manager is responsible for, together with the Sustainability unit, identifying and ensuring that the companys manages its sustainability impact, for developing, coordinating and supporting the organisations sustainability strategies and goals. The unit is also responsible for monitoring compliance with policies, realisation of the sustainability strategy and goals, and ensuring that the Company is aware of and complies with current and emerging legislation. Director HR and Sustainability informs the Board of Directors of the results of the sustainability work as required.

Each unit within Stockholm Exergi has what is known as a team assignment in which the short-term goals in the business plan, including the sustainability goals, are concretised with movements, responsibilities, goals and key performance indicators for the year.

Stockholm Exergi's governance documents include a continuous improvement process for environmental and sustainability work, where lessons are learned and incorporated into operational activities.

Stockholm Exergi's sustainability training, which is completed by all employees, is an important element when it comes to implementing our policies in our operations. Stockholm Exergi's management system is certified according to ISO 45001, ISO 14001 and ISO 9001.

When analysing the proportion of Taxonomy-aligned activities, a major review was carried out of the governance and monitoring of human rights and what could be further improved in relation to these issues.

In 2023, activities have been initiated to describe more comprehensively the existing work related to human rights at Group level, and to integrate the perspective more clearly into existing risk processes. Furthermore, Stockholm Exergi is implementing an ongoing improvement initiative regarding systematic review of suppliers. Discussions with suppliers based on existing codes of conduct, for example, can continue to be developed as a way of addressing risks related to human rights and social issues.

A new policy on biofuels is being drafted and will be finalised in 2023.

Stakeholder group for materiality analysis	Number of respondents	Form of dialogue
Funders	4	In-depth interview
Customers (key customers)	10	In-depth interview
Customers (companies, houses, housing cooperatives)	600	Interviews via EPSI Rating (limited number of questions on sustainability)
Employees	155	Online survey

Report	Number of respondents
SKI Sverigekollen, sector report 2019	13,200
Novus Annual Report 2020 Svenskarnas relation till klimatfrågan, hållbarhet och energi (Swedes' relationships with climate, sustainability and energy)	1,012 individuals in Sweden, aged 18 to 79
Sustainable Brand Index 2020	21,640 individuals in Sweden, aged 16 to 75
Insight Intelligence, Hållbarhet och svenskarna 2019 (Sustainability and Swedes 2019)	10,000 individuals in Sweden, aged 16 to 70

About the materiality analysis

We have an important part to play in society, and a major responsibility to make a positive contribution from an ecological, social and economic perspective. We work systematically to analyse where our impact is greatest and which issues are most important to those affected by our activities. This assessment is known as a materiality analysis. In addition to our own analysis, we gather intelligence and opinions from people who are affected by or who influence our activities and what factors they think it is important for us to focus on. All in all, this should provide good information on where we can make the most positive difference, and what we need to improve and develop. Our stakeholders are listed on the previous page. The materiality analysis provides important information for the business planning process and the Exergi Roadmap, which describes the changes we need to make in order to achieve our vision and goals, with climate goals as our central focus.

We conduct systematic and comprehensive materiality analyses at three-year intervals. The latest analysis was conducted in 2020. The sustainability issues that were identified as most important and how we manage these are described over the next few pages. The overall issue "economic value created" is described first, and then the questions are sorted according to where they appear in our value chain.

How our latest materiality analysis was performed (2020)

The materiality analysis was a four-step process:

Step 1: Identification and matching against the UN Sustainable Development Goals

We started off by reviewing whether the sustainability issues identified previously were still relevant and important to the impact of our operations. We started from the sustainability areas of the GRI standard and added questions specific to our sector. We also matched the sustainability issues identified with the 17 UN Sustainable Development Goals.

Step 2: Which issues are most important to stakeholders?

We implemented what is known as a stakeholder dialogue, asking people with different relationships with us to tell us what they expect from us and which five of the 17 UN Sustainable Development Goals they considered most important. A total of 16 in-depth interviews were conducted, and we received responses to our survey from 755 people who affect us or are affected by what we do in various ways. Their responses were weighted and aggregated. This gave us an order of priority for how high stakeholders' expectations are of our work on each issue.

The stakeholder dialogue resulted in the following:

Most important

Second most important

Step 3: What impact are we having on sustainable development?

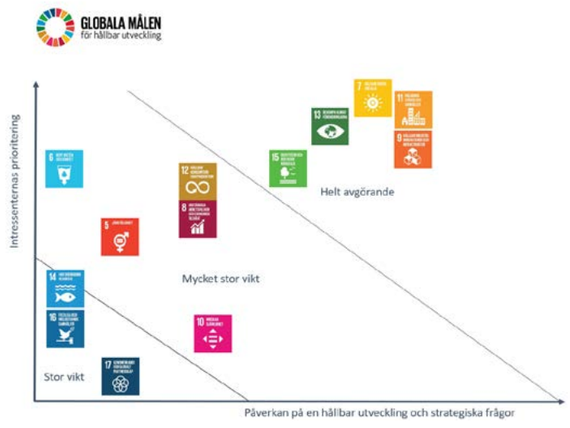
In the next step, our management team – together with a few additional key stakeholders – reviewed our stakeholders' nine priority sustainable development goals, as well as four additional goals that were identified as relevant. These were graded on the basis of Stockholm Exergi's ability to influence sustainable development and the strategic importance of the issue. We assessed both the risks inherent in failing to manage the issue well and the opportunities available if we do a good job. This resulted in factors listed in order of priority, indicating where we can make the biggest difference.

Additional sustainable development goals identified as relevant:

All of the UN Sustainable Development Goals are important, and together provide a prerequisite for achieving sustainable development at a global level. We have chosen to focus and explain about some goals more than others as they are more central to our mission. Goal 7 Affordable and Clean Energy and Goal 11 Sustainable Cities and Communities are examples of goals that are key for us to focus on, given our mission. There are also elements in a number of other goals that we are working on operationally.

Step 4: Summary

Finally, we merged the two perspectives into a single, two-dimensional materiality analysis looking at significance and impact. The Sustainable Development Goals of most relevance to our stakeholders, and where we also have a significant actual impact or opportunity to influence, take top priority. These provide the starting point for how we formulate our strategic, overarching goals.



How we manage our key sustainability issues

A description of how we manage our key sustainability issues based on our value chain is presented below. We have linked to the UN Sustainable Development Goals deemed relevant to us for each part of the value chain.

Economic value created

Creating economic value is a prerequisite for our long-term survival, and in allowing us to go on developing Stockholm's energy system. The governance of financial matters is described in the corporate governance statement and the Directors' Report. This also presents financial key ratios and results.

Production and distribution

Key sustainability issues:

- Waste from operations
- Energy recovery
- Emissions to air and climate impact
- Emissions to water
- Incidents in the local environment

Our sustainability policy provides overall guidance on our significant environmental issues. We have defined long-term and short-term environmental goals to help us move towards fossil-free production and minimise incidents affecting the local environment at our plants. Our environmental management system allows us to work in a structured way to achieve our goals and continuously improve our operations. The environmental performance of our plants is monitored daily at operational meetings. Work on monitoring and improving environmental performance is coordinated in environmental teams made up of environmental specialists. All staff must undergo basic sustainability training. External and internal audits are carried out every year to verify compliance with processes, procedures and instructions.

Waste from operations

Our production generates large amounts of waste. both waste arising from the operation and maintenance of our plants and the residual products left over from incineration. The operation and maintenance organisation is responsible for ensuring that waste is managed and reported in accordance with legal requirements. The fuel procurement unit is responsible for finding uses for ash and slag and ensuring that they are disposed of properly.

Climate impact and energy recovery

We maintain an elaborate systems strategy in order to achieve climate-positive operations. Responsibility for the strategy rests with Stockholm Exergi's management team, but its implementation involves a number of parts of the organisation. For instance, business development is working to develop product areas such as carbon sinks, recycling and customer- and property-related services and concepts with a view to having climate-positive operations by 2025. The concepts are being realised in various ways through investments made by the organisation. Streamlining of existing production rests with the operation and maintenance organisation. The marketing department offers our products to the market and helps customers to streamline their use of heat.

Emissions to air and water and environmental incidents

Most of our production takes place as part of operations requiring permits and is regulated by laws and environmental permits. These environmental permits have been granted by the Land and Environmental Court, which has concluded that the environmental impact arising from our operations will not harm people or the environment. The environmental permits held by the plants control factors such as the levels of substances that may be released into the air and water and the noise levels that our plants and the transport around them may produce. The operation and maintenance organisation is responsible for ensuring that our plants comply with applicable environmental permits, laws and procedures. The operation and maintenance organisation is also responsible for investigating and remedying environmental incidents. Environmental incidents are what happen when we fail to comply with legal requirements or environmental permit conditions, or an accidental release takes place resulting in environmental impact. This may involve environmentally hazardous emissions to water and air, or increased noise levels. Environmental specialists monitor environmental incidents regularly and distribute information on management and prevention measures within the organisation. This allows initiatives to be implemented as needed throughout the Company or for the individual unit where an incident or deviation has occurred. Risk assessments and evaluation of environmental performance also provide a basis for decisions on preventive measures. Project activities are also at risk of causing environmental incidents. To manage this, procedures are in place to identify and manage the environmental risks associated with the project.

Incidents in the local environment

Maintenance and expansion of our distribution networks may cause noise and reduced accessibility for traffic that can affect local residents and businesses. Residents living near our plants may also experience disruptions, mainly in the form of odour and noise. Noise requirements are secured, preventive measures are implemented and, in some cases, specific information is also provided in order to reduce the risk of disruptions caused by construction projects. Our plants are designed to operate without disturbing local residents. The operation and maintenance organisation is responsible for operating and maintaining the plants in such a way that abnormal incidents do not occur. Any complaints are received via customer service and are dealt with by environmental specialists who investigate the causes and provide feedback to the person submitting the complaint.

Customers, society and residual products

Key sustainability issues:

- Responsible behaviour based on Stockholm Exergi's position in the heating market
- Energy recovery
- Offering sustainable products and services
- Employment with emphasis on excluded groups

Responsible behaviour in the marketplace

Stockholm Exergi has a strong position in the district heating market in the areas in which we have a developed district heating network. That is why we comply with relevant antitrust and competition laws and follow the rules of the District Heating Act in respect of disclosure of information and customer relations. Our code of conduct sets out rules for responsible behaviour towards customers and other stakeholders in society. Stockholm Exergi is a member of Prisdialogen, the Price Dialogue, in order to achieve reasonable, predictable and stable price development, thereby strengthening the position of district heating customers on the heating market. Prisdialogen, the Price Dialogue is a model devised by Riksbyggen, SABO and Swedenergy which includes both local dialogue and central review of the Company's price change model for district heating.

Offering sustainable products and services and energy recovery

Our market offerings mainly involve district heating, district cooling, energy recovery through Open District Heating and waste treatment. We also produce electrical energy for the electrical energy market, provide electricity and develop business models for negative carbon emissions, known as carbon sinks.

Our sustainability policy guides how we achieve customer satisfaction, and we have a quality management system that governs how we meet our customers' needs. Our sales department is responsible for customer satisfaction and measures it on a regular basis, alongside Stockholm Exergi's reputation with the general public. The sales and business development departments are also working to develop new products and services that meet the needs of customers and society.

Employment of excluded groups

Our sustainability policy sets out the overall direction of our corporate social responsibility and social sustainability strategy. Goals and activities help us to concretise this work. The HR and sustainability unit is responsible for our work on developing and implementing the strategy. More information is available on page 11.

Suppliers

Key sustainability issues:

- Anti-corruption
- Renewable fuels
- Sustainable procurement and investments
- Transportation
- Extraction of the Earth's resources

To make responsible purchases and investments, we have a number of ways in which to manage both how we make the actual purchases and how we define requirements and monitor suppliers.

Anti-corruption

Business ethics issues such as bribery and conflicts of interest are regulated by legislation, and the Company also applies the Code of Business Conduct and our own code of conduct and related instructions. The legal unit is responsible for developing and implementing business ethics guidelines throughout the organisation. Stockholm Exergi has contacts with the authorities and makes purchases from parts of the world where the risk of corruption is high, which means that we maintain a strict approach to gifts, hospitality and the like. Besides mandatory online training on the code of conduct for all employees, targeted training initiatives are also provided for Board members and individuals whose roles may be particularly vulnerable to corruption risks. Employees who enter into contracts with other parties are examples of such roles. If an employee wishes to report a serious breach of the code of conduct or our business ethics guidelines, they should contact their manager or the legal unit in the first instance; but anonymously reporting via our whistleblower function is also possible. This function can be accessed by employees, suppliers and other contracting parties. The legal unit is responsible for investigating complaints and taking action.

Sustainable procurement, investments and renewable fuels

Stockholm Exergi's supplier code of conduct is based on the UN Global Compact's ten principles on human rights, labour issues, the environment and anti-corruption. This forms part of the contracts with all our suppliers. We also have more specific sustainability-related requirements in our contracts, relating to matters such as traceability of biofuel and health and safety issues for contract services. The units for the purchasing of goods, services and fuels are responsible for ensuring that our major suppliers comply with Stockholm Exergi's sustainability requirements. They regularly monitor the percentage of reviewed suppliers and the percentage of biofuels verified and certified by third parties. Before major investments are made, a sustainability assessment is also carried out to ensure that appropriate environmental and health and safety measures can be implemented during the implementation of the investment project. Key sustainability issues in projects are managed by means of project-specific environmental and health and safety plans that the project manager is responsible for developing and implementing. The HR and sustainability unit supports the procurement and project organisations in defining and monitoring requirements.

Extraction of the Earth's resources

Our operations consume fuels and other goods, draining the Earth's limited resources. Stockholm Exergi's strategy is to increase the share of renewable and recovered energy, thereby reducing the use of finite fossil raw materials for energy production.

Transportation

Fuel and goods are transported to our plants by sea, rail or road. The impact of these involves emissions to air and water of various substances that harm the environment and cause climate change. We also need to ensure that the people who transport fuel and goods do so safely and have fair employment conditions. The fuel procurement unit is responsible for ensuring that our fuels and ash are transported responsibly and with gradually declining environmental impact. This is regulated by our code of conduct and specific contractual requirements related to sea transport and participation in the Responsible Shipping Initiative (RSI).

Employees

Key sustainability issues:

- Health and wellness
- Diversity and inclusion
- Safe working environment

Stockholm Exergi wishes to be an open and inclusive workplace. We want our employees to enjoy their work, perform at their best and stay with the company.

Health and wellness

We have a sustainability policy and an internal code of conduct that form the basis of the Company's efforts to recruit and retain colleagues and create well-being among everyone who works for us. The HR and sustainability unit supports our operations by developing and changing how we work with leadership and teamwork on the basis of current and future needs. Among other things, the unit develops processes and structures for the employment lifecycle. Health and wellness initiatives form an important part of this.

Diversity and inclusion

The HR and sustainability unit bears overall responsibility for Stockholm Exergi's diversity and inclusion initiatives. We have a strategy for our work with goals and activities to help us achieve them. Employees can turn to their line manager or the HR function if they are experiencing abuse or discrimination. It is also possible to submit anonymous reports to our whistleblower function. Employee engagement and pride are gauged regularly and then analysed to generate an action plan. Every manager is responsible for working with the results of the employee survey.

Safe working environment

Stockholm Exergi's sustainability policy, laws and regulations govern the Company's health and safety work. We have structured health and safety management through our management system that covers all employees and contractors. We aim to achieve a healthy and safe workplace with zero occupational accidents. That is why internal management system audits, safety reviews, risk assessments and management of non-conformities are key activities in our systematic health and safety management. We also regularly gauge the incidence of minor and serious accidents. Falls from a height, collisions, burns or crush injuries are examples of serious accidents. We have a structure for our daily meetings in which health and safety always appears at the top of the agenda: this is true of both our operational meetings and those of a more strategic nature.

Our Health and Safety Forum, which is held both locally and for the Stockholm Exergi as a whole four times a year, follows up on health and safety management, as well as making decisions and prioritising general measures. The Head of Health and Safety is responsible for driving the development of health and safety management and supporting line operations in matters involving health and safety. The health and safety organisation is made up of key expert resources in the form of a Head of Health and Safety and health and safety specialists. On a local level, the health and safety specialists support ongoing operations with improvement measures and monitoring. The operation and maintenance organisation is responsible for ensuring that the plants comply with applicable rules, regulations and procedures in the field of health and safety. Stockholm Exergi has a mandatory health and safety training course that has to be passed before anyone – employee or contractor – is allowed access to a facility. Moreover, all employees receive basic health and safety training on a regular basis.

Risk management

Stockholm Exergi applies a methodology for ongoing risk management with a view to countering changes in the environment and the Company's markets that may affect its goals. The risk management process is well integrated into the planning, governance and monitoring of the business.

Goals, process and framework

The purpose of Enterprise Risk Management (ERM) is to maintain complete, structured and transparent risk management at Stockholm Exergi. Enterprise Risk Management is used to identify, analyse and manage all risks that may affect our goals, either negatively or positively. The value creation support offered by the risk function, aimed at ensuring risk awareness and creating transparency, provides the conditions for maximising value while also achieving an optimal balance between growth, profit targets and related risks; as well as ensuring efficient use of resources and thereby helping Stockholm Exergi to achieve its goals.

At Stockholm Exergi, we use the Committee of Sponsoring Organisations of the Treadway Commission (COSO) risk framework and its three lines of defence model and risk process. This framework is based on the principle that operational activities are responsible for identifying, analysing, managing, controlling, monitoring and communicating the status of risks.

Operational risks

Stockholm Exergi operates a capital-intensive business in competitive markets with a strong element of political and environmental governance and control, both indirectly and directly. The business is therefore exposed to various types of risk.

The most critical risk types for Stockholm Exergi's operations are strategic, market, financial, operational and sustainability risks, as well as risks associated with irregularities and corruption.

Strategic risks

Strategic risks are mainly risks affecting Stockholm Exergi's long-term plans and its ability to operate in the heating, cooling and electricity markets. Political decisions such as market regulations may affect Stockholm Exergi's ability to achieve its goals. The development of competing alternatives is another strategic risk. Strategic risks also include legal compliance risks. Stockholm Exergi's operations are subject to many laws, directives and ordinances, so potential changes in these areas are always a risk.

These risks are managed by means of well-developed internal frameworks and decision support, including information on when to seek legal support. Stockholm Exergi applies its own code of conduct to ensure good control and strong business ethics in its day-to-day work.

Market risks

Market risks are risks related primarily to changes in volume or price.

Volume risks

Besides normal market risks in the form of customer contracts won and lost, sales volume in the short term is dependent mainly on normal temperature fluctuations. In the longer term, it is also affected by changing customer consumption patterns and climate change. These risks are managed mainly by offering customers different pricing models.

Electricity price risks

Stockholm Exergi produces electricity at CHP plants and consumes electricity mainly in heat pump plants, which limits the net exposure. Risk is managed by means of financial derivative instruments. Given the increased volatility in the electricity price market in 2022, an adjustment to the situation has taken place and we are monitoring developments on an ongoing basis.

Fuel price risks

The business uses fuels procured on international and national markets. Stockholm Exergi's flexible production options limit the price risks for fuel to an extent. Otherwise, fixed price contracts for physical deliveries and financial electricity derivatives are used to limit price risks. The situation has been reviewed in the light of the increased volatility of the fuel market in 2022. Some adjustments have been made to delegated mandates with a view to optimising Stockholm Exergi's ability to secure sufficient fuel at the best possible price at any given time.

Fuel supply risks

A key part of Stockholm Exergi's operations involves securing and optimising the availability of different types of fuels at any given time so as to ensure continuous delivery to customers. Besides normal temperature variations during the year, the world situation in 2022 has had a particular impact on this work, leading to a review of delegated mandates and adaptation to the circumstances.

Currency risks

These risks arise in particular from investments and fuel purchases. The policy is that agreed cash flows are to be fully hedged with foreign exchange forward contracts.

Policy instrument risks

The EU has set up an emissions trading scheme. A Green Electricity certificate scheme has been set up at national level which supports the production of renewable electricity. Stockholm Exergi's production units are covered by these systems. These risks are managed by means of financial derivative instruments, and by taking into account the prices of the policy instruments when planning production.

Financial risks

Stockholm Exergi's financial risks relate mainly to liquidity, refinancing and interest rates.

Liquidity and refinancing risk

This concerns the risk that may arise if Stockholm Exergi does not have access to liquid assets or loan financing to meet investment needs and other financial commitments. The Board of Directors decides annually on the capital commitment requirements and limits on the maturity profile of external loans. In its ongoing financing activities, Stockholm Exergi is striving to achieve an even maturity structure and to diversify between different sources of finance.

Interest rate risks

Describes how changes in market interest rates affect Stockholm Exergi's net financial income. Increases in market interest rates may increase Stockholm Exergi's interest expenses, which may have a negative impact on the Company's cash flow, financial position and profit. Interest rate risk is managed primarily through norms and mandates set by the Board of Directors for average fixed interest rates. Interest rate derivatives are also used to a certain extent.

Credit risks

Stockholm Exergi is exposed to credit risks every time it enters into a contract. Credit risks are managed by means of risk identification, assessment and monitoring procedures. This also includes dealing with any warranties and restrictions.

Operational risks

Operational risks are the adverse consequences of inadequate processes, system failures, undesirable behaviour or external events that affect business goals. Operational risks are managed through documentation and automation of processes, clear decision-making processes and separation of decision-making and control functions. One risk area that has increased in recent years is information and IT security, which is why we are continuing to focus on this in our risk work. There are established insurance programmes for operational risks that are insurable, and we use these to reduce risk exposure. Stockholm Exergi's internal controls also aim to reduce operational risks. Risks are regularly assessed both internally and by external parties. Corrective action is taken on an ongoing basis.

Environmental risks

Climate-related risks

There are several risks for Stockholm Exergi linked to climate change, but there are opportunities as well.

In 2022, work has continued on analysing and assessing climate-related risks and opportunities in the business in line with the recommendations of the Taskforce on Climate-related Financial Disclosure (TCFD) and Taxonomy. This was conducted through a number of workshops involving representatives from across the business with a view to covering the entire value chain.

This work resulted in the following risks being identified as most significant: risk of affected fuel supply due to acute climate risks (e.g. storm, torrential rain, drought) throughout the value chain, risk of impact on delicate plant components due to severe flooding, risk of high temperatures during heatwaves affecting key components. There are also transition risks associated with changing policy instruments such as regulatory requirements, fees, taxes and emission prices. The opportunities identified are linked mainly to increased cooling needs and greater availability of biofuels in connection with increased growth, for example.

The Company's business planning for both the short and long term is based on forecasts of the most likely developments for existing and new policy instruments. Climate scenario projections in respect of temperature and weather variation are used to take into account long-term climate risks when planning major investments. Moreover, the production system is designed to be both economically and environmentally robust on account of its diversification across different energy commodities and types of production.

The result of this work led to the decision to carry out in-depth risk analyses of physical climate risks at those sites where this has not already been done, with the aim of developing proposals for risk reduction measures.

Risks related to environmental impact/ environmental work

Stockholm Exergi's operations have a significant environmental impact, which may entail major risks if Stockholm Exergi fails in its environmental work. Emissions of substances occur to air and water, and production also generates waste products such as ash from incineration. The operations require a permit under the Environmental Code, and the Company's environmental management system is certified according to ISO 14001. Stockholm Exergi works with compliance in a structured manner as environmental permits and regulations are fundamental to the business. Clear information and consultation with local residents is also important in connection with construction and new plants. The precautionary principle is taken into account in risk analyses and environmental impact assessments.

Environmental risks related to fuel supply and import and other purchases are managed by means of requirements and monitoring in the purchasing process.

Risks related to health and safety, discrimination and harassment

There are organisational, social and physical risks linked to health and safety at Stockholm Exergi. Risks are managed by means of a systematic health and safety management system that complies with applicable legal requirements and is quality assured in accordance with ISO 45001.

There is also a risk of discrimination or harassment based on any of the grounds of discrimination. Our policies and code of conduct are our core values and direction in the field of health and safety. Safety reviews, safety walks, training courses and risk observations are a few examples of how risks in the business are intercepted and addressed in order to prevent ill health and accidents.

Our suppliers are reviewed against our code of conduct and work processes are revised regularly in order to constantly improve and develop our health and safety management.

The biggest risks in our human rights work are in the fuel and transport supply chain. At our workplaces, the biggest risks involve working conditions for subcontractors and temporary staff. We work systematically to ensure fair conditions throughout the supply chain by means of procurement requirements and continuous monitoring. We have policies and training in place to support this, as well as a whistleblower function.

Human rights risks in the supply chain and how these are mitigated can be found on the pages relating to our Suppliers.

Risk of irregularities and corruption

Stockholm Exergi is well aware of the risk of corruption and other irregularities. All activities have been analysed in this regard, and the Company's code of conduct aims to reduce these risks. A new code of conduct was launched for Stockholm Exergi in autumn 2018, and this has since been updated in 2020. All employees are required to complete an online training course on the code of conduct, and this is also integrated into the onboarding process for new employees. 100% of board members and management team have completed training in anti-corruption. Fuel purchases and other purchases have been identified as particularly vulnerable areas, with a heightened risk of irregularities and corruption. Employees in these areas of the business receive more extensive training on business ethics than other employees. There are also procedures and processes for reporting and dealing with suspected corruption cases and irregularities. A general whistleblower function has also been implemented, which allows all employees and suppliers to anonymously report wrongdoing.

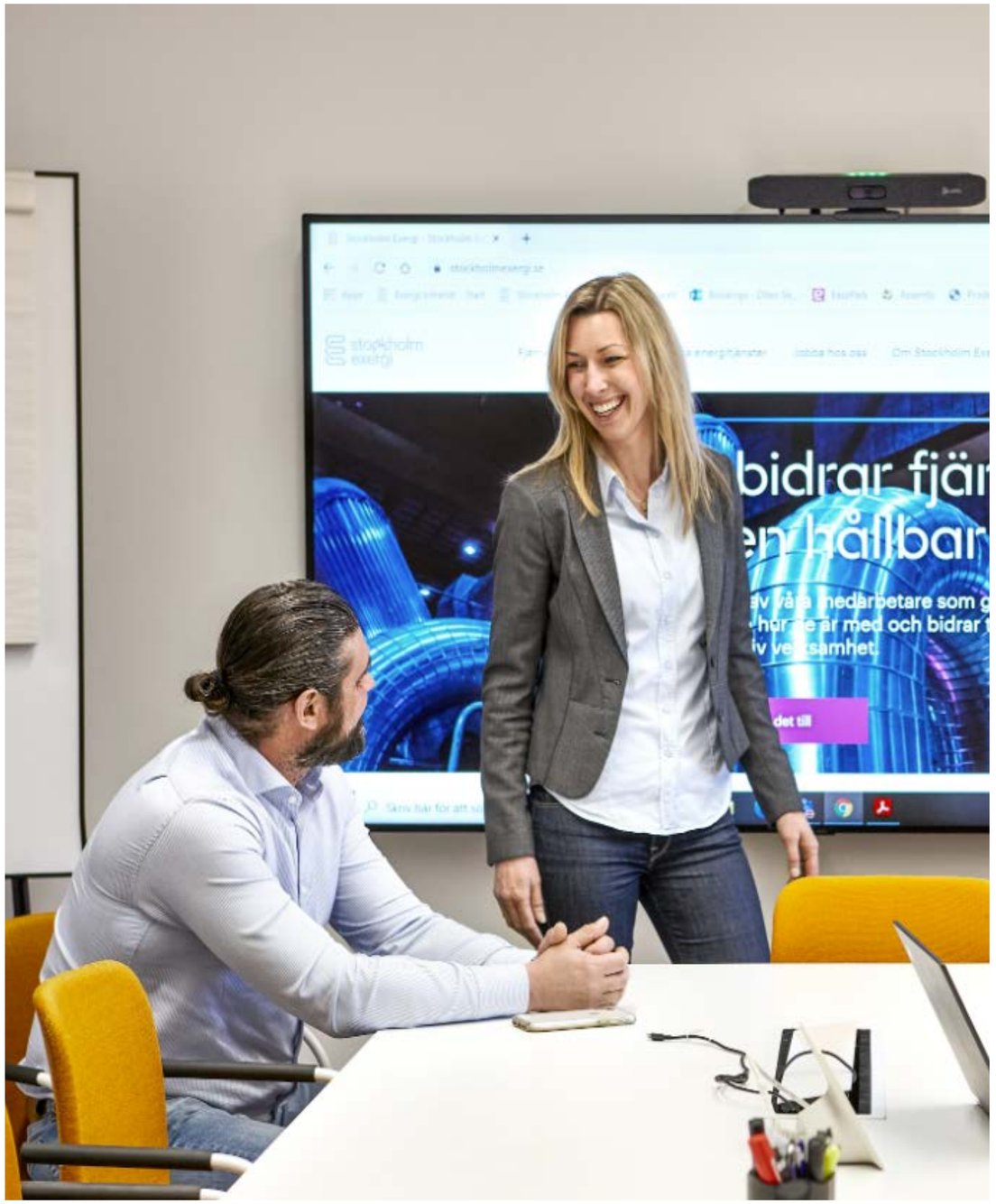
IT and security and information security

Stockholm Exergi's business operations and customer-related services are reliant on effective IT and information management systems and processes. Parts of the IT environment have been transferred from the previous owner to Stockholm Exergi in 2022, and several different systems have also been merged into a new business system in connection with this. Large volumes of data used for decision making, customer service and both internal and external communication and reporting are processed, often in real time, due to the nature of the business. Secure information and system uptime is thus essential for Stockholm Exergi's operations. Cybersecurity risks, including risks related to information, industrial control systems, digitalisation and privacy, are managed centrally by the Head of IT in collaboration with the business. Existing instructions and procedures include requirements for the management and mitigation of cybersecurity risks. The General Data Protection Regulation entered into force on 25 May 2018. This Regulation contains a number of requirements related to the processing of personal data. Stockholm Exergi established a company-wide programme in order to ensure compliance with these requirements. The programme in general was implemented in 2017–2018, and ongoing work is continuing under the leadership of Stockholm Exergi's Data Protection Officer and in collaboration with the business.

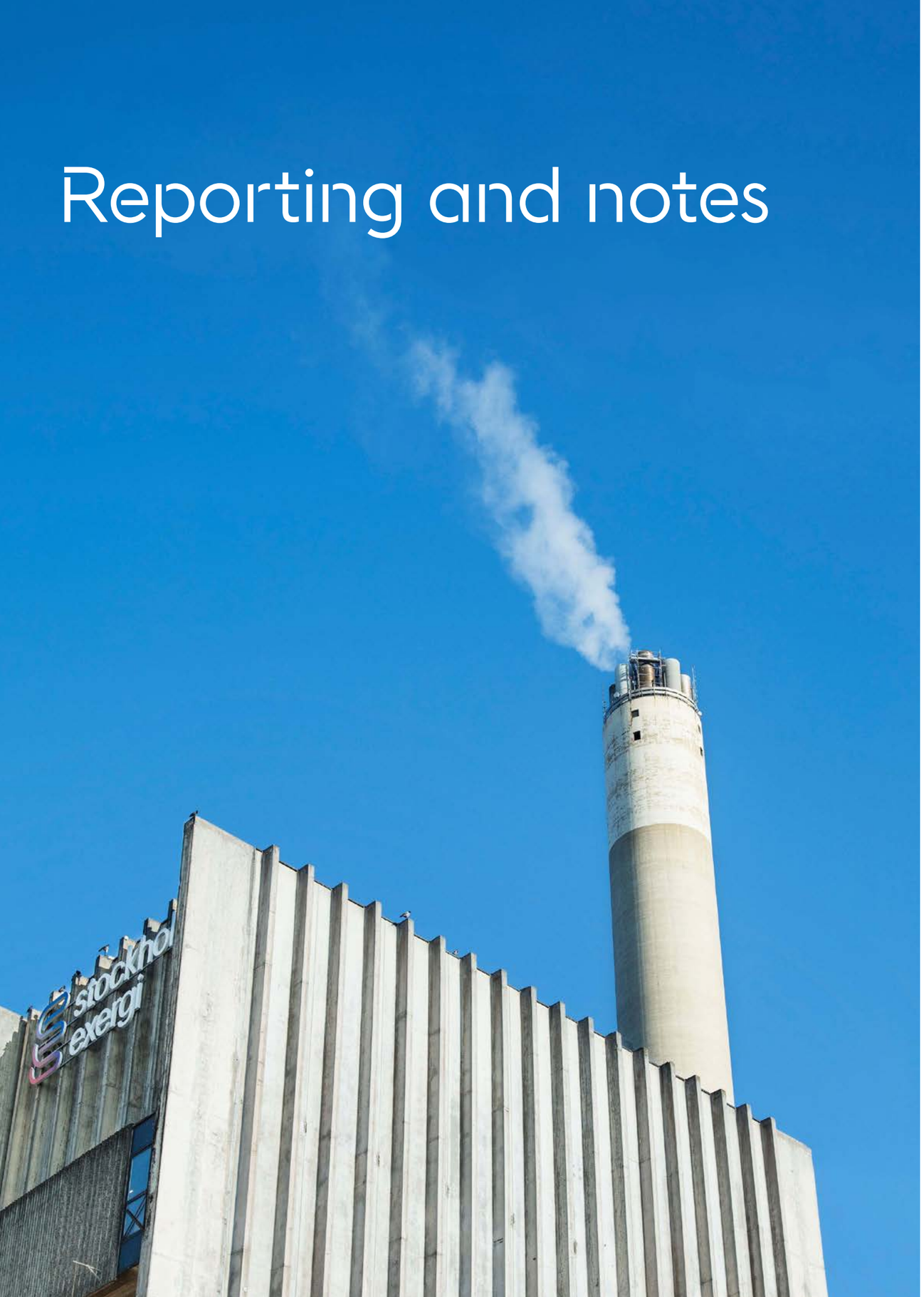
The new Security Protection Act entered into force on 1 April 2019. This clarifies the obligations of the operator of security-sensitive activities and the importance of the operator conducting security assessments of its activities. Stockholm Exergi has conducted company-wide safety analyses in order to ensure compliance with the new requirements and the law. Efforts to implement the measures identified in the security analyses are ongoing and will continue in 2023 under the leadership of Stockholm Exergi's Head of Security Protection and in collaboration with the business.

Risk management and COVID-19

Stockholm Exergi supplies heating, cooling and electricity to the Stockholm region and is thus a socially important business. Ensuring delivery to our customers is part of our business responsibility, and so we have plans and procedures in place to secure operations in various types of critical scenarios. The serious situation in which the world found itself with the spread of COVID-19 in 2020–2022 was one such scenario.



Reporting and notes



Directors' Report

The Board of Directors and the Chief Executive Officer of Stockholm Exergi Holding AB (publ) are hereby authorised to present their annual report for the 2022 financial year.

Ownership structure

Stockholm Exergi Holding AB (publ) is owned by Ankhiale Bidco AB and Stockholms Stadshus AB, both holding 50 per cent. The owners regulate their co-ownership through consortium agreements.

Changes in the Group

No changes during the year.

Operations

Stockholm Exergi Holding AB (publ) is a parent company in a group. The Group produces and supplies eco-friendly district heating, district cooling and electricity to companies and private individuals in the Stockholm region. The Parent Company's operations involve owning shares in the operating company Stockholm Exergi AB, and also standing responsible for Group-wide financing solutions.

Net sales and profit

The Group's net sales in 2022 amounted to SEK 7,996 million (7,294). Sales amounted to 9,276 GWh (9,609), of which 7,782 GWh (8,309) related to heating, 1,138 GWh (979) to electricity, 356 GWh (321) to district cooling and 1 GWh refers to other sales (1). Total sales fell by 333 GWh compared to the previous year. New sales of district heating during the year amounted to approximately 73 GWh (53).

Operating profit for the Group amounted to SEK 1,412 million (1,424). Operating profit previous year was affected by a postive one-off effect of SEK 145 million as a result of the change of solution for defined benefit pension commitments under the ITP2 plan.

Milder weather has meant lower sales of heat which however has been more than compensated by higher production of electricity and higher electricity prices. The higher market prices of fuel have been reflected in the production cost towards the end of the year and the higher interest rate affects the financial net negatively. Overall, however, the result is largely in line with last year. Adjusted for the one-off positive effect of pension redemption of SEK 145 million last year, this year resulted in a SEK 133 million higher result.

The Group's profit before tax amounted to SEK 1,186 million (1,254), or SEK 948 million (970) after tax.

Liquidity and financial position

Group

Cash flow from operating activities amounted to SEK 1,567 million (1,804), while funds used in investing activities amounted to SEK -1,698 million (-1,072). Cash flow before financing activities was SEK -131 million (732). The difference is largely due to the change in working capital, which mainly ties up capital through higher fuel inventories. During April, a capital refinancing was carried out on the capital market through green bond issues totaling SEK 1,500 million in three different tranches. At the same time, maturing green bond loans of SEK 1,500 million were repaid. During the year, bank and other long-term loans also has been amortized with SEK 644 million. During the autumn, a new long-term bank loan of SEK 1,000 million was taken out and the short-term fluctuations in working capital has been financed with overdrafts, money market loans and certificate loans.

At 31 December 2022, the Group had total interest-bearing liabilities of SEK 13,470 million (12,476) and cash and cash equivalents of SEK 1 million (1). Net interest-bearing liabilities therefore amounted to SEK 13,469 million (12,475).

At the balance sheet date, unused credit facilities amounted to SEK 3,128 million (3,098), consisting of one overdraft facility and one credit facilities of SEK 3,000 whose term was renegotiated and extended to 2027.

At the end of the year, equity amounted to SEK 12,673 million (12,037), giving an equity ratio of 39 per cent (40).

Parent Company

Cash and cash equivalents at 31 December 2022 amounted to SEK 0 million (0). At the balance sheet date, SEK 172 million (202) of the Group's overdraft facility was drawn down. Equity amounted to SEK 5,164 million (5,211) at the end of the year, which corresponds to an equity ratio of 29 per cent (31).

Dividends to shareholders will – subject to the approval of the forthcoming Annual General Meeting – be paid in the amount of SEK 758 million in accordance with the established dividend policy plus a non-recurring dividend of SEK 92 million, totalling SEK 850 million.

Please refer to notes 4 and 44 for more information.

Staff

The average number of employees between January and December 2022 was 735 (709).

Investments

Stockholm Exergi is constantly investing in production and distribution to ensure availability, increased energy efficiency and improved environmental performance. Investments in the Group amounted to SEK 1,621 million (1,411), of which 0 (0) was invested in the Parent Company.

Future developments

The transition to renewable and recovered energy needs to take place throughout Europe and globally, and many obstacles need to be overcome along the way. Stockholm Exergi is ensuring the future competitiveness of district heating and cooling through good relations with our customers, investments in digitalisation, partnerships that involve shared benefits, and by recycling resources that would otherwise go to waste. Stockholm Exergi's products shall help society to evolve in a sustainable direction. The move towards fossil-free production with declining environmental impact is ongoing, and several important steps were taken during the year towards the goal of having a climate-positive business through the investment in Bio-CCS in Vartaverket.

Information on risks and uncertainties

Stockholm Exergi supplies heating, cooling and electricity to the Stockholm region and is thus a socially important business. Ensuring delivery to our customers is part of our business responsibility, and so we have plans and procedures in place to secure operations in various types of critical scenarios. The serious world situation caused by the spread of COVID-19 in 2020–2021 – a pandemic – was one such scenario.

Russia´s war on Ukraine affects Sweden´s and Europe´s energy status in different ways. The assesment from the Energy Authority is continuesly that the risk is low for a serious shortage or extensive supply disrutptions in the supply of electricity, gas or fuel in Sweden as a consuquence of the war. The assesment however could change, which could mean consequnces for our deliveries and our businbess on both short and long term. The Energy Authority has during the year regularly requested reporting if there is anything that affects our energy deliveries. We have continuously had, and have reconciliations within all our units to ensure accurat information and prevent possible risks and shortcomings. The unstable world situation has also led to sharp price increases in several different areas, including fuels. Inflation is high and yield curves are rising. This will affect the company and the company´s customers and are followed carefully.

For a further description of significant risks and uncertainties, see pages 82 to 85 and notes 3 and 4.

Effect of climate risks on financial reporting

Physical climate risks that are essential to the business have been identified and for two facilities it is assesed that no further adaption measures are required. For the other facilities it is ongoing work. For the planned facility bio-CCS in Vartaverket, an investigation of physical climate risks has been carried out within the framwork of the enviromental impact assesment. These measures reduce the risk of production disruptions due to extreme weather events but does not affect the technical or economic life span. Overall, the physical climate risks that have been identified are deemed to be manageable within the framwork of Stockholm Exergis omngoing maintenance work.

The company´s short-term business planning includes investments and local technical modifications that increase fuel flexibility in oil-fired plants, so that bio-oils gradually can replace fossil oils. The long-term strategic plan includes continued investments in increased fuel flexibilty and CCS technology at waste and incineration plants. Together, these measures aim to nurture existing energi business, increase the robustness in face of the adjustment risks and at the same time enable completly new business opportunity´s which is in line with the international and local climate goals.

The district heating system today is flexible and different production units are used to varying extents depending on energy needs as well as market and regulatory requirement variations. The need for reinvestments and new investments is updated continously. The strategic change that Stockhlm Exergi is facing will not in any significant way entail a different situation in this respect for existing fixed assets.

See also the section on Enviromental risks on page 70.

Environmental information

The Group operates a number of activities requiring permits and subject to reporting obligations under Chapters 9 and 11 of the Environmental Code. The environmental impact of our operations consists mainly of emissions to air and water; partly from the energy conversion at the production plants, and partly from the extraction and transport of fuels to the plants.

Stockholm Exergi has prepared a sustainability report according to GRI (Global Reporting Initiative). The Sustainability Report has been prepared in a report separate from the Annual Report in order to meet the requirements for a statutory sustainability report in accordance with Chapter 6(11) of the Annual Accounts Act. The content of the Sustainability Report is set out in the GRI Index presented on pages 123 to 125 of this report, and covers Stockholm Exergi Holding AB (publ) and its subsidiaries unless otherwise stated.

Corporate Governance report

The company also prepares a Corporate Governance Report report separate from the Directors' Report, see pages 59-61.

Appropriation of earnings

The Board of Directors proposes that the available earnings of the Parent Company, SEK 4,162,606,163 be appropriated as follows:

Proposed appropriation of earnings, SEK	
Dividends	850,000,000
Carried forward	3,312,606,163
Total	**4,162,606,163**

Opinion of the Board of Directors on the proposed dividend

Subject to approval by the Annual General Meeting, dividends to shareholders will be paid in the amount of SEK 758 million in accordance with the declared dividend policy (see also notes 4 and 44), plus a non-recurring dividend of SEK 92 million, totalling SEK 850 million. The dividend will be paid in 2023.

The Parent Company's equity ratio is 29 per cent, and the Group's equity ratio is 39 per cent. After a total dividend of SEK 850 million, the Parent Company's equity ratio would be 24 per cent and the Group's 37 per cent. Should changes after the balance sheet date also be incluced, the profit for at least four months before payment of the proposed profit distribution becomes relevant. This equity ratio is deemed to be satisfactory. It is believed that it will be possible to maintain liquidity in the Company at a similarly satisfactory level. The Board of Directors is of the opinion that the proposed dividend will not prevent the Company from fulfilling its short and long-term obligations, nor will it prevent the Company from making the necessary investments. The proposed dividend can thus be justified in view of the provisions of the Companies Act Chapter 17(3), paragraphs 2 to 3 (the precautionary rule).

Group – five-year summary

SEK million	2022	2021	2020	2019[1]	2018
Net sales	7,996	7,294	6,180	6,864	7,003
Operating profit before depreciation	**2,950**	**2,919**	**2,811**	**2,835**	**2,800**
Operational result	**1,412**	**1,409**	**1,316**	**783**	**1,323**
Operating profit/loss	**1,412**	**1,424**	**1,302**	**737**	**1,381**
Financial items – net	-226	-170	-190	-190	-168
Profit/loss before tax	**1,186**	**1,254**	**1,111**	**547**	**1,213**
Income tax [2]	-237	-284	-234	-114	-48
Profit for the year	**948**	**970**	**878**	**433**	**1,164**
Total assets	32,160	29,784	29,479	29,740	29,673
Total shareholders' equity	12,673	12,037	11,646	11,762	12,355
Interest-bearing liabilities	13,471	12,476	12,363	12,595	11,779
Net debt	13,469	12,475	12,352	12,593	11,627
Capital employed	26,144	24,513	24,009	24,357	24,134
Working capital	2,251	1,300	1,366	1,626	1,298
Investments	1,621	1,411	1,734	1,550	1,817
Cash flow before financing activities	-131	732	1,100	489	680
Return on equity, %	7.7	8.2	7.5	3.6	9.6
Return on capital employed, %	5.6	5.9	5.4	3.0	5.8
Equity/assets ratio, %	39	40	40	40	42
Debt/equity ratio	1.5	1.5	1.5	1.5	1.4
Net debt/EBITDA	4.6	4.3	4.4	4.4	4.2

[1] Profit after depreciation is burdened by an impairment of SEK -582 million due to the decision made on the closure of KVV6 in Värtan.
[2] Income tax includes a non-recurring effect of SEK 216 million in 2018 attributable to the revaluation of deferred taxes due to future tax rate reductions.

Figures in the Annual Report are generally presented in SEK million, rounded up or down. As a result, rounding differences of +/- SEK 1 million may occur in the total. Where an underlying figure rounds to SEK 0 million, this is written as 0. When there is no figure to report, this is left blank.

Stockholm Exergi uses Alternative Performance Measures (APMs). The key performance indicators presented are not in accordance with IFRS but are considered to facilitate stakeholders' analysis of profit and financial position. Definitions and reconciliations of the alternative key performance indicators can be found on pages 120 and 121.

Consolidated Income Statement

SEK million	Note	2022	2021
Net sales	5	7,996	7,294
Work performed by the company for its own use and capitalised		48	40
Other incomes	7	140	87
Raw materials and consumables		-3,148	-2,722
Other external costs	8, 9	-1,319	-1,213
Personnel costs	10	-767	-581
Operating profit before depreciation		**2,950**	**2,919**
Depreciation, amortisation and impairment of tangible fixed assets and intangible assets	11	-1,539	-1,495
Operational result		**1,412**	**1,409**
Changes in value on revaluation of financial assets/liabilities	6		
Capital gains/losses			14
Operating profit/loss		**1,412**	**1,424**
Financial income	12	2	1
Financial expenses	6, 12	-228	-171
Profit/loss before tax		**1,186**	**1,254**
Income tax	13	-237	-284
Profit for the year		**948**	**970**
Profit attributable to:			
Parent Company shareholders		940	968
Non-controlling interests		8	2
Profit for the year		**948**	**970**

Consolidated report on comprehensive income

SEK million	2022	2021
Profit for the year	**948**	**970**
Other comprehensive income:		
Items not to be reversed in the income statement		
Revaluation of the net pension liability	78	148
Tax effect	-16	-31
Items that can subsequently be reversed in the income statement		
Cash flow hedges		
Fair value gains/losses for the year	622	196
Reversal to the income statement	-81	-19
Reversal to inventories/tangible fixed assets	58	16
Tax effect	-123	-40
Other comprehensive income for the year, net of tax	**537**	**271**
Total comprehensive income for the year	**1,486**	**1,241**
Total comprehensive income attributable to:		
Parent Company shareholders	1,478	1,239
Non-controlling interests	8	2
Total comprehensive income for the year	**1,486**	**1,241**

Consolidated Balance Sheet

SEK million	Note	31 Dec 2022	31 Dec 2021
TILLGÅNGAR			
Non-current assets			
Intangible assets	15	261	183
Tangible assets	16	26,339	26,254
Managed assets (pension assets)	25	45	3
Derivative instruments	3, 14	338	74
Total non-current assets		**26,982**	**26,515**
Current assets			
Stocks	17	1,751	724
Derivative instruments	3, 14	396	87
Accounts receivable	18	1,738	1,640
Other receivables	18	1,292	816
Cash and cash equivalents	19	1	1
Total current assets		**5,178**	**3,269**
Total assets		**32,160**	**29,784**
EQUITY			
Equity attributable to Parent Company shareholders			
Share capital	20	2	2
Reserves		582	45
Retained earnings		12,072	11,982
Total		**12,656**	**12,029**
Non-controlling interests	21	16	8
Total shareholders' equity		**12,673**	**12,037**
SKULDER			
Non-current liabilities			
Interest-bearing liabilities	22	11,069	9,680
Derivative instruments	3, 14	0	20
Deferred tax liabilities	23	3,355	3,201
Other provisions	24	41	49
Pension provisions	25	3	37
Other non-current liabilities			
Total non-current liabilities		**14,468**	**12,987**
Current liabilities			
Interest-bearing liabilities	22	2,402	2,796
Derivative instruments	3, 14	13	19
Accounts payable	26	988	814
Other liabilities	26	1,607	1,114
Current tax liabilities		7	10
Other provisions	24	3	6
Total current liabilities		**5,020**	**4,760**
Total liabilities		**19,488**	**17,747**
Total equity and liabilities		**32,160**	**29,784**

Consolidated report of changes in equity

SEK million	Share capital	Retained earnings including profit for the year	Reserves Cash flow hedges	Total equity attributable to Parent Company shareholders	Non-controlling interests	Total equity
Opening balance at 1 January 2021	**2**	**11,964**	**-56**	**11,640**	**6**	**11,646**
Profit for the year		968		968	2	970
Other comprehensive income for the year		118	153	271		271
Total comprehensive income		**1,086**	**153**	**1,239**	**2**	**1,241**
Transactions with shareholders						
Dividends		-850		-850		-850
Closing balance at 31 December 2021	**2**	**11,930**	**97**	**12,029**	**8**	**12,037**
Opening balance at 1 January 2022	**2**	**11,930**	**97**	**12,029**	**8**	**12,037**
Profit for the year		940		940	8	948
Other comprehensive income for the year		62	476	537		537
Total comprehensive income		**1,002**	**476**	**1,478**	**8**	**1,486**
Transactions with shareholders						
Dividends		-850		-850		-850
Closing balance at 31 December 2021	**2**	**12,082**	**573**	**12,656**	**16**	**12,673**

Consolidated cash flow statement

SEK million	Note	2022	2021
Operating profit before depreciation (EBITDA)		**2,950**	**2,919**
Adjustments for items not included in cash flow[1)]		18	-684
Interest received		2	4
Paid interest		-218	-177
Paid tax		-225	-180
Cash flow from operating activities before changes in working capital		**2,527**	**1,882**
Changes in operating receivables		-1,600	-476
Changes in operating liabilities		641	397
Cash flow from current operations		**1,567**	**1,804**
Cash flow from investing activities			
Acquisitions of tangible fixed assets and intangible assets	15, 16	-1,698	-1,369
Disposal of tangible fixed assets and intangible assets and shares in subsidiaries			297
Cash flow from investing activities		**-1,698**	**-1,072**
Cash flow before financing activities		**-131**	**732**
Cash flow from financing activities			
Loans raised	22	3,150	1,598
Repayment of loans	22	-2,140	-1,690
Change in Group account	22	-29	202
Dividends paid		-850	-850
Cash flow from financing activities		**-131**	**-741**
Total increase (+)/decrease (-) in cash and cash equivalents		**0**	**-9**
Cash and cash equivalents, at beginning of the year		**1**	**11**
Cash and cash equivalents at year-end	19	**1**	**1**

1) Non-cash items mainly relate to adjustments for unrealised gains and losses related to changes in the value of financial assets/liabilities hedging future cash flows and changes in provisions

Additional information on the consolidated cash flow statement

Change in working capital

SEK million	2022	2021
Change in non-interest-bearing receivables, decrease (+)/increase (-)	-573	-772
Change in inventories, decrease (+)/increase (-)	-1,027	296
Change in non-interest-bearing liabilities, decrease (-)/increase (+)	641	397
Total	**-959**	**-79**

Acquisitions of property, plant and equipment and intangible assets

SEK million	Note	2022	2021
Investments	15, 16	-1,621	-1,411
Change for the year in investments posted but not paid		-86	36
Interest earned on major investment projects		8	6
Total		**-1,698**	**-1,369**

Investments in intangible assets and property, plant and equipment in the balance sheet amounted to SEK 1,621 million (1,411). Investments in cash flow
SEK -1,698 million (-1,369) is adjusted for investments posted but not yet paid, i.e. changes in trade payables related to investments and booked accrued investments totalling SEK -86 million (36) and interest earned on investments of SEK 8 million (6), which is also adjusted in the interest paid item.

Parent Company Income Statement

SEK million	Note	2022	2021
Operating expenses			
Other operating expenses		0	-1
Operating profit/loss		**0**	**-1**
Profit/loss from financial items			
Other interest income and similar income	37	42	12
Interest costs and similar costs	37	-214	-151
Profit/loss after financial items		**-173**	**-139**
Appropriations			
Group contributions		1,185	580
Profit/loss before tax		**1,012**	**440**
Income tax	38	-208	-91
Profit for the year		**804**	**350**

There is no other comprehensive income in the Parent Company, and therefore the total comprehensive income for the Parent Company is consistent with the profit for the year.

Parent Company balance sheet

SEK million	Note	31 Dec 2022	31 Dec 2021
TILLGÅNGAR			
Non-current assets			
Financial assets			
Participations in Group companies	39	11,888	11,888
Other long-term receivables from Group companies	40	3,734	3,734
Total non-current assets		**15,622**	**15,622**
Current assets			
Receivables from Group companies		2,434	1,210
Current tax receivables		0	72
Other receivables		1	48
Cash and cash equivalents	42	0	0
Total current assets		**2,435**	**1,329**
Total assets		**18,057**	**16,951**
SHAREHOLDERS' EQUITY AND LIABILITIES			
Shareholders' equity			
Restricted equity			
Share capital (10,000 shares)		2	2
Statutory reserve		1000	1000
Total restricted equity		**1002**	**1002**
Unrestricted equity			
Retained earnings		3,359	3,859
Profit for the year		804	350
Total unrestricted equity		**4,163**	**4,209**
Total shareholders' equity		**5,164**	**5,211**
Non-current liabilities			
Interest-bearing liabilities	41	10,446	9,053
Total non-current liabilities		**10,446**	**9,053**
Current liabilities			
Interest-bearing liabilities	41	2,356	2,629
Liabilities to Group companies		10	12
Current tax liabilities		17	
Accrued expenses and deferred income		63	46
Total current liabilities		**2,447**	**2,687**
Total liabilities		**12,893**	**11,740**
Total equity and liabilities		**18,057**	**16,951**

Parent Company statement of changes in equity

SEK million	Note	Share capital	Statutory reserve	Retained earnings including profit for the year	Total equity
Opening balance at 1 January 2021		**2**	**1,000**	**4,709**	**5,711**
Profit for the year				350	350
Transactions with shareholders					
Dividends				-850	-850
Closing balance at 31 December 2021		**2**	**1,000**	**4,209**	**5,211**
Opening balance at 1 January 2022		**2**	**1,000**	**4,209**	**5,711**
Profit for the year				804	804
Transactions with shareholders					
Dividends				-850	-850
Closing balance at 31 December 2022		**2**	**1,000**	**4,163**	**5,164**

Parent Company Cash Flow Statement

SEK million	Note	2022	2021
Operating activities			
Profit/loss after financial items		-173	-139
Adjustments for items that are not included in cash flow		-3	-1
Total		**-176**	**-140**
Paid tax		-120	-190
Cash flow from operating activities before changes in working capital		**-296**	**-330**
Changes in working capital			
Increase (-)/Decrease (+) in operating receivables		47	-1
Increase (+)/Decrease (-) in operating liabilities		-1	1
Cash flow from current operations		**-250**	**-330**
Cash flow before financing activities		**-250**	**-330**
Cash flow from financing activities			
Loans raised	41	3,150	1,498
Repayment of loans	41	-2,001	-1,552
Group contribution received		580	1,033
External change in Group account	41	-29	202
Change in balance sheet of subsidiaries, Group account		-598	-10
Dividends paid		-850	-850
Cash flow from financing activities		**251**	**321**
Cash flow for the year		**1**	**-9**
Cash and cash equivalents, at beginning of the year		**0**	**9**
Cash and cash equivalents at year-end		**1**	**0**

Supplementary information on the Parent Company's cash flow statement

SEK million	2022	2021
Adjustments for items that are not included in cash flow		
Change in accrued interest income/expenses, etc.	-4	-1
	-4	**-1**

SEK million	2022	2021
Interest received and paid		
Interest received	20	12
Interest paid	-187	-143
Net	**-167**	**-130**

List of notes

Group

Parent Company

Group

NOTE 1 Accounting policies

Summary of significant accounting policies.

1.1 Summary of operations

Stockholm Exergi Holding AB (publ) (the Parent Company) is a Swedish limited liability company, and its registered office is in Stockholm. The Stockholm Exergi Holding AB (publ) Group, hereinafter referred to as the Group, produces and supplies eco-friendly district heating, district cooling and electricity to companies and private individuals in Greater Stockholm. See the Directors' Report for further information on the activities. The Parent Company's operations involve owning shares in the operating company Stockholm Exergi AB, and also standing responsible for Group-wide financing solutions. These financial statements were approved by the Board of Directors on 14 March 2023.

1.2 Basis for the preparation of the reports

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) issued by the International Accounting Standards Board (IASB) and with the interpretations of the International Financial Reporting Interpretations Committee (IFRIC) as adopted by the EU. The Swedish Financial Reporting Board's recommendation RFR 1, Supplementary Accounting Rules for Groups, and the Annual Accounts Act have also been applied.

The consolidated financial statements have been prepared under the cost method, except for derivative instruments, which are measured at fair value through profit or loss or in other comprehensive income in the context of hedge accounting. The Parent Company's financial statements have been prepared in accordance with RFR 2, Accounting for Legal Entities, and the Annual Accounts Act. Where the Parent Company applies different accounting policies to the Group, this is disclosed separately at the end of this note.

1.2.1 Use of estimates and judgements

The preparation of financial statements in accordance with IFRS requires the use of certain key accounting policies. It also requires management to have procedures in place to make the necessary judgements in the application of the Group's accounting policies. Those areas involving a higher degree of judgement or complexity, or areas where assumptions and estimates and judgements are significant to the consolidated financial statements, are disclosed in note 2 Significant accounting estimates and judgements for accounting purposes.

1.2.2 New standards, changes and interpretations in respect of existing standards

No new standards or major changes and interpretations have been introduced in 2022.

New and amended IFRS standards and new interpretations that has yet not come into effect, is deemed not to have any significant impact on the group´s financial statements.

Changes in IAS1-Disclosure of accounting principles: The changes affect the requirements in IAS 1 regarding disclosure of accounting principles. By applying the changes a company informs about its significant accounting principles, instead of its coinsiderable accounting principles. Further amendments to IAS1 is to explain how a company can identify a significant accounting principle. To support the changes, the IASB has also produced guidance and examples to explain and identify a significant accounting principle. The company's management assesses that this change may affect disclosures about applied accounting principles but has not yet evaluated these effects in its whole. Applies from fiscal year beginning January 1 2023.

Changes in IAS1-Classification of liabilities as current and non-current: the change in IAS1 only affects the presentation of liabilities as short or long-term in the financial statement. The amandment clarifies i.a. that it is only based on the rights at the end of the reporting period that should affect the classification of liabilities as short-term or long-term. The classification is not affected by expectations about when the company will use its right to post-pone the settlement of a debt. Further, that only covenants that a company must fullfill during or before the reporting period shall affect the calssification of the corresponding liability as short-term or long-term. Applies from fiscal year which starts on 1 January 2024, but has not yet been approved by EU.

1.2.3 Classification of current assets, property, plant and equipment and current and non-current liabilities

An asset is classified as current and a liability is classified as current if it is expected to be realised within the normal operating cycle or within twelve months of the balance sheet date. Alternatively, they are classified as a financial asset or liability held at fair value through profit or loss. Cash and cash equivalents are classified as current assets. All other assets and liabilities are classified as non-current assets and non-current liabilities respectively.

1.3 Preparation of consolidated financial statements

1.3.1 Subsidiaries

The consolidated financial statements include the Parent Company, Stockholm Exergi Holding AB (publ), and the Parent Company has the right to formulate financial and operational strategies for all the companies and usually holds more than 50 per cent of the votes, either directly or indirectly. The existence and effect of potential votes that can be exercised or converted without delay are taken into account when assessing whether the Group has control over another entity. Information on the Group's subsidiaries is provided in note 34. The acquisition method has been used to account for the acquisition of subsidiaries. The purchase consideration for the acquisition of a subsidiary is measured at the net fair value of the assets transferred and the liabilities incurred or assumed at the date of transfer.

Acquisition-related costs are expensed as incurred. The identifiable assets acquired and liabilities assumed in a corporate acquisition are initially measured at their fair values at the acquisition date, irrespective of the extent of any minority interest.

Cost in excess of the Group's share of the fair value of net identifiable assets acquired is recorded as goodwill. If the cost is less

than the fair value of the net assets of the subsidiary acquired, the difference is recognised directly in the income statement. Subsidiaries are included in the consolidated financial statements from the date on which control is transferred to the Group.

They are excluded from the consolidated financial statements from the date on which control ceases. Intercompany transactions, balances and unrealised gains on transactions between Group companies are eliminated. Unrealised losses are also eliminated unless the transaction clearly indicates an impairment of the asset transferred. Where necessary, the accounting policies of subsidiaries have been changed to ensure consistency with the policies adopted by the Group.

1.3.2 Non-controlling interests

Non-controlling interests in subsidiaries are presented separately from equity attributable to equity holders of the Parent Company. Non-controlling interests are initially recognised at the non-controlling interest's proportionate share of the fair value of the acquired company's identifiable net assets. After the acquisition, non-controlling interests change their share of changes in equity.

1.4 Segment reporting

Operating segments are reported in a manner consistent with the internal reporting provided to the chief executive decision-maker. The chief executive decision-maker is the function responsible for allocating resources and assessing the performance of the operating segments. In the Group, this function has been identified as the CEO. Stockholm Exergi Holding AB (publ) reports its operations as a segment in its internal reporting.

See note 5 Segment information for further information on segment reporting.

1.5 Translation of foreign currency

1.5.1 Functional currency and reporting currency

Items included in the financial statements of the various entities of the Group are measured in the currency of the primary economic environment in which the entity operates ("the functional currency"). The consolidated financial statements use Swedish kronor (SEK) as the Group's reporting currency. The functional currency for all companies in the Group is also Swedish kronor (SEK).

1.5.2 Transactions and balance sheet items

Transactions in foreign currencies are translated into the functional currency at the exchange rates prevailing on the date of the transaction or the date on which the items are revalued. Receivables and payables denominated in foreign currencies that are outstanding at the balance sheet date are translated at the exchange rate prevailing at that date.

Exchange differences have been recognised in the income statement.

1.6 Revenue recognition

Revenue is recognised at an amount that reflects the consideration expected to be received and the consideration to which the entity is entitled for the supply of goods and/or services to customers. Stockholm Exergi recognises revenue when the Group transfers control of a product or service to a customer. The Group's revenue consists mainly of energy delivered to end customers. Revenues are stated net of discounts and rebates and excluding VAT. Payment terms to customers are almost exclusively 30 days credit.

Revenue is recognised as follows:

1.6.1 Sale of district heating, district cooling and electricity

Sales of district heating, district cooling and electricity are recorded at the time of delivery. Sales of heating and cooling to industrial and business customers and to final consumers are reported on the basis of the value of the volume delivered, including the estimated value of the volume delivered to customers between the last meter reading and the end of the year. The net supply of physical electricity is made to Nord Pool but is sold or purchased at market price via Fortum, which is then the customer or supplier to the Company.

1.6.2 Green Electricity certificates

A quota system has been introduced in order to promote the production of electricity using renewable energy sources.

Renewable energy producers can be allocated Green Electricity certificates in proportion to renewable energy production, and electricity suppliers must account for and submit Green Electricity certificates according to a quota system. Revenue from Green Electricity certificates received is recognised at the current price in the month of generation and recorded as a current asset. The asset is revalued at market value at the end of the financial year. Gains or losses on any contracted sales are recognised at the time of the contract and recorded as current assets. The cost of Green Electricity certificates to cover the Company's quota obligation is recognised at the current price in the month of consumption and recorded as an operating liability. The liability is revalued at market value at the end of the financial year. Submission under the quota obligation takes place in April of the following year.

1.6.3 Utility connection charges

Charges paid by the customer on connection to district heating are recognised as income when received. Connection charges for district cooling are recognised as revenue over the customer's contract period.

1.6.4 Other income

Income from activities outside the normal course of business is included in other income. This includes recurring items such as rental income and profits from the sale of emission allowances.

1.7 Government grants for operation and investment

Government grants are recognised at fair value when there is reasonable assurance that the grant will be received and the Group will comply with the conditions attached to the grant. Government grants are accrued and recognised in the income statement as a reduction of expenses over the same periods as the expenses they are intended to cover. Government grants relating to the purchase of tangible fixed assets are deducted from the cost of the asset and recognised as income by reducing the depreciation of the asset to which they relate.

1.8 Emission allowances

Emission allowances are accounted for on the basis of the applicable IFRS standards under which purchased emission allowances are recognised as intangible assets at cost, while emission allowances received free of charge are recognised at face value. A provision is recognised to cover the obligation to return emission allowances. Insofar as the Group already holds rights that meet the obligation, the obligation is recognised at the carrying amount of those rights. Any emission allowance deficits withheld in excess of the liability are valued at the current market value of the emission allowances. The cost of the provision is recognised under "Raw materials and consumables" in the income statement. Gains from the sale of emission allowances are recorded under "other income".

1.9 Borrowing costs

Borrowing costs directly attributable to the acquisition, construction or production of qualifying assets are recognised as part of the cost of the assets until the assets are ready for their intended use or sale.

Qualifying assets are assets that take a significant period of time to complete for their intended use or sale. All other borrowing costs are recognised in the income statement in the period in which they are incurred.

1.10 Research and development costs

Research costs are expensed as incurred and included in other external costs in the income statement.

Development costs that meet the requirements of IAS 38:57 are capitalised and recognised as an intangible asset in the balance sheet and amortised over the useful life of the asset. Conditions to be demonstrated: (a) the technical feasibility of completing the intangible asset so that it will be available for use or sale, (b) the intention to complete the intangible asset for use or sale, (c) its ability to use or sell the intangible asset, (d) how the intangible asset will generate probable future economic benefits. For example, this may be done by demonstrating that there is a market for the production of the intangible asset or the intangible asset or, if the asset is to be used internally, the utility of the intangible asset, (e) the availability of adequate technical, financial and other resources to complete the development and use or sale of the intangible asset, (f) its ability to reliably measure the expenditure attributable to the intangible asset during its development.

1.11 Tangible fixed assets

Tangible fixed assets consist mainly of district heating plants and machinery, transmission pipelines, tunnels and district heating networks. Tangible fixed assets are stated at cost less accumulated depreciation and accumulated impairment losses.

The cost includes expenditure directly attributable to the acquisition of the asset and loan capital capitalised in accordance with the Group's accounting policies. Cost may also include gains or losses transferred from equity on qualifying cash flow hedges taken for the purchase of tangible fixed assets in foreign currency. Assets acquired through the purchase of subsidiaries are stated at fair value at the date of acquisition. Incremental expenditure is added to the carrying amount of the asset or recognised as a separate asset, as appropriate, only when it is probable that the future economic benefits associated with the asset will flow to the Group and the cost of the asset can be measured reliably. All other repairs and maintenance are recognised as expenses in the income statement in the period in which they areincurred. In addition, the cost of a tangible fixed asset includes the estimated cost of dismantling, removing and restoring the site where the asset is located when such explicit claims are made against third parties. However, no such expenditurehas been identified and recognised as at 31 December 2022. See also Part 1.22.2 Obligations to dispose of end-of-life assets. Land and tunnels are not depreciated as they have indefinite useful lives. Depreciation on other assets, to allocate their cost down to their estimated residual value over their estimated useful lives, is calculated on a straight-line basis as follows:

Buildings	25 to 50 years
Ground installations	20 years
Remote cooling pipes	30 years
District heating pipes	40 years
Machinery and other technical installations	5 to 30 years
Equipment, tools and installations	3 to 10 years

The residual values and useful lives of the assets are reviewed, and adjusted if necessary, at the end of each reporting period. The carrying amount of an asset is written down directly to its recoverable amount if the asset's carrying amount is greater than its estimated recoverable amount.

1.12 Intangible assets

Intangible assets are stated at cost less accumulated amortisation and impairment losses, if any, and are amortised on a straight-line basis over their estimated useful lives.

1.12.1 Computer software

Acquired software licences are capitalised on the basis of the costs incurred when the software in question is acquired and put into service. These capitalised costs are amortised over the estimated useful life of three to five years. Costs relating to the development or maintenance of computer software are expensed as incurred.

Development costs that are directly attributable to the development and testing of identifiable and unique software products controlled by the Group, and that will generate future economic benefits in excess of costs in any one year, are recognised as intangible assets. Direct costs recognised as part of the software include the costs of software developers employed and a reasonable proportion of indirect costs. Software development costs recognised as assets are amortised over their estimated useful lives. The estimated useful life is between 3 and 5 years.

1.13 Impairment of non-financial assets

The carrying amounts of individual assets are assessed for impairment at each balance sheet date to determine whether any impairment loss should be recognised. The carrying amount of an asset is written down immediately to its recoverable amount if the carrying amount exceeds its recoverable amount. When considering the need for impairment, the Group assesses whether events or changes in circumstances indicate that the carrying amount may not be recoverable. This assessment is documented once a year in connection with the business planning process. Indications for impairment are analysed and include risks such as changes in the price of fuel, regulatory/policy changes related to energy taxes, etc. An impairment test is performed if there is an indication for impairment. An impairment loss is recognised in the income statement for the amount by which the asset's carrying amount exceeds its recoverable amount. The recoverable amount is the fair value of an asset less costs to sell or its value in use, whichever is the higher. For the purpose of assessing the need for impairment, assets are grouped according to the lowest levels for which there are identifiable cash flows (cash-generating units). Value in use is determined by discounting the future cash flows expected to be generated by the asset or cash-generating unit. Cash flow projections are based on the latest business plan approved by management.

Cash flows arising from future major development investments, such as new production plants, are excluded unless a project has commenced. The cash flow required to complete the asset is included. The period covered by cash flows relates to the useful life of the assets being reviewed for impairment. Forecasts should normally cover a maximum period of five years, but the forecast period is longer as long as the useful life of power plants and other major assets is over 20 years.

Cash flow projections beyond one year after the period covered by the latest business plan are estimated by generalising the projections using steady or declining growth rates for the following year. Non-financial assets that have previously been written down are reviewed at each balance sheet date to determine whether reversal should take place.

1.14 Financial assets

Financial assets are recognised in the Group's statement of financial position when the Group becomes a party to the contractual provisions of the instrument.

Financial assets are initially measured at fair value. Transaction costs that are directly attributable to the acquisition or issue of financial assets (other than financial assets at fair value through profit or loss) are added to or deducted from the fair value of financial assets at initial recognition. Transaction costs directly attributable to the acquisition of financial assets or financial liabilities at fair value through profit or loss are recognised immediately in the income statement.

The Group shall derecognise a financial asset from the statement of financial position only when the contractual rights expire or all the risks and rewards of the financial asset are transferred to another party. If the Group neither transfers nor retains all the risks and rewards of ownership of the financial asset and continues to retain control of the transferred asset, the Group recognises the asset and an associated liability for amounts it may be required to pay. If the Group retains substantially all the risks and rewards of ownership of a transferred financial asset, the Group continues to recognise the financial asset and also recognises a pledged security.

The difference between the carrying amount of the asset and the sum of the consideration received and the receivable is recognised on derecognition of a financial asset measured at amortised cost.

The Group classifies its financial assets in the following categories: amortised cost, fair value through other comprehensive income or fair value through profit or loss.

The classification depends on the purpose for which the financial asset was acquired. Management determines the classification of its financial assets at initial recognition, and the classification is changed if the business model changes.

1.14.1 Financial assets at fair value through profit or loss

A financial asset is classified in this category if the business model is not to hold it to maturity. Derivatives are also categorised as held for trading if they are not designated as hedges. Assets in this category are classified as current assets if they are held for trading or if they are expected to be settled within twelve months of the end of the reporting period.

1.14.2 Definition of defaults

The Group considers the following to be defaults for internal credit risk management purposes as historical experience indicates that financial assets that meet any of the following criteria are generally not recoverable:

- when there is a breach of financial terms by the debtor
- when information produced internally or obtained from external sources indicates that the debtor is unlikely to pay its creditors, including the Group, in full (without taking into account collateral held by the Group).

Notwithstanding the above analysis, the Group considers that a default has occurred when a financial asset is more than 180 days past due.

1.15 Trade receivables

Trade receivables are initially recognised at fair value and subsequently at amortised cost using the effective interest method, less any impairment. In addition, a simplified matrix model (ECL) is used for the impairment of invoiced trade receivables with adjusted impairment rates depending on the risk classification of customer groups and the maturity structure of the trade receivables portfolio. Revenues based on estimates of electricity already delivered but not yet billed, heating, cooling and distribution of electricity not yet billed are also included in trade receivables.

1.16 Cash and cash equivalents

Cash and cash equivalents include cash on hand, bank deposits and other short-term investments with a maturity of three months or less. Valuation is at amortised cost. Cash and cash equivalents are subject to the general impairment model. The low credit risk exception is applied for cash and cash equivalents. For other short-term investments, provisions are made on the basis of the expected credit loss per counterparty.

Amounts drawn on the Group overdraft facility are included in borrowings under current liabilities in the balance sheet.

1.17 Borrowing

Borrowings are initially recognised at fair value, net of transaction costs. They are carried at amortised cost in subsequent periods, and any difference between the amount received (net of transaction costs) and the amount repaid is recognised as interest expense in the income statement over the loan term using the effective interest method.

1.18 Leasing

For leases, the rules under IFRS 16 are applied whereby a lease liability is recognised for leases in a right-of-use asset model. This approach is based on the fact that a lessee has a right to use an asset for a specific period of time, but also an obligation to pay for that right. Assets and liabilities related to leases under IFRS 16 are recognised in the balance sheet.

Usufruct agreements shorter than 12 months or expiring within 12 months of the balance sheet date are classified as short-term and are not included in the recognised liabilities or rights of use. Usufruct agreements with a replacement cost of less than USD 5,000 are classified as low value agreements and are not included in the liabilities or usufruct rights recognised. The discount rate used for the calculations is the Company's marginal lending rate.

IFRS 16 paragraph B34 is specifically observed in assessing the enforceability of the contract in determining the lease term of a contract and the length of the non-cancellable portion.

The classification in the income statement has changed with the introduction of IFRS 16, with the lease cost recognised as depreciation on the asset and interest expense on the liability, resulting in an increase in operating profit and a decrease in net financial income. Reclassifications are also made in the cash flow statement.

Lease liabilities are revalued when there is a change in the assessment of the length of the lease term or when the amount of the lease payments changes, e.g. through indexation adjustments.

A corresponding revaluation of the right-of-use assets is also carried out in connection with this. The leasehold assets are also subject to the annual impairment review of all the Company's fixed assets.

The Group is also a lessor to a lesser extent, mainly through the leasing of certain office premises at its headquarters at Värtaverket and the letting of space in pipeline tunnels.

1.19 Inventories

Stockholm Exergi's inventory consists mainly of fuel used in the production process. Inventories are stated at cost.

Cost is determined using the first-in, first-out (FIFO) principle.

1.20 Income tax

Current tax is based on the taxable profit for the year. The taxable profit differs from the profit reported in the consolidated income statement because of income and expense items that are taxable or deductible in other years and items that are never taxable or deductible. The liability arising for the Group in respect of the current tax is calculated using tax rates enacted or announced at the end of the reporting period. Deferred tax is recognised in full, using the balance sheet method, on all temporary differences arising between the tax bases of assets and liabilities and their carrying amounts in the consolidated financial statements. However, the deferred tax is not recognised if it arises from the initial recognition of an asset or liability in a transaction other than a business combination that affects neither accounting nor taxable profit or loss at the time of the transaction.

Deferred tax is calculated using tax rates (and laws) that have been enacted or substantively enacted by the balance sheet date and are expected to apply when the related deferred tax asset is realised or the deferred tax liability is settled.

Deferred tax assets are recognised to the extent that it is probable that future taxable profits will be available against which the temporary differences can be utilised. Deferred tax assets are offset against deferred tax liabilities when there is a legal right of offset for current tax assets and liabilities and when the deferred tax assets and liabilities relate to taxes levied by the same tax authority. Deferred tax is provided on temporary differences arising on investments in subsidiaries and associates, except for deferred tax liabilities where the timing of the reversal of the temporary difference is controlled by the Group and it is probable that the temporary difference will not reverse in the foreseeable future.

1.21 Employee benefits

The Group has various post-employment benefit plans, including defined benefit and defined contribution pension plans.

1.21.1 Pensions

The Group's former foundation-backed old-age pension under ITP2 is now insured through Alecta and is therefore accounted for as defined contribution and not under IAS 19. However, two smaller defined benefit plans, the Birka Plan and PAKL, continue to be accounted for under IAS 19 (see note 25 for further information).

A defined contribution plan is a pension plan under which the Group pays fixed contributions to a separate legal entity. The Group has no legal or constructive obligation to pay additional contributions if this legal entity does not have sufficient assets to pay all employee benefits related to employees' service in the current or prior periods. For defined contribution pension plans, the Group pays contributions to publicly or privately administered pension insurance plans on a mandatory, contractual or voluntary basis. The Group has no further payment obligations once the contributions have been paid. Fees are recognised as personnel costs when they fall due. Prepaid expenses are recognised as an asset to the extent that the cash refund or reduction in future payments is available for the benefit of the Group.

For defined benefit plans, the pension obligation is calculated annually by independent actuaries using the projected unit credit (PUC) method. The present value of the defined benefit obligation is determined by discounting the estimated future cash flows using the interest rate for the corresponding duration from a mortgage bond curve estimated on the basis of Swedish mortgage bonds. The cost of providing pensions is charged to the income statement in order to spread the service cost over employees' estimated periods of service. Assets under management are valued at market value. The liability recognised in the balance sheet is the present value of the defined benefit obligation at the balance sheet date less the fair value of any plan assets. Actuarial gains and losses arising from experience adjustments and changes in actuarial assumptions are recognised in other comprehensive income in the period in which they arise.

1.21.2 Bonus schemes

The Group recognises a liability and an expense for bonuses based on the calculation principles applicable to the bonus schemes. A provision is recognised where there is a legal or constructive obligation. See note 10 Employee benefits for further information on bonuses.

1.22 Provisions

Provisions for environmental restoration, end-of-life liabilities, restructuring costs and legal claims are recognised when the Group has a legal or constructive obligation to a third party as a result of past events, it is probable that an outflow of resources will be required to settle the obligation and the amount can be reliably estimated. Provisions are measured at the present value of the amount expected to be required to settle the obligation. A pre-tax discount rate is used that reflects current market assessments of the time value and risks specific to the obligation. The increase in the provision due to the passage of time is recognised as an interest expense.

1.22.1 Environmental provisions

Environmental provisions are recognised on the basis of the current interpretation of environmental laws and regulations when it is probable that a present obligation has been incurred and the amount of such obligation can be reliably estimated. Environmental expenditure arising from the remediation of an existing problem caused by past operations and contributing to current or future income is recognised as an expense as incurred.

1.22.2 Obligation to dispose of end-of-life assets

An obligation to dispose of end-of-life assets is recognised either when there is a contractual obligation to a third party or a legal obligation and the amount of the obligation can be reliably estimated. An obligating event is when a facility is built on leased land with an obligation to decommission and remove the asset in the future or when a legal obligation to the Group changes, for example. The obligation to dispose of end-of-life assets is recognised as part of the cost of a property and equipment when the asset is brought into use or when the obligation arises. The costs are amortised over the remaining useful life of the asset. However, no costs for the disposal of end-of-life assets are identified and recorded as above at 31 December 2021.

1.23 Contingent liabilities

A contingent liability is recognised when there is a possible obligation that arises from certain events and whose existence is confirmed only by one or more uncertain future events or when there is an obligation that does not qualify for recognition as a liability or provision because it is not probable that an outflow of resources will be required or when the amount of the obligation cannot be measured reliably.

1.24 Dividends

Dividends proposed by the Board of Directors are not disclosed in the Annual Report until they have been approved by the Company's shareholders at the Annual General Meeting.

1.25 Accounting for derivative instruments and hedging activities

Substantial sales and purchases of raw materials are made in the ordinary course of business. The majority of these transactions are in the form of contracts entered into with the intention of being valid until physical receipt or delivery of the raw material in accordance with the Group's expected sales, purchase or use requirements. Contracts for physical delivery are not covered by IFRS 9. All other net commodity contracts are measured at fair value, with gains and losses recognised in the income statement. Derivative instruments are recognised in the balance sheet on the contract date and are measured at fair value both initially and on subsequent revaluations.

The method of recognising gains or losses arising on revaluation depends on whether the derivative is designated as a hedging instrument and, if so, the nature of the item being hedged. The Group designates certain derivatives that hedge highly probable forecast transactions (cash flow hedges). At the inception of the transaction, the Group documents the relationship between the hedging instrument and the hedged item and its risk management goal and strategy for the hedge. The Group also documents its assessment, both at the inception of the hedge and on an ongoing basis, of whether the derivative instruments used in hedging transactions are effective in offsetting changes in cash balances related to the hedged items.

Derivative instruments are classified as long-term or short-term based on their maturity. In the case of derivatives related to electricity, which have cash flows that fall due in different years, the fair values of these derivatives are allocated between non-current and current assets or liabilities.

1.25.1 Cash flow hedging

The effective portion of changes in the fair value of a derivative instrument that is designated as a cash flow hedge and qualifies for hedge accounting is recognised in other comprehensive income. The gain or loss relating to the ineffective portion is recognised immediately in the income statement in the item Change in value on revaluation of financial assets/liabilities. Amounts accumulated in equity are reversed to the income statement in the periods when the hedged item affects profit or loss (when the forecast sale that is hedged takes place, for example). If a hedge of a forecast transaction subsequently results in the recognition of a non-financial asset (e.g. inventories) or liability, the gains and losses previously recognised in equity are transferred from equity and included in the initial cost of the asset or liability. When a hedge no longer qualifies for hedge accounting and cumulative gains or losses exist in equity, they remain in equity and are recognised in profit or loss when the forecast transaction is ultimately recognised in the income statement. When a forecast transaction is no longer expected to occur, the cumulative gain or loss recognised in equity is immediately transferred to the income statement.

1.25.2 Derivative instruments that do not qualify for hedge accounting

Certain derivative instruments that hedge future cash flows do not qualify for hedge accounting. Changes in the fair value of these derivative instruments are recognised in the income statement.

1.26 Parent Company accounting policies

The Parent Company applies RFR 2 Accounting for Legal Entities and the Annual Accounts Act. The Parent Company applies different accounting policies to the Group where indicated below.

1.26.1 Formats

The income statement and balance sheet follow the format of the Annual Accounts Act. The statement of changes in equity follows the Group's format but includes the columns specified in the Annual Accounts Act. The formats for the Parent Company result in a difference in presentation, compared to the consolidated financial statements, mainly for equity items.

1.26.2 Participations in subsidiaries

Participations in subsidiaries are recorded at cost less any impairments. The acquisition cost includes acquisition-related costs and any additional purchase consideration. A calculation of the recoverable amount is made when there is an indication that the value of investments in subsidiaries has decreased. If this is less than the carrying amount, an impairment loss is recognised. Impairment losses are recognised in the item "Result from participations in Group companies".

1.26.3 Group contributions

Contributions both made and received by the Group are recognised as a provision in the income statement.

1.26.4 Deferred income tax

Amounts allocated to untaxed reserves represent taxable temporary differences. However, in a legal entity the deferred tax liability on untaxed reserves is recognised as part of the untaxed reserves due to the link between accounting and taxation. Also, the year-end disposals in the income statement are reported including deferred tax.

1.26.5 IFRS 9

The Parent Company applies the exemptions under RFR 2 and does not measure financial instruments according to IFRS 9, instead applying a cost-based method according to the Annual Accounts Act. This means that financial fixed assets are valued at cost less any impairment and current financial assets at the lower of cost or market. In calculating the net realisable value of receivables recognised as current assets, the principles for impairment testing and loss allowance as set out in IFRS 9 are applied: see Group policies. In assessing and calculating impairment for financial assets classified as non-current assets, the impairment testing and loss allowance principles in IFRS 9 are applied wherever possible. Financial liabilities are measured at amortised cost using the effective interest method. Policies for the recognition and derecognition of financial instruments correspond to those applied to the Group and described above.

NOTE 2 Significant accounting estimates and judgements for accounting purposes

The preparation of consolidated financial statements in conformity with IFRS requires management to make estimates and judgements that affect the reported amounts of assets and liabilities, the disclosure of contingent assets and liabilities, and the reported amounts of revenues and expenses during the reporting period to which the consolidated financial statements relate. Estimates and judgements are continually evaluated and are based on historical experience and other factors, including expected future events that are believed to be reasonable under current conditions. Actual results and timing may differ from these estimates. The following are areas where management's estimates and judgements are critical to the reported results and financial position.

2.1 Deferred tax and current tax

Stockholm Exergi has deferred tax assets and liabilities that are expected to be realised in the income statement over longer periods of time in the future. In calculating deferred tax, the Group is required to make certain assumptions and estimates about the future tax consequences of temporary differences between the tax bases of assets and liabilities and their carrying amounts for financial reporting purposes.

See notes 13, 23 and 38.

NOTE 3 Financial risk management

The purpose of risk management, as well as its principles and framework, is defined by the Board of Directors in the annually revised risk policy. See also the Information on risks and uncertainties section of the Directors' Report.

3.1 Market risks related to movements

Market risks related to movements refer to the negative effects of price or volume changes for the core products of heating and cooling, as well as electricity, fuels and environmental values. Only a few of these risk drivers can be managed with financial instruments. Risk management is therefore largely achieved by exploiting the production flexibility of the generation plants, physical supply contracts and fuel storage. The remaining exposure to fuel price risks is mitigated by fixed price purchases covering forecast consumption levels. Fixed-price purchases are made either through physical deliveries or in the form of financial hedges. The Group's activities fall under the EU Emissions Trading System. The Group manages its exposure to changes in CO_2 futures prices and by ensuring that the cost of emission allowances is taken into account during production planning. Most of these CO_2 futures are proprietary contracts, valued at cost, and some are treated as derivatives in the accounts in certain cases.

Risk analyses are carried out on an ongoing basis to quantify market risks, taking into account the interdependence of these risks. Stress tests are used to assess the impact of extreme price changes on the Group's results. Risk-taking is limited by risk mandates approved by the Board and delegated to the CEO. The Group's activities also expose it to a number of financial risks. These include liquidity and financing risk, interest rate risk, currency risk and credit risk. Risks are monitored and reported to the Board on a monthly basis. The Group's use of financial instruments for risk management purposes is limited by the risk policy to hedging exposures. Futures, swaps and options are permitted instruments.

3.1.1 Sensitivity arising from financial instruments to market risks related to movements

Sensitivity analyses show the sensitivity arising from financial derivatives as defined in IFRS 9. These derivatives are used as hedges. The sensitivity is calculated on the position at 31 December 2022 (31 December 2021). All outstanding 2022 contracts qualify for hedge accounting, and so price increases will have no impact on the profit before tax in the table below. Positions are actively managed within daily operations. The sensitivity analysis only covers market risks arising from derivatives, which means that the underlying physical purchases and sales of electricity are not included. The sensitivity analysis is calculated assuming that future electricity prices on NASDAQ Commodities and ICE would change as follows.

Sensitivity under IFRS 7

Sensitivity analysis, SEK million	Effect	2022	2021
+/- EUR 1 change in electricity forward prices – Impact on profit before tax	-/+	0.0	0.0
+/- EUR 1 change in electricity forward prices – Impact on equity	-/+	0.6	13.7

3.1.2 Electricity derivatives

The tables below show the Group's electricity derivatives used to hedge the cash flows of electricity purchases and generation. These derivatives are classified as a hedging instrument in a cash flow hedge in accordance with IFRS 9. The hedged flows of electricity are expected to occur with a high probability on an ongoing basis during the hedged period, and the values recognised in the hedging reserve will be recognised in the income statement as the corresponding flows occur. The table below shows the respective derivatives, in total and by time period.

See also note 1: Accounting policies, fair value measurement and note 6: Change in fair value of derivative instruments and the underlying items in the income statement for the effects in the income statement when the primary derivative is not designated as a hedge in the financial statements.

Electricity derivatives by instrument, classification and maturity

	Volume			Fair value, SEK million		
	Less than 1 year	1 to 5 years	Total	Positive	Negative	Net
Derivatives 2022						
Electricity – Sales swaps (GWh)	508	88	595	167	279	-112
Electricity – Purchasing swaps (GWh)	632	474	1,106	705	60	645
Electricity – EPAD Sales CFD (GWh)	129	0	129	0	14	-14
Electricity – EPAD Purchase CFD (GWh)	175	0	175	16	0	16
Total	**1,444**	**562**	**2,006**	**889**	**353**	**535**
Derivatives 2021						
Electricity – Sales swaps (GWh)	708	81	789	17	183	-165
Electricity – Purchasing swaps (GWh)	855	912	1,767	272	20	252
Electricity – EPAD Sales CFD (GWh)	35	0	35	1	4	-4
Electricity – EPAD Purchase CFD (GWh)	219	175	394	52	0	52
Total	**1,817**	**1,168**	**2,985**	**343**	**207**	**135**
Derivatives classification 2022						
Electricity derivatives meeting hedge accounting requirements (GWh)	1,444	562	2,006	889	353	535
Total	**1,444**	**562**	**2,006**	**889**	**353**	**535**
Derivatives classification 2022						
Electricity derivatives – long-term				223	3	220
Electricity derivatives – short-term				665	350	316
Total				**889**	**353**	**535**
Derivatives classification 2021						
Electricity derivatives meeting hedge accounting requirements (GWh)	1,817	1,168	2,985	344	208	136
Total	**1,817**	**1,168**	**2,985**	**344**	**208**	**136**
Derivatives classification 2021						
Electricity derivatives – long-term				62	1	61
Electricity derivatives – short-term				281	206	75
Total				**343**	**207**	**135**

3.1.3 Emission derivatives

Emission rights accounted for as derivative instruments.

	2022		2021	
	Volume	Fair value net, SEK million	Volume	Fair value net, SEK million
Emission rights accounted for as derivative instruments – Sold (ktonCO2)	0	0	0	0
Emission rights accounted for as derivative instruments – Purchased (ktonCO2)	0	0	25	14

3.2 Financial risks

3.2.1 Liquidity and financing risk

The Group's activities are capital-intensive and require long-term and flexible financing. The financing consists of a mix of long-term SEK bonds under an MTN programme and other loans, mainly from the EIB and NIB. Seasonal variations in working capital have been financed in 2022 by borrowing on the Swedish commercial paper market. Liquidity and financing risk refers to the risk that Stockholm Exergi may not have access to cash and/or loan financing to meet investment needs, loan maturities or other financial commitments. The funding strategy is based on minimising liquidity and financing risk by maintaining a consistent loan maturity structure over time and having cash and/or committed loan commitments available at all times to meet all financial commitments. The following mandates applied for the management and monitoring of these risks at the balance sheet date: i) the average capital commitment for loans shall at all times be at least 3 years; ii) the total loan arrears over a 12-month period may not exceed SEK 3,000 million; and iii) Stockholm Exergi shall at all times have access to cash and cash equivalents and committed loan commitments including unused overdraft facilities corresponding to the refinancing needs for the next twelve-month period.

The agreed credit facility in the form of a group account limit amounted to SEK 300 million, of which SEK 128 million had been drawn at the balance sheet date. In addition to the Group overdraft limit, the Group has agreed a revolving credit facility of SEK 3,000 million which was fully undrawn at the balance sheet date. The total liquidity reserve at year-end was SEK 3,129 million (3,099).

Maturity analysis of financial liabilities and derivative instruments

The amounts below are undiscounted expected cash flows (future interest payments and repayments) of interest-bearing liabilities (excluding lease liabilities) and currency derivatives.

	2022				2021			
SEK million	Less than 1 year	1 to 5 years	Over 5 years	Total	Less than 1 year	1 to 5 years	Over 5 years	Total
Interest-bearing liabilities	2,575	9,409	2,190	14,174	2,701	7,162	2,649	12,513
Accounts payable	988			988	814			814
Gross derivatives (liabilities)	1,900	478		2,378	603	654		1,257
Gross derivatives (receivables)	-1,932	-502		-2,434	-596	-649		-1,244
Net derivatives (liabilities)	37	129	54	220	9	5		14
Net derivatives (receivables)	-51	-172	-71	-294	-3	-3		-5
Total	**3,517**	**9,342**	**2,173**	**15,032**	**3,528**	**7,170**	**2,649**	**13,347**

See note 22 Interest-bearing liabilities for information on interest-bearing liabilities.

3.2.2 Interest rate risk

The Group's finance policy provides for limits on the interest rate risk allowed, i.e. how changes in interest rates may affect the Group's net interest payments. Interest rate risk is measured as the average duration of interest rate fixation and is allowed to remain within the 12 to 36-month range, as well as flow risk, i.e. the change in interest expenditure over the next 12-month period, given unchanged debt levels and a parallel shift in the yield curve of 1 percentage point. At the end of 2022, the maximum allowable flow risk was SEK 75 million. Strategies are evaluated within these mandates and developed to find the optimal balance between risk and cost of funding. To meet these requirements, the Group has entered into interest rate derivatives that swap the variable interest rate on part of the debt into a fixed interest rate. The interest flows on the swaps and on the liabilities are expected to occur simultaneously and thus affect the income statement at the same time. The dates are shown in the table "Currency derivatives and interest rate swaps by instrument and use" below.

At 31 December 2021, the average maturity of the debt portfolio was 20.4 months (25.0). Some 42 per cent (62) of the debt portfolio was at variable or fixed rates maturing within the next 12 months. The impact of a one per cent change in the interest rate on the current debt portfolio was SEK 60 million (60). The average interest rate on loans and derivatives at 31 December 2021 was 1.15 per cent (1.15).

3.2.3 Currency risk

Stockholm Exergi's currency risk arises from transaction exposure, i.e. when purchases are made in different currencies, which affects the result for the year. Transaction exposure is defined as already contracted transactions or items that are dependent on forecast foreign exchange and cash flows, and is divided into balance sheet exposure and cash flow exposure. Balance sheet exposure reflects currency-denominated liabilities or assets that are paid in a currency other than the entity's base currency. Cash flow exposure reflects future forecast or contracted foreign currency flows arising from business activities such as purchases or investments. Net translation differences arising from transaction exposures are recognised in financial income or expenses when they relate to financial items or trade receivables/payables recognised in items included in operating profit. Translation differences related to cash flow hedges that qualify for hedge accounting are recognised in other comprehensive income and included in equity.

The Group's policy is to hedge transaction exposures with an equivalent value exceeding SEK 3 million. These exposures arise mainly from fuel purchases and investments.

Balance sheet positions in foreign currencies may occur in connection with cash and bank balances, and balances in foreign currencies in bank accounts may not exceed the equivalent of SEK 30 million in aggregate for all accounts per currency so as to limit the currency risk in these positions.

Balance sheet positions in foreign currencies may occur in connection with cash and bank balances, and balances in foreign currencies in bank accounts may not exceed the equivalent of SEK 30 million in aggregate for all accounts per currency so as to limit the currency risk in these positions.

Group transaction exposure

	2022			2021		
SEK million	**Exposure**	**Hedges**	**Open**	**Exposure**	**Hedges**	**Open**
EUR	941	-941	0	881	-881	0
GBP	-31	30	-1	-139	139	0
USD	28	-28	0			
Total	**938**	**-939**	**-1**	**742**	**-742**	**0**

Currency hedges consist of currency derivative contracts that are matched against the underlying cash flows at maturity.

Currency derivatives and interest rate swaps by instrument and use

	Nominal amount, remaining maturity				Fair value		
SEK million	**Less than 1 year**	**1 to 5 years**	**Over 5 years**	**Total**	**Positive**	**Negative**	**Net**
Derivatives by instrument and use, 2022							
Foreign exchange forward contract	1,891	478		2,369	71	-12	60
Interest rate swaps	-	550	1,050	1,600	66	-	66
Total	**1,891**	**1,028**	**1,050**	**3,969**	**137**	**-12**	**126**
Of which							
- long-term					93	0	93
- short-term					44	-11	33
Derivatives by instrument and use, 2021							
Foreign exchange forward contract	599	654		1,252	17	-21	-5
Interest rate swaps	-	417		417	-	-9	-9
Total	**599**	**1,070**	**0**	**1,669**	**17**	**-30**	**-13**
Of which							
- long-term					13	-20	-7
- short-term					4	-10	-6

All currency derivatives and most interest rate derivatives meet the hedge accounting requirements.

3.2.4 Counterparty risks

The Group is exposed to credit risk in each contractual obligation with an external counterparty. The Group has measures in place to ensure that overall credit risks are kept at an acceptable level in relation to the size of the Group's business and the operating margins of the business. Credit risk management includes counterparty analysis, limit setting, credit exposure reporting and proposals for risk mitigation measures such as demands for collateral, etc.

The Group's sales, and hence its credit risks, are well diversified across a large number of customers. No one customer accounts for more than 3 per cent of revenue, and the top ten customers account for around 14 per cent of revenue. Credit losses have historically been very low, and credit validity is considered very good.

Credit quality of financial assets

At 31 December 2021, the Group has no interest-bearing receivables other than cash and cash equivalents and derivative instruments. Cash and cash equivalents on the balance sheet date amount to SEK 1 million (11), and derivative instruments recognised as assets amount to SEK 17 million (9), of which current SEK 4 million (8). See note 18 Trade and other receivables for trade receivables.

NOTE 4 Capital risk management

The Group strives to achieve a safe and efficient capital structure that supports its strategy. Maintaining a strong balance sheet and a flexible capital structure is a priority. The Group manages the capital structure based on net debt to EBITDA ratio with a target level of around 4. Net debt is calculated as interest-bearing liabilities minus cash and cash equivalents. EBITDA is calculated by adding back depreciation and amortisation to EBIT.

The Company has an established dividend policy to ensure that shareholders receive a fair dividend, taking into account the Company's interest in sound and long-term financing. Stockholm Exergi's goal is to pay a dividend of 40 to 80 per cent of net profit after tax, taking into account equity ratio, net debt to EBITDA ratio and creditworthiness.

Stockholm Exergi's credit rating is unchanged. Standard & Poor's rates the Company BBB+ in the long term and A-2 in the short term; the rating outlook is stable.

Net debt / EBITDA ratio

SEK million	**Note**	**2022**	**2021**
Interest-bearing liabilities	22	13,471	12,476
Minus: Cash and cash equivalents	19	1	1
Net debt		**13,469**	**12,475**
Operating profit/loss		1,412	1,424
Plus: Depreciation and impairment charges		1,539	1,495
EBITDA		**2,950**	**2,919**
Net debt / EBITDA		**4.6**	**4.3**

NOTE 5 Segment information

5.1 Stockholm Exergi

Stockholm Exergi's business activities are conducted within one essential segment, heating. Its main activity is to produce and supply district heating, district cooling and electricity to businesses and individuals. Internal reporting follows this classification.

5.2 Segment information

IFRS 8, Operating Segments, requires operating segments to be reported in a manner consistent with the internal reporting provided to the chief executive decision-maker. The chief executive decision-maker is the function responsible for allocating resources and assessing the performance of the operating segments. In the Group, this function has been identified as the CEO and the entire business is reported as a segment in the internal reporting, and therefore no segmentation is made in the financial statements.

5.3 Group-wide information

Group net sales by major product

SEK million	**2022**	**2021**
Heating	5,889	6,023
Electricity	1,457	908
Cooling	232	224
Other net sales	417	140
Total	**7,996**	**7,294**

No one customer accounts for more than 10 per cent of the Group's net sales. The Group's registered office is in Sweden, and all revenues are derived from customers in Sweden. All assets and employees are located in Sweden

Revenue is recognised when goods are delivered or services are rendered, i.e. when delivery commitments have been met and control of the goods or services included in the delivery commitment has passed to the customer. Only a marginal part of the revenue is recognised over time. Revenue is recognised at the price the Company expects to receive under the contract and is net of discounts, rebates and VAT.

Heating and cooling revenues arise from charges made directly to customers and generally consist of a fixed monthly charge and a variable charge based on the volume of heating and cooling supplied in the current period. All electricity-related revenues have been grouped together under the heading **Electricity**, i.e. also allocated Green Electricity certificates for renewable electricity production as well as revenues for electricity power and electricity readiness. Electricity revenues arise from net supplies of electricity to Nord Pool, which are made via Fortum at market prices. The valuation of Green Electricity certificates is based on a combination of the market value at the balance sheet date and the proceeds from the sale of Green Electricity certificates. **Other net sales** include the provision of services and the sale of fuels.

NOTE 6 Change in fair value of derivative instruments and the underlying items in the income statement

The changes in fair value in operating profit or loss presented below arise from derivative instruments that hedge future cash flows but do not qualify for hedge accounting under IFRS 9, as well as the ineffective portion of cash flow hedges.

A few of the interest rate hedging contracts no longer qualify for hedge accounting. Changes in the value of these contracts are recognised in net financial income.

SEK million	2022	2021
In the operating profit/loss		
Changes in fair value of derivative instruments that do not qualify for hedge accounting		
Derivatives and forward foreign exchange contracts		
The ineffective part of cash flow hedges		
Total effect on operating profit/loss	**0**	**0**
In net financial income		
Interest rate hedging contracts		
Total effect on profit before tax	**0**	**0**

NOTE 7 Other operating income

SEK million	2022	2021
Rental revenue	35	35
EU-grant for BECCS project	49	
Other items	55	52
Total	**140**	**87**

Revenue from activities outside the normal course of business is recognised as other income. This includes recurring items such as rental income and non-recurring items such as insurance claims. The EU has granted grants for the BECCS project, approximately MEUR 18. Part of the grant refers to compensation for incurred costs and is paid out according to agreed control stations and reported in the income statement under the heading, Other operating income

NOTE 8 Other external expenses

SEK million	2022	2021
Rented plants and property costs	-173	-162
Repairs and maintenance	-555	-540
Marketing, public relations and other selling expenses	-21	-22
IT and telecommunications costs	-99	-122
Other external services	-56	-54
Consultancy services	-289	-145
Other operating expenses	-125	-169
Total	**-1,319**	**-1,213**

Of the above, SEK -13 million (-11) was expensed for research and development during the year.

NOTE 9 Remuneration to auditors

SEK thousand	2022	2021
Deloitte AB		
Auditing services	-1,581	-1,158
Audit activities other than the audit assignment	-406	-350
Other services	-225	-182
Total	**-2,212**	**-1,690**

Audit assignments refer to the examination of the annual report and accounting records and the administration of the Board of Directors and the Chief Executive Officer, other tasks incumbent on the Company's auditor and advice or other assistance resulting from observations made during such examination or the performance of such other tasks.

The item Audit activities other than the audit assignment includes fees for the review of the sustainability report of SEK -406 thousand (-350). "Other services" relates to other assignments.

NOTE 10 Remuneration to employees

SEK million	2022	2021
Salaries	-488	-466
Pensions		
Defined contribution plans	-80	-873
Defined benefit plans (see note 25)	-5	1,022
Social security contributions	-172	-255
Total employee benefits	**-744**	**-572**
Other personnel-related costs	-23	-8
Total personnel costs	**-767**	**-581**

Salaries, other benefits and social security costs

	2022		2021	
SEK million	**Salaries and other benefits**	**Pension costs**	**Salaries and other benefits**	**Pension costs**
Board members, CEO and other senior executives	-22	-8	-21	-6
Other employees	-467	-77	-445	154
Group total	**-488**	**-84**	**-466**	**148**

	2022		2021	
Average number of employees	**Total**	**Of whom men**	**Total**	**Of whom men**
Sweden	735	80%	709	80%
Group total	**709**	**80%**	**732**	**79%**

	2022		2021	
Gender distribution in the Group	**Number at balance sheet date**	**Of whom men**	**Number at balance sheet date**	**Of whom men**
Board members	10	6	10	7
CEO and other senior executives	10	8	10	8
Group total	**20**	**14**	**20**	**16**

Remuneration of the CEO and other executives

At the balance sheet date, the Group's management team consisted of ten members, including the Chief Executive Officer. The following table shows the total remuneration of the Chief Executive Officer and the Group management team, taking into account changes in the management team during the year. The CEO is employed by Stockholm Exergi AB and has received remuneration from that company as shown in the tables below. Other senior executives and Board members have received the following remuneration:

Compensation and other benefits, 2022

SEK thousand	Benefits	Pension cost [1]	Total compensation and benefits
Jonas Abrahamsson (Chair of the Board)	60		**60**
Alexandra Grimfors (Vice Chair)	156		**156**
Fredrik Adolfsson (Board member)	48		**48**
Charlotta Sandving Brändström (Board member), elected in 2022	24		**24**
Petra Engman (Board member)	48		**48**
Irina Frolova (Board member)			
Carlo Maddalena (Board member)			
Johanna Strömsten (Board member), resigned in 2022			
Rickard Hjort Warlenius (Board member)	48		**48**
Anders Egelrud (Chief Executive Officer)	5,114	1,907	**7,021**
Other senior executives (9 positions) [2]	16,301	5,667	**21,968**
Total	**21,799**	**7,575**	**29,374**

Compensation and other benefits, 2021

SEK thousand	Benefits	Pension cost [1]	Total compensation and benefits
Alexandra Grimfors (Chair of the Board)	154		**154**
Jonas Abrahamsson (Vice Chair from September), elected in 2021			
Ola Hökstrand (Vice Chair from September), resigned in 2021			
Fredrik Adolfsson (Board member)	47		**47**
Petra Engman (Board member)	47		**47**
Irina Frolova (Board member), elected in 2021			
Toni Kekkinen (Board member), resigned in 2021			
Carlo Maddalena (Board member), elected in 2021			
Peter Strannegård (Board member), resigned in 2021			
Johanna Strömsten (Board member), elected in 2021			
Andreas Tiedtke (Board member), resigned in 2021			
Rickard Hjort Warlenius (Board member)	47		**47**
Anders Egelrud (Chief Executive Officer)	4,312	1,485	**5,798**
Other senior executives (8 positions) [2]	16,144	4,506	**20,650**
Total	**20,753**	**5,991**	**26,744**

[1] Pension cost refers to the cost that affected earnings for the year.
[2] Senior executives are defined as the executive management team.

Bonus
The Group's bonus system covers all employees except the executive management team and is calculated on the basis of attainment of common financial performance targets for the Stockholm Exergi Group.

This system is divided into two bonus classes, where the maximum bonus can be 10 to 20% of an employee's annual salary. The maximum bonus for nominated key employees is 20% of the annual salary, and for other employees 10% of the annual salary. If the target is met exactly, 10% and 5% of the annual salary will be paid as a bonus, corresponding to exactly half of the maximum bonus mentioned above.

Severance pay

The notice period for the CEO is 6 months on the part of the CEO and 12 months on the part of the Company, severance pay being payable for 6 months.

There is no severance pay for other senior executives beyond the agreed notice period. A notice period of 6 months applies for other senior executives.

Pension plans

Everyone in the Group is covered by collective agreements. This means ITP1 (defined contribution) and ITP2 (defined benefit) plans.

The Group has two pension plans for alternative ITP: the Birka Plan (defined benefit) and Over 10 (defined contribution scale).

The Birka defined benefit plan is insured by Skandia. There are two insurers for Over 10: Skandia and AMF. Both pension plans are closed to new subscriptions.

The retirement age for the CEO is 65. The CEO is covered by an alternative ITP plan, the Birka Plan. In addition to the Birka Plan, the CEO is covered by a defined contribution pension promise. Premiums are equal to 20% of the pensionable salary in the range of 30 to 50 income base amounts.

NOTE 11 Depreciation and amortisation of tangible and intangible fixed assets

SEK million	2022	2021
Depreciation of tangible fixed assets		
Buildings and ground installations	-229	-222
Machinery, other technical installations, furniture and tools	-1,238	-1,206
Right-of-use assets	-28	-33
Amortisation of intangible assets	-44	-34
Total depreciation and amortisation of tangible and intangible fixed assets	**-1,539**	**-1,495**

NOTE 12 Financial income and expenses

SEK million	2022	2021
Financial expenses		
Interest expenses on loans	-192	-133
Interest expenses on lease debt	-17	-16
Capitalised loan expenses	8	6
Interest expenses on defined benefit pensions	0	-5
Other interest expenses	-17	-12
Other	-10	-12
Total	**-228**	**-171**
Financial income		
Other interest income	2	1
Total	**2**	**1**
Financial income and expenses – net	**-226**	**-170**

NOTE 13 Income tax

SEK million	2022	2021
Current tax on profit for the year	-262	-182
Temporary tax reduction	40	
Adjustments to current tax relating to previous years	0	2
Total current tax	**-222**	**-180**
Deferred taxes		
Accrual and reversal of deferred taxes	-15	-104
Effect of change in future tax rates	0	0
Total deferred tax	**-15**	**-104**
Total income tax	**-237**	**-284**

Income tax rates

The table below explains the difference between the theoretical assumed tax rate in Sweden and the tax rate in the income statement

SEK million	2022	%	2021	%
Profit/loss before tax	1,186		1,254	
Tax calculated at the applicable tax rate for the Parent Company, 20.6%	-244	-20.6%	-258	-20.6%
Non-deductible expenses	-11	-0.9%	-77	-6.1%
Non-taxable income	17	1.5%	10	0.8%
Revaluation of deferred tax – change in the Swedish tax rate	0	0.0%	0	0.0%
Deferred tax in 2021 due to temporary tax reduction in 2022	0	0.0%	40	3.2%
Adjustment relating to previous years	0	0.0%	2	0.2%
Other	0	0.0%	0	0.0%
Tax cost	**-237**	**-20.0%**	**-284**	**-22.6%**

All companies within the Group operate in Sweden, and therefore the tax rate applicable to the Parent Company also applies to all Group companies and was 20.6 per cent (20.6). The effective tax rate was 20.0 per cent (22.6).

NOTE 14 Financial instruments by category

The financial assets and liabilities shown in the tables below are broken down by the categories prescribed by IFRS 9. The categories are further subdivided into classes which are the basis for valuation of the asset or liability in question.

Financial assets by category, 2022

SEK million	Amortised cost	Fair value through profit or loss: Derivatives, non-hedge accounting	Fair value through other comprehensive income: Derivatives, hedge accounting	Total financial assets
Financial assets, non-current				
Derivative instruments			338	38
Financial assets, short-term				
Derivative instruments		1	395	396
Accounts receivable	1,738			1,738
Other short-term receivables	1,292			1,292
Cash and cash equivalents	1			1
Total	**3,031**	**1**	**733**	**3,765**

Financial assets by category, 2021

SEK million	Amortised cost	Fair value through profit or loss: Derivatives, non-hedge accounting	Fair value through other comprehensive income: Derivatives, hedge accounting	Total financial assets
Financial assets, non-current				
Derivative instruments			74	74
Financial assets, short-term				
Derivative instruments			87	87
Accounts receivable	1,640			1,640
Other short-term receivables	816			816
Cash and cash equivalents	1			1
Total	**2,458**	**0**	**161**	**2,620**

Financial liabilities by category, 2022

SEK million	Financial liabilities at fair value through profit or loss: Holdings for trading	Financial liabilities at fair value through profit or loss: Derivatives in hedge accounting	Other financial liabilities: Amortised cost	Total financial liabilities
Non-current liabilities				
Interest-bearing liabilities			11,069	11,069
Derivative instruments				
Current liabilities				
Interest-bearing liabilities			2,402	2,402
Derivative instruments	1	11		13
Accounts payable			988	988
Total	**1**	**12**	**14,459**	**14,472**

Financial liabilities by category, 2021

SEK million	Financial liabilities at fair value through profit or loss: Holdings for trading	Financial liabilities at fair value through profit or loss: Derivatives in hedge accounting	Other financial liabilities: Amortised cost	Total financial liabilities
Non-current liabilities				
Interest-bearing liabilities			9,680	9,680
Derivative instruments		12		12
Current liabilities				
Interest-bearing liabilities			2,796	2,796
Derivative instruments		19		19
Accounts payable			814	814
Total	**31**	**13,290**		**13,321**

Financial assets and liabilities according to the fair value hierarchy

The table below shows financial instruments valued at fair value and items for which fair value disclosures are required, based on their classification in the fair value hierarchy.
The different levels are defined as follows:

Level 1: Refers to quoted prices (unadjusted) in active markets for identical assets or liabilities. No assets or liabilities related to level 1 are held by Stockholm Exergi Holding AB (publ).

Level 2: Means that the fair value of financial instruments is calculated using a valuation model whose inputs consist of observable market data. The fair value of all instruments is calculated by discounting the contractual cash flows and prices at the balance sheet date in the respective market. Forward rates for the corresponding maturities have been used for currency futures, forward rates on NASDAQ-OMX for electricity futures, forward rates on ICE for oil and carbon derivatives, and yield curves for interest rate derivatives. Items denominated in foreign currencies have been translated at the exchange rates prevailing at the balance sheet date and, for items with variable interest rates, it has been assumed that the interest rates prevailing at the balance sheet date will remain unchanged.

The fair value of financial liabilities is calculated by discounting the future contractual cash flows at the interest rate, including the credit margin, that would be available to the Company at the balance sheet date.

Level 3: Refers to data for the asset or liability that is not based on observable market data (i.e. unobservable data). No assets or liabilities related to level 3 are held by Stockholm Exergi Holding AB.

Financial assets

	Level 2	
SEK million	**2022**	**2021**
In fixed assets		
Derivative instruments		
Hedge accounting	338	74
No hedge accounting		
In current assets		
Derivative instruments		
Hedge accounting	395	87
No hedge accounting	1	
Total	**734**	**161**

Financial liabilities

	Level 2	
SEK million	**2022**	**2021**
In long-term liabilities		
Interest-bearing liabilities	11,069	9,680
Derivative instruments		
Hedge accounting		20
In current liabilities		
Interest-bearing liabilities	2,402	2,796
Derivative instruments		
Hedge accounting	11	19
Total	**13,483**	**12,515**

NOTE 15 Intangible assets

	Capitalised expenditure on software		Emission rights and goodwill		Work in progress of intangible assets		Total	
SEK million	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**	**2022**	**2021**
Cost at 1 January	364	323	103	19	0	0	467	342
Investments	6						6	
Disposals and retirements								
Change of emission rights			66	84			66	84
Reclassifications	49	41					49	41
Cost at 31 December	**419**	**364**	**169**	**103**	**0**	**0**	**588**	**467**
Accumulated depreciation at 1 January	**-283**	**-249**	**0**	**0**	**0**	**0**	**-283**	**-250**
Disposals and retirements								
Depreciation for the year	-44	-34					-44	-34
Reclassifications			0	0				
Accumulated depreciation at 31 December	**-327**	**-283**	**0**	**0**	**0**	**0**	**-327**	**-283**
Carrying amount at 31 December	**92**	**80**	**169**	**103**	**0**	**0**	**261**	**183**

NOTE 16 Tangible fixed assets

Tangible fixed assets, 2022

SEK million	**Land and tunnels**	**Buildings, plants and ground installations**	**Machinery and equipment**	**Construction in progress and advances**	**Right-of-use assets**	**Total**
Cost at 1 January 2022	**2,838**	**7,940**	**39,269**	**1,853**	**593**	**52,494**
Investments			4	1,611		1,615
Net change in right-of-use assets					14	14
Disposals and retirements			-189		-24	-213
Transferred from construction in progress	4	56	888	-996		-49
Reclassifications						
Cost at 31 December 2022	**2,842**	**7,996**	**39,972**	**2,467**	**583**	**53,860**
Accumulated depreciation at 1 January 2022	**0**	**-3,570**	**-22,579**	**0**	**-90**	**-26,240**
Adjustment of opening balance						
Transfers		10	-10			0
Disposals and retirements			189		24	213
Depreciation and amortisation for the year		-229	-1,238		-28	-1,495
Reclassifications						0
Accumulated depreciation at 31 December 2022	**0**	**-3,788**	**-23,639**	**0**	**-94**	**-27,521**
Carrying amount at 31 December 2022	**2,842**	**4,207**	**16,333**	**2,467**	**488**	**26,339**

Tangible fixed assets, 2021

SEK million	**Land and tunnels**	**Buildings, plants and ground installations**	**Machinery and equipment**	**Construction in progress and advances**	**Right-of-use assets**	**Total**
Cost at 1 January 2021	**2,838**	**7,844**	**37,674**	**2,464**	**598**	**51,418**
Adjustment of opening balance			2			2
Investments		1	8	1,402		1,411
Net change in right-of-use assets					4	4
Disposals and retirements		-101	-173	-18	-8	-300
Transferred from construction in progress		196	1,759	-1,955		0
Reclassifications						0
Cost at 31 December 2021	**2,838**	**7,940**	**39,269**	**1,853**	**593**	**52,494**
Accumulated depreciation at 1 January 2021	**0**	**-3,351**	**-21,377**	**0**	**-66**	**-24,794**
Adjustment of opening balance			-1			-1
Transfers		0	0			0
Disposals and retirements		2	6		8	17
Depreciation and amortisation for the year		-222	-1,207		-33	-1,461
Reclassifications						0
Accumulated depreciation at 31 December 2021	**0**	**-3,570**	**-22,579**	**0**	**-90**	**-26,240**
Carrying amount at 31 December 2021	**2,838**	**4,370**	**16,690**	**1,853**	**503**	**26,254**

16.1 Capitalised loan costs

	Capitalised assets and construction in progress	
SEK million	**2022**	**2021**
1 January	239	250
Increases	8	2
Depreciation	-12	-12
31 December	**235**	**239**

Borrowing costs of an additional SEK 8 million were capitalised in 2022 (2) for ongoing major construction projects in Stockholm. The weighted interest rate for capitalisation was 1.65 per cent (1.25).

16.2 Investments

Investments include both intangible assets and tangible fixed assets. Investments in 2022 and 2021 consisted mainly of investments in renewable electricity and heat. Maintenance investments in 2022 amounted to SEK 525 million (411). Investments due to regulatory requirements amounted to SEK 161 million (113). Investments that increased productivity amounted to SEK 211 million (275). Growth investments amounted to SEK 724 million (612) and acquisition-investments amounted to SEK 0 million (0). There were no significant investments in intangible assets in 2022 or 2021.

Major ongoing projects in 2022 included the electronics business (KVV1, G3 and G5). Other major projects are the bioconversion of the cisterns and land acquisition in Högdalen. Total investments in 2021 in renewable generation, including the distribution network and waste sorting plant, amounted to SEK 1,230 million (1,411), which gives a share of total investments of 76 per cent (86).

16.3 Assets previously leased under finance leases

SEK million	**2022**	**2021**
Cost	-10	-10
Accumulated depreciation at 1 January	-2	-6
Depreciation for the year	4	4
Total	**-8**	**-13**

NOTE 17 Stocks

SEK million	**2022**	**2021**
Oil	348	105
Biofuels	775	213
Woodchips and pellets	351	157
Coal	11	18
Other fuel	0	0
Materials and spare parts	266	230
Total	**1,751**	**724**

No provision has been made for bad debts in 2022, and the provisions from previous years have been reversed during the year.

NOTE 18 Trade and other receivables

SEK million	**2022**	**2021**
Accounts receivable	1,738	1,640
Accrued income electricity	847	354
Other prepaid expenses and accrued income	433	802
Other short-term receivables	12	14
Elecrtrical certificate	0	1
Total	**3,030**	**2,457**

Ageing analysis of trade receivables

	2022		2021	
SEK million	**Net trade receiv-ables**	**Expected credit loss (ECL)**	**Net trade receiv-ables**	**Expected credit loss (ECL)**
Not due	1,736	4	1,636	2
Past due 1–90 days	0	0	5	0
Past due 91–180 days	1	0	0	0
Past due more than 181 days	1	0	0	0
Total	**1,738**	**4**	**1,640**	**3**

The fair value of trade and other receivables, excluding interim receivables, is deemed to be in line with the above carrying amount.

18.1 Trade receivables

Impairment of invoiced trade receivables is performed using an expected credit loss (ECL) model according to IFRS9. The amount of impairment losses recognised in the income statement was SEK -4 million (-3), and the reserve amount has increased by SEK 1 million.

The Group had not received any bank guarantees as collateral for trade receivables in 2022 (0).

See note 3.2.4 for further information on credit risk management.

NOTE 19 Cash and cash equivalents

SEK million	**2022**	**2021**
Cash and bank balances	1	1
Total	**1**	**1**

The Group has a Group account system through Nordea. An overdraft facility of SEK 300 million has been added to the Group account. Credit balances at the balance sheet date are included in Cash and cash equivalents, while drawdowns are included in Other current interest-bearing liabilities. The utilisation of the credit facility at the balance sheet date was SEK 128 million (98). In addition to the Group account in Nordea, there are a few independent bank accounts in both Nordea and other commercial banks.

NOTE 20 Share capital

	2022		2021	
SEK million	**Number of shares**	**Share capital**	**Number of shares**	**Share capital**
Registered shares at 1 January	18,020	2	18,020	2
Registered shares at 31 December	18,020	2	18,020	2
The shares consist of:				
Issued ordinary shares, voting value 1	18,020		18,020	

Stockholms Stadshus AB and Ankhiale Bidco AB each hold exactly half of the share capital and voting rights in the Company.

NOTE 21 Non-controlling interests

The Brista 2 companies are co-owned with Sollentuna Energi och Miljö AB, which has a 15% stake in both companies. The table shows the minority's share of equity at the balance sheet date.

SEK million		2022	2021
Brista 2 KB	Sweden	16	8
Brista 2 AB	Sweden	0	0
Total non-controlling interests		**16**	**8**

NOTE 22 Interest-bearing liabilities

SEK million	2022	2021
Bond loans	8,290	7,193
Loans from credit institutions	2,156	1,860
Lease liabilities	497	500
Other long-term interest-bearing liabilities	126	126
Total long-term interest-bearing liabilities	**11,069**	**9,680**
Bond loans	400	1,499
Current portion of loans from credit institutions	699	628
Current portion of other long-term interest-bearing liabilities	28	45
Leasing liabilities	17	22
Other current interest-bearing liabilities	1,258	602
Total current interest-bearing liabilities	**2,402**	**2,796**
Total interest-bearing liabilities	**13,470**	**12,476**

During April, refinancing was carried out on the capital market through green bonds issued for a total of SEK 1,500 million in three diferent tranches. Maturing bond loans of SEK 1,500 million were repaid at the same time. During the fall a new long-term bank loan has been taken out SEK 1,000 million as well as throughout the year bank and other long-term loans have also been amortized with SEK 644 million and the short-term fluctations in working capital have been financed with overdrafts, money market loans and certificate loans.

At 31 December 2021, the average maturity of the debt portfolio was 34.9 months (38.2). Approximately 62 per cent (62) of the debt portfolio was at variable or fixed interest rates maturing within the next 12 months. The average interest rate on loans and interest rate derivatives at 31 December 2022 was 2.55 per cent (1.09). External undrawn credit facilities amounted to SEK 3,128 million at year-end, consisting of one overdraft facility and three credit facilities.

22.1 Interest-bearing liabilities excluding leasing liabilities

			Interest rate renegotiation					
SEK million	Effective interest rate, %	Carrying value, 2022	Less than 1 year	1 to 5 years	Over 5 years	Actual value, 2022	Carrying value, 2021	Actual value, 2021
Bond loans	2.3	8,290	3,595	4,096	599	7,810	7,193	7,225
Loans from credit institutions	3.1	2,156	2,156			2,913	1,860	1,904
Non-current interest-bearing liabilities	2.1	111		111		110	126	131
Total long-term interest-bearing liabilities	**2.5**	**10,557**	**5,751**	**4,207**	**599**	**10,833**	**9,180**	**9,259**
Short-term interest-bearing liabilities	2.0	2,400	2,400	0	0	1,703	2,774	2,814
Total current interest-bearing liabilities	**2.0**	**2,400**	**2,400**			**1,703**	**2,774**	**2,814**
Total interest-bearing liabilities [1]	**2.0**	**12,956**	**8,151**	**4,207**	**599**	**12,536**	**11,954**	**12,073**

[1] The average interest rate on loans and interest rate derivatives at 31 December 2022 was 2,55 per cent (1.09).

The interest-bearing liabilities excluding lease liabilities increased in 2022 to SEK 12,956 million (11,954). The amount of short-term financing decreased and amounted to SEK 2,400 million (2,774) at year-end.

Interest-bearing liabilities (excluding leases) falling due:

SEK million	2022
2023	2,228
2024	2,423
2025	2,398
2026	2,216
2027	1,597
2028 or later	2,095
Total	**12,956**

See note 3 Financial risk management for more information.

22.2 Supplementary information for Cash flow from financing activities

Liabilities included in financing activities			Changes not affecting cash flow		
SEK million	Opening balance, 1 January 2022	Changes affecting cash flow	Accrual of borrowing costs	Reclassifications	Closing balance, 31 December 2022
Bond loans	7,193	1,497	3	-403	8,290
Loans from credit institutions	1,860	998	2	-705	2,156
Lease liabilities	500			-4	497
Other long-term interest-bearing liabilities	126			-1	126
Total long-term interest-bearing liabilities	**9,681**	**2,495**	**5**	**-1,112**	**11,069**
Bond loans	1,499	-1,500	-2	403	400
Current portion of loans from credit institutions	628	-634		705	699
Current portion of other long-term interest-bearing liabilities	45	-17		1	28
Lease liabilities	22	-18		13	17
Other current interest-bearing liabilities	602	656			1,258
Total current interest-bearing liabilities	**2,796**	**-1,513**	**-2**	**1,121**	**2,402**
Total interest-bearing liabilities	**12,476**	**981**	**4**	**9**	**13,470**

Liabilities included in financing activities			Changes not affecting cash flow		
SEK million	Opening balance, 1 January 2021	Changes affecting cash flow	Accrual of borrowing costs	Reclassifications	Closing balance, 31 December 2021
Bond loans	7,492	1,198	2	-1,500	7,193
Loans from credit institutions	2,485			-624	1,860
Lease liabilities	518			-18	500
Other long-term interest-bearing liabilities	135			-9	126
Total long-term interest-bearing liabilities	**10,632**	**1,198**	**2**	**-2,151**	**9,680**
Bond loans	1,000	-1,000		1,500	1,499
Current portion of loans from credit institutions	557	-564		624	628
Current portion of other long-term interest-bearing liabilities	49	-15		11	45
Lease liabilities	26	-22		18	22
Other current interest-bearing liabilities	100	502			602
Total current interest-bearing liabilities	**1,732**	**-1,089**	**0**	**2,153**	**2,796**
Total interest-bearing liabilities	**12,363**	**109**	**2**	**2**	**12,476**

NOTE 23 Deferred tax

Changes in deferred tax assets and liabilities in 2022

SEK million	1 Jan 2022	Recognised in the income statement	Recognised in other compre-hensive income	Reclassification	31 Dec 2022
Deferred tax assets					
Derivative instruments	0				0
Pension obligations	7	0		-7	0
Temporary tax reduction	40	-40			0
Other	3	-1			2
Total deferred tax assets	**50**	**-41**	**0**	**-7**	**2**
Offset against deferred tax liabilities	0				0
Net deferred tax assets	**50**	**-41**	**0**	**-7**	**2**
Deferred tax liabilities					
Buildings and land	71	-1			69
Machinery and equipment	3,154	-7			3,146
Derivative instruments	26		123		149
Pension obligations	0		1	7	9
Other	0	-16			-16
Total deferred tax liabilities	**3,251**	**-25**	**124**	**7**	**3,357**
Offset against deferred tax asset	-10	41	0	7	-2
Net deferred tax liabilities	**3,201**	**16**	**124**	**14**	**3,355**

Changes in deferred tax assets and liabilities in 2021

SEK million	1 Jan 2021	Recognised in the income statement	Recognised in other compre-hensive income	Reclassification	31 Dec 2021
Deferred tax assets					
Derivative instruments	0	0			0
Pension obligations	163	-125	-31		7
Temporary tax reduction on investments		40			40
Other	3	-1			3
Total deferred tax assets	**166**	**-86**	**-31**	**0**	**50**
Offset against deferred tax liabilities	0				0
Net deferred tax assets	**166**	**-86**	**-31**	**0**	**50**
Deferred tax liabilities					
Buildings and land	73	-2			71
Machinery and equipment	3,122	31			3,153
Derivative instruments	-13	0	40	-1	26
Other	11	-12		1	0
Total deferred tax liabilities	**3,193**	**18**	**40**	**0**	**3,250**
Offset against deferred tax asset	-166	86	31		-50
Net deferred tax liabilities	**3,027**	**104**	**70**	**0**	**3,201**

NOTE 24 Other provisions

	2022			2021		
SEK million	**Environmental debt**	**Other**	**Total**	**Environmental debt**	**Other**	**Total**
1 January	**46**	**9**	**55**	**54**	**6**	**61**
Provisions for the period		0	0		3	3
Used during the year	-5	-6	-11	-9		-9
31 December	**41**	**3**	**44**	**46**	**9**	**55**
Of which short-term provisions		3	3		6	6
Of which long-term provisions	41	0	41	46	3	49

Environmental debt includes the restoration of the environment. Other refers to the demolition of buildings and structures on contaminated land. The bulk of the provision is expected to be used within ten years.

NOTE 25 Pension obligations

All employees are covered by collective bargaining agreements, and the Company's pension obligations include both defined contribution and defined benefit pension plans. Employees born in 1978 or earlier are covered by ITP 2, which is a defined benefit plan, while employees born in 1979 or later are covered by ITP 1, which is a defined contribution plan.

In addition to ITP 2, the Group has two alternative ITP pension plans. The Birka plan, which is a defined benefit plan, and the "Over 10" plan, which is a defined contribution plan. The Birka defined benefit plan is insured by Skandia. The "Over 10" plan has two insurers, Skandia and AMF. Both the Birka plan and the "Over 10" plan are closed for new subscriptions.

For Group employees, the ITP 2 plan's defined benefit pension obligations for family pensions are secured through an insurance policy with Alecta. According to a statement from the Swedish Financial Reporting Board UFR 10 Classification of ITP plans funded by insurance in Alecta, this is a multi-employer defined benefit plan. However, the family pension under ITP2, which is secured by insurance in Alecta, is accounted for as a defined contribution plan for the Group in accordance with IAS 19.

The premium for the defined benefit old-age and family pension is calculated on an individual basis and depends on factors such as salary, previously earned pension and expected remaining period of service. Expected premiums for the next reporting period for ITP 2 insurance from Alecta amount to SEK 3 million.

The collective consolidation level is the market value of Alecta's assets as a percentage of insurance liabilities calculated according to Alecta's actuarial methods and assumptions. The collective consolidation level should normally be allowed to vary between 125 and 155 per cent. If Alecta's collective consolidation level falls below 125 per cent or exceeds 155 per cent, action must be taken to create the conditions for the consolidation level to return to the normal range. In the event of low consolidation, one measure could be to increase the agreed price for new subscriptions and extensions of existing benefits. In the event of high consolidation, one measure could be to introduce premium reductions. At the end of 2022, Alecta's surplus in terms of the collective consolidation ratio was172 per cent (172).

A total of 16 (16) of the Group's employees are covered by defined benefit plans that provide pension benefits. Pensions or similar benefits have been paid to a total of 854 (854) individuals. Amounts recognised in the income statement in respect of defined benefit pensions under IAS 19 amounted to SEK -5 million (1,016). The positive amount is due to non-recurring effects on redemption to Alecta. Amounts in excess of these included in comprehensive income (change in value of the net pension liability) amount to SEK 78 million (148).

Amounts recognised in the income statement

SEK million	2022	2021
Current year service costs	-2	-33
Reductions	-3	1,055
Total items recognised as employee benefits	**-5**	**1,022**
Net interest income/expense	0	-5
Total amount recognised in the income statement relating to pensions	**-5**	**1,016**

Amounts recognised in the balance sheet

SEK million	2022	2021
Present value of funded obligations including special payroll tax	216	332
Fair value of plan assets	-257	-298
Deficit (+) / surplus (-) in funded plans	**-41**	**35**
Present value of unfunded obligations		
Net assets (-) / net liabilities (+) in the balance sheet	**-41**	**35**
Defined benefit assets on the balance sheet		
Defined benefit obligations	**-41**	**35**

Contributions to post-employment benefit plans are expected to amount to SEK 6 million for the 2021 financial year. Pension costs recognised as defined contribution in the income statement amount to SEK -873 million (-43). The high amount in 2021 is due to the non-recurring effect of redemption to Alecta.

Changes in the present value of defined benefit obligations

SEK million	2022	2021
1 January	**332**	**1,498**
Current year service costs	2	33
Interest expenses	4	10
Actuarial gains/losses due to changes in financial assumptions	-69	-116
Regulations	-35	-1,063
Benefits paid from the plan	-20	-30
31 December	**216**	**332**

Changes in fair value of plan assets

SEK million	2022	2021
1 January	298	630
Interest income	4	4
Actuarial gains/losses on plan assets	9	32
Regulations	-37	-8
Withdrawals	-20	-368
Deposit	4	7
31 December	**257**	**298**

Fair value of plan assets

SEK million	2022	2021
Equity instrument	81	95
Interest-bearing securities	125	158
Cash and cash equivalents other than cash and bank balances	0	0
Property	30	30
Other assets	21	15
Total	**257**	**298**

At 31 December 2021, plan assets amounted to SEK 257 million (298) and the corresponding pension obligations to SEK 216 million (332), corresponding to a consolidation level of119% (90%).

Change in discount rate

The pension plan liabilities are calculated using a discount rate based on a mortgage bond curve with an equivalent duration to the pension obligation, and the company is thus exposed to a risk attributable to the development of the for mortgage bond market. If the market rate increases, the debt will decrease; and vice versa.

Risk related to assumptions used

The actuarial calculations use assumptions about future inflation and salary levels and life expectancy. If the actual outcome differs from the assumptions made, this may result in a higher or lower debt.

A specification of the plan assets has not been available when the pension plan has been funded by an insurance company. In these cases, the fair value of the plan assets has been included in other assets.

The main actuarial assumptions used

	2022	2021
Discount rate, %	3.90	1.40
Future wage increases, %	3.00	3.20
Future pension increases, %	2.00	2.20
Inflation rate, %	2.00	2.20

The liabilities of the plan are calculated using a discount rate determined by using a discount rate based on a mortgage bond curve with a duration equal to the duration of the obligation. The Group has used mortgage bonds to determine the discount rate and therefore has a risk related to the evolution of the mortgage bond market.

Assumptions regarding life expectancy are based on the assumptions made in the latest mortality study by the Research Council for Actuarial Science and Insurance Statistics and are referred to as DUS14. These assumptions are based on the Makeham model. Changes in life expectancy assumptions are based on their new mortality tables. These are mainly influenced by age and gender. These assumptions imply the following average remaining years of life for a person retiring at age 65.

	2022	2021
Men – 45 years	23	23
Women – 45 years	26	25
Men – 65 years	22	22
Women – 65 years	24	24

The weighted average duration of the pension obligation is 9.0 years.

The discount rate, inflation rate and salary growth rate used are the main assumptions used in the calculation of defined benefit obligations. The impact of a 0.5 percentage point change in the discount rate, inflation rate or salary growth rate on the defined benefit obligation at 31 December 2022, other assumptions remaining constant, is presented in the table below.

Impact on defined benefit obligation of changes in assumptions, sensitivity analysis

Change of assumption	2022	2021
0.5% increase in the discount rate	-5.6%	-7.0%
0.5% reduction in the discount rate	6.1%	7.7%
0.5% increase in the inflation rate	5.9%	7.0%
0.5% reduction in the inflation rate	-5.4%	-6.4%
0.5% increase in the wage growth rate	0.3%	0.6%
0.5% reduction in the wage growth rate	-0.2%	-0.5%

NOTE 26 Trade and other payables

SEK million	2022	2021
Accounts payable	988	814
Accrued expenses and deferred income		
Accrued personnel expenses	127	110
Accrued interest expenses	65	48
Green Electricity certificates	0	0
Other accrued expenses and deferred income	1,020	645
Other liabilities		
VAT liabilities	73	72
Energy taxes and excise duties	88	91
Advances received and other liabilities	11	19
Emission rights	223	129
Total	**2,595**	**1,928**

The carrying amount of trade and other payables is deemed to be equal to their fair value.

NOTE 27 Pledged assets

SEK million	2022	2021
Pledged assets	None	None

See note 30 for more information on contingent liabilities.

NOTE 28 Leasing

The Group applies IFRS 16 for lease accounting,

The majority of the major contracts covered by IFRS 16 relate to land leases and ground leases, the duration and likelihood of renewal of which have been assessed taking into account in particular the useful life of the assets constructed and the long-term nature of the activities carried out therein, as well as the specific costs that termination of the contract would entail for the parties to the contract.

In addition to land leases and ground leases, the Group also has leases for premises and warehouses, track facilities, certain transport equipment and vehicles and forklifts. Costs for short-term contracts and low-value contracts excluded from IFRS 16 are marginal.

The right-of-use asset is included under the heading Tangible fixed assets in the balance sheet: see note 16 for disclosure of the carrying amount. The leasing debt is included under the heading Interest-bearing liabilities: see note 22 for disclosure of the carrying amount.

The total cash outflow for leases under IFRS 16 in 2022 has been SEK 39 million (42), of which interest amounts to SEK 17 million (16).

The Group has no material exposure to future lease cash flows that are not reflected in the measurement of the lease liability.

NOTE 29 Investment commitments

SEK million	2022	2021
Property, plant and equipment	624	767
Total	**624**	**767**

Investment commitments are investments contracted at the balance sheet date, but not yet recognised in the financial statements. The commitments relate mainly to investments in combined heat and power plants.

See note 16 Tangible fixed assets for more information on investments.

NOTE 30 Contingent liabilities

SEK million	2022	2021
Liability as a shareholder in Brista 2 KB	706	706
Total	**706**	**706**

NOTE 31 Legal actions and administrative procedures

Stockholm Exergi plans for a new CHP plant in western Stockholm where we can recover energy from sorted residual waste and biofuel for production of electricity and heat. In the fall of 2022 the Land and Enviromental Court gave the notice not to grant a permit. Stockholm Exergi has chosen to proceed and at the end of the year filed an appeal of the judgement.

NOTE 32 Transactions with related parties

Owners

Stockholms Stadshus AB and the consortium Ankhiale Bidco AB each own half of the share capital and voting rights in Stockholm Exergi Holding AB (publ) at the balance sheet date.

Stockholm Exergi also has transactions with companies owned by the City of Stockholm and administrations within the City of Stockholm. These are on the same terms as for other external customers. Of this year's turnover, 11 per cent (14) relates to companies and administrations within the City of Stockholm.

The aggregated balance of outstanding receivables from companies and administrations within the City of Stockholm amounts to SEK 6 million (6).

Board of Directors and executive management team

The key persons in the Group are the Board of Directors and members of the executive management team. The Group has not been involved in any material transactions with members of the Board of Directors or the management team. There are no loans for any Board member or the management team as at 31 December 2022.

See note 10 Employee benefits for further information on the remuneration and shareholdings of the Board of Directors and the Stockholm Exergi management team.

NOTE 33 Events after the balance sheet date

No significant events after the balance sheet date

NOTE 34 Composition of the Group, 31 December 2022

SEK thousand

Company name	Corp. ID no.	Registered office	Number of shares / participation, %	Equity / Profit for the year	Book value in the respective Parent Company
Stockholm Exergi AB	556016-9095	Stockholm	32,199,970 / 100	6,649,327 / 154,087	11,888,000
Fortum Vindvärme AB	556915-3686	Stockholm	100,000 / 100	6,446/297	100
Stockholm Exergi Tunnlar AB	556981-9187	Stockholm	100,000 / 100	34,583 / 9,052	1,645,866
Brista 2 Kommanditbolag	969720-4254		- / 85	-539,773 / 99,701	-543,553
Brista 2 AB	556829-4564	Stockholm	85,000 / 85	102/0	85
Hässelbystrand Fastighet AB	559139-6451	Stockholm	50,000 / 100	50/0	50
Stockholm Exergi Materialåtervinning AB	559187-3244	Stockholm	50,000 / 100	116/1	50

The consolidated value for Brista 2 KB is reported under the Book value heading.

Parent Company

NOTE 35 Remuneration to auditors

Audit fees for the Parent Company have been invoiced to the subsidiary Stockholm Exergi AB.

NOTE 36 Remuneration to employees

The Parent Company has no employees, and therefore no salaries or benefits have been charged to the Parent Company.

Gender distribution in the Parent Company

	2022		2021	
	Number at balance sheet date	Of whom men	Number at balance sheet date	Of whom men
Board members	10	6	10	7
CEO and other senior executives	1	1	1	1
Group total	**11**	**7**	**11**	**8**

NOTE 37 Financial income and expenses

SEK million	2022	2021
Interest income		
Interest income, Group companies	41	13
Total	**41**	**13**
Interest expenses		
Interest charges on external debt	-202	-138
Other financial expenses	-11	-13
Total	**-213**	**-151**
Financial income and expenses – net	**-173**	**-138**

NOTE 38 Income tax

SEK million	2022	2021
Current tax on profit for the year	-208	-91
Total current tax	**-208**	**-91**
Total income tax	**-208**	**-91**

Income tax rates

The table below explains the difference between the theoretical assumed tax rate in Sweden and the tax rate in the income statement

SEK million	2022	%	2021	%
Profit/loss before tax	1,012		440	
Tax calculated at the applicable tax rate for the Parent Company, 21.4%	-208	20.6%	-91	20.6%
Tax cost	**-208**	**20.6%**	**-91**	**20.6%**

NOTE 39 Participations in Group companies

SEK million	2022	2021
Opening costs	11,888	11,888
Carrying amount	**11,888**	**11,888**

Parent Company's holdings of shares in Group companies

Company name	Corporate ID number	Domicile	Number of shares	Capital share	Equity/profit for the year	Book value
Stockholm Exergi AB	556016-9095	Stockholm	32,199,970	100	6,495 / 7	11,888
Total						**11,888**

The ownership share of the capital is referred to, which corresponds to the proportion of votes for the total number of shares.

NOTE 40 Receivables from Group companies

SEK million	2022	2021
Long-term receivables from Group companies		
At the beginning of the year	3,734	3,734
Carrying amount at year-end	**3,734**	**3,734**

All long-term receivables are due more than 5 years after the balance sheet date. No provision for expected credit losses has been made as there are no financial receivables other than loans to Group companies.

NOTE 41 Interest-bearing liabilities

SEK million	2022	2021
Bond loans	8,290	7,193
Loans from credit institutions	2,156	1,860
Total long-term interest-bearing liabilities	**10,446**	**9,053**
Bond loans	400	1,499
Current portion of long-term loans from credit institutions	699	628
Other current interest-bearing liabilities	1,258	502
Total current interest-bearing liabilities	**2,356**	**2,629**
Total interest-bearing liabilities	**12,802**	**11,683**

The long-term bond loans mature with a nominal value of SEK 6,200 million between 1 and 5 years, and SEK 2,100 million after 5 years from the balance sheet date.

The long-term portion of loans from credit institutions matures by SEK 2,168 million between 1 and 5 years from the balance sheet date.

The Parent Company has a Group account at Nordea with a credit of SEK 300 million. The external Group account balance with the bank is recorded as cash and cash equivalents when the balance is positive, or as current interest-bearing liabilities when the balance is negative. The balance in 2021 was SEK -172 million (-202).

Intra-Group balances with subsidiaries are recorded as receivables from and payables to Group companies.

For information on changes in liabilities related to financing activities in the Parent Company's cash flow statement, please refer to the corresponding figures for the Group in note 22.

Overdraft facility

SEK million	2022	2021
Credit limit granted	300	300
Unutilised portion	-128	-98
Amount of credit used	**172**	**202**

NOTE 42 Cash and cash equivalents

SEK million	2022	2021
Cash and bank balances	0	0
Total cash and cash equivalents	**0**	**0**

NOTE 43 Derivative instruments

	Nominal amount Remaining maturity		
SEK million	1 to 5 years	Over 5 years	Total
Interest rate derivatives at 31 December 2022	417		417
Interest rate derivatives at 31 December 2021	417		417

NOTE 44 Profit appropriation

The Board of Directors proposes that the available earnings of the Parent Company, SEK 4,162,606,163 be appropriated as follows:

Proposed appropriation of earnings, SEK	
Dividends	850,000,000
Profit/loss carried forward	3,312,606,163
Total	**4,162,606,163**

Opinion of the Board of Directors on the proposed dividend

Subject to approval by the Annual General Meeting, dividends to shareholders will be paid in the amount of SEK 758 million in accordance with the declared dividend policy (see also note 4), plus a non-recurring dividend of SEK 92 million, totalling SEK 850 million. The dividend will be paid in 2023.

The Parent Company's equity ratio is 29 per cent, and the Group's equity ratio is 39 per cent. After a total dividend of SEK 850 million, the Parent Company's equity ratio would be 24 per cent and the Group's equity ratio 37 per cent. Should changes after the balance sheet date also be incluced, the profit for at least four months before payment of the proposed profit distribution becomes relevant. This equity ratio is deemed to be satisfactory. It is believed that it will be possible to maintain liquidity in the Company at a similarly satisfactory level. The Board of Directors is of the opinion that the proposed dividend will not prevent the Company from fulfilling its short and long-term obligations, nor will it prevent the Company from making the necessary investments. The proposed dividend can thus be justified in view of the provisions of the Companies Act Chapter 17(3), paragraphs 2 to 3 (the precautionary rule).

Certification by the Board

Signatures by the CEO and Board.

As set out below, the annual report and the consolidated financial statements have been approved for issue by the Board of Directors on 17 March 2023.

The Group's income statement and balance sheet and the Parent Company's income statement and balance sheet will be subject to adoption at the Annual General Meeting on 19 April 2023. I, the undersigned, declare that the consolidated and annual financial statements have been prepared in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU and with generally accepted accounting principles, and provide a true and fair view of the activities, position and results of the Group and Parent Company, and of the principal risks and uncertainties that the Group's companies face.

Stockholm, 17 March 2023.

Anders Egelrud
CEO

Carlo Maddalena
Board member

Jonas Abrahamsson
Chair

Charlotta Sandving Brändström
Board member

Alexandra Grimfors
Vice Chair

Rikard Hjorth Warlenius
Board member

Fredrik Adolfsson
Board member

Tobias Alvaeus
Employee representative

Petra Engman
Board member

Reine Lorenz
Employee representative

Irina Frolova
Board member

Our audit report was submitted on 23 March 2023 Deloitte AB

Daniel Wassberg
Authorised Public Accountant

Auditor’s report

To the Annual General Meeting of Stockholm Exergi Holding AB (publ), corporate identity number 556040-6034

Report on the annual accounts and consolidated accounts

Opinions
We have audited the annual accounts and consolidated accounts of Stockholm Exergi Holding AB (publ) (publ) for the financial year 2022-01-01 - 2022-12-31. The annual accounts and consolidated accounts of the company are included on pages 73-117 in this document.

In our opinion, the annual accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the parent company as of 31 December 2022 and its financial performance and cash flow for the year then ended in accordance with the Annual Accounts Act. The consolidated accounts have been prepared in accordance with the Annual Accounts Act and present fairly, in all material respects, the financial position of the group as of 31 December 2022 and their financial performance and cash flow for the year then ended in accordance with International Financial Reporting Standards (IFRS), as adopted by the EU, and the Annual Accounts Act. The statutory administration report is consistent with the other parts of the annual accounts and consolidated accounts.

We therefore recommend that the general meeting of shareholders adopts the income statement and balance sheet for the parent company and the group.

Our opinions in this report on the annual accounts and consolidated accounts are consistent with the content of the additional report that has been submitted to the parent company's audit committee in accordance with the Audit Regulation (537/2014) Article 11.

Basis for opinions
We conducted our audit in accordance with International Standards on Auditing (ISA) and generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor’s Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements. This includes that, based on the best of our knowledge and belief, no prohibited services referred to in the Audit Regulation (537/2014) Article 5.1 have been provided to the audited company or, where applicable, its parent company or its controlled companies within the EU.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Key audit matters
Key audit matters of the audit are those matters that, in our professional judgment, were of most significance in our audit of the annual accounts and consolidated accounts of the current period. These matters were addressed in the context of our audit of, and in forming our opinion thereon, the annual accounts and consolidated accounts as a whole, but we do not provide a separate opinion on these matters.

Valuation of tangible fixed assets
Fixed assets total 26 339 MSEK as of December 31st, 2022 which amounts to approximately 82% of total assets. The fixed assets consist mainly of heating plants and machinery, pipelines and tunnels which are carried at cost less accumulated depreciation and impairment losses. The carrying amount of the individual assets is assessed annually by determining the recoverable amount. Indications of impairment are analysed and include risks such as changes in fuel prices, discount rate, political change related to energy taxes, etc. If any such indication exists, the entity shall estimate the recoverable amount of the asset. The valuation of fixed assets can have a significant impact on the Group's earnings and financial position and the valuation of these assets is therefore of particular importance to our audit.

For further information see accounting principles in note 1, note 2 for significant assumptions and assessments and note 16 in the annual accounts.

Our audit included, but was not limited to, the following review procedures:

- We have received the entity’s assessment at the end of the reporting period whether there is any indication that an asset may be impaired.
- We have audited a sample of recognized costs related to significant investments.
- We have audited the entity’s assessment of recognizing cost upon finalizing their investments in accordance with IAS 16.

Information other than the annual financial statements and consolidated financial statements
This document also contains other information than the annual accounts and consolidated accounts and is found on pages 1-58, 63-72 and 120-141. The Board of Directors and the Managing Director are responsible for this other information.

Our opinion on the annual accounts and consolidated accounts does not cover this other information and we do not express any form of assurance conclusion regarding this other information.

In connection with our audit of the annual accounts and consolidated accounts, our responsibility is to read the information identified above and consider whether the information is materially inconsistent with the annual accounts and consolidated accounts. In this procedure we also take into account our knowledge otherwise obtained in the audit and assess whether the information otherwise appears to be materially misstated.

If we, based on the work performed concerning this information, conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Responsibilities of the Board of Directors and the Chief Executive Officer

The Board of Directors and the Managing Director are responsible for the preparation of the annual accounts and consolidated accounts and that they give a fair presentation in accordance with the Annual Accounts Act and, concerning the consolidated accounts, in accordance with IFRS as adopted by the EU. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of annual accounts and consolidated accounts that are free from material misstatement, whether due to fraud or error.

In preparing the annual accounts and consolidated accounts, The Board of Directors and the Managing Director are responsible for the assessment of the company’s and the group’s ability to continue as a going concern. They disclose, as applicable, matters related to going concern and using the going concern basis of accounting. The going concern basis of accounting is however not applied if the Board of Directors and the Managing Director intends to liquidate the company, to cease operations, or has no realistic alternative but to do so.

The Audit Committee shall, without prejudice to the Board of Director’s responsibilities and tasks in general, among other things oversee the company’s financial reporting process.

Auditor’s responsibilities
Our objectives are to obtain reasonable assurance about whether the annual accounts and consolidated accounts as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor’s report that includes our opinions. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with ISAs and generally accepted auditing standards in Sweden will always detect a material misstatement when it exists. Misstatements can arise from fraud or error and are considered material if, individually or in the aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of these annual accounts and consolidated accounts.

As part of an audit in accordance with ISAs, we exercise professional judgment and maintain professional scepticism throughout the audit.

A further description of our responsibilities for the audit of the annual accounts and consolidated accounts is located at the Swedish Inspectorate of Auditors website: https://www.revisorsinspektionen.se/revisornsansvar This description forms part of the auditor´s report.

Report on other legal and regulatory requirements

Opinions
IIn addition to our audit of the annual accounts and consolidated accounts, we have also audited the administration of the Board of Directors and the Managing Director of Stockholm Exergi Holding AB (publ) (publ) for the financial year 2022-01-01 - 2022-12-31 and the proposed appropriations of the company’s profit or loss.

We recommend to the general meeting of shareholders that the profit to be appropriated in accordance with the proposal in the statutory administration report and that the members of the Board of Directors and the Managing Director be discharged from liability for the financial year.

Basis for opinions

We conducted the audit in accordance with generally accepted auditing standards in Sweden. Our responsibilities under those standards are further described in the Auditor’s Responsibilities section. We are independent of the parent company and the group in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

We believe that the audit evidence we have obtained is sufficient and appropriate to provide a basis for our opinions.

Responsibilities of the Board of Directors and the Chief Executive Officer
The Board of Directors is responsible for the proposal for appropriations of the company’s profit or loss. At the proposal of a dividend, this includes an assessment of whether the dividend is justifiable considering the requirements which the company's and the group’s type of operations, size and risks place on the size of the parent company's and the group’s equity, consolidation requirements, liquidity and position in general.

The Board of Directors is responsible for the company’s organization and the administration of the company’s affairs. This includes among other things continuous assessment of the company’s and the group’s financial situation and ensuring that the company's organization is designed so that the accounting, management of assets and the company’s financial affairs otherwise are controlled in a reassuring manner. The Managing Director shall manage the ongoing administration according to the Board of Directors’ guidelines and instructions and among other matters take measures that are necessary to fulfill the company’s accounting in accordance with law and handle the management of assets in a reassuring manner.

Auditor’s responsibilities

Our objective concerning the audit of the administration, and thereby our opinion about discharge from liability, is to obtain audit evidence to assess with a reasonable degree of assurance whether any member of the Board of Directors or the Managing Director in any material respect:

- has undertaken any action or been guilty of any omission which can give rise to liability to the company, or
- in any other way has acted in contravention of the Companies Act, the Annual Accounts Act or the Articles of Association.

Our objective concerning the audit of the proposed appropriations of the company’s profit or loss, and thereby our opinion about this, is to assess with reasonable degree of assurance whether the proposal is in accordance with the Companies Act.

Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with generally accepted auditing standards in Sweden will always detect actions or omissions that can give rise to liability to the company, or that the proposed appropriations of the company’s profit or loss are not in accordance with the Companies Act.

A further description of my (our) responsibilities for the audit of the management’s administration is located at the Swedish Inspectorate of Auditors website: www.revisorsinspektionen.se/revisornsansvar. This description forms part of the auditor´s report.

Deloitte AB, was appointed auditor of Stockholm Exergi Holding AB (publ) by the general meeting of the shareholders on the 2021-04-21 and has been the company’s auditor since 2006-03-30.

Stockholm, 23 March 2023.

Deloitte AB

Daniel Wassberg

Authorised Public Accountant

Definitions and reconciliation of alternative key performance indicators

Stockholm Exergi uses Alternative Performance Measures (APMs).
The key performance indicators presented below are not in accordance with IFRS but are considered to facilitate the analysis of profit and financial position by stakeholders.

Key performance indicator	Definition	Motivation
EBITDA	Operating profit before depreciation	Reflects the main, cash-generating result from operations and can be related to factors such as the Company's indebtedness
Operational result	Profit before capital gains/losses on non-current assets, effects of IFRS adjustments, financial items and tax	This performance metric is used to analyse the Company's earnings related to purely operational activities
Net debt	Interest-bearing liabilities less cash and cash equivalents	This metric describes the total net liabilities and is used together with EBITDA to reflect some aspect of financial risk
Capital employed	Total equity and interest-bearing liabilities	This key performance indicator is important as it shows the percentage of the Company's assets that are financed by owners or lenders
Equity/assets ratio	Equity through balance sheet total interest-bearing liabilities	This metric shows the long-term solvency of the Company
Working capital	Inventories and operating assets less operating liabilities	This metric shows the short-term capital needs of the Company
Return on equity	Profit for the period divided by average equity	This key performance indicator shows the return on the owners' invested capital
Return on capital employed	Operating profit increased by interest income divided by average capital employed	Shows the return on capital financed by owners or lenders
Debt/equity ratio	Non-current and current liabilities through equity	This metric shows one aspect of the Company's financial risk (interest rate sensitivity)

	2022	2021	2020	2019	2018
EBITDA					
Operating profit [1]	1,412	1,424	1,302	737	1,381
Depreciation	1,539	1,495	1,509	2,098	1,419
EBITDA	**2,950**	**2,919**	**2,811**	**2,835**	**2,800**
Net debt					
Non-current interest-bearing liabilities	11,069	9,680	10,631	10,266	9,256
Short-term interest-bearing liabilities	2,402	2,796	1,732	2,329	2,523
Cash and cash equivalents	-1	-1	-11	-2	-152
Net debt	**13,469**	**12,475**	**12,352**	**12,593**	**11,627**
Capital employed					
Shareholders' equity	12,673	12,037	11,646	11,762	12,355
Interest-bearing liabilities	13,471	12,476	12,363	12,595	11,779
Capital employed	**26,144**	**24,513**	**24,009**	**24,357**	**24,134**
Equity/assets ratio					
Shareholders' equity	12,673	12,037	11,646	11,762	12,355
Balance sheet total	32,160	29,784	29,479	29,740	29,673
Equity/assets ratio, %	**39**	**40**	**40**	**40**	**42**
Working capital					
Operating assets					
Inventories	1,751	724	1,019	1,010	798
Derivative instruments (portion not designated for hedge accounting)	1	0	0	25	75
Accounts receivable	1,738	1,640	1,293	1,582	1,630
Other receivables	1,292	816	392	424	475
Total operating assets	**4,782**	**3,180**	**2,704**	**3,041**	**2,977**
Operating liabilities					
Other non-current liabilities	0	0	0	-61	-3
Derivative instruments (portion not designated for hedge accounting)	-1	0	0	0	-1
Accounts payable	-988	-814	-568	-637	-1,033
Other liabilities (less accrued interest)	-1,541	-1,066	-770	-717	-643
Total operating liabilities	**-2,530**	**-1,880**	**-1,338**	**-1,415**	**-1,680**
Working capital	**2,251**	**1,300**	**1,366**	**1,626**	**1,298**
Return on equity					
Equity IB	12,037	11,646	11,762	12,355	11,969
Equity UB	12,673	12,037	11,646	11,762	12,355
Average equity	**12,355**	**12,841**	**11,704**	**12,059**	**12,162**
Profit for the period	948	970	878	433	1,164
Return on equity, %	**7.7**	**8.2**	**7.5**	**3.6**	**9.6**
n					
Return on capital employed					
Capital employed IB [2]	24,513	24,009	24,357	24,735	23,617
Capital employed UB	26,144	24,513	24,009	24,357	24,134
Average capital employed	**25,328**	**24,261**	**24,183**	**24,546**	**23,875**
Operating profit [1]	1,412	1,424	1,302	737	1,381
Interest income	2	1	1	1	1
Return on capital employed, %	**5.6**	**5.9**	**5.4**	**3.0**	**5.8**
Debt/equity ratio					
Non-current liabilities	14,468	12,987	14,660	14,169	13,039
Current liabilities	5,020	4,760	3,173	3,809	4,279
Total liabilities	**19,488**	**17,747**	**17,833**	**17,978**	**17,317**
Shareholders' equity	12,673	12,037	11,646	11,762	12,355
Debt/equity ratio, multiple	**1.5**	**1.5**	**1.5**	**1.5**	**1.4**

[1] The 2019 operating profit is burdened by an impairment of SEK -582 million due to the decision made on the closure of CHP plant 6 at Värtaverket.
[2] 2019 opening balance adjusted by +SEK 601 million for change in accounting policy for leases under IFRS 16

Reporting sustainability (GRI)

We report in accordance with the Global Reporting Initiative Standards (GRI). This helps to provide balance, transparency and comparability over time in our reporting.

What we report is listed in the GRI index on the next page. The section entitled Calculation principles describes in general how key performance indicators are calculated. GRI notes are intended to provide more detailed information on some of our key performance indicators, and for the mandatory disclosures not included in the other sections of the Annual and Sustainability Report.

GRI index – 2022

The GRI Index provides references to the pages of the Annual and Sustainability Report where information on the various GRI disclosures can be found. The GRI index also includes a reference to the points in the report where we describe sustainability according to the different areas of the Annual Accounts Act and the pages on which our work related to the UN Sustainable Development Goals is reflected.

This year's GRI reporting is done according to GRI Standards 2021. The subject-specific disclosures are grouped according to our value chain in order: Production and distribution, Customers and society, Residual products of society, Suppliers and Employees.

Reporting under the EU Taxonomy Regulation EU 2020/852 is available on pages 136-141.

Areas to be described according to the Annual Accounts Act are indicated by the following colour coding in the GRI Index:

- Business model
- Policy and goals
- Risks and risk management
- Environment
- Staff
- Social conditions
- Human rights
- Anti-corruption

General standard disclosures

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Organisation and reporting methods	2-1 Organisational details	Business model, Policy and goals		3, 4, 59
	2-2 Entities included in the organisation's sustainability reporting	Business model		3, 4
	2-3 Reporting period, frequency and contact point			3
	2-4 Restatements of information	Business model		127
	2-5 External assurance	Business model, Policy and goals		3, 142
Activities and employees	2-6 Activities, value chain and other business relationships	Business model		4, 7, 59
	2-7 Employees[1]	Staff		127
	2-8 Workers who are not employees	Staff		127
Governance	2-9 Governance structure and composition	Business model, Policy and goals		56-61
	2-10 Nomination and selection of the highest governance body			59
	2-11 Chair of the highest governance body			56, 59-60
	2-12 Role of the highest governance body in overseeing the management of impacts			63-67
	2-13 Delegation of responsibility for managing impacts			63
	2-14 Role of the highest governance body in sustainability reporting			63
	2-15 Conflicts of interest			59
	2-16 Communication of critical concerns			59
	2-17 Collective knowledge of the highest governance body			56-57, 63
	2-18 Evaluation of the performance of the highest governance body			61
	2-19 Remuneration policies			97-98 (not 10)
	2-20 Process to determine remuneration			60
	2-21 Annual total compensation ratio			127
Strategy	2-22 Statement on sustainable development strategy	Business model		6
	2-23 Policy commitments	Policy and goals, Risks and risk management		61, 63
	2-24 Embedding policy commitments	Business model		63-67
	2-25 Processes to remediate negative impacts[2]	Risks and risk management		41
	2-26 Mechanisms for seeking advice and raising concerns	Policy and goals, Human rights, Anti-corruption		70-71
	2-27 Compliance with laws and regulations[3]	Policy and goals		see note
	2-28 Membership associations			129
Stakeholder engagement	2-29 Approach to stakeholder engagement	Business model, Risks and risk management	Goals 12.7 and 16.5	128
	2-30 Collective bargaining agreements	Staff		129

[1] Information omitted regarding external labour used within the business.
[2] Information omitted regarding stakeholders inolvement.
[3] There has been no number of non-compliance.

Materiality analysis

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Materiality analysis	3-1 Process to determine material topics			64
	3-2 List of material topics			7
	3-3 Management of material topics			63-67

Economic value created

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Sustainability management	3-3 Management of material topics			63-65
Economic value created	201-1 Direct economic value created and delivered (2016)			5, 12

Production and distribution, Society's residual products

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Sustainability management	3-3 Management of material topics			40-41, 45-47, 63-67 (65)
Emissions to air and climate impact	302-1 Energy consumption within the organisation (2016)		Goal 11.6	38-39, 130
	305-1 Direct (Scope 1) GHG emissions (2016)			41, 132
	305-2 Energy indirect (Scope 2) GHG emissions (2016)			132
	305-3 Other indirect (Scope 3) GHG emissions (2016)			132
	305-4 GHG emissions intensity (2016)			133
	305-7 Nitrogen oxides (NOx), sulphur oxides (SOx), and other significant air emissions (2016)			133
	G4-EU2 Energy production, net			38-39
	G4-EU5 Emission rights, CO_2			129
	G4-EU11 Production efficiency of thermal production plant		Goal 7.3	130
	G4-EU12 Transmission and distribution losses		Goal 7.3	38-39, 130
CO_2 emissions per tonne of waste treated	Own disclosure			21
Waste from operations	306-1 Waste generation and significant waste-related impacts (2020)[1)]			See note
	306-2 Management of significant waste-related impacts (2020)		Goal 12.5	21, 41, 65, 66
	306-3 Waste generated (2020)			135
	306-4 Waste diverted from disposal (2020)			135
Incidents in the vicinity of production plants and discharges to water	Own disclosure, Significant environmental disturbances		Goal 6.3	133

[1)] Information omitted due to lack of relevant data.

Customers and society

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Sustainability management	3-3 Management of material topics			8-13, 63-67
Responsible behaviour based on Stockholm Exergi's position in the heating market	Own disclosure			10-11, 66
Offering sustainable products and services	Own disclosure		Goal 13.2 and goal 11.6	9, 13
Employment with emphasis on excluded groups	413-1 Local community involvement, impact assessment and development programme (2016)[1)]		Goal 10.2 and goal 8.6	11

Society's residual products

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Sustainability management	3-3 Management of material topics			21, 63-67 (66)

Suppliers

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Sustainability management	3-3 Management of material topics			22-25, 29, 63-67 (66)
Anti-corruption	205-1 Entities analysed for corruption risk (2016)			70
	205-2 Communication and training on anti-corruption policies and procedures (2016)		Goal 16.5	70, 129
	205-3 Corruption incidents and their management (2016)		Goal 16.5	129
Extraction of the Earth's resources	301-1 Material use by weight or volume (2016)		Goal 15.2	130
Renewable fuels	304-2 Significant impact on biodiversity (2016)[2)]		Goal 15.2	131
Sustainable procurement and investments	308-1 New suppliers reviewed in respect of environmental performance (2016)		Goal 12.7	134
	414-1 New suppliers reviewed in respect of social issues (2016)		Goal 12.7	134
Transportation	305-2 Energy indirect (Scope 2) GHG emissions (2016)			132

Employees

Area	Information	Annual Accounts Act	UN Sustainable Development Goals	References
Sustainability management	3-3 Management of material topics			49-51, 63-67 (67)
Safe work environment, wellness and health	403-8 Workers covered by an occupational health and safety management system (2018)			63-67 (67)
	403-9 Work-related injuries (2018)		Goal 8.8	134
Diversity	405-1 Diversity of governance bodies and employees (2016)		Goal 5.5 and goal 10.2	127
	405-2 Ratio of basic salary and remuneration of women to men (2016)[3)]		Goal 5.1	134
	406-1 Incidents of discrimination and corrective actions taken (2016)		Goal 5.1 and goal 5.2	49, 134

1) Information omitted for ii-viii due to lack of data
2) The information in the indicator is adapted to the activity and does not follow the requirements of the standard.
3) Information omitted on pay differentials by job type due to lack of data.

Calculation principles (GRI)

The information on financial performance comes from the audited financial statements.

The information on the environment covers plants where Stockholm Exergi is the legal holder of the environmental permit or is counted as an operator. Plant data are reported in full, including plants where Stockholm Exergi is a co-owner.

Stockholm Exergi uses a database for collecting data on the fuel consumption and production of its plants. The site organisation is responsible for reporting and making the necessary calculations. Stockholm Exergi's environmental unit compiles and assures the quality of all data. Stockholm Exergi's environmental unit is also responsible for some calculations, in particular those made using templates. Calculations are based on sampling when determining emission quantities for substances for which there is no continuous measurement. The halved reporting limit is used in the calculation for analyses of samples where the analytical result is below the reporting limit.

Stockholm Exergi's consumption of additives and chemicals is based on a summary of the plants' total purchases or consumption. No account has been taken of variations in concentration or volume in the summary.

Conversion to carbon dioxide equivalents for methane, nitrous oxide and refrigerants is estimated in accordance with IPCC AR5 for 2018–2021. In accordance with IPCC AR6 from 2022.

Stockholm Exergi's direct carbon dioxide emissions are covered by the EU Emissions Trading System and are verified annually by external accredited verifiers. Calculation of carbon dioxide emissions is based on the greenhouse gas emission permit of the plant in question and on actual, verified values reported in the Emissions Trading System.

Transport calculations are based on data on fuel, ash, waste and chemical volumes with associated average transport distances and type of vehicle, and emission factors from the NTM.

The average energy consumption for heating and hot water in apartment buildings is used when calculating the number of apartments for which heat production is sufficient.

Stockholm Exergi uses the Fortum Group's system for employee data. Other social data are collected via other reporting systems and Statistics Sweden.

Stockholm Exergi follows the indicators LWIF (lost workday injury frequency) and TRIF (total recordable injuries), both combined for its own and other employees and broken down by group. The monitoring of own staff also includes vacancies and externally hired staff replacing staff on leave of absence and parental leave. The number of hours for external labour and contractors is calculated on the basis of invoiced amounts. The number of sick days due to accidents is compiled from information provided by the victim or their employer.

GRI notes

GRI 2-4 Restatements of information

Changed format of waste reporting for more details and alignment with GRI requirements. It does not affect the results.

The figures for climate accounts 2021 (GRI 305-1 and GRI 305-3) are revised, which meant that emissions in scope 1 increased by 3 kton Co2e and in scope 3 with 11 kton Co2e. Emissions after climate compensation increased by 11 ktons from 525 to 536 ktons Co2e.

GRI 2-7, GRI 405-1 Employees

Employees by employment type, gender (number)	Women	Men	Total
Permanent employees	150	578	728
- Of which full-time	143	565	708
- Of which part-time	7	13	20
Temporary staff	4	12	16
Total	154	590	744

Managers and employees by age and gender (number)	Women	Men	Total
< 30	10	63	73
- Of which managers	0	0	0
30-50	91	273	364
- Of which managers	13	32	45
> 50	49	242	292
- Of which managers	3	32	35

Distribution of women and men	Women	Men	
All employees	21%	79%	
Managers	20%	80%	

Health	Women	Men	Total
Sick leave	3.2%	3.3%	3.2%

Employees are expressed in FTE (full time employees) as at 31 December 2022.

GRI 2-8 Workers who are not employees

	2021	2022
Number of persons	N/A	868

Employees are expressed in FTE (full time employees) as at 31 December 2022. The most common types of assignments and contracts are consulting assignments in IT, technology and professional services such as administration. The data are based on the number of unique resources registered.

GRI 2-21 Annual total compensation ratio

	2021	2022
Ratio of highest paid to median earnings	N/A	4.34
Ratio of annual percentage increase in highest paid/median earnings	N/A	0.9

The median excludes the highest paid.
High pay/Median pay = ratio of highest paid to median pay. Percentage annual increase in high pay/percentage annual increase in median pay = ratio.
The data are calculated from "compensation by month" data, two comparable periods, 2021-12 and 2022-12.

GRI 2-29 Approach to stakeholder engagement

Stakeholder group	Dialogue
Owners	• Annual General Meeting • Board meetings (11 including constituent meetings) • Operational contacts between Group functions within Stockholm Exergi and various administrations, committees, etc. in the City of Stockholm (ongoing)
Customers	• 3 price dialogue meetings and more than 2,000 customer meetings of various kinds. • 4 customer newsletters, 1 per quarter with adapted content depending on the segment. Approximately 20 notifications for condition changes or heat distribution, for example. • Digital seminars and events. Various educational videos produced. Participated in various external events and fairs. • Digital information meetings with about eight different schools. • Advice (almost 800 physical and digital sessions) • Customer surveys (ongoing) and Customer Satisfaction Index (CSI) surveys twice a year.
Employees	• Ongoing Exergi dialogue (six times a year) • Reporting of incidents and suggestions for improvement (ongoing) • Information via intranet (ongoing) • Live briefings for all employees (monthly or as needed) with the opportunity to ask questions • Digital or physical meetings, spontaneously or planned within teams. To assist with keeping in touch with changes in working practices (ongoing) - Exergi days for all employees in order to review the Company's overall strategies and goals - Annual process for setting team missions and goals for each unit, department and group • Targeted pulse surveys to monitor commitment (three times a year) and ask questions about matters such as health and safety or change management (if necessary) – health and safety week twice a year with various activities on the theme - Health and safety pulse survey twice a year, with targeted questions about health and safety • Leadership forum, ongoing information, training and dialogue with company managers (four to six times a year)
Trade union organisations	• Codetermination Act negotiations (weekly) • Health and safety committee (four times a year) • Codetermination council (four times a year) • Annual safety representative day
Partners	• Meetings six to 12 times a year in different forums
Suppliers of goods, services and fuels	• Meetings and contract negotiations (ongoing) • Review against the Stockholm Exergi code of conduct (ongoing, risk-based)
Policymakers and officials and public authorities	• Discussions and meetings (ongoing)
Investors, banks, bilateral lenders and rating agencies	• Investors: Dialogue via banks and direct contact (ongoing) • Banks: Analysis of Stockholm Exergi (annual) and Dialogue and negotiations (ongoing) • Bilateral lenders: Dialogue and negotiations (ongoing) • Rating agencies: Review (annual) and contact (ongoing)
Voluntary organisations and formers of opinion	• Meetings and interviews (if necessary) • Collaborations and working group meetings (ongoing)
Accommodation near production plants	• Digital channels – website, Facebook, Instagram, YouTube, LinkedIn, Twitter and purchased and editorial media (ongoing) • Customer service – continuous handling of about 600 customer cases per month by email, and as many by phone. • Posting on association notice boards (if necessary) • Consultations and informal dialogue meetings (two) • Mailings and port notifications for construction projects (if necessary) • Sveriges Radio P4 Stockholm (in the event of serious incidents)
Academic community, research	• Meetings and workshops (ongoing), research collaborations with some 20 universities and other R&D stakeholders

GRI 2-28 Membership associations

Stockholm Exergi is part of a number of organisations where membership is considered strategically important:

- **Avfall Sverige – Swedish Waste Management** Stockholm Exergi contributes significant funding and is part of working groups for biological recycling and subgroups for energy recovery.
- **Energiforsk** Stockholm Exergi contributes significant funding and is represented on programme boards and participates in various programme councils on electricity and heat production.
- **Swedenergy** Stockholm Exergi is represented on the Board, councils, networks and expert groups.
- **Swedish Energy Agency** Stockholm Exergi participates in councils, programme councils and networks on energy research related to fuels, energy system studies and Green Electricity certificates.
- **Energinätverk Sverige** Stockholm Exergi is represented on the Board.
- **Haga Initiative** Stockholm Exergi is represented on the Board.
- **Prisdialogen** Stockholm Exergi has been a member since 2015.
- **Responsible Shipping Initiative** Stockholm Exergi is represented on the Board.
- **Swedish Professionals for the Built Environment** Stockholm Exergi participates in councils.
- **Swedish Green Building Council** Stockholm Exergi is represented on the Board.
- **Svebio – Swedish Bioenergy Association** Stockholm Exergi is represented on the Board.
- **Waste Refinery** Stockholm Exergi is represented on the Board.
- **Heating and power companies** Stockholm Exergi is represented on the Board and in various working groups.
- **European Commission Directorate-General for Climate Action** Stockholm Exergi is represented on the expert group for carbon removals

Stockholm Exergi certifications:

- **FSC®** Stockholm Exergi has been certified according to the Forest Stewardship Council® Chain of Custody Standard, licence number FSC-C126045, since 2015.
- **ISO 14001** Stockholm Exergi's environmental management system has been certified according to ISO 14001 since 2001.
- **ISO 45001** Stockholm Exergi has been certified since 2011.
- **ISO 9001** Stockholm Exergi certified since 2018.

GRI 2-30 Collective bargaining agreements

Stockholm Exergi has collective agreements with Seko, Unionen, Engineers of Sweden and Ledarna. All employees except the CEO are covered.

GRI 205-2 Communication and training in anti-corruption policies

All new employees attend a web-based training in the code of conduct. The training was launched in 2018. In 2022, 122 employees completed the training. A total of 735 employees (current employees) have undergone it, which corresponds to 98% of 744 employees.

GRI 205-3 Confirmed incidents of corruption and actions taken

No cases of corruption were reported to Stockholm Exergi during the year.

GRI G4-EU5 Allocation of emission allowances

The EU Emissions Trading System (EU ETS) has been running a surplus of emission allowances for a long time, resulting in low price levels, but the price has risen following the decisions made in 2018 to reform the scheme. This reform includes a reduction in the availability of emission allowances.

The price of emission allowances has fluctuated around the level of EUR 80 per unit in 2022. District heating production will continue to be eligible for some free allocation of emission allowances, at least until 2025. Stockholm Exergi is a net purchaser of emission allowances. New decisions were made in the EU in December 2022 that will alter the conditions beyond 2025. The price of emission allowances is expected to remain high as a consequence.

In 2022, Stockholm Exergi was allocated 233,217 (234,355) tonnes of emission allowances. The allocation corresponded to 50 (55) percent of the total need. Stockholm Exergi's net need for emissions allowances were 237,796 (192,043) tonnes (one emission allowance corresponds to one tonne of carbon dioxide).

GRI G4-EU11 and GRI G4-EU12 Production efficiency of thermal generation plant and losses in transmission and distribution of electricity and heat

Product	Supplied (GWh) [1]	Efficiency (%)	Production (GWh)	Distribution loss (%)	Supply (GWh)
Electricity	1,651	83%	1,374	- [2]	1,374[3]
Heating	7,471	96%	7,208[4]	5%	6,853[5]
Total	**9,122**		**8,582**		**8,227**

[1] Proportional allocation based on electricity and heat production.
[2] Stockholm Exergi's delivery point is the power grid, not the end customer. Distribution losses occur after Stockholm Exergi's supply.
[3] Of which 1,138 GWh is supply to the power grid.
[4] Reported production excludes thermal energy from Open District Heating and data centres.
[5] Reported supply includes only heat produced by Stockholm Exergi.

Cooling is not considered to be energy input, but energy output. This energy is dissipated in several ways in Stockholm Exergi's processes:

- Free cooling: Transfer of heat from the district cooling network to seawater. Electricity consumption only for the distribution of cooling.
- Waste cooling: Recovery of excess heat from buildings to the district heating network. Electricity consumption only for the distribution of cooling.
- Heat pump cooling: Cooling produced at the same time as heat in a heat pump. Electricity consumption for both distribution and operation of the compressor in the heat pump.
- Chiller cooling: Cooling without heat recovery. Electricity consumption for both distribution and operation of the compressor in the chiller.

The efficiency of a cooling process is described by the COP (coefficient of performance); the ratio of cooling produced to electricity supplied. In 2022, the COP for district cooling was 5.3 (5.3).

GRI 301-1 Materials used by weight or volume

Inputs for own activities	2021	2022
Renewable or recycled fuels		
- Residual waste (tonnes)	827,831	906 954
- Bio-oils (Nm^3)	87,140	67 409
- Solid biofuels (tonnes)	1,115,266	1 089 587
Fossil fuels		
- Coal (tonnes)	0	0
- Fossil oil (Nm^3)	19,271	26 326
Additives and chemicals (tonnes)	27,562	25 265

GRI 302-1 Energy consumption within the organisation

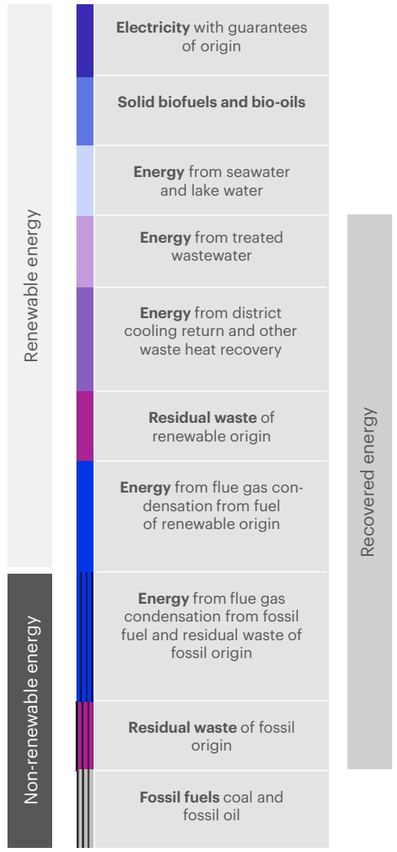
Energy supplied (GWh) to production plants by product	Electricity	Heating	Cooling	Total
Residual waste	1,168	1,648	0	2,816
Solid biofuels	1,629	1,623	0	3,252
Bio-oils	101	546	0	647
Fossil oils	76	187	0	263
Coal	0	0	0	0
Electricity	163	807	91	1,061
Thermal energy from flue gas condensation	0	958	0	958
Thermal energy from treated wastewater	0	660	0	660
Thermal energy from seawater and lake water	0	340	0	340
Thermal energy from district cooling return	0	166	0	166
Thermal energy from Open District Heating and data centres	0	80	0	80
Free cooling	0	0	102	102
Production cooperation [1]	0	897	0	897
Total	**3,137**	**7,912**	**193**	**11,242**

[1] Refers to supply to Stockholm Exergi's district heating network. The split between fuel consumption for heat and electricity is calculated on the basis of the allocation principle agreed in the Värmemarknadskommittén.

Energy supplied (GWh) to production plants by renewable and non-renewable fuel	Renewable (GWh)	Non-renewable (GWh)	Total (GWh)
Residual waste	1,684	1,132	2,816
Solid biofuels	3,252	0	3,252
Bio-oils	647	0	647
Fossil oils	0	263	263
Coal	0	0	0
Electricity	901	160	1,061
Thermal energy from flue gas condensation	789	169	958
Thermal energy from treated wastewater	660	0	660
Thermal energy from seawater and lake water	340	0	340
Thermal energy from district cooling return [1]	166	0	166
Thermal energy from Open District Heating and data centres	80	0	80
Free cooling [2]	102	0	102
Production cooperation	637	260	897
Total	**9,258**	**1,984**	**11,242**

[1] Of which 56 GWh was produced via Open District Heating.
[2] Of which 3 GWh was produced via Open District Heating.

The figure below shows how we classify the various forms of energy.



GRI 304-2 Significant impacts of activities, products and services on biodiversity

Stockholm Exergi's production of district heating and cooling is carried out in urban environments. The Company measures and reduces greenhouse gas emissions. Any impact on biodiversity as a consequence of changes in operations is assessed in the Company's environmental permit reviews.

Fuels represent Stockholm Exergi's most significant risk of impact on biodiversity. Stockholm Exergi reduces this risk by defining environmental requirements for suppliers of bio-oils and solid biofuels. The solid forest fuels purchased by Stockholm Exergi must not include tree species on the CITES list of protected species, but only come from sustainable sources according to the requirements defined by REDII. The impact of bio-oils is also controlled by REDII. These requirements are included in the contracts with our fuel suppliers.

GRI 305-1, GRI 305-2 and GRI 305-3 Direct and indirect GHG emissions

Stockholm Exergi has prepared climate accounts for a number of years in accordance with the methodology of the Greenhouse Gas Protocol. Stockholm Exergi's own direct emissions correspond to Scope 1.

Local greenhouse gas emissions are mainly caused by Stockholm Exergi's energy production. Residual waste contains plastics and other fossil materials. Residual waste accounts for about 31 (27) per cent of the energy supplied, and about 83 (84) per cent of Stockholm Exergi's local greenhouse gas emissions. The decrease is due to higher consumption of fossil fuels during start-up and shutdown and a cold snap at the end of the year.

Approximately 5 (7) per cent of Stockholm Exergi's total greenhouse gas emissions occur upstream when fuels are collected, undergo processing (where applicable) and are transported to the production plants. The production of heat, electricity and cooling, including purchased electricity, accounts for 87 (93) per cent of total greenhouse gas emissions, of which 76 (83) per cent are Stockholm Exergi's own emissions and the rest come from partners. The remaining greenhouse gas emissions come from purchased goods and services, as well as business travel. There was also the sale of coal in 2022, the end use of which by customers is reported under scope 3.

Emissions from operations (ktonCO$_2$e)	**2018**	**2019**	**2020**	**2021**[12)]	**2022**	**Breakdown, 2022 (%)**
Scope 1	**913**	**705**	**382**	**450**	**492**	**59%**
Production[1)]	913	705	381	450	492	59%
- CO_2 from coal combustion	461	274	1	0	0	0%
- CO_2 from oil combustion	96	69	18	52	71	9%
- CO_2 from combustion of fossil fraction in waste and recovered fuels	304	326	342	377	400	48%
- Other greenhouse gas emissions [2)]	52	36	20	21	21	2%
Business travel [3)]	0.28	0.20	0.18	0.16	0,10	0%
Scope 2	**67**	**51**	**63**	**72**	**69**	**8%**
Purchased electricity [4)]	362	265	373	396	395	
Reduction through purchase of origin labelled renewable electricity [5)]	-295	-214	-310	-325	-326	
Scope 3	**120**	**112**	**103**	**120**	**276**	**33%**
Business travel [6)]	0.18	0.13	0.02	0.02	0,04	0%
Production by another district heating producer supplied by Stockholm Exergi [7)]	48	48	62	77	84	10%
Production and distribution of energy and automotive fuels [8)]	72	64	41	43	59	7%
Goods and services purchased [9)]					29	3%
Sale of fuel [10)]					104	12%
Total (before climate compensation)	**1101**	**868**	**548**	**642**	**837**	**100%**
Climate compensation [11)]	-351	-232	-62	-106	-88	
Total (after climate compensation)	**750**	**636**	**486**	**536**	**749**	

[1)] Stockholm Exergi's own production, emissions of carbon dioxide, nitrous oxide, methane and refrigerants. Biogenic emissions amount to 2,047 kilotonnes.
[2)] Refers to nitrous oxide, methane and refrigerants. Conversion to carbon dioxide equivalents is calculated according to IPCC AR5 between 2017 and 2021, or according to IPCC AR6 from 2022.
[3)] Refers to cars on official business.
[4)] Emissions from the production of purchased electricity, district heating or district cooling, assuming that everything is unspecified (residual mix). "Share of total" includes contracts for origin-labelled electricity. The market-based method is used when calculating Scope 2 emissions. Scope 2 emissions would have been 74 kilotonnes if the location-based method had been applied.
[5)] Reduction due to the fact that Stockholm Exergi purchases origin-labelled electricity for district heating and district cooling production.
[6)] Refers to air travel on official business.
[7)] Emissions from a stakeholder other than Stockholm Exergi in the case of production collaboration for district heating. Emissions include both emissions from plants and emissions from the extraction and distribution of fuels to these plants.
[8)] In addition to the production and transport of fuels, also refers to the transport of additives and ash as well as upstream emissions for purchased electricity and fossil emissions from aerial thermography. Calculation of emissions from transport has been refined and is now based on transported quantities instead of energy consumed in the plant.
[9)] New category for 2022. Includes the manufacture of chemicals, additives, spare parts, machine services, consumables and more.
[10)] New category for 2022, one time occurance. Refers to emissions from the customer's use of coal sold by Stockholm Exergi.
[11)] Preliminary calculation before verification.
[12)] Revised figures after 2021 annual report. See note GRI 2-4 for further information.

GRI 305-4 GHG emissions intensity

Emission intensity (g CO_2-e/kWh)[1)]	**2018**	**2019**	**2020**	**2021**[5)]	**2022**
Emissions from own production [2)]	108	88	67	65	72
Emissions per energy supplied [3)]	111	90	69	68	77
Emissions per energy supplied [4)]	76	67	62	57	68

[1)] 2022 values for purchases of goods and services (new category for 2022, see GRI 305-3) have been extrapolated for 2018 to 2021 to ensure better comparability with 2022. The result for 2022 is also net of the non-recurring event (coal sold, which is included in the accounting of emissions (GRI 305-3).
[2)] Total emissions from Scope 1, 2 and 3 for own production of electricity, heat and district cooling.
[3)] Total emissions from Scope 1, 2 and 3 above per total supply of district heating, electricity and cooling before climate compensation.
[4)] Total emissions from Scope 1, 2 and 3 above per total supply of district heating, electricity and cooling after climate compensation.
[5)] Figures for energy supplied emissions have been revised since the 2021 annual report.

GRI 305-7 Nitrogen oxides (NO_x), sulphur oxides (SO_x), and other significant air emissions

Emissions to air from operations	**2018**	**2019**	**2020**	**2021**	**2022**
Emissions of nitrogen oxides (tonnes)	**1,442**	**1,399**	**759**	**1,178**	**1,215**
- Of which nitrogen oxides from electricity and heat production	989	831	589	884	831
- Of which nitrogen oxides from transport to and from the enterprise	453	568	170	294	384 [1)]
Sulphur dioxide emissions (tonnes)	**545**	**538**	**139**	**339**	**374**
- Of which sulphur dioxide from electricity and heat production	198	100	23	142	91
- Of which sulphur dioxide from transport to and from the enterprise	347	438	116	197	283 [1)]
Dust emissions (tonnes)	**47**	**56**	**21**	**35**	**50**
- Of which dust from electricity and heat production	12	13	9	15	21
- Of which dust from transport to and from the enterprise	35	44	12	20	29
Hg emissions from electricity and heat production (kg)	**11**	**12**	**11**	**13**	**5**
Cd emissions from electricity and heat production (kg)	**1**	**2**	**2**	**2**	**10** [2)]
Dioxin emissions from electricity and heat production (mg)	**83**	**96**	**205**	**117**	**86**

[1)] Emissions from transport have increased compared to recent years. This increase is partly due to the refinement of transport emissions calculations in 2022, which are now based on quantities transported rather than energy consumed, and partly due to an increase in transport of imported waste.
[2)] Cadmium emissions are measured by means of random sampling. One of them had high values and is due to a malfunction at the time of sampling.

Own disclosure Significant environmental disturbances

Type of incident	**Substance**	**Recipient**	**Number**	**Comments**
Exceeding the limit value	CO	Air	1	Exceeding the limit value according to the Regulation (2013:253) on the incineration of waste
Exceeding the limit value	dust	Air	1	Exceeding the limit value according to the Regulation (2013:252) on large combustion plants
Exceeding the limit value	NOx	Air	1	Exceeding the annual mean value according to environmental permit
Exceeding the limit value -	NOx	Air	1	Exceeding the annual average value according to BAT-LCP
Exceeding the limit value	CO	Air	1	Exceeding the hourly mean value according to environmental permit
Oil leakage	-	Land, water	2	Fuel leakage to soil and water
Total			**7**	

GRI 308-1, GRI 414-1 New suppliers that were screened using environmental criteria

All new fuel suppliers are assessed on the basis of a statement of their sustainability performance before a contract is signed. All existing suppliers were approved in 2022, and 100 per cent of all new fuel suppliers were reviewed.

REDII, the EU's updated Renewable Energy Directive, entered into force in 2021 and applies for the whole of the 2022 financial year. Like the first version of RED, this Directive has been implemented in the Swedish Sustainability Act with its associated ordinance and regulations. REDII now also includes sustainability criteria for solid biofuels in addition to liquid biofuels, which have been included previously.

Our purchasing requirements for fuel suppliers aim to ensure that biofuels meet the requirements of the Sustainability Act and thus REDII, as well as the EU Timber Regulation.

When purchasing all goods and services, a check is performed to ensure that the tendering suppliers meet a number of basic requirements such as credit control, ethical counterparty control, quality, environment and health and safety.

All suppliers must guarantee via a contract that they comply with our code of conduct, which ensures social sustainability aspects.

GRI 403-9 Work-related injuries

	Own staff		Contractors	
Type of event (number)	**2021**	**2022**	**2021**	**2022**
Fatal accidents	0	0	0	0
HCI [1)]	0	0	2	0
HCIF [2)]	0	0	2	0
LWI [3)]	3	0	12	14
LWIF [2)]	2.7	0	9.6	8.7
TRI [4)]	10	7	22	26
TRIF [2)]	9.1	6.1	17.5	16.1

[1)] HCI (High-consequence work-related injuries) refers to accidents where the injured person has not recovered or is not expected to recover within six months.
[2)] The frequency is based on a calculation with 1,000,000 hours worked.
[3)] LWI (Lost workday work-related injuries) refers to accidents that have resulted in more than one day's absence.
[4)] TRI (Total recordable work-related injuries) refers to accidents resulting in more than one day's absence, medical treatment or work-related injury leading to limited work capacity.

Deviation from GRI, Information is not reported by gender due to the fact that this information is unavailable.

GRI 405-2 Ratio of basic salary and remuneration of women to men

For 2022, Stockholm Exergi AB has a gender distribution of 21 (20) per cent women and 79 (80) per cent men. 20 (23) per cent of employees in senior positions were women. Women's median salary in relation to men's is 109 (111) per cent, a difference of 4,090 (4,618) in favour of women, for the whole of Stockholm Exergi AB.

The presence of women at higher levels of the organisation is slightly higher than at lower levels, which contributes to the increase in the median. Stockholm Exergi works actively to achieve an equal gender distribution throughout the company.

GRI 406-1 Incidents of discrimination and corrective actions taken

Information has been omitted due to the sensitivity of the issue and the low number of incidents. The few known incidents that occurred in 2021 have been managed and closed. Procedures for dealing with incidents that occur are in place within Stockholm Exergi. Preventive work is ongoing, including through the company's recruitment and training in diversity and inclusion.

GRI 306-3, GRI 306-4 Waste generated, waste diverted from disposal

Ash (tonnes) [1)]	**2021**	**2022**
Fly ash, sent to landfill	**892**	**18 831**
Hazardous waste	886	1 618
Non-hazardous waste	6	17 212
Fly ash, recycled	**44,296**	**29 698**
Hazardous waste	19,303	19,783
- Hazardous waste, other recycling (new for 2022)	-	0
- Hazardous waste, material recycling (new for 2022)	-	19,783
Non-hazardous waste	24,993	9,914
- Non-hazardous waste, other recycling (new for 2022)	-	15
- Non-hazardous waste, material recycling (new for 2022)	-	9,899
Bottom ash, sent to landfill	**0**	**40**
Hazardous waste	0	0
Non-hazardous waste	0	40
Bottom ash, recycled [2)]	**144,558**	**176,311**
Hazardous waste	0	0
- Hazardous waste, other recycling (new for 2022)	-	0
- Hazardous waste, material recycling (new for 2022)	-	0
Non-hazardous waste	144,558	176,311
- Non-hazardous waste, other recycling (new)	-	0
- Non-hazardous waste, material recycling (new)	-	176,311
- Non-hazardous waste, energy recovery (new)	-	0
Total	**189,746**	**224,879**

Other waste (tonnes) [1)]	**2021**	**2022**
Other waste, sent to landfill	**1,188**	**1,143**
Hazardous waste	445	386
Non-hazardous waste	743	757
Other waste, destruction	**362**	**65**
Hazardous waste	**-**	63
Non-hazardous waste for destruction		3
Other waste, recycled [1)]	**24,239**	**19,705**
Hazardous waste	1,248	864
- Hazardous waste, other recycling (new for 2022)	-	275
- Hazardous waste, material recycling (new for 2022)	-	110
- Hazardous waste, energy recovery (new for 2022)	-	478
Non-hazardous waste	22,991	18,841
- Non-hazardous waste, other recycling	-	1,354
- Non-hazardous waste, material recycling	-	16,733
- Non-hazardous waste, energy recovery	-	754
Excavated soil	**36**	**13,348**
Excavated soil, sent to landfill (previously termed "Contaminated excavated soil sent to landfill")	36	35
- Hazardous waste	-	0
- Non-hazardous waste	-	35
Excavated soils, other recycling (previously termed "Contaminated excavated soil recycled")	0	13,313
- Hazardous waste, materials recycling (new for 2022)	-	87
- Non-hazardous waste, materials recycling (new for 2022)	-	12,937
- Non-hazardous waste, other recycling (new for 2022)	-	290
Total	**25,825**	**34,261**

[1)] for 2022, we have provided a more detailed breakdown of how waste has been recycled than for 2021, where it was only stated as a total. Of recycled waste in 2021, 1,420 tonnes went to energy recovery and 7,690 tonnes to material recycling.

Accounting according to the Taxonomy Regulation

Stockholm Exergi is subject to the requirements of Article 8 of the EU Taxonomy Regulation, EU 2020/852, as of 2021. For 2022, the proportion of a company's economic activities that are Taxonomy-eligible and Taxonomy-aligned must be reported.

Application of the Taxonomy Regulation

The turnover indicator

In terms of turnover, Stockholm Exergi estimates four economic activities to be Taxonomy-eligible. These activities relate to the substantial contribution to the climate change mitigation objective (environmental objective 1) and correspond to 4.15 "District heating/cooling distribution", 4.16 "Installation and operation of electric heat pumps", 4.20 "Cogeneration of heat/cool and power from bioenergy" and 4.24 "Production of heat/cool from bioenergy".

All sites have been assessed as meeting or not meeting the description of the above activities. The assessment is based on the concept of an installation in the EU's Industrial Emissions Directive (IED) as the taxonomy does not have its own definition of an installation. If an installation consists of several sub-activities, the assessment has taken into account whether there is a technical and environmental link in terms of emissions and pollution. As in previous years, the district heating network and the district cooling network are treated as a coherent network regardless of physical interconnection.

Capital expenditure (CapEx) and operating expenditure indicators (OpEx)

In terms of capital expenditure and operating expenditure, Stockholm Exergi is estimated to have – as in 2021 – expenditure associated with the four activities listed under the turnover indicator. Through the ongoing investment in bio-CCS, Stockholm Exergi is also expected to have expenditure associated with activity 9.1 "Close to market research, development and innovation" in 2022. In addition, a survey of the following has been conducted for the purpose of accounting for expenditure:

- Capital expenditure and operating expenditure that are part of a plan to expand the proportion of activities eligible by the taxonomy or enable economic activities eligible by the taxonomy to become compliant with the requirements of the taxonomy within five years
- Procurement of products from economic activities that are aligned with taxonomy requirements, as well as individual measures that enable the activities to become low-carbon or reduce greenhouse gas emissions.

Based on the survey, Stockholm Exergi is expected to have additional Taxonomy-eligible expenditure in 2022. These relate to activities 7.3 "Installation, maintenance and repair of energy efficiency equipment" and 7.4 "Installation, maintenance and repair of charging stations for electric vehicles in buildings". The expenditure concerns individual measures for energy-efficient lighting and ventilation systems, as well as the detailed design and procurement of charging infrastructure for electric cars.

No capital expenditure or operating expenditure has been allocated to the climate change adaptation objective (environmental objective 2). This is because Stockholm Exergi has not had any significant expenses in 2022 that are primarily aimed at adapting its operations to climate change as described in the Taxonomy Regulation.

General

For those installations deemed to be Taxonomy-eligible, criteria have been managed at installation level based on the site concept in the IED. Significant activities that are not eligible in the Taxonomy Regulation are the recovery of energy in the final treatment of residual waste by incineration, and energy production with fossil fuels. However, the heat pumps that have been assessed as separate installations and that recover residual heat from waste boilers have been deemed to correspond to the description under activity 4.16. As in previous years, the bio-boilers that use auxiliary fuel have been deemed to correspond to the description under activities 4.20 and 4.24 when consumption is less than 1 per cent of the boiler's total consumption.

Assessment of Taxonomy alignement

A total of 7 per cent of turnover, 1 per cent of capital expenditure and 18 per cent of operating expenditure have been assessed being Taxonomy-aligned. These percentages are found in three activities: 4.20 "Cogeneration of heat/cool and power from bioenergy", 4.24 "Production of heat/cool from bioenergy" and 9.1 "Close to market research, development and innovation". Taxonomy-aligned activities under 4.20 and 4.24 consist of two individual production units, one corresponding to each activity code. Activity 9.1 refers to Stockholm Exergi's bio-CCS initiative. For this, only operating expenditure corresponding to research and development is recognised as being aligned with the taxonomy.

Substantial contribution to climate change mitigation

Stockholm Exergi has investigated the requirements for a substantial contribution as listed in the Delegated Regulation in respect of climate under activities 4.20 and 4.24. For Taxonomy-aligned installations, the requirements regarding forest biomass and greenhouse gas emission reductions under the Renewable Energy Directive (RED II) have been assessed as fulfilled. The assessment of the fuel is based on procured volumes in the 2022 financial year. The other requirements for substantial contribution are re-criteria and have been deemed inapplicable as the installations in question neither apply anaerobic digestion of organic matter nor are small installations using gaseous biomass fuels. Our conclusion is that the two installations in question contribute significantly to environmental objective 1.

With regard to activity 9.1, the project has been assessed against the criteria for substantial contribution listed under 9.1 of the Delegated Regulation in respect of climate. Based on publicly available market information, Stockholm Exergi is the first to bring the biofuel-based CCS technology to the market. Through evaluation of life cycle emissions, the technology is assessed to lead to significant reductions in net emissions in accordance with the criteria. The bio-CSS initiative, including the pilot installation, is jointly assessed to meet the description in the Regulation and to fulfil all criteria. Our conclusion is that the activity contributes significantly to environmental objective 1.

DNSH – climate change adaptation

For activities 4.20, 4.24 and 9.1, the physical climate risks that are substantial for the activity are required to be identified and managed according to the general DNSH criteria for climate adaptation (environmental objective 2). Two installations under 4.20 and 4.24 have been deemed to meet these DNSH criteria. A general assessment of physical climate risks has been conducted at one of these installations. The assessment concluded that no further adaptation measures are required. Thus the DNSH criteria have been considered to be fulfilled. At the second installation, the risks identified have been addressed by implementing the necessary adaptation solutions.

For activity 9.1, a physical climate risk assessment has been carried out as part of the environmental impact assessment for the intended full-scale bio-CCS facility. Our conclusion is that the solution resulting from the research activities does not cause significant harm to environmental objective 2.

DNSH – biodiversity and ecosystems, and water and marine resources

Activities 4.20, 4.24 and 9.1 require management of risks related to water and marine resources (environmental objective 3) and biodiversity and ecosystems (environmental objective 6) according to the general DNSH criteria for each environmental objective. Environmental impact assessments have been carried out in connection with the permit application process for the two installations in question. Furthermore, Stockholm Exergi has no production installation less than 100 metres away from a Natura 2000 site. As the installations in question have undergone a permit application process with associated control programmes, our conclusion is that they meet the criteria throughout the chain and thereby meet the DNSH criteria for environmental objectives 3 and 6.

For activity 9.1, any threats to aquatic environments and ecosystems are evaluated and addressed within the framework of the ongoing permit application process for water activities and environmentally hazardous activities. This process relates to an amendment authorisation for the construction of a carbon dioxide capture facility at Värtaverket. Our conclusion is that the solution resulting from the research activities does not cause significant harm to environmental objectives 3 and 6.

DNSH – prevention and control of pollution

For installations falling under 4.20 and 4.24 and covered by the Industrial Emissions Directive (IED), emissions are required not to exceed the emission levels corresponding to the best available techniques according to the latest applicable BAT conclusions. The Industrial Emissions Directive has been incorporated into Swedish legislation, and emission levels are reported by Stockholm Exergi in connection with annual environmental reporting to the supervisory authority. We therefore conclude that the installations in question fulfil the DNSH criterion for pollution prevention and control (environmental objective 5).
For activity 9.1, any risks of significant increases in emissions are evaluated and addressed within the framework of the ongoing permit application process for environmentally hazardous activities. It is noted that the use of some chemicals on the phase-out list (REACH) is planned for the solution resulting from the research activities. The product selection principle is followed for these chemicals. Our conclusion is that the technology resulting from the research activities does not cause significant harm to environmental objective 5.

DNSH – transition to a circular economy

For activities 4.20 and 4.24, the Delegated Regulation in respect of climate states that the requirement not to cause significant harm to the transition to a circular economy (environmental objective 4) does not apply. Hence no assessment has been performed for the two installations in question.

With regard to activity 9.1, the amounts of waste generated in the activity are evaluated within the framework of the ongoing permit application process for environmentally hazardous activities. In relation to other activities, the increase in waste from the bio-CSS solution is considered limited. It is noted that the possible target activities for the technology, such as 4.20 and 4.24, lack DNSH criteria for environmental objective 4. Our conclusion is that the technology resulting from the research activities does not cause significant harm to environmental objective 4.

Minimum safeguards

Compliance with minimum safeguards under Article 18 of the Taxonomy Regulation has been assessed at Group-wide level. To assess compliance with minimum safeguards, Stockholm Exergi conducted a survey of existing procedures relating to human rights, corruption, tax issues and fair competition in December 2022 based on the requirements of Article 18. Possible areas for development linked to the UN Guiding Principles on Business and Human Rights were also identified as part of the survey.

The survey showed that the sustainability policy, code of conduct and supplier code of conduct are the main platforms for integrating human rights requirements, and are binding for all procurement. The sustainability policy addresses human rights issues broadly and is operationalised in codes of conduct. In addition, Stockholm Exergi has an established process for monitoring suppliers in both fuel trading and transport and installations. Our overall conclusion is that the company currently applies minimum safeguards in accordance with the requirements of the taxonomy.

See page 22-29 for more information on how Stockholm Exergi works with sustainable supply chains.

Accounting policies

Turnover

Principles for allocating turnover per plant are the same as for 2021. Turnover from heating, cooling and electricity has been allocated to plants based on annual production in MWh per product (heating, cooling and electricity). The share of turnover allocated to distribution corresponds to the share of Stockholm Exergi's total operating expenses that can be attributed to distribution (heating and cooling networks). For distributed turnover per plant, a standardised deduction has been made for the part of the turnover attributable to the distribution of heating and cooling.

The network affiliation of production plants or customers, or of the fact that the product "electricity" has a price per volume that varies on an hourly basis, has not been taken into account. As in the previous year, negative income related to trading in financial electricity has been included in total turnover. The recognition of total turnover corresponds to the item Net sales in the consolidated income statement on page 76 and note 5 on page 95.

Capital expenditure

The proportion of Taxonomy-eligible or Taxonomy-aligned capital expenditure corresponds to all investments for the financial year that are related to facilities and individual measures that are eligible or aligned with the taxonomy. For all investments during the financial year, an assessment has been made as to whether they are related to plants or individual measures that are eligible or alignedwith the taxonomy. For items of expenditure involving several plants, an estimate of the distribution of costs has been made on the basis of judgement in consultation with those responsible. Investment costs that cannot be attributed to production or distribution facilities or individual measures have been excluded from the numerator.

Investment cost refers to additions to tangible and intangible assets during the year before depreciation, revaluation and impairment and excluding changes in fair value. It also includes additions to rights of use. See notes 15 and 16 on pages 102 and 103.

Operating expenditure

The share of Taxonomy-eligible economic activities refers to maintenance and repair costs related to production and distribution facilities with applicable activities, as well as research and development costs. The definition of operating expenditure in the Taxonomy differs from other financial reporting. For this definition, only repair and maintenance costs that can be linked to production and distribution (including property) and research and development costs are relevant for Stockholm Exergi's reporting under the Taxonomy Regulation. For all repair and maintenance costs during the financial year, an assessment has been made as to whether they are attributable to production or distribution facilities eligible according to or aligned with the Taxonomy.

Operating expenditure involving several plants has been allocated according to allocation keys. This includes expenditure related to common property costs and depot operations. For common property costs, allocation has been based on the energy produced at the plant to which the property is most closely connected. For depot operations, allocation has been made by calculating the mass moved to plants that are covered by or compatible with the taxonomy. Operating expenditure that cannot be attributed to any production or distribution facility has been excluded from the numerator.

Analysis

A large proportion of Stockholm Exergi's turnover, capital expenditure and operating expenditure is Taxonomy-eligible. However, only a small proportion of these have been judged to be Taxonomy-aligned. One explanation is the Taxonomy's far-reaching requirements for climate adaptation based on the criterion of not causing significant harm to environmental objective 2. Today, only two of Stockholm Exergi's production plants are deemed to fulfil the requirement. Stockholm Exergi currently has an ongoing project concerning climate adaptation in which physical climate risks and the need for adaptation solutions are mapped at other production facilities. As the project progresses, it is expected that more plants will be able to fulfil the criterion and thus a greater proportion of the activity will be classified as Taxonomy-aligned.

Waste incineration remains a significant activity that is not Taxonomy-eligible. In 2022, it was decided that energy production using fossil natural gas and nuclear power will be eligible, while thermal final treatment of residual waste with energy recovery is not eligible. However, it is unclear whether the recovery of energy from waste incineration should be regarded as an activity that should be eligible in its own right, similar to the recovery of other waste heat from various processes in society. Environmentally sound final treatment of residual waste is a necessary public service that is required, regardless of whether or not the energy is recovered. The alternative would be to divert the heat to a recipient. Energy recovery represents a significant energy potential. This could reduce the need to import fossil fuels into the EU, for example.

Stockholm Exergi's strategy is to develop the final treatment so that it can eventually be carried out using CCS/CCU technology, which would minimise the climate impact and create either permanent negative emissions or increased material cycles. Stockholm Exergi's goal is to become Europe's largest producer of negative emissions in 2026 through its investment in bio-CCS, while also continuing its work to reduce remaining fossil emissions, primarily from waste treatment. In this way, Stockholm Exergi is contributing to the Swedish climate goal of net zero and then negative emissions by 2045, and in the same way to the City of Stockholm's goal of a fossil-free and climate-positive Stockholm. This initiative is reflected in our research and development expenditure and represents a significant part of the group's Taxonomy-aligned operating expenditure. The Annual and Sustainability Report contains more information about the initiative and other relevant parts.

Turnover

				Substantial contribution criteria		Do no significant harm (DNSH) criteria									
Economic activities	**Code/codes**	**Absolute turnover**	**Proportion of turnover**	**Climate change mitigation**	**Climate change adaptation**	**Climate change mitigation**	**Climate change adaptation**	**Water and marine resources**	**Circular economy**	**Pollution**	**Biodiversity and ecosystems**	**Minimum safeguards**	**Taxonomy-aligned proportion of turnover, 2022**	**Category (enabling activity)**	**Category (transitional activity)**
		SEK million	**%**	**%**	**%**	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	Yes/No	**%**	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES															
A.1. Environmentally sustainable activities (Taxonomy-aligned)															
Cogeneration of heat/cool and power from bioenergy	4.20	505	6%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	6%	-	-
Production of heat/cool from bioenergy	4.24	57	1%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	1%	-	-
Turnover of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**562**	**7%**	**100%**	**0%**	-	-	-	-	-	-	-	**7%**	-	-
A.2. Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities)															
District heating/cooling distribution	4.15	657	8%												
Installation and operation of electric heat pumps	4.16	1,315	16%												
Cogeneration of heat/cool and power from bioenergy	4.20	1,977	25%												
Production of heat/cool from bioenergy	4.24	222	3%												
Turnover of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**4,172**	**52%**												
Total (A.1 + A.2)		**4,733**	**59%**												
B. TAXONOMY NON-ELIGIBLE ACTIVITIES															
Turnover of Taxonomy non-eligible activities (B)		**3,263**	**41%**												
Total (A + B)		**7,996**	**100%**												

Capital expenditure

Economic activities	Code/codes	Absolute CapEx	Proprotion of CapEx	Substantial contribution criteria		Do no significant harm (DNSH) criteria							Taxonomy-aligned proportion of CapEx, 2022	Category (enabling activity)	Category (transitional activity)
				Climate change mitigation	Climate change adaptation	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards			
		SEK million	%	%	%	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Per cent	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES															
A.1. Environmentally sustainable activities (Taxonomy-aligned)															
Cogeneration of heat/cool and power from bioenergy	4.20	13	1%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	1%	-	-
Production of heat/cool from bioenergy	4.24	3	0%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	0%	-	-
CapEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**16**	**1%**	**100%**	**0%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**1%**	**-**	**-**
A.2. Taxonomy-eligible but not environmentally sustainable (not Taxonomy-aligned activities)															
District heating/cooling distribution	4.15	436	27%												
Installation and operation of electric heat pumps	4.16	85	5%												
Cogeneration of heat/cool and power from bioenergy	4.20	116	7%												
Production of heat/cool from bioenergy	4.24	35	2%												
Installation, maintenance and repair of energy efficiency equipment	7.3	1	0%												
Installation, maintenance and repair of charging stations for electric vehicles in buildings (and parking spaces attached to buildings)	7.4	1	0%												
CapEx of Taxonomy-eligible but not environmentally sustainable activities (not taxonomy-aligned activities) (A.2)		**674**	**41%**												
Total (A.1 + A.2)		**690**	**42%**												
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES															
CapEx of Taxonomy non-eligible activities (B)		**9**	**58%**												
Total (A + B)		**1,635**	**100%**												

Operational expenditure

Economic activities	Code/codes	Absolute OpEx	Proportion of OpEx	Substantial contribution criteria		Do no significant harm (DNSH) criteria							Taxonomy-aligned proportion of OpEx, 2022	Category (enabling activity)	Category (transitional activity)
				Climate change mitigation	Climate change adaptation	Climate change mitigation	Climate change adaptation	Water and marine resources	Circular economy	Pollution	Biodiversity and ecosystems	Minimum safeguards			
		SEK million	%	%	%	Yes/No	Yes/No	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Yes/ No	Per cent	E	T
A. TAXONOMY-ELIGIBLE ACTIVITIES															
A.1. Environmentally sustainable activities (Taxonomy-aligned)															
Cogeneration of heat/cool and power from bioenergy	4.20	35	5%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	5%	-	-
Production of heat/cool from bioenergy	4.24	5	1%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	1%	-	-
Close to market research, development and innovation	9.1	92	13%	100%	0%	-	Yes	Yes	Yes	Yes	Yes	Yes	13%	E	-
OpEx of environmentally sustainable activities (Taxonomy-aligned) (A.1)		**132**	**18%**	**100%**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**-**	**18%**	**-**	**-**
A.2. Taxonomy-eligible but not environmentally sustainable (not Taxonomy-aligned activities)															
District heating/cooling distribution	4.15	57	8%												
Installation and operation of electric heat pumps	4.16	55	8%												
Cogeneration of heat/cool and power from bioenergy	4.20	92	13%												
Production of heat/cool from bioenergy	4.24	22	3%												
OpEx of Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned activities) (A.2)		**225**	**31%**												
Total (A.1 + A.2)		**357**	**50%**												
B. TAXONOMY-NON-ELIGIBLE ACTIVITIES															
OpEx of Taxonomy non-eligible activities (B)		**360**	**50%**												
Total (A + B)		**717**	**100%**												

Assurance statement for the sustainability report

Auditor's Limited Assurance Report on Stockholm Exergi Holding AB's Sustainability Report and statement regarding the Statutory Sustainability Report

To Stockholm Exergi Holding AB (publ.), corporate identity number 556040-6034.

Introduction

We have been engaged by the Board of Directors of Stockholm Exergi Holding AB ("Stockholm Exergi") to undertake a limited assurance engagement of the Stockholm Exergi Sustainability Report for the year 2022. The Company has defined the scope of the Sustainability Report in connection to the table of content in the Annual and Sustainability Report on page 3, which also constitutes the Statutory Sustainability Report.

Responsibilities of the Board of Directors and the Executive Management

The Board of Directors and the Executive Management are responsible for the preparation of the Sustainability Report including the Statutory Sustainability Report in accordance with the applicable criteria and the Annual Accounts Act respectively. The criteria are defined on page 123 in the Annual and Sustainability Report, and are part of the Sustainability Reporting Standards published by GRI (Global Reporting Initiative), which are applicable to the Sustainability Report, as well as the accounting and calculation principles that the Company has developed. This responsibility also includes the internal control relevant to the preparation of a Sustainability Report that is free from material misstatements, whether due to fraud or error.

Responsibilities of the auditors

Our responsibility is to express a conclusion on the Sustainability Report based on the limited assurance procedures we have performed and to express an opinion regarding the Statutory Sustainability Report. Our engagement is limited to historical information presented and does therefore not cover future-oriented information.

We conducted our limited assurance engagement in accordance with ISAE 3000 (revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information. A limited assurance engagement consists of making inquiries, primarily of persons responsible for the preparation of the Sustainability Report, and applying analytical and other limited assurance procedures. Our examination regarding the Statutory Sustainability Report has been conducted in accordance with FAR's accounting standard RevR 12 The auditor's opinion regarding the Statutory Sustainability Report. A limited assurance engagement and an examination according to RevR 12 is different and substantially less in scope than an audit conducted in accordance with International Standards on Auditing and generally accepted auditing standards in Sweden.

The firm applies International Standard on Quality Management 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements. We are independent of Stockholm Exergi in accordance with professional ethics for accountants in Sweden and have otherwise fulfilled our ethical responsibilities in accordance with these requirements.

The limited assurance procedures performed and the examination according to RevR 12 do not enable us to obtain assurance that we would become aware of all significant matters that might be identified in an audit. The conclusion based on a limited assurance engagement and an examination according to RevR 12 does not provide the same level of assurance as a conclusion based on an audit.

Our procedures are based on the criteria defined by the Board of Directors and the Executive Management as described above. We consider these criteria suitable for the preparation of the Sustainability Report.

We believe that the evidence we have obtained is sufficient and appropriate to provide a basis for our conclusion below.

Conclusions

Based on the limited assurance procedures we have performed, nothing has come to our attention that causes us to believe that the Sustainability Report, is not prepared, in all material respects, in accordance with the criteria defined by the Board of Directors and Executive Management.

A Statutory Sustainability Report has been prepared.

Stockholm, March 23, 2023

Deloitte AB

Daniel Wassberg
Authorised Public Accountant

Adrian Fintling
Expert Member of FAR

STOCKHOLM EXERGI IN BRIEF

Stockholm Exergi is Stockholm's energy provider. Using resource-efficient solutions, we ensure that the growing Stockholm region has access to electricity, heating, cooling and waste services. We provide heat to more than 800,000 Stockholmers and our 3,000-kilometre-long district heating network forms the basis for the societal benefits that we create together with our customers and partners. We are owned by the City of Stockholm and Ankhiale and our 700 employees work every day to reduce Stockholmers' climate impact. By developing carbon dioxide capture technologies, we are committed to making zero emissions a reality.

OTHER FINANCIAL REPORTS AND EVENTS

Annual General Meeting: April 19, 2023
Interim Report, January-June 2023: August 31, 2023
Year-end Report 2023: February 23, 2024

This report is an English translation of the Swedish original. In the event of any difference between the two versions, the Swedish is to take precedence.

Stockholm Exergi Holding AB (publ)
Org. nr. 556040-6034
115 77 Stockholm
tel: 020-31 31 51
stockholmexergi.se

stockholm exergi