# Game Changer 2022

St1 Nordic Oy Integrated Report

# Contents

## About this report

**This is the Corporate Sustainability Report of St1 Nordic. It is published to recount our most material disclosure topics in corporate sustainability as well as our business activities. It also serves as our Communication on Progress towards the UN Global Compact.**

**Our corporate sustainability reporting follows the same principles of consolidation as our Financial Statement and includes all our Group companies. This report has been prepared with reference to the Global Reporting Initiative Standards. Additionaly, our oil refinery in Gothenburg complies with the standards of ISO 14001.**

WE SUPPORT UN GLOBAL COMPACT

# Year 2022

CEO's review

# Sustainable energy and security of supply

Even before Russia's invasion of Ukraine, Europe was heading towards an energy crisis. However, the war has seriously accelerated the impact of the crisis on the global market. The situation has tested the ability of companies' processes, risk management, and business models to cope with the consequences of this kind of severe shortfall in the energy supply.

The energy crisis has made us all realize that while we are in the middle of the energy transition, we must maintain  security of supply. The willingness to increase the use of low-emissions energy is greater than ever before, but the realistic means to deliver a significant scale-up are still lacking. We have to realize that to carry out the energy transition in a sustainable way, the time frame for doing so will inevitably have to be longer than the current targets have forecast.

## Focused on the energy transition roadmap

Despite these challenging times, we continued our work of transitioning our value chain towards greater sustainability, according to our energy transition roadmap. With that roadmap, we have created a strong link from our vision – to be the leading producer and seller of $CO_2$-aware energy – to our strategic focus areas in the short- and mid-term, and our plans for years to come.

This roadmap presents our ambitious outlook for the future regarding new projects, the viability of which will require a continuous, healthy cash flow and strong partners. Nevertheless, decisions on the future regulatory framework will almost certainly affect the roadmap's realization.

## Our sustainable projects progressed by leaps and bounds

2022 was an exceptional year for St1.
I feel privileged to work with our dedicated organization, one that has accomplished such great things. Once more, together we have achieved something that we haven't seen before.

Our renewable fuels business took a significant step forward in the beginning of the year when

> "Our sustainable projects progressed by leaps and bounds."



we finalized the acquisition of Brocklesby Ltd. in the United Kingdom. We welcomed the recycling expert of used cooking oil and fatty food waste, one of the UK's leading refiners in this field. Brocklesby will provide feedstocks for renewable diesel and sustainable aviation fuel (SAF), to be produced in the new Gothenburg biorefinery, which will be operational by the end of 2023. The biorefinery is our biggest single investment in our history so far, highlighting the scale and scope of our sustainability ambition.

In the biogas business area, we established a joint venture with the food company Valio to produce renewable biogas as transport fuel, using dairy farm manure and agricultural by-products. Suomen Lantakaasu Oy is planning the construction of what will be Finland's largest biogas and liquefaction plant to date, in North Savo.

We also made an investment decision to construct a biogas upgrading and liquefaction refinery in Borås, Sweden. This investment helps us to continue expanding our biogas filling network in the Nordics.

Towards the end of the year, we acquired 14.5% of the shares of Scandinavian Biogas Fuels International AB, one of the leading biogas producers in the Nordics.

Our Power-to-X projects advanced on many fronts. In the summer, we formed a partnership with Vattenfall. A feasibility study is currently ongoing, aimed at addressing the full value chain for the production of synthetic fuel from offshore wind on the west coast of Sweden.

We also reached an agreement with the circular economy energy company Vantaa Energy for cooperation on the distribution of the gas produced by their electric fuel plant to our customers.

In the autumn, we announced plans to construct the first synthetic methanol plant in Finland. The commercial-scale pilot project aims to produce renewable synthetic methanol to replace fossil fuels used in maritime and road transport.

We strengthened our wind power portfolio significantly last year. In Norway, our wind power projects in Finnmark advanced well. The 800 MW Davvi project is currently in the permitting phase, and we also submitted a notification regarding a new 750 MW wind power project, Sandfljellet, in the same area. Additionally, we acquired Nordre Sørøy Energiselskap AS, which has a 200 MW wind power project in the Hammerfest municipality of Northern Norway.

Electric vehicle (EV) charging network installations continued in Norway as part of our retail offering. We are also preparing to expand our charging network to Sweden and Finland as we see growth in this segment going increasingly forward.

## The financial year

Our operating environment in 2022 was very volatile and challenging. Changes were rapid and the energy market experienced a number of unprecedented events, particularly in terms of prices, as a result of the war in Ukraine. Maintaining security of supply and monitoring the market were key in all parts of our value chains. Nevertheless, St1 delivered strong performance in 2022.

> We base our growing energy business on our values: transparency, fairness, sustainability, and equal opportunities.

We also pursued our planned investments rigorously, both in our existing business as well as in our new renewable energy projects in particular. Our investments in renewable energy production exceeded EUR 110 million.

Net sales of the St1 Nordic Group in 2022 amounted to EUR 10.5 billion, up EUR 4.1 billion compared to the previous year. Net sales increased due to the sharp rise in the prices of oil products on the world market during the year, as well as due to slightly higher sales volumes of service stations and direct sales. Finland accounted for 22%, Sweden for 52%, Norway for 25%, and the UK for 1% of our net sales.

Operating profit amounted to EUR 284.4 million, up EUR 103.0 million year-on-year. Earnings after tax amounted to EUR 234.6 million, whereas earnings in the previous year amounted to EUR 148.8 million. Refining and wholesale margins were significantly higher than in the previous year due to the volatility in the energy market caused by the global geopolitical situation.

Due to continued intense price competition, the performance of the Retail and Direct Sales market weakened. The performance of the biogas business was negatively affected by the high market price of gas products, especially towards the end of the year.

Cash flow from operating activities amounted to EUR 226.5 million. Investments amounted to a total of EUR 284.6 million. The largest of these were the biorefinery under construction in Gothenburg and the acquisition of Brocklesby Ltd. in the UK in early 2022.

## Conducting business according to our values

We base our growing energy business on our values: transparency, fairness, sustainability, and equal opportunities.

Achieving results is important, but the way we reach our goals is just as critical. St1 Nordic committed to the UN Global Compact in 2020. Since then, its ten core principles concerning human rights, working life, the environment, and the fight against corruption have inspired our sustainability work and given it a solid backbone upon which we can build more transparent and sustainable business operations.

In 2022, St1 Group's sustainability themes focused heavily on developing and ensuring the sustainability of our supply chain and implementing measures required by due diligence. Our focus for the year was to develop the company's sustainability risk management and assessment as well as to increase measures to guarantee transparency, alongside the development of a continuous impact assessment of our value chain. In addition, we updated the entire organization's materiality analysis by engaging stakeholder groups. As part of this development work, we will publish our first due diligence report in spring 2023.

> We have grown from a small Finnish fuel retailer to an energy transition company, now operating in four countries.

## People are the heart of our value chain

Executing our strategy demands agile but controlled moves, and this is particularly important in challenging times. We need to dedicate our resources to developing a profitable and sustainable business for the future. As an energy transition company, we continued to strengthen our organization with new capabilities and ensure the transparent flow of information, together with common processes and tools.

We focus continuously on maintaining psychological safety, helping everyone within our organization to feel valued. Our Culture for Growth gives us a strong platform for all of us to thrive. We evaluate the success of what we measure frequently and process the received feedback together to drive action.

We are committed to offering a safe working environment for everyone at St1. Strong Health, Safety, Security & Environment (HSSE) performance is of high importance in the development of all our business units.

Last year, St1 celebrated its 25th anniversary. We have grown from a small Finnish fuel retailer to an energy transition company, now operating in four countries. Our refinery turned 75 years old last year and is now ready to open a biorefinery to produce renewable diesel and sustainable aviation fuel. Our history shows that our dedicated people, who constantly renew themselves to create sustainable business for the future, will attain our ambitious vision to be the leading producer and seller of $CO_2$-aware energy.

I would like to extend my warmest thanks to our employees for their humble efforts and team spirit. I would also like to thank our clients and partners for your trust in our services and activities during these challenging times.

As I write this, it is hard to even think about the human impact of Russia's invasion of Ukraine. I sincerely hope that the hostilities will end quickly, and that peace will prevail.

**Henrikki Talvitie**, CEO

## St1 Energy Transition Roadmap

# Our future depends on the energy transition

**Paris Agreement targets to mitigate climate change require relevant actors to develop a new low-emission energy system globally. Such a system would gradually change the way we as a planet produce, store, and use our everyday energy.**

System-level change challenges and demands all energy sector organizations as well as entire societies to develop their own ambitious energy transition roadmaps combined with milestones to facilitate the shift from fossil energy to low emission energy. Those roadmaps would support the prompt and efficient entry of new energy carriers, and thus also quicken the reduction of emissions throughout the whole energy value chain,  expediting the achievable impact.

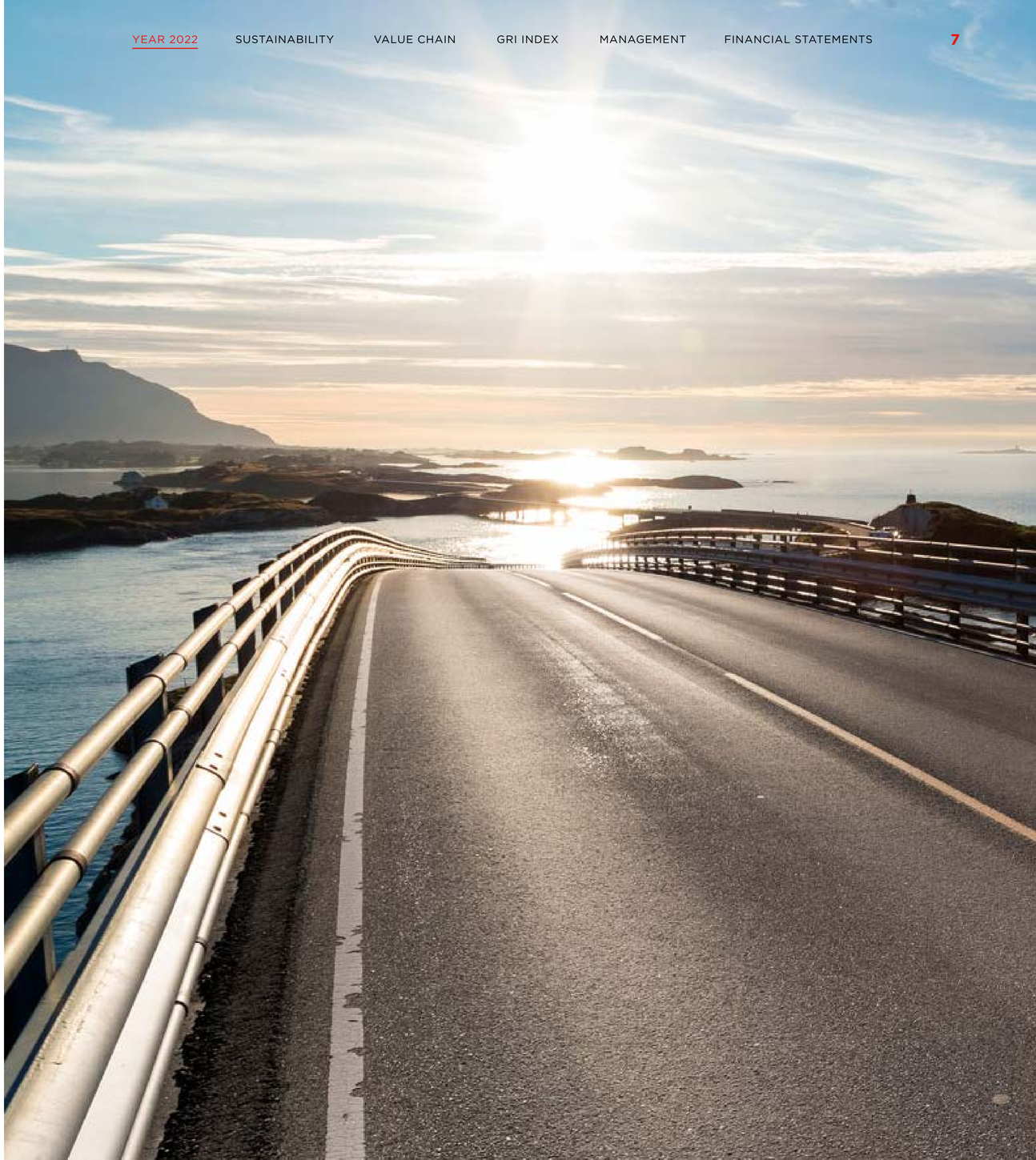
To finally reach a sustainable carbon cycle, massive investments are required in decarbonization – through renewable energy and energy efficiency; and through carbon sequestration in the form of carbon capture and storage (CCS) and carbon capture and utilization (CCU) technologies and carbon sinks.

In this challenging situation, we must find optimism and together create a sustainable way forward. There are plenty of tools and means to succeed in that.

### The framework of St1's Energy Transition Roadmap

Our vision is to be the leading producer and seller of $CO_2$-aware energy. We are realizing our vision through investments in the energy transition, and at the same time, building world-class expertise in the energy sector.

As a company in transition, we need to uncover further new avenues for sustainable growth and build a profitable business for the future. In the process of renewing our business, we are drawing an energy transition roadmap which will guide our operations going forward.



Our roadmap work is governed by society's regulations and decisions, technological advancements, as well as our business's adaptation to new situations and customers' demands and behavioural changes.

Growth opportunities for St1 arise by developing and exploring new business areas while at the same time ensuring a healthy cash flow that supports the transition. Furthermore, we are accelerating growth through acquisitions and strengthening our operations through strategic long-term partnerships in various areas. In addition, we are developing future value chains to invest in $CO_2$ -aware energy production. Naturally, future decisions within the regulatory framework will affect the realization of these opportunities.

Liquid transport fuels will continue to play a major role for decades to come, but the products will change over time towards more and more low-emission fuels. Today, St1 has a strong asset base for liquid fuels trade in the Nordics: refinery infrastructure, terminal and retail networks, and logistics, and sales network for end customers in the transport fuels segment, such as road, marine, and aviation.

Our work in developing liquid fuels will continue to contribute a significant part of our cash flow and allow us to introduce more and more sustainable energy to the market in different forms.

## Our energy transition roadmap supports our vision

The St1 Energy Transition Roadmap serves as a framework and tool for us to continuously model our future energy mix and decrease the carbon intensity of the portfolio of the energy we produce and sell. It is based on our strategy and business plans aligned with the Nordic energy demand scenarios and EU regulation. The primary target of our roadmap is to grow our low-emission energy portfolio. This requires us to connect our new products with growing market segments that could also emerge in different sectors and in geographical areas.

Our roadmap consists of low-emission energy like renewable electricity, hydrogen-based energy carriers and biofuels, as well as fossil fuel-based energy. In other words, it is our projection of what the Nordic energy system will look like, and what St1's role will be in it, considering both the timespan and volume development of different low-emission energy solutions replacing traditional fuels.

The roadmap's main drivers are St1's vision as well as our strategic choices to continuously enhance the sustainability of our value chain. The stakeholder interface and dialogue are also key elements to understand what requirements our customers will set us and how quickly the market and society adapts to new energy carriers.

We want to offer all our customers a solution where we can manage market-related risks, not only delivering energy, but also providing transparent and trustworthy ways to reduce their own carbon footprint.

Carbon sequestration from the atmosphere using a combination of technological and nature-based solutions is a critical part of climate mitigation. At this point, our roadmap does not count these as part of emission reduction solutions for St1's own value chain emissions. However, we are continuously developing such programs and are already offering our customers the possibility to invest in atmospheric carbon removal.

> "Our energy transition journey became evident in 2007, when in the spirit of our vision, we opened our first Etanolix®-plant in Finland, producing waste-based ethanol for transportation."

## Our journey so far

As a small energy transition company, we have punched above our weight and continue to do so. Our energy transition journey became evident in 2007, when in the spirit of our vision, we opened our first Etanolix®-plant in Finland, producing waste-based ethanol for transportation. Already then, we were determined to solve global energy challenges. And today, this passion is stronger than ever.

We have boldly taken ambitious steps to explore, pilot, and commercialize new energy solutions. We expanded the advanced ethanol biorefinery network, introducing the waste-based RE85 high-blend ethanol fuel in Finland. We also entered the industrial wind power production market, promoting the spread of the renewable energy and its technological development.

Our associated company TuuliWatti became the leading wind power actor in Finland. We saw great opportunities worth piloting in combustion-free heating through deep geothermal heat, drilling into depths of over 6 kilometres in the hope of uncovering an emissions-free solution. We have taken risks in our search of answers in the face of global energy challenges – at times successfully and at other times not – but always learning and advancing.

Today, we produce and sell biogas and advanced ethanol, as well as design, construct, and maintain ground source heating systems. We will soon begin producing renewable diesel and sustainable aviation fuels. We have many significant renewable energy projects in the pipeline, many of them with our steadfast partners.

In line with our vision, we seek to enable a positive societal impact through our operations. We work constantly towards enabling a more sustainable value chain.

We believe that we will achieve our vision by running a responsible and profitable business where economic performance, social responsibility, and environmental sustainability are in balance. In this report, we aim to transparently share our ambition and the steps we are taking in our energy transition journey.

## St1 in brief

# Energy transition company St1

**St1 is an energy transition company that operates in Finland, Sweden, Norway, and the United Kingdom. Through our operations, we implement our vision to be the leading producer and seller of $CO_2$-aware energy.**

**In the spirit of our vision, we research, develop, produce and invest in the energy transition to be able to provide our customers with $CO_2$-aware energy while creating a positive societal impact.**

**We focus on fuel marketing activities, oil refining and low-emissions energy solutions such as advanced biofuels, biogas and industrial wind power.**

**Today, we produce advanced ethanol and biogas from waste. A new bio-refinery is under construction on the St1 refinery site in Gothenburg. It is designed to optimize production of renewable diesel and sustainable aviation fuel. Moreover, our Power-to-X projects and wind power projects are advancing on many fronts.**

**Our Group has St1 and Shell branded retail stations in Finland, Sweden, and Norway together with the growing network of gas distribution and EV charging points.**

**Headquartered in Helsinki, we currently employ more than 1,000 people. Our operations are strengthened by strategic long-term partnerships in various areas.**

### Retail Stations

A fuel distribution network that also offers quality food and other convenience retailing services in Finland, Sweden, and Norway.

All in all, 1,269 St1 and Shell stations: unmanned and service stations as well as heavy goods vehicle (HGV) sites together with a network of gas distribution and EV charging points.

Fuels with lower impact on the environment with better fuel economy and performance

Secure mobile payment services

### Customer relations and corporate sales

A wide range of energy products and services for both private and corporate customers

Premium-class heating oils, liquid fuels for machinery and marine fuels

Fuel cards for private and corporate use

### Energy production

Refining food waste for biofuel feedstock

Biorefining advanced biofuels for transport

Production of biogas for transport

Operating wind farms as a service concept

Ground source heating solutions

Oil refinery in Gothenburg with an annual capacity of approximately 30 million barrels of crude oil, products sold mostly through our own network

### Sustainability and future business

Developing the sustainability of St1's value chain

Power-to-X business

Carbon sequestration business

Partnerships and cooperation with academia and the business sector

### Energy trade and logistics

A comprehensive logistics chain in all our operating countries consisting of terminals and a wide transport network, together with our associated company North European Oil Trade (NEOT)

NEOT sources oil products from the St1 Gothenburg refinery and other refineries in the Baltic Sea region. Renewable fuels are sourced globally from suppliers that comply with the official EU sustainability criteria for biofuels

Centralized energy trade and risk management of feedstocks for liquid and gaseous fuels, electricity, EU ETS allowances, carbon credits, and currency trade

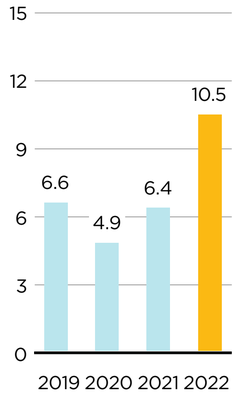
Key figures

# Year 2022 in figures

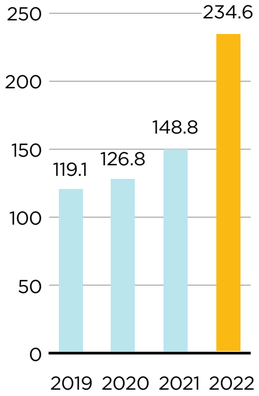
## Market shares, %

| Finland | Sweden | Norway |
|---|---|---|
| Petrol | Petrol | Petrol |
| **24.9** | **20.4** | **16.7** |
| Diesel | Diesel | Diesel |
| **20.7** | **15.9** | **17.6** |

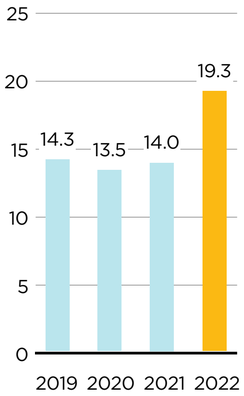
### Net sales, EUR billion



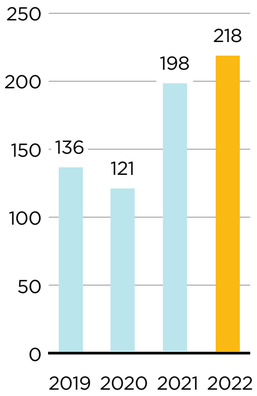

### Profit for the period, MEUR



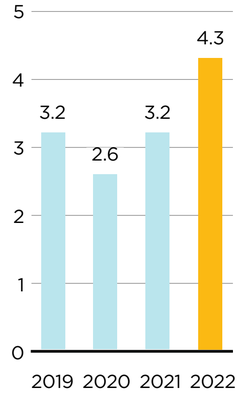

### Return on equity, %



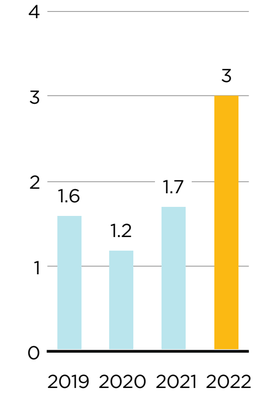

### Investments, MEUR



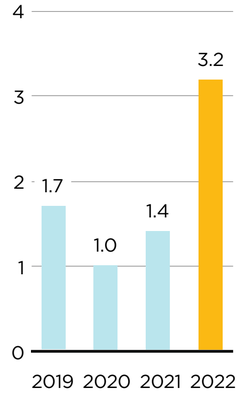

### Retail net sales, EUR billion




### Direct sales, net sales, EUR billion




### Energy trade & logistics, net sales, EUR billion




### Renewable energy net sales*

**17.4%**
2022

**19%**
2021

**19%**
2020

*** Sold mainly through Retail and Direct Sales channels.**

## Gothenburg refinery

Throughput, million barrels
**29.8**

Utilization rate
**89%**

Operation of wind farms and related battery energy storage, MW
**381**

Excise & property taxes, MEUR
**2,065**

Income taxes, MEUR
**54**

R&D expenditure, MEUR
**39**

**1,046**
Personnel

**114**
Renewable energy production investments, MEUR

**44%**
Renewable energy production investments/capital expenditure cum. 2018–2022

Renewable energy company acquisitions not included

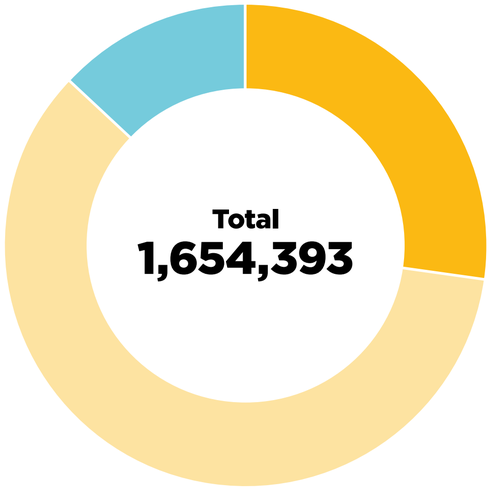
Biorefineries
**100%**
of the feedstock of our advanced ethanol production in biorefineries is waste

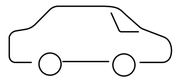
## $CO_2$-reduction from use of biofuels, tons

Finland
**451,888**

Sweden
**990,574**

Norway
**211,931**



**$CO_2$-reduction equalled more than**
**800,086**
**passenger cars***

* A car with an annual mileage of 13,600 km and emissions of 152 g $CO_2$/km.

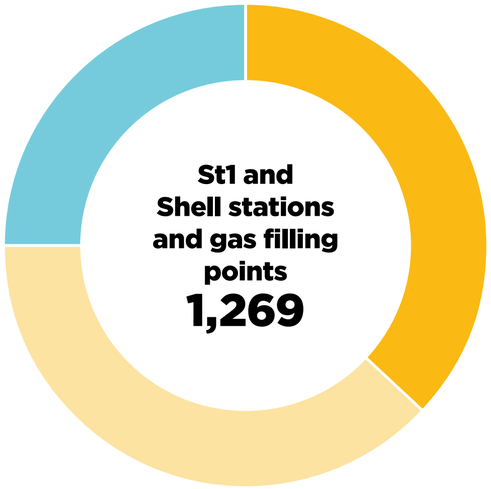
The average driven kilometres was adjusted to be in line with Statistic Finland's figure. Emissions 152g $CO_2$e/km corrected from previous year's 151g/$CO_2$e/km.

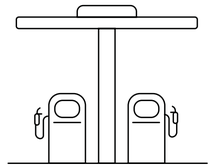
## Retail station network

Finland
**40%**

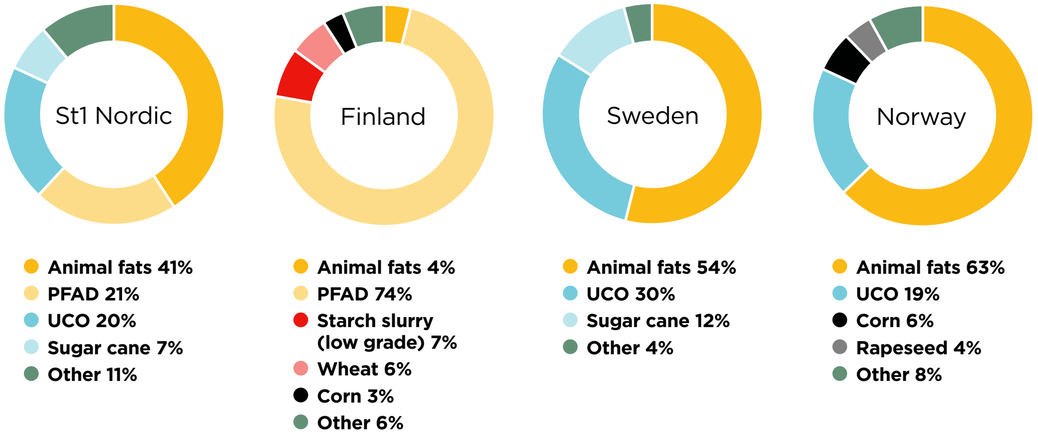
Sweden
**36%**

Norway
**24%**



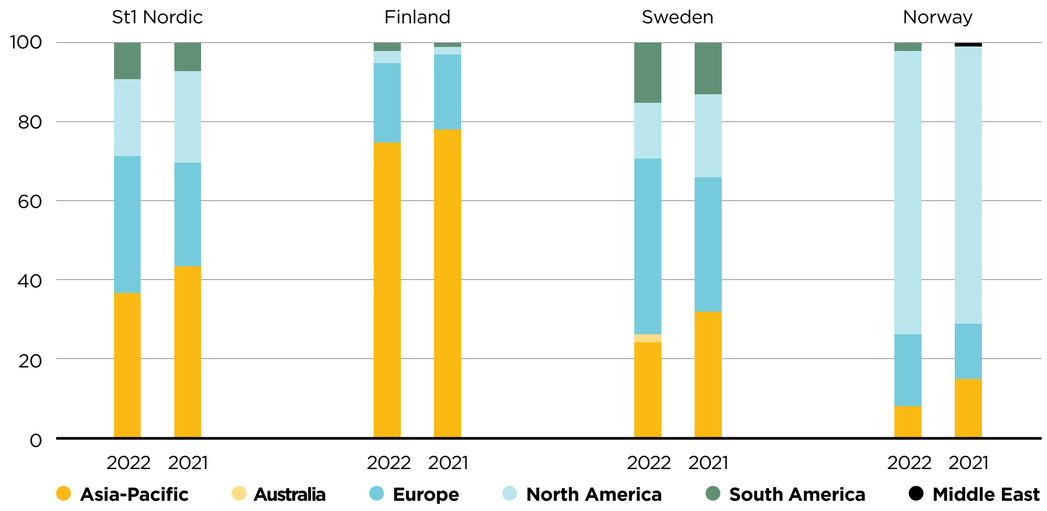



## Biofuels feedstock split 2022

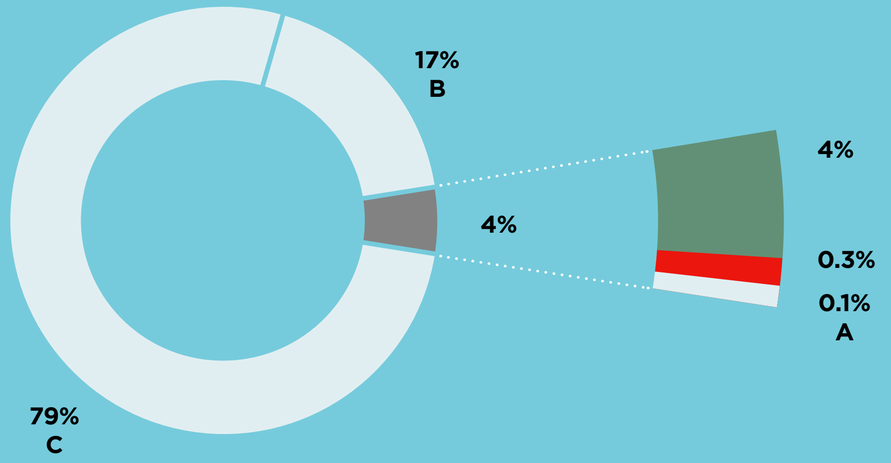



* Figures include heating oil and off-road use bio.

## Biofuels feedstock country of origin by region (% volume)




## Value chain emissions, total 15 Mton $CO_2e$




### UPSTREAM EMISSIONS

**A** SCOPE 3
Upstream transportation and distribution
14,700 tn $CO_2e$

**B** SCOPE 3
Purchased goods and services
2,590,000 tn $CO_2e$

### DOWNSTREAM EMISSIONS

**C** SCOPE 3
Use of sold products
11,890,000 tn $CO_2e$

SCOPE 1
Own production
576,000 tn $CO_2e$

SCOPE 2
Purchased electricity and heat
42,800 tn $CO_2e$

The emissions calculation has been broken down in more detail on **page 32**.

## Highlights

# Key developments in 2022

### Steps in our energy transition journey

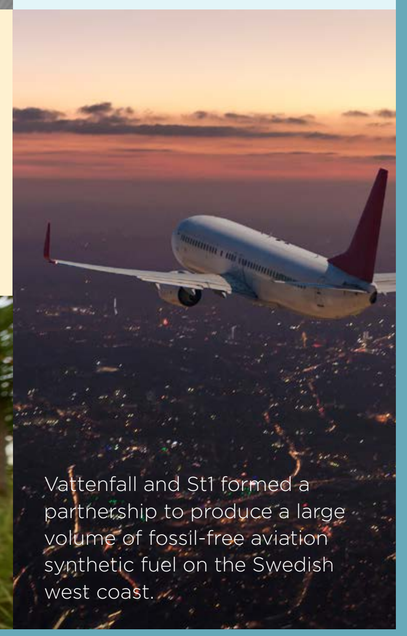
St1 acquired 100% of Brocklesby Ltd, an expert in recycling used cooking oil and fatty food waste in the United Kingdom.


St1 announced plans for a synthetic methanol plant in Finland adjacent to the Finnsementti factory in Lappeenranta.

St1 made an investment decision to construct a biogas upgrading and liquefaction refinery in Borås, Sweden.


St1 and Vantaa Energy announced cooperation to distribute electric fuel to be produced in Finland in 2025.

St1 and the food company Valio have established a joint venture to produce renewable biogas as transport fuel in Finland, using dairy farm manure and agricultural by-products.

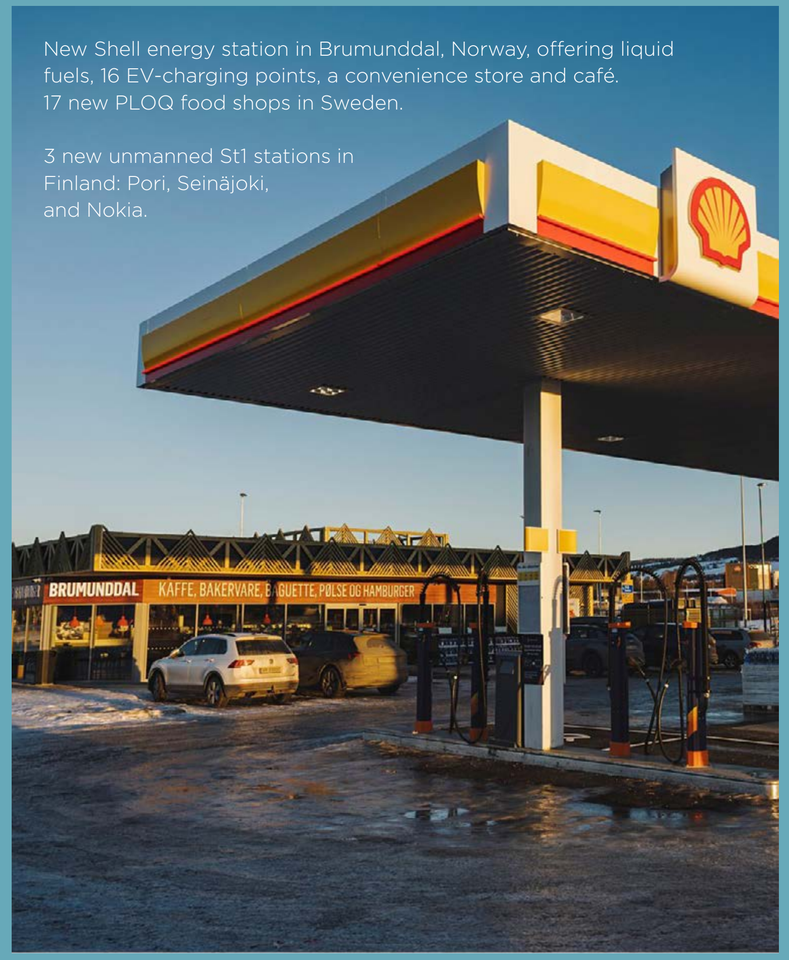


Vattenfall and St1 formed a partnership to produce a large volume of fossil-free aviation synthetic fuel on the Swedish west coast.

### Strengthening the Nordic network

New Shell energy station in Brumunddal, Norway, offering liquid fuels, 16 EV-charging points, a convenience store and café.
17 new PLOQ food shops in Sweden.

3 new unmanned St1 stations in Finland: Pori, Seinäjoki, and Nokia.



> Much like 20 years ago, oil, coal, and natural gas continue to be the sources of 80% of energy production.



## Statement of the Chairman of the Board

# Cross-border collaboration more crucial than ever

**The current climate policy goals are built on plans, which in order to be realized, still need to be translated into a more concrete roadmap and actions.**

Much like 20 years ago, oil, coal, and natural gas continue to be the sources of 80% of energy production. This suggests that to make progress in mitigating climate change, quick measures must be taken to advance global solidarity, education, innovations, and investments into the energy transition.

The more time we lose, the harder it will be to achieve our goals. If we truly put the energy transition into motion as an international community, we can achieve multiple global benefits – not only greater climate stability but also new economic opportunities and jobs.

## Solidarity

In light of the statistics, the emissions caused by Europe account for less than 8% of total global fossil $CO_2$ emissions. The continent's emissions have gone down despite growth in its economy. However, our climate actions should not stop at our own borders for two important reasons. First, populations in emerging markets and developing economies (EMDE) are the hardest hit by climate change. Second, the emissions from our consumer goods are generated in the country of production, which is often different from the country or even continent of consumption.

New investments in fossil energy production are constantly being made to meet the increasing energy demand in EMDEs. Those economies

> By 2030, an additional 85 million jobs related to the energy transition could be created worldwide.

currently count for over 95% of the increase in global greenhouse gas emissions and two-thirds of the world's population, but only one-fifth of global investment in clean energy, and a mere tenth of global financial wealth.

Reducing $CO_2$ emissions in emerging markets and developing economies would cost about half as much on average as in advanced economies, thus the climate impact would be greater with the same amount of money spent.

The EU should enable companies to invest in non-EU countries to fulfil their climate targets and to minimize the share of new fossil energy production. European wealth and expertise should be spent on establishing renewable energy as the basis of the energy systems of emerging and developing economies from the very beginning.

In industrialized countries, the transition is driven by regulation. Regulation should ensure that the most effective measures are being implemented first, such as preventing the construction of new coal power plants, stopping deforestation, and creating carbon sinks that include extensive afforestation. In emerging and developing countries, there is less of a drive towards a transition, and thus real global solidarity through finance is necessary.

## Education

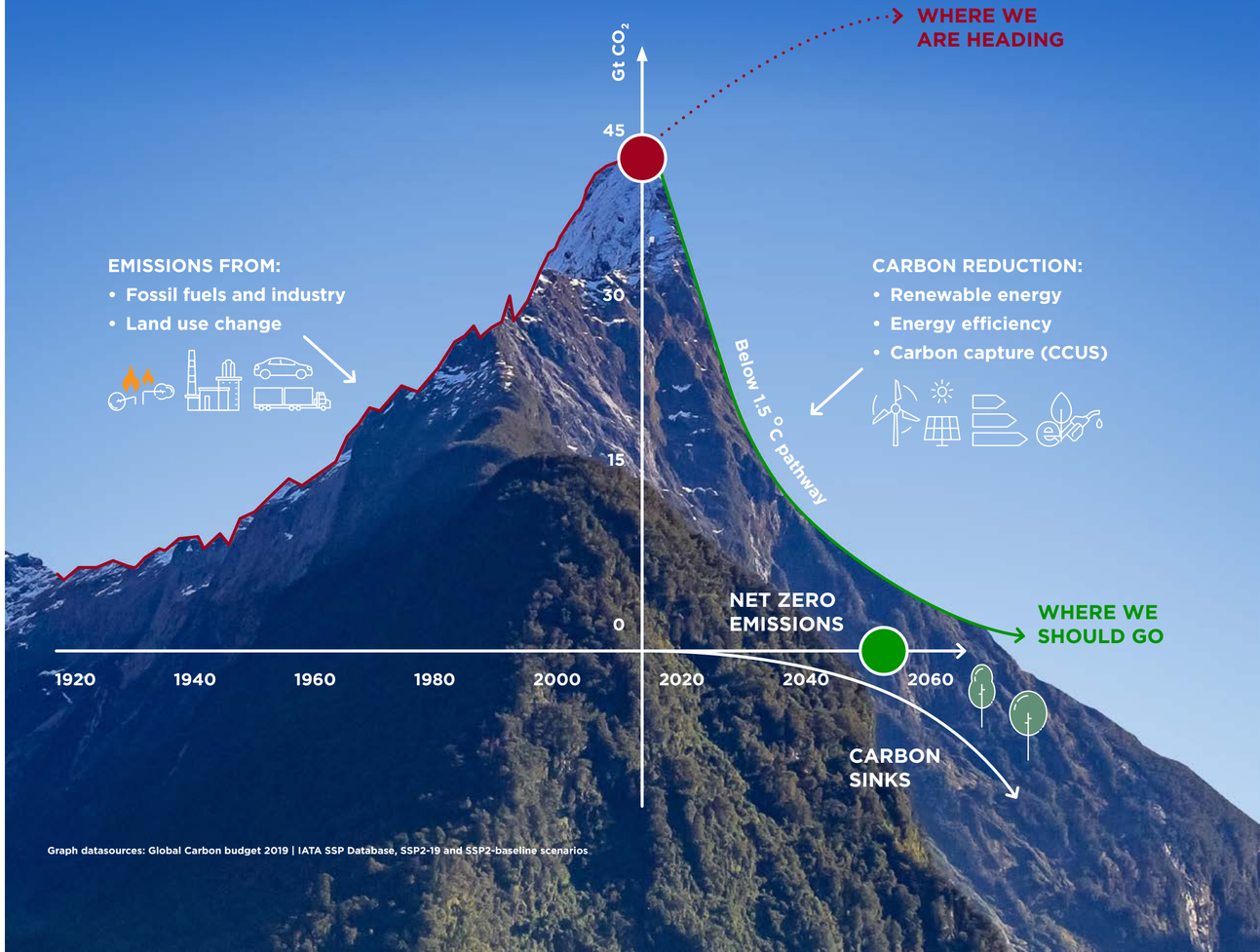
It is estimated that over 65 million people in total currently work in the energy sector, a figure that corresponds to about 2% of global employment. By 2030, an additional 85 million jobs related to the energy transition could be created worldwide. Meeting the demand to fill new jobs requires scaling up education and training programs, alongside measures to build a diverse and inclusive energy transition workforce.

The energy transition also holds enormous potential for EMDEs. According to a review by the International Renewable Energy Agency (IRENA) in 2022, transition-related sectors could double the jobs in the energy sector, for example, from 10 million to 20 million in Africa by 2030, and additionally create a significant shift from current fossil energy sector jobs to renewable energy ones.

## Innovation and investments

The start of Russia's invasion of Ukraine accelerated the energy crisis. But, even in these demanding times, we all want to overcome these challenges and keep the energy transition

## ILLUSTRATIVE PATHWAY OF GLOBAL NET $CO_2$ EMISSIONS LIMITING GLOBAL WARMING TO 1.5 °C



> The most important technology needed would be to store electricity in the industrial scale.

moving forward by meeting emission targets and increasing the construction capacity of the world's renewable energy production. What is now needed from the energy science community is a realistic schedule of actions in the right order.

We have all the technologies available in the market to make the required emission reductions by the year 2030. But when looking at 2050, almost 50% of $CO_2$ emissions reductions should come from technologies that are currently at a demonstration or prototype stage. Huge investments and intense R&D efforts aiming at commercializing energy sector innovations must now be made within a few years' time.

The time has come for energy companies to show leadership. We must dedicate enough resources to R&D to bring about the necessary innovations and technological breakthroughs. The most important technology needed would be electricity storage in the industrial scale. If this succeeds, the key enabler to the energy transition will be in sight.

Last year, St1 announced a new partnership with Vattenfall to study to start production of a large volume of synthetic aviation fuel on the Swedish west coast in 2029. To give an idea of the scale of the plan, the renewable electricity to be produced and consumed in the project corresponds to one-third of the electricity consumption of Finland. A total of one million cubic metres of electric fuels would be produced every year, which would meet the annual needs of Arlanda Airport. While, this may sound enormous, replacing fossil oil will require thousands of similar projects. And many challenges still need to be solved in order for the projects to be realized.

Supporting growing economies while reducing emissions and energy consumption at the same time seems like an unsolvable equation for humankind. The only way forward is for all parties to pull in the same direction through international cooperation.

Climate change does not adhere to geographical boundaries. Thus, a global regulatory framework enabling cross-border and cross-sectoral investments in the most cost-efficient $CO_2$ reductions could offer the most plausible solution.

**Mika Anttonen**, Chairman of the Board

02

# Sustainability at St1

## Sustainability overview

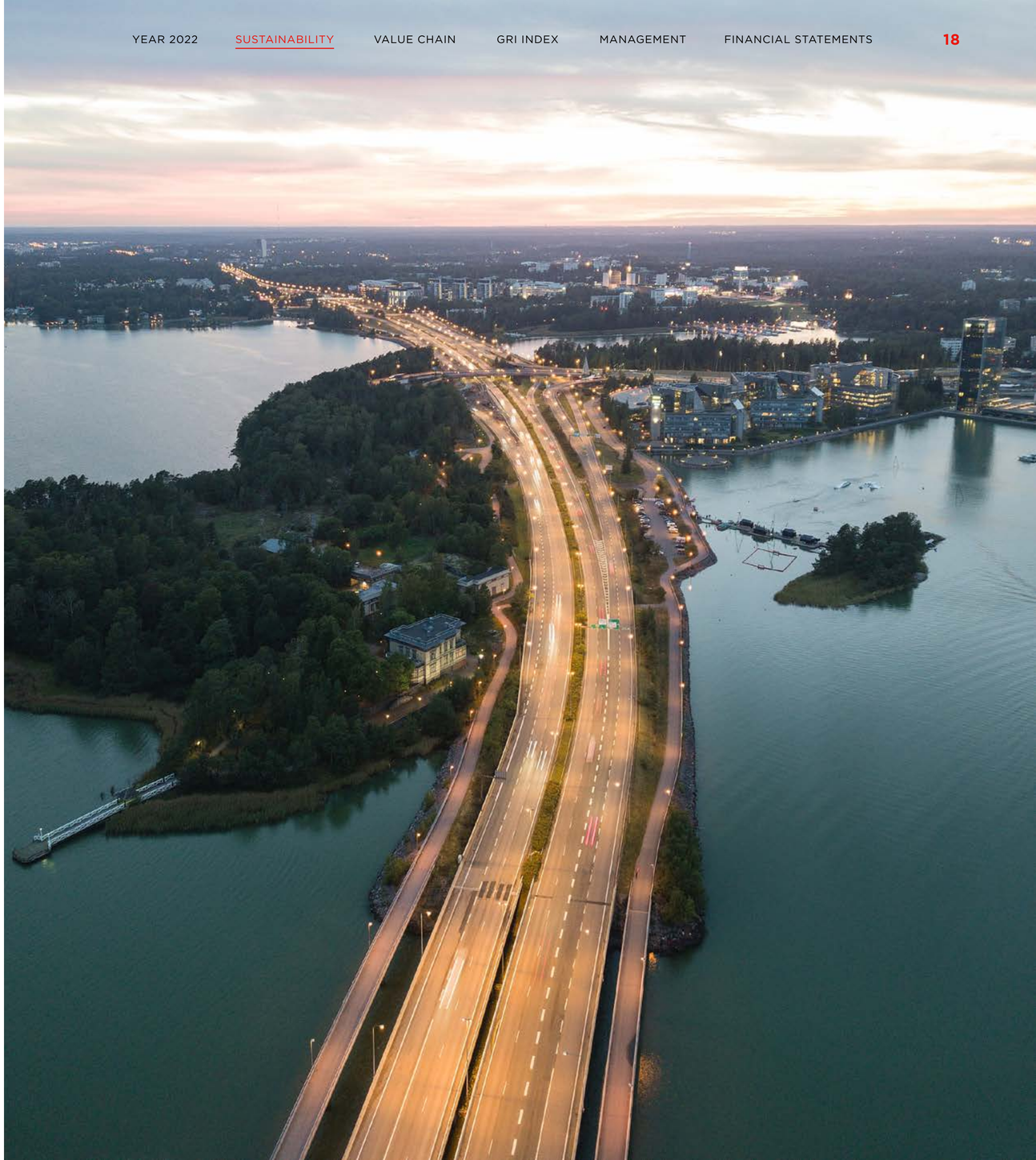
# Our sustainability journey

**As the global transition towards sustainable energy continues to accelerate, the role of the energy industry has become increasingly critical. At St1, we recognize the urgent need to address the challenges of climate change and contribute to a more sustainable future.**

At St1, we believe that transparency through developing robust due diligence processes, and supplier screening is crucial for ensuring sustainable practices throughout our supply chain. As a provider of energy products, we recognize that our operations have a significant impact on the environment and the communities where we operate. As such, we are committed to ensuring that our suppliers share our values and commitment to our ethical principles and sustainable business practices.

The invasion of Ukraine in early 2022 highlighted the importance of ethical business principles and transparency, especially in the commodities business. 2022 was a turbulent year which also challenged our sustainability roadmap and its further development. During the year, we further emphasized our commitment to developing more transparent supply chains and raised the level and the urgency of streamlining our current partner management practices to cover the whole St1 Group. Working towards sharing mutual practices in screening our suppliers and integrating sustainability risk management practices into daily decision-making processes within our entire value chain is not yet complete, but the process leaped forward drastically during the year.

We recognize that sustainability is a journey, and we are committed to the continuous improvement of our sustainability practices. In 2022, we placed a strong emphasis on our Group's due diligence process development as well as integrating sustainability aspects into corporate risk management practices. As we have a vast and complex value chain, we acknowledged that building functioning processes while simultaneously increasing the competence level of our people operating in key roles, it is essential to prioritize our efforts. Our approach in 2022 placed a strong urgency on regulatations-driven sustainability governance. The first half of the year demanded the greatest efforts from our Norwegian organization during the



> Our industry needs active front runners who are leading the change.

implementation of the Norwegian Transparency Act. Our regulatory responsiveness will continue in 2023, when we will start implementing the UK Modern Slavery Act into our Group policies and risk management. As a part of this work, we also conducted a thorough gap analysis of our operations against the UN Guiding Principles and OECD Due Diligence guidelines to ensure that we are managing our social and environmental risks effectively. This has resulted in, for example, our updating of the St1 Code of Conduct package and related training materials, which will be launched in 2023.

As a company operating within biofuels and fossil fuels, our critical impacts are in the supply chains of our feedstocks and products. The first quarter of the year began with our sustainability team increasing the availability of resources for supply chain compliance. Meanwhile, the first ISCC (International Sustainability & Carbon Certification) certification in St1's history was attained in July, for St1 Sverige Ab. Since then, we have certified many other Group companies and locations, and will continue this work in the following years. Our supply chain compliance team now spans across the entire Group, and operates in the matrix organization, ensuring that our competence and capabilities for developing more sustainable business operations in one of our riskiest areas continue efficiently. The ISCC system, together with our other commitments and regulatory frameworks, enables us to track our biofuel feedstocks through the supply chain, providing greater transparency and accountability.

Overall, despite the challenging and in many ways unstable environment, 2022 brought our sustainability work even closer to our daily business. A year that focused on the alignment of St1's sustainability targets with our impacts and risk management, and the integration of our ethical business principles into our partner selection processes. The world around us is in constant flux, and we as a company want to be an integral part of that transition. Our industry needs active frontrunners, who are leading the change. From a sustainability perspective our approach remains humble; we are constantly evaluating our impacts, and trying to adjust our efforts in the areas that are most crucial. Despite a turbulent 2022, our sustainability framework development continued within our Group's management, whose strong commitment and ownership can also be seen in our updated materiality assessment results. This report outlines our efforts towards putting sustainability into action, and how we as a company promote the transition towards a more sustainable value chain.

## The pillars of St1 Sustainability Framework

### The sustainability story

**Our sustainability agenda and what it is rooted in.**

**1**
Establishing our ambition level

**2**
Group policies

**3**
Storyline of prioritizations, aligned with St1 vision

**4**
Sustainability compliance and mindset integrated into core decision making processes

**5**
Task Force as initiative to drive change and coordinate efforts for maximization of impact

### Sustainability roadmap

**The way we are operationalizing our sustainability agenda.**

**1**
Business Unit level targets and roadmaps aligned with Group level sustainability objectives

**2**
Prioritized targets with focus on mitigating negative and maximizing positive impacts

**3**
Visualization of targets aligned with international frameworks and expectations

### Governance structures

**How we are ensuring compliance and progress.**

**1**
Communication of policy and practice on our webpages

**2**
Sustainability linked KPIs

**3**
UN Global Compact Communication of Progress

**4**
Sustainability due diligence processes

**5**
Sustainability reporting directives and acts

**6**
Target progress tracking platform

Impacts on people

# Prioritizing our people's safety and well-being

**The health of our employees and the contracted labour within our value chain is paramount.**

## Health and Safety in focus

Our ambition leads us to strive for improvement through competence development as well as a genuine desire to make certain that everyone who works within St1's value chain feels safe, regardless of their working environment.

In 2022, we took a deeper dive into our value chain by conducting a materiality assessment, which provided us with another level of insight for communicating as a Group. While we already make immense efforts with regard to health and safety, we acknowledge that the topic will continue to be one of our most important focus areas. We also recognize that we must make even greater efforts to improve the well-being of our employees. This means that we must set ambitious targets for ourselves for the coming years. We wish to look back on our commitments with pride in the tangible improvements we have managed to achieve.

We ensure safety through the implementation and effectiveness of safety barriers that manage risks, prevent incidents, and reduce negative impacts on people, the environment, operations, assets, information, and brand. Our commitment to safety requires everyone's participation and dedication to improving safety by understanding the hazards associated with our operations and having excellent risk assessment and management practices.

> More than ever, companies are being held to account for their entire value chains. New legal requirements aim to enhance the commitment of the private sector to respect human and labour rights.

To enhance safety, we have further developed our Life Saving Rules based on high-risk activities that have caused fatalities and serious injuries in our industry. Our refinery in Gothenburg has been following Life Saving Rules for several years. While we experienced a Total Recordable Case Frequency TRCF of 7.2 in 2022 for St1 employees, we did not have any injury resulting in a permanent effect on health. The main types of injuries were slips, trips and falls, cuts, and scratches. Our total working hours for employees were approximately 1.6 million hours.

Looking ahead, we have set ambitious health and safety targets for the year, with a particular focus on reducing the TRCF for St1 employees to 5. We recognize that the upcoming turnaround at the Gothenburg refinery and the high number of personnel involved in the project during the spring pose significant safety risks, and we are taking proactive measures to mitigate these risks.

Our top priority is to ensure the safety of our personnel and prevent serious injuries during the shutdown and the project. To achieve this, we have implemented comprehensive safety measures and procedures, including safety barriers, risk assessments, and safety training programs. We are continuously monitoring and evaluating our safety performance to identify areas for improvement and take corrective actions when necessary.

We endeavour to hold high standards of safety throughout our whole value chain, including our production operations where personnel may be exposed to greater risks of injury. We have identified improvement areas and learned about their impacts, which may extend beyond our direct operations. We will address these as priorities for the short and long-term. Understanding the impact of our Health, Safety, Security, and Environment (HSSE) policies and standards has always been a priority for St1. Embedding them into our sustainability work enables us to widen our approach in developing our safety culture and processes.

We are confident that with our strong safety culture and the collective efforts of our personnel, we will achieve our health and safety targets and maintain a safe working environment for all.

## Our approach to human rights due diligence

Our commitment to respecting The Ten Principles of the UN Global Compact on human rights, labour, environment, and anti-corruption are embedded, along with our values, into our policies and management systems. We continuously develop our processes to integrate these principles into our day-to-day activities. At the beginning of 2022, we conducted a gap analysis of our operations against Organization for Economic Cooperation and Development (OECD) Due Diligence Guidelines and the United Nations Guiding Principles (UNGP) in line with our commitment to the UN Global Compact.

Throughout the year, we have been working on creating internal tools and processes to bridge these gaps and monitor progress. We have placed our focus on developing internal models for impact assessment, identifying and prioritizing actual and potential sustainability impacts, and developing our supplier due diligence process.

During 2022, we conducted a Group-wide sustainability impact assessment. Its purpose was to identify actual and potential adverse sustainability impacts in own operations and throughout our value chain. In addition, we performed a Group-wide human rights impact assessment in 2020. As a result of these assessments, we have been able to define the most salient human rights issues that are present in our value chain.

More than ever, companies are being held to account for their entire value chains. New legal requirements aim to enhance the commitment of the private sector to respect human and labour rights. For example, the Norwegian Transparency Act came into force in July 2022. The UK Modern Slavery Act also became applicable to St1 in 2022, due to our purchase of Brocklesby Ltd.

### The most salient human rights issues

**Fundamental labour rights**
Fair working hours and compensation, right to organize and bargain, right to join a union, right to freedom from slavery and forced labour, rights of children and youth

**Health and Safety**
Health and safety of employees, sub-contractors, and all workers throughout our value chain

**Non-discrimination and equal opportunities**
Right to equal treatment and non-discrimination, women's rights, and right to privacy and family life

**Land and resource rights**
Indigenous peoples' rights, land, livelihoods, culture, and right to health and life


Both legislations underline the importance of impact-driven sustainability management. They require companies to conduct human and labour rights due diligence, establish processes to identify potential risks of violations, and prioritize actions to mitigate potential adverse impacts. Both also require annual reporting on the steps taken to identify, address, prevent, and mitigate potential human and labour rights violations. St1 will publish its first annual Due Diligence Statement, covering our general due diligence practices and risk assessments as well as targets and progress, in summer 2023.

## Transparent stakeholder dialogue

We aspire to make a positive impact on people in the areas where we operate, and therefore, base our stakeholder engagement on the principles of transparency, accessibility, and inclusiveness. This means we actively seek meaningful engagement with stakeholders who may potentially be impacted by our activities. It is important to us that engagement with both private persons and public institutions starts in early project phases, thus optimizing positive impacts and mitigating any potential negative ones.

We have had a total of 7 Speak-Up cases in 2022 which were responded to within the given time limit, 7 days. All cases have been investigated and handeled with utmost discression. We encourage everyone to use our Speak-Up channel should there be any suspicions of misconduct. We also welcome any kind of feedback concerning our processes through the same channel.



## Our Human Rights Due Diligence Approach

**1**

**Policy commitments**

St1's Code of Conduct package, created in 2020, consists of the following documents:

St1 Code of Conduct
St1 Partner Code
St1 Human Rights Policy

**2**

**Identify and assess actual and potential adverse impacts**

Human Rights Impact assessment performed in 2020 to identify the most salient human rights issues for St1

Conducted an in-depth evaluation of St1's actual and potential adverse impacts as part of Materiality Assessment in 2022

Project-specific Integration of human rights impact identification assessments into strategic projects

**3**

**Cease, prevent, or mitigate**

Development of supplier and other third-party due diligence processes

Integration of St1 Partner Code to contracts with suppliers and other third parties

Code of Conduct and Human Rights training mandatory for all St1 employees

**4**

**Track implementation and results**

Development of internal tool to track implementation in line with OECD Due Diligence Guidelines

**5**

**Communicate**

St1 Game Changer annual integrated report

Annual Due Diligence reporting in line with Norwegian Transparency Act and UK Modern Slavery Act

Internal communication tools and channels

Communication with affected stakeholder if applicable

**6**

**Provide for or cooperate in remediation when appropriate**

St1 Speak Up channel

Site-specific grievance and non-conformity reporting mechanisms

Value chain sustainability

# Sustainability across our entire value chain

## Supplier and business partner due diligence

Our partners are an integral part of our value chain and our vision. We aim to make certain that they enable positive societal impacts, and together with us, create a more sustainable future. We expect all our partners to adhere to the St1 Partner Code, which outlines the expectations we have on our business partners.

In 2022, we developed a Code of Conduct and Human Rights training and made it mandatory for all St1 employees. The training is a step towards ensuring that our employees are aware of the potential adverse human rights impacts present in our value chain. During the year, 893 employees completed our Code of Conduct and Human Rights training. As our training calendar runs until June 2023, we expect that completion of mandatory training will be achieved by the given deadline by all employees.

St1 has a diverse value chain. For this reason, we strive to take a risk-based approach for our diverse types of suppliers. The highest risks for human or labour rights violations are not generally found within the spheres of our direct operations or influence. Instead, these risks often concern points of origin, the early phase of processing and transportation.

As a large part of our sustainability impacts are outside of our direct control, in 2022 we started to develop Group level supplier and third-party due diligence processes. The development started with mapping our entire value chain, identifying actual and potential impacts, and translating them into supplier risk assessment criteria. Through this process, we make sure that sustainability risk-based criteria are integrated into our partner selection process.

Several factors, including country exposure and industry exposure, determine the sustainability risk of a supplier. During the year, we developed an internal country risk evaluation model by using country indicators across 15 different topics. These include fundamental labour rights, corruption, modern slavery, child labour, migrant workers' rights, land rights, climate change, and biodiversity, among other factors. In addition, a supplier self-assessment questionnaire helps us analyse the supplier's ability to mitigate the abovementioned risks.

Partners that are determined to be of high risk are subject to desktop research by our internal sustainability experts at St1. The investigation involves an extensive country risk overview, adverse media screening, and a review of external Environmental, Social, and Governance (ESG) ratings. The next steps could include a supplier sustainability dialogue and the development of follow-up actions.

In 2022, our main strategic partners and suppliers underwent our due diligence process. In the coming years, we will focus on refining the process and enhancing our roadmap to see to it that all our suppliers are screened through social and environmental criteria.

## Biofuel and bio feedstock traceability

In preparation for increasing production at St1's Green Production Unit (GPU) in Gothenburg during 2023, we had already initiated the sourcing of suitable waste and residue-based feedstocks in 2022. The building blocks of the supply chain as well as the needed processes and systems were put in place to make certain that the sourced materials fulfil their sustainability criteria and that materials flowing through the chain are traceable.

Activation on upstream sourcing of feedstocks has also meant that in some cases, St1 interacts directly with the points of origin where the feedstocks are generated. For example, the acquisition of Brocklesby Ltd. has enabled us to

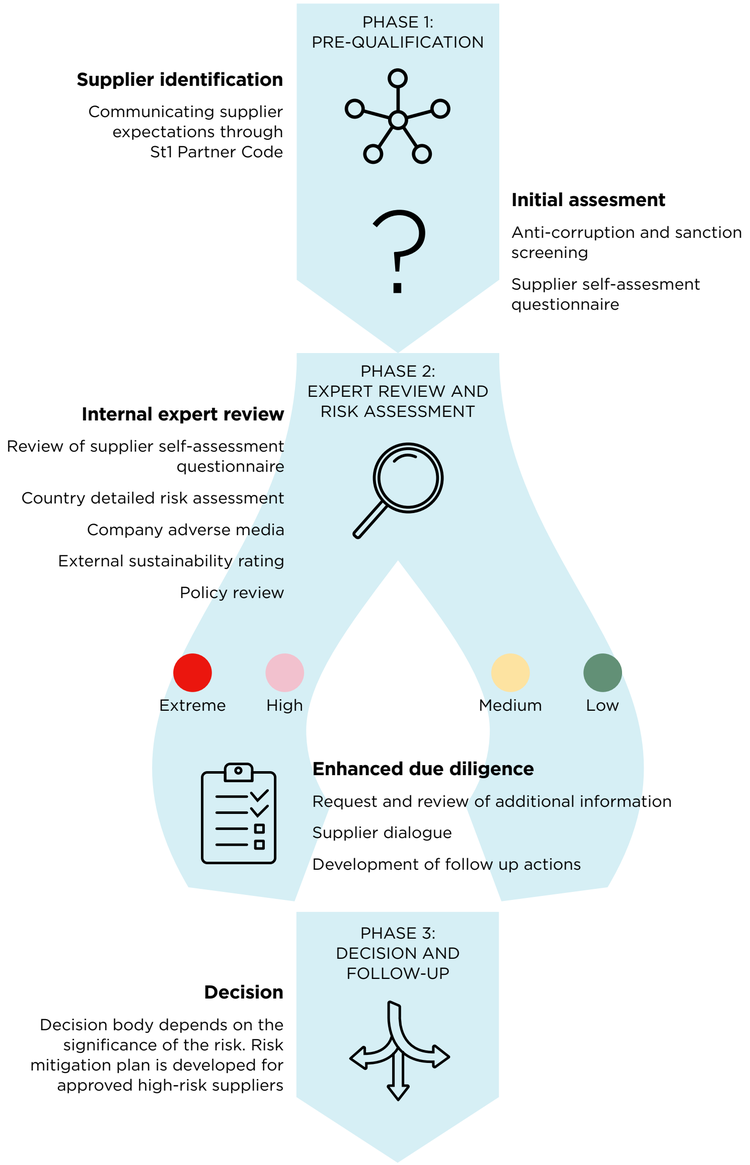
have full control and visibility over a substantial portion of sourced feedstocks in our own value chain. This makes tracing of molecules all the way from the point of origin to the final biofuels possible. However, to guarantee that all capacity is fulfilled at the GPU, we are sourcing additional feedstocks globally.

When procuring bio feedstock and biofuels, it is important for us to safeguard their traceability and compliance with the relevant regulations in the markets where St1 operates. In addition to performing our own due diligence work in our value chains, our main method for ensuring compliance with regulations is to source renewable feedstocks and fuels only from suppliers that comply with official EU sustainability criteria. These are suppliers who are approved either by EU voluntary schemes, such as the International Sustainability & Carbon Certification (ISCC), or by nationally accepted sustainability schemes.

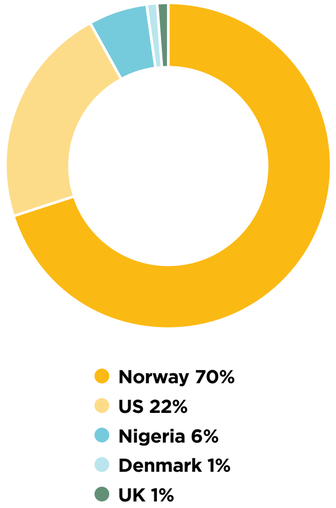
The level of inspection on the traceability of feedstocks in our sector is set to increase with the implementation of the Union Data Base (UDB). The UDB will allow the full value chain to be verified, thus lowering the risk of fraudulent activity in the marketplace. Ensuring compliance and performing due diligence at the stage of feedstock purchasing is therefore vital for maintaining a sustainable and compliant material flow into our value chain.

In 2022, we developed our sustainability system to meet the requirements of the ISCC scheme. We then obtained ISCC certification to St1 Sverige Ab during the summer. In 2023, we will work on further expanding the scopes of our certifications

## Supplier due diligence process




## Crude oil processed at St1 Gothenburg Refinery by country of origin




to meet the demands of operating in new areas of the value chain. The objective of this effort will be to certify the production process at Green Production Unit (GPU) under the ISCC.

To ensure the sustainability of our products, it is essential that we meticulously keep track of the sustainable characteristics of our materials and mass-balances, as well as calculate and forward greenhouse gases in the biofuels and bioliquids market. As a cornerstone of this process, we are currently developing and implementing a mass balancing tool, the Sustainability and Mass Balancing Application (SAMBA) to safeguard the traceability of all our value chains as well as our compliance with the EU regulations.

SAMBA helps simplify processes, and combined with the ISCC certification, offers a unifying umbrella from the point of origin to the final biofuel being produced. The system is already in use by some departments of St1 and is due to be rolled out to all parts of the value chain during 2023 and in early 2024.

### Crude oil and fossil fuel supply

Our most important source of oil supply is St1's refinery in Gothenburg. Most of our crude oil during 2022 was sourced mainly from identifiable locations in the North Sea; namely, Norway, Denmark, and the UK. A small volume is procured from the US, and a lesser amount from Nigeria. In 2022, we started developing a process for screening our crude oil suppliers and make certain of their alignment with St1's values and principles.

Our supply partner, NEOT, supplies additional fuels to fulfil our demand. NEOT sources these fuels, which are of fossil and bio-origin, from other refineries, mainly in Finland, Sweden, Denmark, and Norway, emphasizing high quality and suitability in its fuel selection process.

Due to the complex nature of fossil fuel supply chains and a lack of legislation to drive the industry towards traceability, it is not yet possible to prove traceability of the crude oil supply chain to the same extent as with renewable fuels. While we have full traceability in our direct crude oil purchases, the possibility of tracing crude oil origins while purchasing finished products such as petrol and diesel is limited. During 2023, we will work together with our supply partner NEOT to enhance the traceability of our products.

## Materiality assessment

# Defining our most relevant topics

**We conducted our first materiality assessment in 2016, setting an inital framework for St1 Group's sustainability work.**

In 2016, St1 conducted its first materiality assessment, setting the framework for the Group's sustainability work. We continued developing the topics which highlighted our focal themes, and the results provided important insights into our stakeholders' expectations. We used this insight to define the initial phase of St1's strategy towards more sustainable value chain.

In 2019, we introduced RESPECT, St1's internal Sustainability Framework. During 2020 this sustainability framework developed into outlining four key topics: Impacts on People, Transparency, Sustainable Carbon Cycle and Competence Development. RESPECT has evolved since its launch, and is now integrated in our Sustainability Objectives, while the four principles from the initial framework have served as guiding threads throughout St1's energy transition.

Developing St1's sustainability framework has been a journey of continuous improvement ever since it started to form a structure within the company in 2016. External requirements and expectations have increased tremendously, which gives great direction to our internal development. We see that one of the most important tools for us to communicate our journey is through our report, the Game Changer. The new Global Reporting Initiative (GRI) standards were updated in January 2022 to GRI 11: Oil and Gas Sector 2021, which prompted St1 to re-evaluate our chosen material topics and take a deeper dive into the sustainability of our supply chain.

### A message of thanks to our stakeholders

The insights, feedback, and collaboration of our stakeholders were invaluable in helping us identify the most significant sustainability issues facing our company and our industry. We would like to take this opportunity to express our sincere thanks and gratitude to all who participated in our materiality assessment process.

We recognize that sustainability is a collective effort, and we are committed to working collaboratively with our stakeholders to drive progress towards a more sustainable future. We believe that by listening to and engaging with our stakeholders, we can identify shared goals and objectives and work together towards solutions that benefit everyone.

## The process for our materiality assessment

In 2022, the process for our materiality assessment took place in four stages: identification, engagement, prioritization, and the validation of our most material sustainability topics. We carried out the materiality analysis by carefully mapping our entire value chain, which enabled us to home in on the most impactful areas within our operations. This has been illustrated in the Selected Business Area image.

Through this exercise we were able to choose relevant stakeholders which included internal St1 employees as well as external experts from different fields, such as logistics, biofuel, climate change, human rights, carbon markets. The 1-to-1 interviews took place online.

Our earlier materiality assessment in 2020 was conducted predominantly through a web survey, sent to approximately 2,279 respondents, as a part of our wider stakeholder research. In 2022, we chose to take a more qualitative approach that allowed us to tailor our questions according to our interviewee's expertise. We believe this approach facilitates genuine engagement while minimizing the risk of misunderstandings around complex topics such as climate change and human rights.

We spoke with customers, industry associations, suppliers, employees, educational institutions, and NGOs (non-governmental organizations), as well as selected St1 experts and members of St1's Executive Board. We also interviewed 12 external stakeholders to gain a better understanding of their expectations regarding St1's corporate responsibility activities.

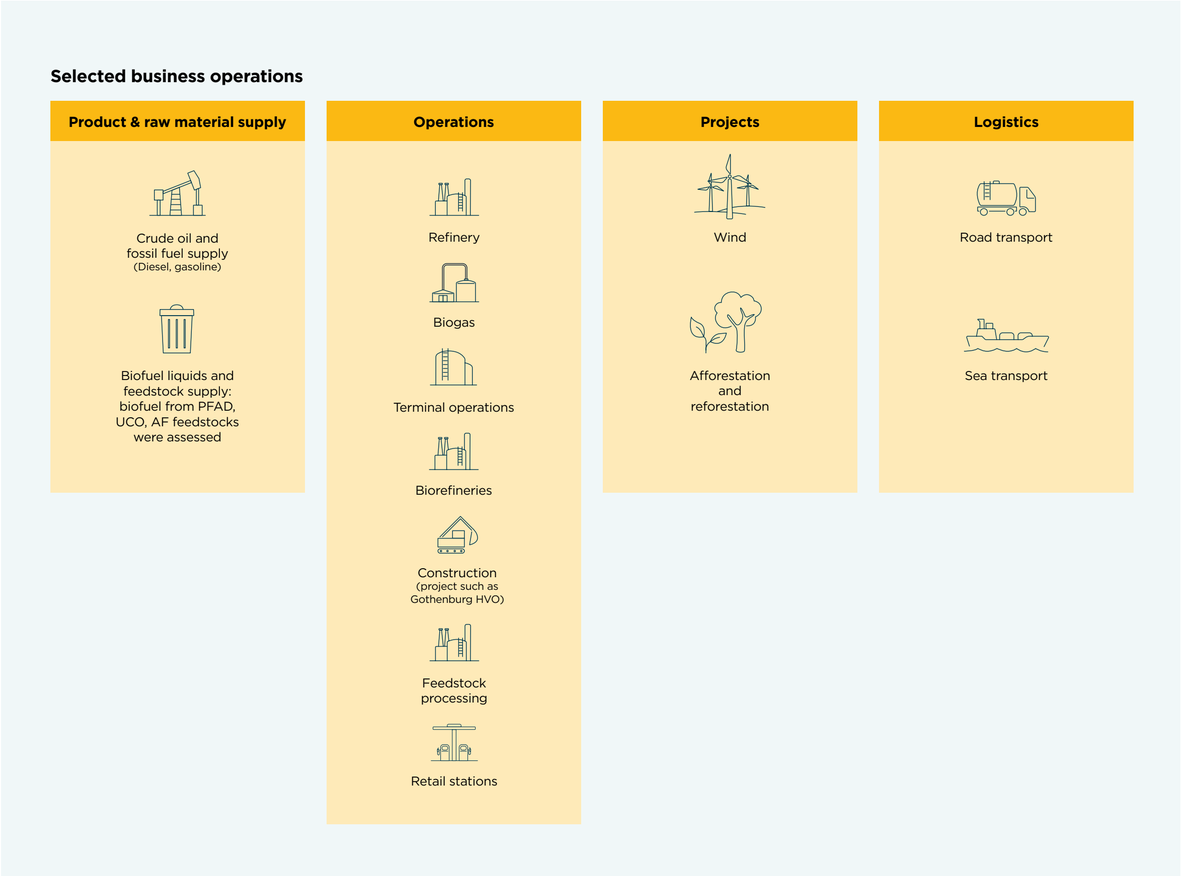
The 2022 impact assessment was conducted by St1's Sustainability team. We obtained consultation support from a third party who were able to provide impartial feedback. The third party has reviewed the results on a structural and thematic basis to support our team with an external perspective on the process.

The criteria for prioritizing the identified topics were based on their impact and perceived importance within our value chain and their relevance to our business. The results provided important insights for defining the current phase of St1's strategy.

## Health, Safety, Security and Environment

The Health, Safety, Security & Environment (HSSE) topic has been identified as material within St1's supply chain, which encompasses both our employees and our contracted labour.

We acknowledge that due to the nature of our business, there is a higher likelihood of serious incidents occurring in our production facilities, which include our Refinery in Sweden and biorefineries in Finland along with our used cooking oil (UCO) collection and production facilities in the UK.




> We recognize that sustainability is a collective effort, and we are committed to working collaboratively with our stakeholders to drive progress towards a more sustainable future.

> Sustainability is a collective effort, and we are committed to working with our stakeholders to drive progress towards a more sustainable future.

Construction work is ongoing at our HVO production facility in Gothenburg, and this is carried out primarily by contract workers. We have several terminals in Finland, Norway, and Sweden and our retail network extends across all the Nordics, encompassing over a thousand different sites. Our logistics refers to road transportation and sea shipping, with the latter handled by our partner company NEOT. All the abovementioned activities were considered in our impact assessment and were chosen as areas for development due to their relevance to our business.

Due to the lack of full transparency over the exact working hours of our contracted labour, the TRCF for this employee segment is higher than the one for St1 employees. For this reason, in 2023, we will emphasize the alignment of health and safety definitions across the Group and see to it that all our operations follow the same guidelines.

## Equal opportunities & non-discrimination

In 2022, we continued our efforts to promote equal opportunities and non-discrimination in our recruitment and hiring practices. We implemented improved recruitment practices to reduce the risk of unconscious biases. In addition, we conducted a pay gap analysis to ensure fair compensation for all employees regardless of their gender, age, or background.

Furthermore, we provided Code of Conduct training to all employees, emphasizing our commitment to treating everyone with respect and fairness. We believe that a safe and inclusive work environment is essential to the well-being and productivity of our employees and the success of our business.

We believe that by fostering a diverse and inclusive workforce, we can create a culture of excellence and drive sustainable growth for our company and stakeholders.

## Sustainable supply chain

Our upstream supply chain is extensive and involves many actors, and this increases the likelihood of adverse impacts taking place. While conducting impact assessments, we assessed St1's biofuel supply from Used Cooking Oil (UCO), Animal Fats (AF), and Palm Fatty Acid Distillate (PFAD) feedstocks, as well as our fossil fuel supply separately.

The scope of the impact assessments also included the logistics of our products, including shipping and road transportation.

The assessments found that with relation to St1's business, fundamental human and labour rights are a high-risk area, together with environmental and climate impacts, biodiversity impacts as well as land and resource rights. Read more about our efforts to ensure sustainability in our supply chain.

## Biodiversity as a material topic

Our operations are highly regulated, and we follow strict local environmental standards. Despite this, we recognise that biodiversity is an area which we must improve on and gain more knowledge on what impacts the different parts of our value chain have towards nature and its natural balance. One good example of how to integrate biodiversity into project development, is our Davvi project in Norway, where third-party research, performed by Multiconsult, has taught us a great amount for how to assess the local landscape for similar future projects in Sweden and Finland. We are striving in reaching the same level of detail to be extended to our whole value chain, of course bearing in mind that the focus remains on the areas we have the largest impact.

During 2022 we started to examine biodiversity from capability perspective and quickly understood that we need to gain more industry level knowledge and partake in peer networks to learn more how to manage our impact beyond the current regulatory requirements. In the future we will increase our understanding and competence around biodiversity within our direct supply chain, which involves mapping our production facilities I.e., refineries and terminals, and their impact on the surrounding environment.

## Energy transition and climate impact

We are committed to taking action to reduce our greenhouse gas (GHG) emissions, a topic that is of critical importance to our business and stakeholders. As an energy company, we recognize our responsibility to contribute to the transition to a low-carbon economy and address the urgent challenge of climate change.

Furthermore, we commit to following the Nordics' ambitious national emission reduction targets and will continue to invest in renewable energy sources and technologies while optimizing our existing operations to reduce emissions.

To support these efforts, we are creating an energy transition roadmap that outlines our goals and actions to reduce GHG emissions and promote renewable energy solutions. It includes targets for reducing emissions from our own operations as well as those associated with the use of our products. We recognise the importance of involving our stakeholders, including customers, suppliers, and local communities, to drive progress towards our climate goals.

## Energy supply

As an energy company, ensuring energy supply is one of our key priorities. We understand the importance of having a diverse energy mix and reducing our reliance on fossil fuels. Our ambition is to introduce new feedstocks into the market, including biofuels, biogas, and other renewable sources, to help us achieve a more sustainable and secure energy future. There is no silver bullet to the energy challenge. Therefore, we will continue to seek out various solutions to achieve a diversified and secure energy supply.

We believe that our efforts to enhance energy security will not only benefit our company, but also the wider society and the environment. By investing in a diversified energy mix, we can contribute to the overall stability of the energy market and reduce the impact of any potential disruptions.

### Potential future impacts

Through our impact assessment we have identified areas within our business which we must pay close attention to as we pursue our energy transition. Wind, carbon sequestration and our raw material supply chain for HVO are all business areas that are likely to have a broader impact than they do today.

### Wind power

Land-based wind power requisitions land areas for the period that the wind farm is granted a permit to operate, and this may lead to associated land and resource rights risks. In the Arctic regions of Finland, Sweden, and Norway, there are also risks associated with indigenous peoples' rights.

Furthermore, there are risks connected with topics such as biodiversity, visual disturbance, and noise effects. However, actual risks related to these areas are mitigated extensively through impact assessments, in which topics are determined by national authorities. To maximize positive social impacts and minimize negative ones, we also work systematically using meaningful stakeholder engagement starting from the projects' inception.

### Carbon sequestration

While we are committed to promoting sustainable practices throughout our supply chain, we are fully aware that there are significant challenges related to human rights and land rights when it comes to carbon sequestration projects.

Carbon sequestration, which involves capturing and storing $CO_2$ emissions from the atmosphere, is an important tool in the fight against climate change. However, it is essential to make certain that we develop these projects in ways that respect the rights of local communities and that do not contribute to land rights violations or displacement.

We at St1 recognize the importance of addressing these challenges and are committed to promoting responsible practices in our carbon sequestration projects. We aim to work closely with local communities and stakeholders to ensure that their rights are respected throughout the project lifecycle. In addition, we assess the potential risks of land rights violations and displacement. However, we realize that these challenges are complex and that addressing them requires ongoing engagement and dialogue with the potentially affected parties.

### Prioritization of impacts based on their significance

We have identified our actual and potential impacts through multiple steps, considering their scale, scope, and remedially. In addition, we assessed the significance of the identified impacts and prioritized them according to their relevance to our business.

> "The lessons we have gained from our materiality assessment have also helped us in developing our energy transition roadmap."

The significance of an actual and potential negative impact is determined by its severity and likelihood. The combination of the severity and the likelihood of a negative impact is referred to as 'risk'. The assessment was done with the help of an internal tool which measured the impact from 1-5, with 1 having the lowest impact, and 5 having the most impact. Each topic was assessed based on St1's value chain.

### Policies and commitments regarding the material topic

As described in the People section of this report, St1 has impressive existing practises in place regarding employees' health and safety and extending to security and environment related incidences. We have set mechanisms to record all incidences related to injuries and spills. In addition, our management group received safety training in 2022 which focused on their respective responsibilities within their roles. We were delighted to learn that our terminals in Norway celebrated 3,000 incident-free days in 2022. Moreover, this is our third year without any high consequence injures.

### Lessons learned

Our recent materiality assessment offered valuable insights into our own operations and our wider value chain. We have incorporated these findings into our operational policies and procedures to ensure that our values, needs, and expectations are aligned.

For instance, we have developed a supplier and third-party due diligence pilot process that helps us identify and manage risks related to human rights, labour practices, and environmental protection. We have also begun screening our business partners and suppliers against social criteria to make certain that we work with companies that share our values and principles.

Moreover, we will begin conducting biodiversity impact assessments for our biorefinery concepts. Biodiversity is essential for the health of our planet, and we are committed to minimizing our impact on it. The lessons we have gained from our materiality assessment have also helped us in developing our energy transition roadmap.

Overall, the materiality assessment has supported us in understanding our stakeholders' expectations and concerns, and we have incorporated this knowledge into our operational policies and procedures. We will continue to engage with our stakeholders and work towards achieving our sustainability goals.

| | Material topic | Sustainability objective | SDG | ESG | Performance highlights in 2022 | Action points going forward |
|---|---|---|---|---|---|---|
| We are developing best-in-class ESG stewardship, by being a trustworthy and responsible actor, and a desirable partner in the energy sector | 1 | Sustainability governance is integrated into our core processes and decision making | 8, 10, 12 | Governance | • Code of conduct training is created<br>• Materiality assessment is performed<br>• Gap analysis of our operations against UN Guiding Principles and OECD Due Diligence guidelines | • Increase competence in Human and labor rights for management<br>• Continue development of Group level sustainability roadmap<br>• Increase due diligence competence in organization<br>• Integrate sustainability criteria into project management frameworks |
| We are committed in transitioning towards a more sustainable value chain | 2 Energy transition and Climate impact<br>Energy security | We set measurable and effective emissions reduction targets and introduce new feedstocks to improve energy diversity | 7, 12, 15 | Environment | • Acquiring Brocklesby Ltd.<br>• Biogas JV together with Valio<br>• Developing wind portfolio<br>• Developing energy transition roadmap | • SBTi method implementation<br>• Establish carbon intensity ($gCO_2e/MJ$) targets for scopes 1, 2 and further developing scope 3<br>• Progress Wind & Biogas GWh targets<br>• St1 Gothenburg Biorefinery startup |
| | 3 Supply chain sustainability | We are developing compliant and transparent supply chain as well as more sustainable production | 7, 8, 15 | Environment, Social | • Development of third-party due diligence pilot process<br>• The majority of main business partners and supplier screened against social criteria<br>• ISCC certification obtained | • Development of centralized Group level supplier due diligence process<br>• Develop social and environmental criteria for supplier sustainability audit<br>• Create human rights training for our suppliers and business partners<br>• Expand ISCC certification scope to St1 Green |
| | 4 Energy security<br>Energy transition and Climate impact | We develop a sustainable retail network in the Nordics | 7, 8, 12 | Environmental, Social | • Investment in electric vehicle charging network<br>• Digital solution for labour rights tracking<br>• HSSE focus and training | • Expand EV charging network in the Nordics<br>• Employee retention and talent development<br>• Work with suppliers to unpack value chains and create transparency |
| | 5 Biodiversity | We work to protect biodiversity and mitigate negative impacts through own operations and supply chain | 12, 15 | Environmental | • Biodiversity is integrated into carbon sequestration project selection criteria<br>• Biodiversity impact assessment started for biorefinery concept | • Conduct environmental impact assessment for St1 value chain<br>• Increase internal competence |
| People are the heart of our value chain | 6 Non-discrimination and equal opportunities | We aim for balanced representation and have zero tolerance in discrimination at all levels of employment. | 3, 8, 10 | Social | • Improved recruitment practices to minimize the risk of unconscious biases<br>• Pay gap analysis | • Increase internal and external (Game Changer) communication regards to, recruitment practices, wellness frequency, overtime capture, gender balance |
| | 7 Health, Safety, Security & Environment (HSSE) | We will align our HSSE processes to industry best practice in the Nordics | 3, 8, 12 | Governance, Social | • TRCF targets for St1 employees | • Develop Group level Health and Safety targets for contract labor<br>• Establish a panel group to measure and develop Security and Environment objectives |

CASE

# A deep dive into the Davvi planning area

**Planning for wind farms in Norway requires independent impact assessments, and in the case of the Davvi wind farm, the engineering consultancy Multiconsult has spent thousands of hours in the planning area.**

“There are not many projects in Norway where more work hours have been spent in the field than with Davvi,” says Kjetil Mork at Multiconsult.

Mork is the project leader for the impact assessment of the Davvi wind park. This was a project that started all the way back in 2012, when the first field biologists went out to the planning area. The impact assessments are a crucial part of the permit application for the Davvi wind park that the Norwegian Water Resources and Energy Directorate (NVE) is currently evaluating.

“The area has been thoroughly investigated. We have put in a significant effort compared to previous practices for wind power in Norway, because we have always set the bar high in the field work,” says Mork.

## Assessments have to be objective

From time to time, it is claimed that impact assessments represent commissioned work from the client. Mork does not recognize this claim. "We are constantly met with the argument that it is the developer who pays for the assessments and therefore gets the conclusions they want. But that's not true," he emphasizes.

"We make our assessments based on standard and established methodology. The developer can of course read through our reports, but they have no influence on the conclusion. It is completely clear. Sometimes they agree with us and sometimes they don't, but our role is to produce objective conclusions. That's just how it must be," states Mork.

## A significantly reduced area

When they started looking at the area ten years ago, it was much larger. There have been several rounds of adjustments to the planning area, primarily downsizing.

“Originally, it was a much larger project, but it has been scaled down for reasons that have taken into consideration reindeer husbandry, as well as the Tana municipality, which did not want development in their municipality,” explains Mork.

Now they are left with an area of 63 square kilometers, which is only one-tenth of the original area, but still significant in size.

## Weeks in the field

Mork is responsible for the impact assessment and has naturally visited the area several times. But he has not spent nearly as many hours in the field as the others involved. Throughout the project, Mork has had field biologists and those responsible for assessing the landscape, outdoor recreation, and cultural heritage along with him.

“It is important to get a very good impression of environmental qualities, natural conditions, and topography in the planning area. I feel we have gained a truly solid overview of this,” he says.

The field biologists have spent the most time in the area. To map flora and fauna well enough, you have to get down to ground level and study the conditions.

“They have spent quite a few weeks in the area spread over several years. They started the first field work in 2012 and finished in 2018. They have crisscrossed the area and recorded findings related to vegetation, plant species, nature types, wildlife, and birds,” notes Mork.

## Little vegetation, little wildlife

“In terms of the natural environment and diversity, this is one of the most barren areas we have in Norway,” says Mork.

“You have these high-lying stone screes in Finnmark where there is very little vegetation. Where there is little vegetation, there is also minimal animal life because there is almost no food source,” he continues.

The surrounding areas are sparsely populated, and the area itself is difficult to access. This, together with the fact that the area has a relatively harsh climate in the winter months, means that it is rarely used.

## Not able to take a stance

If the goal is to build wind power with the least possible impact on biodiversity, society, and cultural heritage, Davvi seems like a good area. But this rarely comes without drawbacks. This is precisely what NVE must weigh when the permit application is finally processed.

"There are very good wind resources up there, which makes the area very well-suited for wind power. But you have to establish such a large project in a continuous, untouched natural area. That is where the most negative impact comes in," says Mork.

As the responsible party for the impact assessment, it is not Multiconsult's role to take a stance on whether wind power should be established or not.

"Our mission is to provide a good knowledge base so that the NVE can make a decision on the project. In our reports, it is not the case that we recommend or advise against development. That is not our mandate. We describe what the consequences will be, and then it is up to the NVE to assess whether the benefits outweigh the drawbacks," emphasizes the Multiconsult advisor.

## Value chain emissions

# Reducing our dependence on fossil fuels

**Renewable energy will be increasingly important in shaping the future of our organization.**

In 2022, St1 made significant investments in low-carbon energy as part of our ongoing efforts to find solutions to reduce our emissions and contribute to the energy transition. We recognize that financial growth should not come at the expense of the environment and that the importance of reducing greenhouse gas emissions cannot be overemphasized.

Despite society's current reliance on fossil fuels, there is a clear drive to reduce the world's dependence on these finite resources. Our investments in renewable energy as well as our commitment to decreasing our emissions reflect our recognition of this shift.

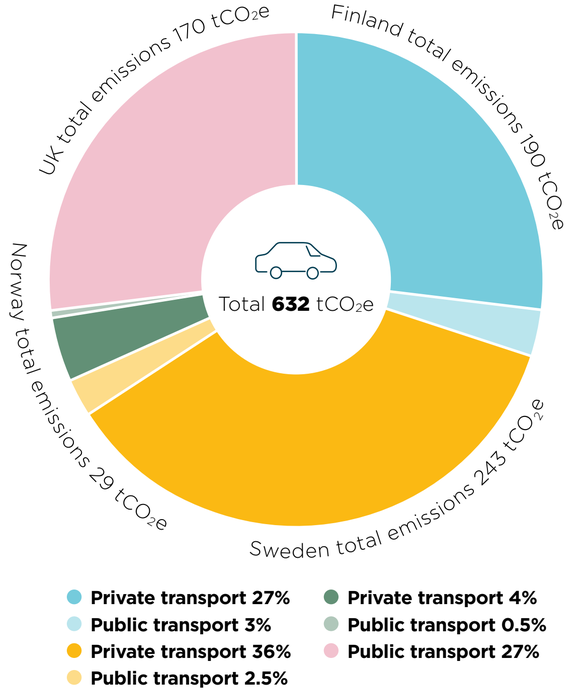
We have made progress in our efforts to enhance our internal emissions data management infrastructure. This has enabled us to identify new opportunities for reducing emissions and demonstrates our continuing commitment to sustainability and environmental responsibility. Continually improving our data management processes allows us to make informed decisions that will help us achieve positive environmental impact.

As a result of our comprehensive analysis, St1's emissions are organized into categories. St1s emissions are divided into three scopes in accordance with the GHG protocol standards: Scope 1, which encompasses direct emissions from our owned refineries, Scope 2, which covers indirect emissions generated by the production of energy used by our facilities and Scope 3 which includes all indirect emissions with the largest contributor being the end-use of our sold products.

To determine Scope 2 emissions, we employ two methods: the location-based method and the market-based method. In the location-based method, we utilize average national emission factors, while in the market-based method, we use emission factors that are specific to our electricity suppliers. This approach allows us to assess our performance in relation to the overall energy mix and to continuously strive towards reducing our carbon footprint.

Scope 3 is divided into upstream and downstream emissions. According to the GHG protocol, upstream emissions consist of indirect GHG emissions related to purchased or acquired goods and services. Downstream emissions are indirect GHG emissions related to sold goods and services. Our Scope 3 emissions encompass five upstream categories, such as emissions from purchased goods and services, upstream transportation and distribution, waste generated in operations, business travel and employee commuting as well as one downstream category, which consist of emissions from the end-use of our sold products.

### Commuting emissions of St1 employees in 2022




Commuting caused 632 tons of $CO_2e$ emissions in 2022.

The average commuting emissions per employee in 2022 were 540kg $CO_2$ in Finland, 200kg $CO_2e$ in Norway, and 570kg in Sweden and 1,890kg $CO_2e$ in the UK.

Active transport: Walking, Cycling, Running etc.
Total emissions: **0 $tCO_2e$**

Private transport: Car, Motorbike, Moped etc.
Total emissions: **594 $tCO_2e$**

Public transport: Bus, Train, Subway, Tram etc.
Total emissions: **38 $tCO_2e$**

The data was gathered in February 2023 as part of a value GHG inventory. Based on 248 responses, survey data was utilized as the source of data. Data on emission factors were extracted from both the VTT Lipasto –database and the JEC Well-to-Wheels Report v5. Electricity emissions were calculated based on national emission factor

| | | Category | Emissions tCO2eq | Definition |
|---|---|---|---|---|
| Scope 1 | | Direct emissions | 576,000 | Direct emissions from St1 owned refineries. |
| Scope 2 | | Location-based method | 20,300 | Emissions from the consumption of heat and electricity including e.g. service stations, refineries and terminals. National average emissions factor used. |
| | | Market-based method | 42,800 | Emissions from the consumption of heat and electricity including e.g. service stations, refineries and terminals. Electricity supplier spesific emissions factor used. |
| Scope 3 | | **Upstream emissions** | | |
| | 1 | Purchased goods and services | 2,590,000 | Well to tank emissions of St1 products (excluding transport from terminals to service stations) Consists mainly of emissions of extraction, production, and transportation of refined oil products, biofuels, and 3rd party crude oil. |
| | 4 | Upstream transportation and distribution | 14,700 | Emissions from transportations between terminals and service stations. |
| | 5 | Waste generated in operations | 17,500 | Waste generated in refining. |
| | 6 | Business Travel | 600 | Business travel: Emissions from business travel. Category consists mainly of business flights. Employee commuting excluded. |
| | 7 | Employee Commuting | 630 | Emissions of employee commuting (Travel between workplace and home). Emissions of leasing cars included. |
| | | **Downstream emissions** | | |
| | 11 | Use of sold products | 11,890,000 | Tank-to-wheel emissions of sold products. Put simply: the emissions from the exhaust pipe of cars using St1 products. |
| **TOTAL** | | | **15,132,000** | |

## Sustainability framework and objectives

# Setting clear targets

**Since 2020, St1 has committed to promoting the UN's Sustainable Development Agenda through our active participation in the UN Global Compact and continuous integration of sustainability into our core business functions.**

In 2022, we concentrated our efforts on putting St1's approach to sustainability into operation. In the first half of the year, making use of input from our Sustainability Task Force, we finalized a model for setting team-specific sustainability targets within our organization.

On a general level, the model is based on the framework presented in the UN Global Compact's Ambition Acceleration program, which St1 participated in during the spring of 2021. We have taken this approach and made sure that the targets we are beginning to set are impact based as well as aligned with our vision and our Group level objectives.

By enabling us to measure our progress and address material topics, the targets serve as an essential element of our sustainability governance framework. We expect to continue expanding on our target-setting in the future, considering increasing expectations from customers, authorities, and regulatory systems.

Team-specific targets make it possible for us to demonstrate how St1 prioritizes sustainability in practice. It shows how we walk the talk. At the same time, it is equally important that the targets promote ownership of these topics in all corners of the company and that they tie the bigger picture together.

Sustainability is about taking responsibility where we can, and by setting targets on the team-specific level we promote individual responsibility in the work that each of us does every day. It is this everyday work that brings us closer to our vision, litre by litre and contract by contract.

We support a holistic approach to sustainability that goes beyond $CO_2$ emissions to include impacts on people, nature, and economy, and our governance model and objectives allow us to work with these three.

## We develop a sustainable retail network in the Nordics

| Energy efficiency | | People | Convenience retail | | Car wash |
|---|---|---|---|---|---|
| Reduce footprint in the retail network. $CO_2$ reduction and increasing energy efficiency | | Nordic values build world class expertise | Building sustainable convenience Retail through a franchising model with a focus on differentiated quality food and reducing environmental footprint | | Car wash based on quality, convenience and environmental footprint |
| **1** Expand charging network for electric | **2** Energy saving lighing, inside and outside | **5** Career development and structured training for retail staff | **7** Replace non-recyclable plastic, product by product | **8** Quality food and access healthy alternatives | **11** Reduce water use and water pollution in car wash |
| **3** Replace cooling systems with high energy efficiency solutions | **4** Update contracts with new requirements for energy efficient solutions | **6** Active collaboration and participation with unions and employers organizations | **9** Reduce food waste through strategic planning | **10** Digital training platform and tracking of HSSE actions | |

Our retail organization is the first part of the business with Nordic targets and national targets that have they have already shared with partners. The work is an example of how we define and act on our Group objective "Building sustainable retail networks in the Nordics".

The retail organization focuses on four pathways:

1. Energy efficiency
2. People
3. Convenience retail
4. Car wash

# Retail network highlights

## Case Sweden: Car Wash

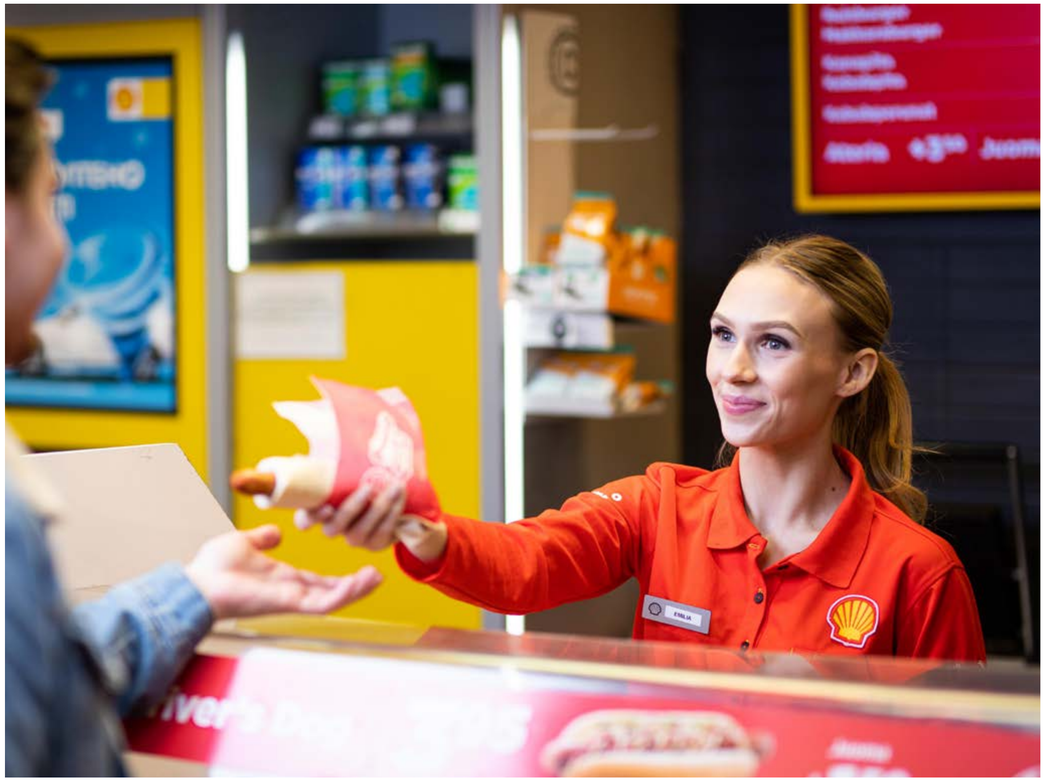
By installing water recycling systems at our sites Sweden, we have managed to shrink the environmental footprint of St1's car wash operations. We have rolled these systems out at 81 of 83 of our sites in Sweden.

In line with St1's value chain thinking, we own this process and business ourselves. Our chosen recycling technology exceeds the legal requirement that relates to handling chemicals. Furthermore, it reduces freshwater use per wash by 75 %. The used water is recycled in buffer tanks, and then repurposed for the next wash.

## Case Norway: Easy@work

The aim of the "Easy@Work" system, rolled out to our retailers in Norway in 2022, is to support and assure workers at sites in the St1 retail network that their labour rights are taken care of. The system uses an app for tracking shifts and working hours, as well as labour rights and contract management in St1's retail network. The Easy@work system is secured according to GDPR regulation.

Through the system, we enable our retailers to easily stay compliant with all the relevant legislation while also securing employees' access to information. For instance, the shift planner links to relevant labour laws, while standardized contracts are developed using legal assistance and input from the Federation for Norwegian enterprise.



## Case Finland HSSE

In 2022, St1's Finnish retail organization rolled out a new online solution for site and retail staff. The solution facilitates the reporting of safety-related incidents while also making it easier to trace how individual incidents are handled.

Following the implementation of the new solution, the number of reports rose by 30%, clearly indicating that the new system works by providing the retail network with concrete means to address safety. The initiative will be shared in St1's Nordic HSSE network, which was set up in 2022. The newly established body aims to facilitate collaboration on best practices as well as discussions on developments in HSSE trends.

# Stakeholder engagement

**STAKEHOLDER DIALOGUE** is important to ensure our success; as such, it is a vital part of daily work of the Group's management and employees.

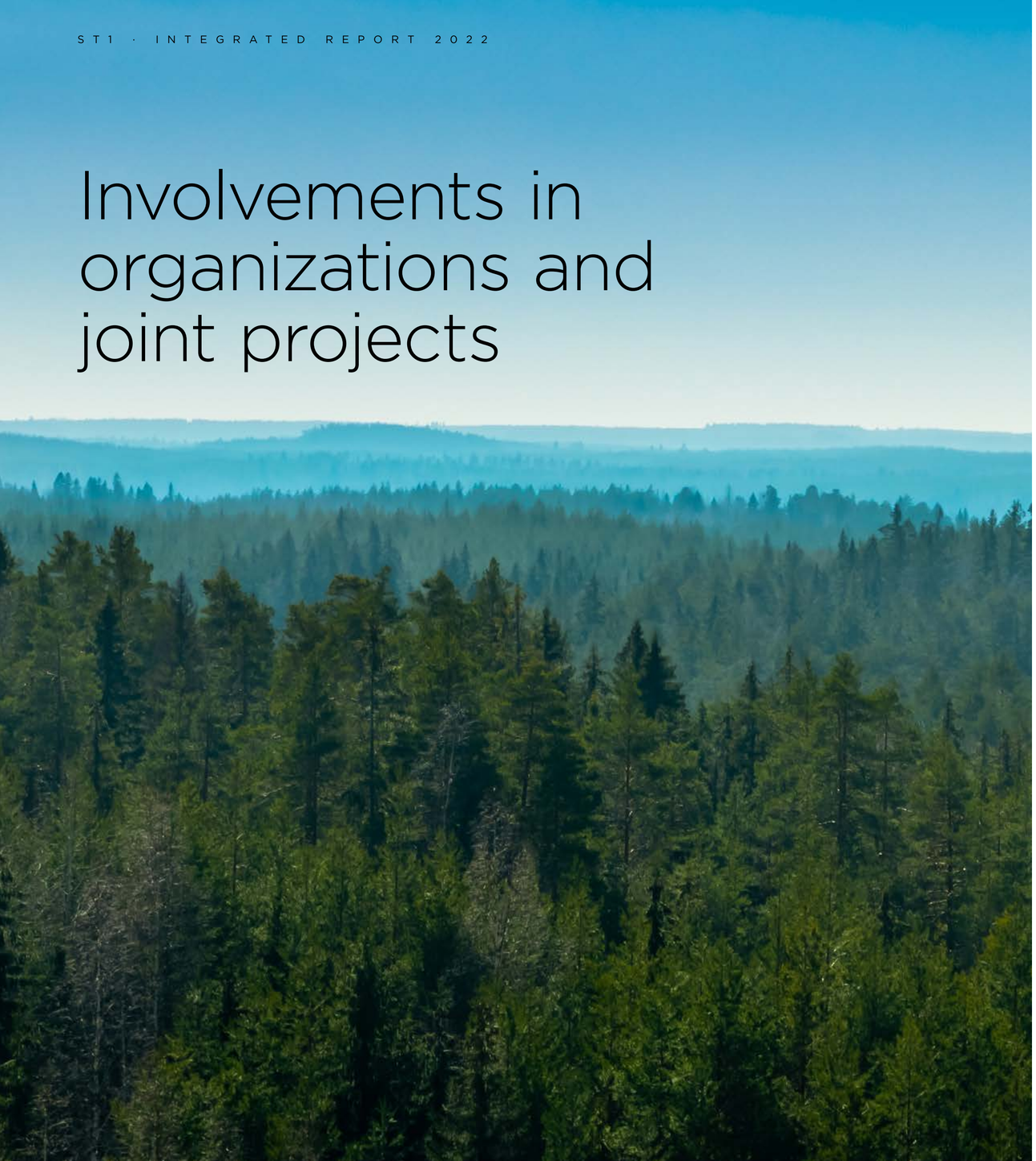
We continuously engage with many stakeholders in various formal and informal settings in the markets we operate in. Our engagement includes interacting with our customers and employees, participating in business and industry associations, and organizing community meetings and seminars.

Open dialogue helps us live up to our stakeholders' expectations of our business environment and sustainability matters.

| Stakeholder Group | Expectations | Our Engagement Actions |
|---|---|---|
| **Customers**<br>• Consumers<br>• Companies<br>• Public entities | • Develop sustainable and safe products, services and solutions that fulfil their needs<br>• Help customers to make sustainable choices<br>• Superior customer service<br>• Enable safe service and customer experience | • Introduced new shop concepts and products<br>• Newsletter<br>• New ways of working and processes to ensure safe service and customer experience |
| **Extended personnel and management**<br>• More than 1,000 employees in Group's and its subsidiaries' offices, terminals and production facilities<br>• More than 70 employees in associated companies<br>• More than 6,500 indirectly employed: entrepreneurs and distributors and their staff, station managers, sales channel traders, employees of transportation companies | • Vision and values to be proud of<br>• A fulfilling and inspiring workplace<br>• Open communication and dialogue<br>• Company culture that enhances involvement, professional development and respect<br>• Successful and sustainable business conduct | • Yearly Retail and Sales Kick Off -events<br>• St1 Value Chain engagement<br>• St1 Story Day for employees<br>• Employee Engagement and Pulse surveys<br>• Regular performance development and training opportunity reviews<br>• Group Intranet, Nordic and local Town Halls, Open Houses |
| **Partners**<br>• Distribution chain entrepreneurs and traders<br>• Strategic product and service providers Business partners<br>• Organizations<br>• Research organizations and universities | • Long-term partnerships<br>• Successful and sustainable business conduct<br>• Mutual development opportunities | • Yearly Retail and Sales Kick Off -events<br>• Meetings, seminars, direct interaction<br>• Participation in various research projects and studies |

| Stakeholder Group | Expectations | Our Engagement Actions |
|---|---|---|
| **Financiers**<br>• Banks and financial institutions<br>• Investors<br>• Analysts | • To provide timely and consistent data about St1's progress and sustainable business conduct<br>• To highlight significant topics affecting St1's financial performance | • Company releases, direct communication with financiers, presentations, annual integrated report |
| **Society**<br>• Local communities<br>• Authorities, decision makers and legislators<br>• Academia<br>• Non-governmental organizations, industry associations and cooperation bodies<br>• National Emergence Supply Agency | • To provide market specific and general information on the energy sector and transition to further enhance the basis for decision making<br>• Technological and scientific challenges for research<br>• Local presence in communities<br>• Social responsibility<br>• Job creation | • One-on-one meetings, hosting site and company visits, meetings, seminars, roundtables, articles, excursions to St1 sites<br>• A service segment training program<br>• A recruitment channel for service segment<br>• Various university research projects<br>• Access to work-life learning for young people<br>• National crisis trainings<br>• St1 Outlook publication |
| **Media**<br>• Domestic and international media<br>• Social media channel traders, and employees of transportation companies | • To provide transparent fact-based information<br>• To contribute to general discussion<br>• To be easily approachable and available | • Press releases, company releases, social media posts, website, newsletter, regular updates and events, site visits, presentations at seminars, interviews<br>• Immediate response to media requests<br>• Transparent dialogue also on challenging topics |

# Involvements in organizations and joint projects



**We participate in many consortia and partner initiatives; including trade associations and industry platforms together with sustainability and environmental initatiatives.**

| | |
|---|---|
| LIFE CarbonFarmingScheme | LIFE Preparatory, a project aimed at addressing specific needs for the development and implementation of the European Union's environmental and climate policies and legislation. |
| NEGEM | A negative emissions project led by VTT, the Technical Research Centre of Finland. It assesses the realistic potential of carbon dioxide removal and its contribution to achieving climate neutrality |
| World Energy Council Finland | World Energy Council Finland is a network of leaders and practitioners promoting an affordable, stable and environmentally sensitive energy system. |
| CLC (Climate Leadership Council) | Climate Leadership Coalition is the largest non-profit climate business network in Europe. CLC believes that profound transition to a sustainable world can be economically beneficial, viable, and financeable. The members strive to be among the leaders of their respective fields in terms of climate change mitigation ambition. |
| Committed network | A community initiative for innovation by Wärtsilä, TietoEVRY, St1, and Fortum. |
| F3- Fossil Free Future | f3 Innovation Cluster for Sustainable Biofuels is a network organization with a long history of stakeholder collaboration around system-related research on renewable fuels. |
| 2030 sekretariatet | The national secretariat for following up the Swedish government's goal of a fossil-free vehicle fleet by 2030. |
| Fossilfritt Sverige | A national initiative that aims for Sweden to become one of the first fossil-free welfare countries |
| CLIC Innovation | An open innovation cluster with the mission of facilitating the creation of breakthrough solutions in bioeconomy, circular economy, and energy systems. |
| Helsinki Metropolitan Smart & Clean Foundation | A collaboration that aims to make Helsinki's metropolitan area a global reference for intelligent and ecologically sustainable solutions. |
| Ilmastokumppanit | A network aiming for a carbon-neutral City of Helsinki |
| United Nations Global Compact | A call for companies to align strategies and operations with universal principles of human rights, labor, environment, and anti-corruption, and take actions that advance societal goals |
| Leaders of Sustainable Biofuels | Supports advanced biofuels lobby in the EU agenda. |
| FuelsEurope | Represents the interests of companies conducting refinery operations in the EU. |
| European Clean Hydrogen Alliance (ECH2A) | The European Clean Hydrogen Alliance aims for the ambitious deployment of hydrogen technologies by 2030. It brings together renewable and low carbon hydrogen production to meet the demand from industry, mobility, and other sectors, as well as hydrogen transmission and distribution. Through the ECH2A, the EU wants to build its global leadership in this domain and support the EU's commitment to achieving carbon neutrality by 2050 |

| | |
|---|---|
| European Technology and Innovation Platform Bioenergy (ETIP Bioenergy) | European Technology and Innovation Platforms (ETIPs) are industry-led stakeholder fora recognised by the European Commission as key actors in driving innovation, knowledge transfer and European competitiveness in the energy sector. |
| Biomethane Industrial Partnership | Industry, EU and European Biogas Association (EBA)-led partnership supporting the implementation of the REPowerEU (affordable, secure and sustainable energy for Europe) target of 35 bcm biomethane in 2030 |
| Chemical Industry Federation of Finland | A trade association for the chemical industry and its closely related sectors, covering various fields in the basic and production chemical industry |
| Lähienergialiitto (Finnish Clean Energy Association) | The goal of the Finnish Clean Energy Association is to make the use of renewable energy as easy as possible for Finns as well as to help the clean energy industry to grow. Its focus is on renewable energy, smart energy solutions, and energy efficiency. |
| Finnish Biocycle and Biogas Association | Promotes nutrient recycling, the use and development of biogas technology, and the public awareness of these in society. The Association aims to influence positive development in the biocycle sector by taking part in legislative development, publishing information and giving presentations in events organized by the association or other actors. |
| Etanoliautoilijat ry | An interest group whose main goal is to make high-blend ethanol one of the major solutions when converting traffic to low emissions. |
| Industrial Biotechnology Cluster Finland | IBC Finland builds novel biotechnology solutions, services, and products through project cooperation between companies and research institutes. IBC Finland looks forward to cooperating with national and international partners in the area of industrial biotechnology. |
| Hydrogen Cluster Finland | A cluster of Finnish companies driving hydrogen economy in Finland |
| Drivkraft Norge | Promotes the common interests of the energy station sector and uses its competences to lobby renewable liquid fuels and related policy objectives towards Norwegian politicians, media, and stakeholders. |
| Virke Servicehandel | Virke Servicehandel is the kiosk and petrol station dealers' industry unit of Virke, The Federation of Norwegian Enterprise. The industry unit has close to 2,500 member companies, including kiosks, petrol stations, car repair shops, and service concepts associated with the industry. |
| Energi i Nord | Energi i Nord is a cluster with members from the entire energy sector and from all of Northern Norway. |
| Energi Gass Norge (EGN) | An association supporting gas (biogas). Trying to set it self up as the all gas association. |
| Biogass Norge | Biogas Norway is an interest organization for companies and organizations that are concerned with developing the market for biogas. |
| Fornybar Norge | Renewables Norway is a non-profit industry organization representing about 400 companies involved in the production, distribution, and trading of electricity in Norway. |

| | |
|---|---|
| Drivkraft Sverige (formerly SPBI) | An industry organization for the fuel, fuel bitumen, and lubricant sectors in Sweden. Its task is to assist members and society in related issues, convey correct information, disseminate knowledge, and promote the interests of the industry. |
| Avfall Sverige | A stakeholder and trade association in the field of waste management and recycling. |
| Energigas Sverige | A member-financed industry organization that works for increased use of energy gases. |
| Vätgas Sverige | Promotes hydrogen (H2) as an energy carrier in Sweden to support the Swedish innovation system for hydrogen and contribute to a sustainable development in industry and society, with lower emissions and more renewable energy and increased resilience. |
| Mekanisterna | The Swedish mechanists' national organization, a member of the Lubricant and Fuels committee. |
| SIS – Swedish Standards Institute | An organization that coordinates standardization in Sweden. Member of the European standardization organization, CEN. |
| Svebio | A commercial environmental organization focusing on developing bioenergy in a sustainable society. |
| Hållbar Biltvätt | An organization aiming to inform, educate, and develop sustainability around the future of car washing |
| Convenience Stores Sweden | An organization working with questions contributing to the future growth and development of convenience retail. Its approximately 6,500 members include business organizations, chains, and suppliers |
| Biogas Solutions Research Centre | Research and communication on the biogas value chain |
| Nordic E-Fuels Alliance(NEFA) | A lobbying coalition that advocates e-fuel investments and regulations in the EU and Nordics. |
| Responsible Care | A voluntary initiative by the global chemical industry aimed at supporting sustainable development in the sector. |
| Biodrivstoff 2030 | Biofuels 2030 is a collaboration consisting of 16 players who work to accelerate the transition to a fossil-free transport sector through increased use of sustainable biofuels. |
| Arctic Energy Forerunners | An organization that aims to enable cheap and clean electricity in the Nordic market to ensure the competitiveness of industry and achieve national carbon neutrality goals |

# 03

# Towards a more sustainable value chain

# How we create value

## St1 Group strategy

# Conducting business according to our values

St1 is an energy company, whose vision is to be the leading producer and seller of $CO_2$-aware energy. In the spirit of our vision, we research, develop, produce and invest to be able to provide our customers with $CO_2$-aware energy while creating positive societal impact. Our employees' ambitious work keeps transitioning our value chain constantly towards greater sustainability and increasing the share of renewable energy of our net sales.

We accelerate growth through acquisitions and our operations are strengthened by strategic long-term partnerships in various areas.

Our value chain begins with sustainable raw materials and energy sources such as waste, wind, biomass and geothermal heat. We produce and invest in sustainable energy production: wind parks, geothermal heat, and biorefineries. We also invest in energy transition at our traditional refinery.

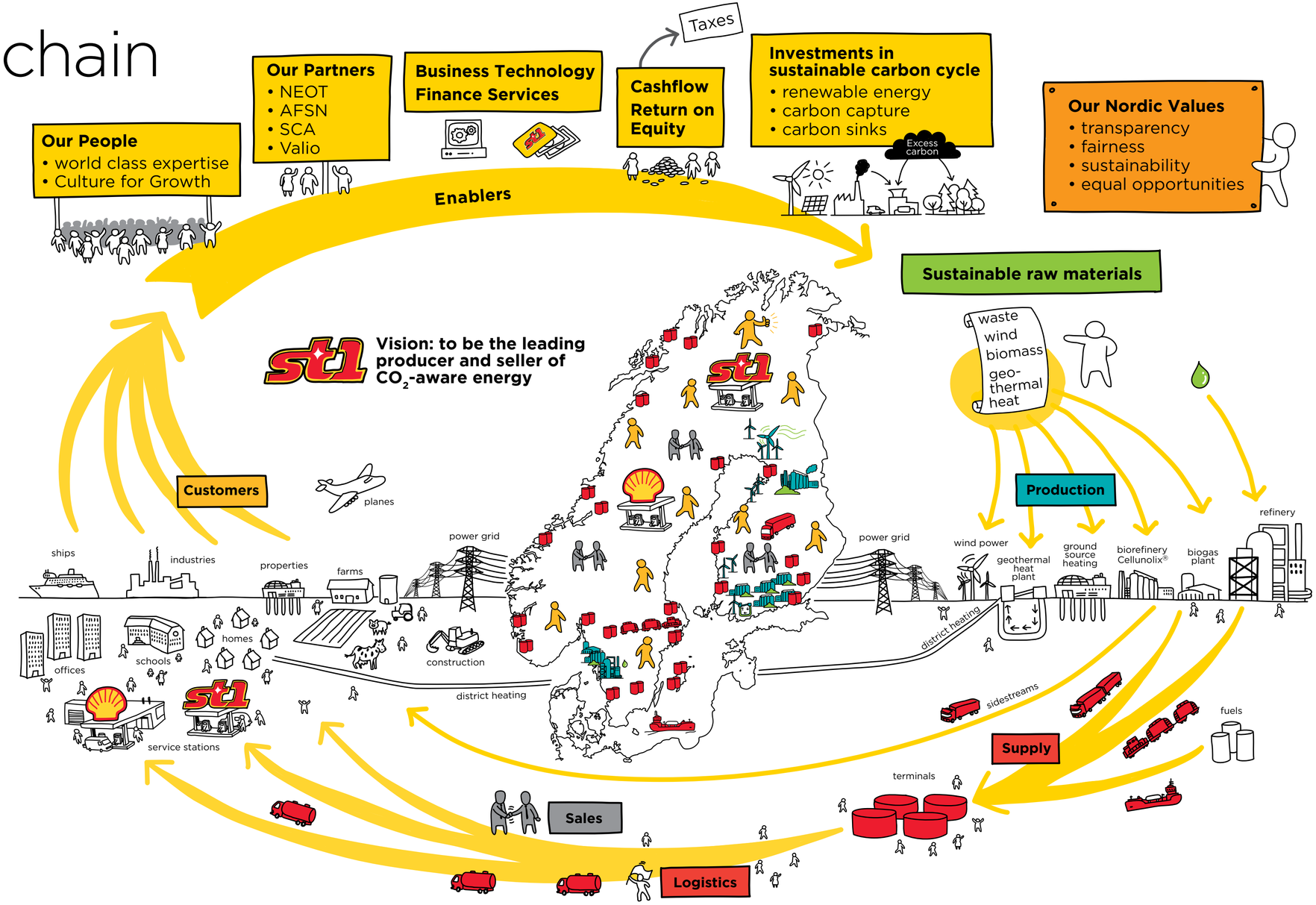
Through our optimized supply chain and logistics our products finally reach our customers. We have an extensive network of terminals to which trucks, trains and ships transport our products. From there, they are further trucked to our service stations and customers. We serve our customers with premium energy products for use in air-, maritime- and land traffic, various industries, agriculture and houses.

Our customers benefit from the competitive edge we gain by managing the complete value chain from raw materials and energy sources to products and services. The key enablers of our solid performance are our world-class people and company culture, partners, business technology, financing services, and cash flow together with our return on equity. Liquid transport fuels contribute significantly to our cashflow, which allows us to build world-class expertise in the introduction of more and more sustainable energy to the market.

A passion for promoting a sustainable carbon cycle and for driving energy transition also powers our research and development of new, innovative $CO_2$-aware energy solutions together with projects to reduce carbon in the atmosphere.

We base our growing energy business on Nordic society's values. We believe in transparency, fairness, sustainability and equal opportunities that result in equal education, health care and social security. Our values provide us a solid base to ambitiously consider the big picture at all times. We must keep abreast of what's going on in the world and understand what society will need in the future.

# St1 value chain




→ Watch the video

## Raw materials and production

# Increasing the share of renewable raw materials

### Refinery

St1 works in close collaboration with our associated company North European Oil Trade (NEOT) in the purchase of crude oil. The crude oil is sourced mainly from the North Sea and only from identifiable sources. All oil used in St1's Gothenburg Refinery is purchased, and St1 is not involved in crude oil production, oil exploration, or drilling. During 2022, we signed with a new crude oil supplier to shift from Shell to Equinor.

The refining capacity of our Gothenburg facility is approximately 30 million barrels of crude oil per year. In 2022, throughput amounted to almost 29.8 million barrels. The Gothenburg refinery's utilization rate was 89% versus a potential level of 90+%, resulting mainly from maintenance work at the facility.

The refinery's environmental permit was renewed in 2020, and measures related to it were initiated in the permitting process. We are committed to continuously improving our environmental performance, and the new permit enables the refinery to take a big leap in our transition towards biorefining.

The St1 refinery was the first in Europe to attain the ISO 14001 environmental management certificate.

St1's refinery is exceedingly energy efficient with an Energy Intensity Index of 76, emissions of approximately 550 kt of $CO_2$, and a high degree of heat recovery. Nearly a third of the heat generated by the production equipment is recycled by Gothenburg's district heating network, to which we deliver approximately 600 GWh of recovered heat every year. Devised by Solomon Associates, the Energy Intensity Index (EII) is a refinery energy efficiency metric that compares actual energy consumption with the standard energy consumption for a refinery of a similar size and configuration.

To maintain safe and reliable operations without interruptions, the refinery's existing equipment and facilities require planned maintenance and repair measures regularly. While there was no planned turnaround in 2022, due to a power failure during spring there was some downtime in parts of the facility. But all in all, the facility had high availability and was able to utilize high refinery margins.

Russia's invasion of Ukraine has had a major impact on the world, affecting the flow of oil as well as supply and demand for oil products. Due to the fact that we do not use Russian crude oils and our station network utilizes petroleum products produced from St1's Gothenburg Refinery and other nearby refineries located mainly in Finland, Sweden, Denmark, and Norway, the war has not directly impacted our operation. The lack of supply of crude oil and oil products has had a major impact on the European market with high fuel prices as a result.

### Most of our refined products are used in our own value chain

In addition to refining crude oil, our Gothenburg Refinery also operates as a blending hub.

Besides the fuel we refine from crude oil, our partner NEOT supplies additional fuels to fulfil our demand. NEOT sources these fuels, which are of fossil and bio-origin, from other refineries in the Baltic Sea area, emphasizing high quality and suitability in its fuel selection process. We use light and low sulfur crudes, which means both less energy consumption and lower emissions from processing. We then sell most of the resulting products directly through our network in Sweden, Finland, and Norway.

Our fuel blends contain several bio-components, mainly sourced from the global market, to maximize the reduction of greenhouse gas emissions. The blends of fossil and bio-components in our products vary depending on the country of operation, national regulations, and demand factors.

We constantly strive to develop and market new products that enable better fuel economy and reduce environmental impact. The share of renewable components we use has increased in recent years as we have incorporated larger volumes of bio-components such as ETBE, bio-MTBE, and HVO-naphtha. In addition, we will use new sustainable raw materials when we start producing our renewable diesel and sustainable aviation fuel in 2023.

The products of our refinery include motor gasoline, JET A1, sulfur-free MK-1 diesel and other middle distillates and marine fuels as well as liquefied petroleum gas (LPG). The refinery also produces 0.5% S marine fuel components, which complies with the International Maritime Organization (IMO) limit that came into force on January 1, 2020. All of the products of the refinery comply with the applicable environmental requirements.

### Health, safety, security, and environment

At St1's Gothenburg Refinery, safety always comes first. The refinery has a Health, Safety, and Environmental (HSE) Management System in place to systematically and continuously improve our work concerning health, safety, security, and the environment (HSSE) as well as minimize the risk of incidents.

External audits of our environmental management system are conducted annually by accredited bodies. Our internal audits are carried out by trained St1 personnel and cover the entire management system for health, safety, and the environment.

During 2022, the St1 refinery continued its journey to further increase and develop safety and security awareness within the organization. The Behaviour-Based Safety Program that was initiated in 2021 continued, and all employees at the refinery were trained in behavioural safety and risk awareness. Behaviour-Based Safety is a process that aims to strengthen the daily behaviour of employees and managers through safety observations which reduce the risk of accidents in the workplace.

In 2022, work began on reviewing the refinery's safety routines and life-saving rules. As part of this, updated and clarified life-saving rules and safety instructions were developed for all employees and contractors at the refinery. This type of work, which positively impacts the whole organization, will continue for many years to come, and serve as a solid foundation for our daily operations.

## Refinery in transformation

### Steps towards organizational transformation

2022 was a year of development and planning at the refinery, and the process continues in preparation for the start of renewable diesel and sustainable aviation fuel production at the facility in 2023.

The refinery organization has defined focus areas for the coming years: 1. Safety and environment, which translates into increased behaviour-based safety awareness and a commitment to constantly improve environmental performance; 2. Preparing for the future, which relates to the transformation journey toward biorefining; and 3. Enhanced administrative structure, in order to provide a supporting framework for the whole refinery organization as well as continuously resourcing to manage the Green Process Unit startup and the refinery´s progress.

Last year, the refinery welcomed close to 30 new employees.

### Preparing for the start of the biorefinery

In 2022, the work toward mechanical completion of the Green process unit continued. The tankfarm and pretreatment unit will be ready during the summer of 2023 and the aim is to prepare the whole unit for start-up before the end of 2023. The biorefinery will have an annual capacity of 200,000 tons of renewable fuel production.

In 2021, St1 entered a joint venture with SCA to produce and sell liquid biofuels, and during 2022 solid cooperation continued. SCA and St1 are equal shareholders of the joint venture, which

will itself have a 50% share in the Gothenburg Biorefinery.

The design of the biorefinery brings flexibility to the process by allowing the use of a wide range of feedstocks. The unit can meet the current and future specifications of the renewable fuels to be produced, which include renewable diesel, sustainable aviation fuel (SAF), and naphtha. The joint venture will have access to SCA's tall oil, a by-product from the kraft pulp production at SCA's mills in Östrand, Obbola, and Munksund, Sweden.

In 2022, we initiated a new project involving the whole St1 HVO-value chain to ensure that we have the organizational structure and all related systems and processes in place to support the operation of the new biorefinery.

At the beginning of 2022, we acquired 100% of Brocklesby Ltd in the United Kingdom to strengthen our value chain further upstream towards feedstock collection. Brocklesby is a recycling expert dealing with used cooking oil and fatty food waste and is among the UK's leading refiners in this field. Brocklesby waste collection is based on strong partnerships with a large number of restaurants, retailers, and food manufacturers in the UK.

Brocklesby will provide feedstocks for our own growing renewable fuels production and facilitates St1's future growth in a new business area. The feedstocks will be used for renewable diesel and sustainable aviation fuel (SAF) production at the Gothenburg Biorefinery. Another distinct area of competence for St1 is in technological screening and the evaluation of thermochemical pathways with our partners to produce renewable diesel, bio-jet, and other biorefining products.

## Advanced biofuels

As the result of tightening EU regulations and national laws, the demand for sustainable biofuels is growing. However, there is competition for the same limited amount of sustainable raw materials and feedstocks for different needs, such as plastics and textile production. The replacement of fossil energy in heat and electricity production also demands the same feedstock. Our target is to find higher value-added uses for biomass, such as the secondary residues of the Nordic forest industry's saw- and pulp mills.

Our long-term strategy for advanced renewable fuels for St1's domestic markets is to competitively fulfill regulations for the year 2030 and beyond. Today, we are producing advanced ethanol from various kinds of waste and cellulosic materials and biogas from various organic wastes.

The St1 research team is developing the Cellunolix® concept, which produces advanced ethanol from sawdust and the onsite enzyme solution to be used in the process. The R&D laboratory forms a world-class entity with a Cellunolix® demonstration biorefinery in Kajaani, Finland. The research results and development work can immediately and seamlessly be taken into production for testing on a demonstration scale, and the results can be used in the development work.

The annual capacity of our Kajaani biorefinery is 10 million litres, but production adapts to the test runs of the current research and development


phase, resulting in two million litres yearly. This investment aims to extend the sustainable feedstock base of biofuels with solid biomass, much needed globally, which could significantly increase the use of biofuels. The size of future advanced ethanol biorefineries could then be scaled up five-fold.

St1 is also a 50% owner, together with SCA, of Östrand Biorefinery AB. The Östrand Biorefinery is a joint venture company that holds an environmental permit to produce 300,000 tons of liquid biofuel-based solid biomass, such as sawdust or bark.  Östrand Biorefinery has entered the phase of finalizing the concept and moving forward to the next project phases in 2023 and 2024. The start of land reclamation work as well as the signing of the lease agreement with SCA ensures that a plot of land will be available for the project in Sundsvall, Sweden.

## Advanced ethanol

100% of the feedstock of our advanced ethanol production is waste-based and comes from fully traceable sources. Life cycle emissions have been cut down by using waste as feedstock. The performance characteristics of St1's waste-based advanced ethanol is of high quality compared to most other alternative biofuels and it generates up to 90% less $CO_2$ emissions than conventional fossil fuels.

In addition to using renewable energy in production, energy efficiency has been one of our top priorities in developing our technologies. Our advanced ethanol is used in high-blend

> St1's strategic goal is to build up significant production capacity in the Nordic wind power market.

ethanol fuels or as a biocomponent in petrol in low blends. St1's advanced ethanol produced from waste has a low $CO_2$ footprint.

Our Kajaani Cellunolix® demonstration biorefinery uses sawdust, a processing residue from the sawmill industry, as feedstock for bioethanol. Through our R&D activities, as well as by participating in partnership-funded R&D projects, we continuously seek out prospective new sustainable feedstocks for producing advanced fuels. For example, cassava starch mill waste has proven to be a source of potential new feedstock for ethanol production in Thailand.

Advanced ethanol biorefineries produce other bioproducts in addition to ethanol, and the commercialization of these products is important for evaluating these investments' profitability. For example, some bioproducts can be used as substitutes for plastics or as recycled nutrients in organic fertilizers.

Manufacturing advanced ethanol alone is not enough to bring biorefineries to profitable levels, and therefore a significant revenue stream must also be obtained from other bioproducts. Now, lignin is the bioproduct St1 is working with that exhibits the greatest potential. It's also the largest product of the Cellunolix® concept in terms of volume.

St1 is involved in several lignin application developments together with universities and private partners. Some of the promising applications are, for example, bitumen replacement in asphalt production, the replacement of fossil components in resin production, and biochar production for the steel industry.

## Biogas

Through St1's entry into the biogas business, we have taken a big step towards reaching our vision of being the leading producer and seller of $CO_2$-aware energy. Biogas infrastructure will complement our value chain as there are synergies between existing operations and gaseous fuels.

Biogas is a renewable gas that is produced through the anaerobic digestion of organic material. In concrete terms, waste collected from households in the form of wastewater and food waste is combined with manure from farms, and then broken down in an oxygen-free environment. The end product that is produced is biogas; the remaining mass becomes organic fertilizer that is spread on fields. Natural fertilizer nourishes the organic food that later ends up on our tables, completing the cycle.

In Sweden, St1 is a leading biogas player in the traffic segment. St1 has six biogas production and upgrading units, two of which are partly owned companies, Söderåsen Bioenergi AB and Falkenbergs Biogas AB. We import and export biogas and deliver it to customers through several sales channels.

In 2022, St1 decided to invest in the construction of a biogas upgrading and liquefaction refinery in Sobacken, Borås, in Sweden. The basis for the biorefinery investment decision was the long-term off-take contract to buy raw biogas, which St1 had signed with Borås Energi och Miljö. St1 has signed an agreement with Wärtsilä Gas Solutions to supply the latter's biogas upgrading and liquefaction facilities. Klimatklivet, a Swedish investment support program targeting projects reducing climate impact, has granted its support for the project. The project started during autumn 2022, and the biorefinery is expected to commence operations by the end of 2023.

St1 and Borås Energi och Miljö together create a strong value chain in renewable biofuels, both focusing on their own areas of expertise. St1 will upgrade and liquefy the raw biogas Borås Energi and Miljö produces from food waste and sewage sludge, and then sell it in its developing distribution network. St1 will continue expanding its biogas filling network in the Nordics to distribute this new liquid biogas production.

In addition, during 2022, St1 became the second largest shareholder in Scandinavian Biogas Fuels International AB. Scandinavian Biogas is one of the leading biogas producers in the Nordics.

In Norway, St1 has embarked on a joint venture with two partners. With the Biogass Energi Aksdal company, St1, Knapphus Energi and Norlog have begun cooperating to plan and build a retail network for liquefied biogas (LBG) in Norway.

In Finland, St1 and the food company Valio have entered into an agreement to establish a joint venture to produce renewable biogas from dairy farm manure and other agricultural by-products as fuel for heavy-duty transport. The joint venture company Suomen Lantakaasu Oy, was established in the beginning of 2022.

Suomen Lantakaasu Oy aims to achieve production capacity of up to one terawatt hour (TWh) by 2030. The company is planning to build Finland's biggest biogas production plant in Upper Savo, Finland. The Finnish Ministry of Economic Affairs and Employment has granted EUR 19.2 million in funding for the construction of Suomen Lantakaasu Oy's biogas and liquefaction plant.

## Wind power

Compared to other sources of renewable energy in use today, wind power is one of the most cost-efficient ways to produce electricity. In the Nordics, the wind conditions are highly favourable for wind power production. Nordic wind power will play an important role in satisfying the rapidly growing demand for renewable electricity.

St1's strategic goal is to build up significant production capacity in the Nordic wind power




market. The conditions in the Arctic areas in Northern Norway are exceptionally good. St1 is a majority shareholder in Grenselandet DA, which is developing Davvi wind farm, an 800 MW wind farm project in Finnmark county in northern Norway.

Grenselandet has applied for a permit for the Davvi wind farm and has commissioned impact assessments covering both environmental and societal aspects. These also cover the project's impact on reindeer herding and local inhabitants. Among its findings, the independent impact assessment states that protected areas, important habitats, or valuable geological deposits will not be affected. In 2022, the host municipality of Lebesby asked the Norwegian government to start the official review of the application. The hearing is expected to take place in 2023.

In 2022, St1 also submitted a notification regarding a new 750 MW wind power project, Sandfjellet wind farm, located in Gamvik municipality, Finnmark, northern Norway. The notification is expected to be sent for hearing in 2023 before the impact assessments can begin.

In 2021, St1 Sverige AB acquired Wästgöta Wind AB, a wind power project company with projects in early development. No St1 projects are currently in the permitting phase in Sweden.

St1 has been building cutting-edge expertise in industrial wind power generation for more than a decade. Today, the company offers a wind power service concept that covers the operation of wind farms in Finland. We are also continuously developing projects throughout the Nordic countries.

## Geothermal Heat

St1 offers and delivers geothermal heat solutions to meet our customers' demands. In our ground source heat pump solutions, St1 Lähienergia (Local Energy) designs, constructs, and maintains heat plants in the range of 30 to 5,000 kW. Our focus is on larger housing properties and public buildings, where ground source heating plants replace the use of fossil-based energy, such as coal and oil. The heat wells are typically drilled to a depth of 250–350 metres. In larger projects, the wells have extended down to 600 metres.

St1's pilot project in Otaniemi, Espoo, has explored options for the technical implementation of a geothermal heating plant. Two geothermal wells were drilled to a depth of greater than six kilometres, where the temperature of the bedrock is about 120 degrees Celsius. The project was halted in 2022 due to the inability to obtain sufficient water flow from one well to the other. The thermal output of the planned powerplant would not have been commercially viable.

At this stage, St1 is offering the deep geothermal wells for use in research. The deepest geothermal wells in Finland, drilled into hard Finnish bedrock, have attracted a great deal of interest for research. The wells provide a completely unique and international research environment for different areas of study, from the development of geothermal energy and other geosciences to microbiological research.

CASE

# Trust and communication support growth

**Brocklesby's first year as a part of the St1 family ended up being the most profitable year for Brocklesby, and through trust and communication, this collaboration has truly been beneficial for both parties.**

Brocklesby, an expert in recycling used cooking oil and fatty food waste - and one of the UK's leading oil recycling processors - was acquired by St1 on January 31st, 2022. Sometimes when a business is acquired, employees may feel a sense of alarm, and wonder what it might mean for their own jobs. According to Neil Taylor, Managing Director at Brocklesby Ltd., St1 has let people at Brocklesby get on with their work, which is why such concerns did not materialize.

"The acquisition has been received tremendously well. I think people have understood the reasons why we sold the business: it made a great deal of sense, and it positions us well to meet our future ambitions," Taylor asserts.

"When the business was acquired, I was very protective of my team. In my eyes, it is very important not to try and fix something that isn't broken."

"I am very proud to say that, after these 12 months, our team is the same as it was before, and we still retain the same energy and positivity within the business," says Taylor.

Brocklesby continues to grow well, and trust has been built between both parties. Communication has been key to this fruitful collaboration, as it has given people the space to focus on the important things:

"I think this success came about through solid, clear communication. It allowed us to continue to develop our operations. The first year after a company is acquired, it's not unusual that it doesn't perform well. But we've managed to grow our volume of procured feedstock by 11% compared to the previous year and enjoyed the most profitable year that Brocklesby has ever had, all during our first year as a part of St1. This calls for huge applause for everyone involved."

## New opportunities on both sides

As St1's biorefining business grows, the need for feedstock increases as well. Currently, Brocklesby's production equates to 60,000 tons of cooking oil. In the future, their goal is to provide an even larger share of St1's needs. But used cooking oil is not all that Brocklesby has to offer.


**Neil**

"I think we've added a lot of value with our knowledge of the marketplace, predominantly in the UK. We've also offered St1 security of supply and broadened their horizons. It's not just used cooking oil that we can supply, there's a wider feedstock range that we can offer."

The benefits have been mutual. St1 has provided the capital for Brocklesby to ensure the implementation of its own strategy. On top of that, St1 has been able to offer its knowledge in many fields, one of them being sustainability:

"Sustainability is of massive importance to us as a business and as a Group. Even though we did have some plans around it, I can admit there were some definite knowledge gaps within our team. The strength of the knowledge that St1 has been able to offer has accelerated our resourcing and focus on the topic. It has added significant value, not just to the individuals focusing on sustainability issues, but to the wider team as well," concludes Taylor.

CASE

# Wind power and energy efficiency – The advantages of a large wind power plant

**With a planned area of 63 square kilometres, Davvi wind farm will be a substantial – but at the same time a highly energy efficient – wind power plant. It's precisely the size of the plant that contributes to less negative consequences for biodiversity per unit of energy produced.**

"One concentrated seize of nature is more effective from an energy production point of view and has less negative impacts than many small ones," begins Svein Skudal Aase, Head of Wind Power at St1 Norway. Daily he works to realize the planned Davvi wind park in Finnmark. St1 is the majority owner of the project which permit application is currently under evaluation by The Norwegian Water Resources and Energy Directorate (NVE).

The fact that a larger wind farm is more energy efficient requires an explanation, and for the most part, it's relatively simple. A wind power plant, regardless of its size, will affect the surroundings outside the planning area or so-called "area of influence."

For each of these facilities, access roads need to be built, and these can influence the natural ecosystem. Also, regardless of the size of the park, the wind turbines will be visible far from the geographic area of the wind farm itself, explains Skudal Aase.

There are six licensed wind power projects in the northern Norwegian region surrounding Nordland, Troms and Finnmark. Together, these six make up an area of influence that is almost six times the area of the Davvi wind park, even though the latter will generate more electricity than the other six wind farms combined.

"In other words, with the Davvi wind farm, we'll get more power from a sixth of the total influence area," Skudal Aase emphasizes.

**Svein**

# CASE

## What defines the size of a wind power plant?

What exactly distinguishes a large wind power plant from a small one? There isn't a simple answer, but it's a combination of three factors – land area, number of turbines, and total production capacity.

Skudal Aase believes that it isn't primarily the land area that defines the wind farm's size, but rather what power production you manage to achieve using the same amount of land.

"I think that what primarily determines the size is how many megawatts (MW) the facility delivers. I consider up to 100 MW wind farms to be small," says Skudal Aase. For comparison the Davvi wind park will generate 800 MW - meaning an estimated production of 3.3 TWh per year.

"Also, the number of turbines can vary considerably. A single turbine can, for example, generate anything from 3 to 8 MW," he adds.

## Davvi wind park will be a large and energy-efficient wind power plant

The physical size of the turbines will also play a role. For Davvi wind park's part, the wind resources are so good that you don't need to go up to a great height, with big blades, to catch the wind.

Anyway, Davvi would be considered a large wind farm, both in terms of area and capacity, and regardless of whether it ultimately turns out to have 60 or 166 turbines.

"It's a sizable area, but it also provides high energy production. We must find the right number of turbines and evaluate which type is most effective given the wind conditions on site. Sometimes it can be beneficial to use smaller turbines because it gives an easier entrance to the area," says Skudal Aase.

## Optimal land use and better energy efficiency

When dealing with untouched nature it is vital to utilize suitable areas efficiently. The planned location for the Davvi wind park has low biodiversity and its wind resources are close to ideal. These prerequisites offer further reasons to make the best possible use of the area with a large wind power plant.

"Every wind farm comes with some negative ripple effects. In sum, these will be far fewer by building a large plant precisely where the conditions are favourable. If we can utilize the area where it has less impact on nature, the negative impact per produced kWh will be low," Skudal Aase underlines, before adding:

"A wind park, whether large or small, is also a political issue. Municipalities are responsible for planning their land use and must look at the ripple effects created by both small and large wind power plants."

## Cost effectiveness

It is of course also economically advantageous to build large scale facilities when they are to be built anyway. The economies of scale are clear, especially where you have good wind resources and with that, a high number of production hours.


"It's cost effective to build a large wind power plant. The fixed costs go down, so you can produce energy at a lower price," Skudal Aase stresses.

## Potential to attract new industry

"When we can deliver renewable power at a low price in one certain area, it will attract other power-demanding industries. Cheap renewable energy will automatically bring opportunities and increase the likelihood of positive ripple effects in the region," he continues.

Davvi wind farm has been scaled down on several occasions during the scoping phase. Today, the planning area covers 63 sqm. The general manager of Grenselandet AS believes it's important that this area's current planned size is preserved in the event of realization.

"Considering the power situation, it's very important that we achieve the production we have outlined so that we can help facilitate industrial development in Finnmark," says Skudal Aase.

CASE

# Making wind power manageable

**Owning and operating a wind farm is no easy task. With St1's TCM service, we're helping partners to streamline the wind power revolution.**

With many years of experience in the wind power sector under its belt, St1 decided that some of this this deep knowledge could be utilized in the service of those that own and operate the rapidly growing onshore wind farms that will power the energy transition. This is the ethos behind their Technical and Commercial Management (TCM) service, which is already helping wind farms across the Nordics deliver maximum benefit for the planet and for people.

Keeping a wind farm running efficiently is no mean feat. Ensuring health and safety, conducting inspections, analyzing data, and preventing costly downtime all require a vast kaleidoscope of various contractors and skillsets. With the TCM service, the idea is for St1 to act as a single point of contact on behalf of the owner of the wind farm, coordinating all of the different people and resources to ensure everything keeps running smoothly.

"Our job is to represent the owners and safeguard their asset," explained Yrjö Laine, the service business lead for TCM.

"By streamlining everything and holding all of the different parties accountable, we can extract maximum benefit from wind farms for everyone."

St1 conducts regular on-site inspections, reports any actual or potential issues, and makes sure that all repairs and upgrades are done on-the-spot.

"We're sort of a custodian for the wind park operators. We're there to give an overview of everything that is going on and make sure no-one is cutting any corners," Laine added.

Crucial to St1's value proposition is the legal side of things. Taking on the role of negotiator and enforcer, their job is to manage contracts with the revolving cast of repair services, manufacturers, power companies, and engineers that keep the blades spinning, ensuring that everyone meets their obligations.

"Our customers often tell us that just knowing that we are on the ground doing the follow-up gives them so much peace of mind," Laine explained.

## Making renewable power generation even more sustainable

Ensuring the sustainability of the wind farms themselves is also a crucial part of offering. While reducing downtime is one part of this, reducing the footprint of the infrastructure itself is also key.

"Wind farms themselves have an impact on the planet, and we exist to help mitigate that," says Laine.

This means recycling blades and parts that can be re-used, to cite just one example. It also means ensuring that day-to-day operations do not harm the surrounding land.

**Yrjö**

Crucially, sustainability also means safety, which is why a core part of St1's TCM offering is the upholding of high Health, Safety, Security and Environment (HSSE) standards for any third party that sets foot on their client's wind farms.

In the long-term, St1's main concern is securing the future of wind as a viable, sustainable power source.

"This kind of operations management is what makes wind power scalable in a way that can actually make a difference, both for the customer and for the environment."

Energy trade and logistics

# An emphasis on transparency and traceability

## Supply and logistics

Committed to leading the way in transparency in our supply and logistics chain, we cooperate closely with our associated company North European Oil Trade Group (NEOT). Co-owned by St1 and the Finnish SOK Cooperation, NEOT is a significant independent fuel procurement company in the Baltic Sea region and a vital part of our supply chain.
NEOT specializes in oil and renewable wholesale liquid fuels in Finland, Sweden, and Norway, and operates in the global trading market. The purpose of NEOT's operations is to provide its owners with competitive and sustainable fuel solutions.

### Supply

NEOT acquires fuels from global trading markets and handles storage and blending, as well as transportation from refineries to the terminals. Our Gothenburg refinery is the most important source of supply, but NEOT also sources oil products from other refineries in the Baltic Sea Region (BSR), mainly from Finland, Sweden, Norway, and Denmark.

In 2022, the invasion of Ukraine had a major impact on the oil flows in the region. Although the conflict did not affect St1 directly, it created a shortage of crude oil and oil products in the European market. The biggest effects were felt in the natural gas market in the form of increasing prices, which also influenced oil product demand and prices. The rebalancing of the market is still ongoing and will continue into 2023.

### Traceability of fuels

Our vision is not only to be the leading producer of $CO_2$-aware energy, but we also aspire to reach the forefront of transparency when it comes to tracking fuels and the other energy products we offer.

NEOT supplies the St1 Gothenburg refinery with bio components from the global market and has an offtake agreement to obtain 100% of St1's waste-based advanced ethanol production.

All the renewable fuels that NEOT supplies are traceable and compliant with the regulatory requirements in the markets where St1 operates. NEOT sources renewable fuels exclusively from suppliers that comply with the official EU sustainability criteria, either through the approved voluntary EU schemes, such as the International Sustainability & Carbon Certification (ISCC) or nationally accepted sustainability schemes.

St1's sustainability schemes verify compliance with the EU's biofuels sustainability criteria and include a third-party auditing process. NEOT's operations are also certified according to the ISCC, the Finnish National scheme, the Norwegian authorities' scheme, and are audited annually. As an official member of ISCC, NEOT also ensures that its contracts regarding renewable fuels take into consideration all necessary sustainability requirements, including those for traceability.

Due to the complex nature of fossil fuel supply chains and the lack of legislation to drive the industry to improve traceability, it is not yet possible to demonstrate the traceability of the crude oil supply chain at the same level as with renewable fuels. We are, however, working towards optimizing traceability for fossil fuel products.

In Sweden, we have labelled our products according to their origins since 2015. St1 was, in fact, the first fuel and energy company to provide information on the origin of our fossil fuel products.

We believe in increasing knowledge and contributing to the positive development of our industry. For this reason, we present our information as clearly as possible so that our customers can see where our crude oil, fuels, components, and bio-products come from, regardless of whether we buy finished products on the world market or process them ourselves at our refinery in Gothenburg.

More information on our third party due-diligence process and the traceability of our fossil fuels can be found in the sustainability section.

It is our ambition to grow our energy trading business further in the future. To support this aim, we have strengthened our energy trade and logistics business unit, thereby growing our capabilities to optimize our existing and new assets. Reinforcing the business unit will also enable us to put greater emphasis on centralized energy trade and managing risks with regard to feedstocks for liquid and gaseous fuels, electricity, EU Emissions Trading System (EU ETS) allowances and carbon credits, as well as currency trade.

## Logistics

Together with NEOT, St1 maintains a comprehensive logistics chain in all our operating countries which consists of terminals for storing products and a wide transportation network. Quality, safety, and environmental aspects are taken into careful consideration throughout the logistics chain.

### Terminals

In Finland, the network consists of six terminals operated by NEOT. Seven terminals in Sweden and nine in Norway are operated by St1. Our marine depots and some partner terminals

“Together with NEOT, St1 maintains a comprehensive logistics chain in all our operating countries which consists of terminals for storing products and a wide transportation network.”

complement our terminals throughout the Nordics, and together these form a network of more than 30 storing points.

### Transportation

Jointly, St1's and NEOT's transportation network includes shipping as well as road and rail transport. Its main activities center on the Baltic Sea region.

The network transports biofuel components to the refinery as well as the end products from the refineries to the terminals. The majority of NEOT's shipping operations are conducted as time chartering.

Five of the six most-used vessels in NEOT work to reduce the environmental impact of oil products in the supply chain by using new and energy-efficient LNG technology. Vessels that use LNG technology have a significantly lower environmental impact compared to traditional tankers, as they generate fewer sulfur oxides (SOx), nitrogen oxides (NOx), and particle emissions.

The newest vessels are hybrid vessels combining an onshore power supply with conventional engines, enabling the vessels to run on 100% electricity when handling cargo in ports.

Road transport is handled by our cooperation partner network, and in Finland, NEOT is responsible for road transport from the refinery to fuel stations and direct sales customers. In Sweden and Norway, other transport operators are responsible for the deliveries to our station network and direct sales customers.

The transport of fuel products between the port terminal in Hamina and the inland terminal in Varkaus in Finland is conducted via domestic railway. In Sweden, the products are delivered by train from Gothenburg to Karlstad and Jönköping, and from Gävle to Arlanda Airport.

We collaborate with NEOT to improve the sustainability of our supply chain. The goal of the collaboration is to enhance the traceability of our products and to enable the calculation of their carbon footprint.

More information about NEOT's operations can be found in NEOT's Sustainability Report and the partner section of this report.

## Sales and customers

# Meeting customer needs in a volatile market

Securing society's fuel supply is a key responsibility for St1. Russia's invasion of Ukraine in February 2022, set off a year of energy supply challenges. Because of the war in Ukraine, and the subsequent sanctions levied on Russia, prices skyrocketed to over 110 USD per barrel.

Further down the value chain, this affected fuel prices, which rose to record highs during the summer of 2022. The volatile price changes over the year relate not only to fuel, but energy in general, which created ripple effects for our business and indeed our customers.

St1 provides private and corporate customers with a wide range of products and services. The main products sold are premium traffic fuels, heating oils, middle distillates for machinery, and marine fuels. Bioproducts, which make up an important share of our liquid fuels offering, accounted for 17.4 % of our net sales in 2022. We continued to install electric vehicle (EV) charging stations as part of our retail offering, especially in Norway, and we expect to grow significantly in this segment going forward.

Our offering also includes a wide range of enhanced payment cards, payment methods, and services for fleet customers, commercial road transportation customers, and private consumers.

### Retail station network

When taken together, the cross-Nordic energy station network, comprising approximately

> Our EV charging network is expanding in tandem with rising sales in electrical vehicles in the Nordic countries, turning our network of fuel stations into energy stations.

1,270 St1 and Shell energy stations across Finland, Sweden, and Norway, is our retail business' forte. The network of unmanned stations and service stations with shops, convenience stores, restaurants, and car washes serves the many needs of hundreds of thousands of people on the go.

Additionally, the St1 mobile refuelling concept further enhance convenience for our customers. Our app has become a significant sales channel for car wash services, coffee offers and the like. Our EV charging network is expanding in tandem with rising sales in electrical vehicles in the Nordic countries, turning our network of fuel stations into energy stations.

In Sweden, in order to reduce food waste, many of our stores have initiated collaboration with an external partner, Too Good To Go. We have also developed our carwash business further, and we now have water waste management on all our sites. We have rolled out our PLOQ concept on one-fifth of our network in Sweden (17 sites in 2022). The focus of the concept is fresh, healthy food prepared on-site. For 2023, we will continue the roll this out, maintaining focus on operational excellence and continuous growth in desired categories

In Norway, we built a new retail station in Brumunddal – Shell Brumunddal – which, like the other new energy stations established over the past year, have EV charging points alongside traditional gasoline pumps. As convenience retail (CR) sales continue to increase, we are also capturing market share with a growing customer base.

In Finland, we continued pursuing our aim of meeting customers' needs by introducing our new B2B app – St1 Business. The next steps will follow in the coming years. Additionally, we opened three unmanned stations: St1 Unmanned Pori Mikkola, St1 Unmanned Seinäjoki Kasperi, and St1 Unmanned Nokia Nuijamiestentie.

In all countries our entrepreneurs and partners, together with our operational team, performed extremely well.

## Corporate sales

2022 presented new challenges for our business. As crude oil, diesel distillates and gas from Russia were abandoned in Europe, we saw a rapid increase of gas prices. In the relevant markets of Sweden and Finland, we were able to increase our supply of industrial gasoil (IGO) to secure our societies' energy supply, replacing gas in the process.

The volatile energy market and its connection with security of supply is important. Our robust supply chain and close dialogue with key players in the many industries we serve have delivered proven value for our customers time after time.

These unprecedented changes led to the creation of new customers, agreement types and new ways to optimize limited energy sourcing while maintaining good customer experience. This was accomplished through close co-operation with our customers, thus creating growth in many customer segments.

Our customers are increasingly asking for ways to reduce their environmental footprint. Together with them, we have developed multiple solutions and programs to help mitigate their climate impact.

Significant emission reductions can be achieved by using biogas, especially for heavy-duty transport.

St1 is a leading biogas player in Sweden, with about 30% market share in the road transport segment. Its biogas operations are located in the urban areas of Southern Sweden as well as in Stockholm. The company produces, imports, and exports biogas, and delivers it to customers through several sales channels.

In Finland, St1 and the food company Valio have established the joint venture Suomen Lantakaasu Oy, planning to produce renewable, liquified biogas from dairy farm manure and other agricultural by-products. St1 would distribute the biogas through its own nationwide network of fuelling stations for heavy-duty vehicles. The planned annual production capacity of the first biogas production plant is 125 GWh, and the goal is for the plant to be operational by 2026.

Our terminals in Finland, Norway and Sweden are instrumental to securing volumes to the market amidst the challenging global energy situation in 2022. The newest terminal in Gävle has continued to strengthen our customer offering in Sweden. Our sales team, together with our supply and logistics teams, have succeeded in growing volumes. The terminal enhances our ability to provide our customers with a wider energy mix to meet their future needs.

## Shift

Shift is a pilot program started in 2022 that contributes to the fulfillment our vision to be the leading producer and seller of $CO_2$ -aware energy. Investments in the sustainable carbon cycle are part of St1's strategy and value chain.

By offering our customers an opportunity to invest in Shift carbon credits, we enable financial investments in carbon sequestration projects that remove $CO_2$ from the atmosphere.

Shift is currently in a pilot phase, where we have started with a minimum viable product (MVP) by offering carbon credits from a reforestation project in Kenya. The piloting period provides a valuable opportunity to gather information and learn important information from our customers and from the voluntary carbon market. Read more.

**Erica**

CASE

# The strength of the St1 brand accelerates business growth

**Building a strong St1 brand plays a key role in developing and maintaining a successful and profitable business.**

The St1 brand is well known within the consumer transport segment, which is natural as our St1 sites are clearly visible in Finland and Sweden. Our robust brand has enabled us to invest in projects that will help us realize our vision to be the leading producer and seller of $CO_2$ -aware energy.

"As our company grows and we enter into more projects that will help us reduce the impact of $CO_2$ emissions from fossil energy, having a strong and clear brand platform to lead us in our work is vital. We need to bring the whole company together and build one solid brand for the future," explains Erica Samuelsson, who is responsible for Brand Management and Strategic Marketing at St1.

Together with a team of people from across St1's Marketing, Corporate Communication, Public Affairs, and HR departments, Samuelsson is working on developing a new Brand Platform that will provide a framework for all internal and external marketing and communication.

**Creating a common platform**

"Due to different histories in our markets, the St1 brand has developed with slight deviations between countries. To align the brand strategy, we are now working on creating a common brand platform that will be the base for us to build an even stronger brand. That will support us in the energy transition towards our vision and at the same time differentiate us on the market," Samuelsson asserts.

Building a strong brand is not only important for attracting new and more loyal customers, but also internally as all employees working for St1 should be brand ambassadors. For that to happen, we need to keep up the interest and engagement internally.

"We should all know about the great things that we as a company are doing so that we can feel proud and share the St1 story with our families, friends, and stakeholders. And having a strong brand will also help attract new talent to St1. That's very important to us," Samuelsson explains.
We have an exciting brand journey ahead of us.

CASE

# Making mass EV charging a reality

**St1 is investing heavily in its retail EV charging network, looking to meet soaring demand and scale up the energy transition.**

On the B2C side of St1's business, mobility remains the most significant source of energy consumption. As such, providing the infrastructure to make electric vehicles (EVs) the obvious choice is key to making the energy transition a reality.

This is the sentiment that drives Oscar Sandström, Director of Strategy and Energy Transition at St1. Having previously worked in Norway for Shell prior to its acquisition by St1, Sandström has seen first-hand how the EV transition is reshaping the role that retail stations have to play.

"Back when we started building EV charging points at our Norway stations in 2016, none of us could have guessed how quickly electric mobility would grow. From less than one hundred thousand vehicles back then, today Norway has over half a million EVs on the road, compared to a total fleet of around 2 million cars, and Sweden is catching up fast," Sandström explained.

**Oscar**

The rapid uptake of EVs has required St1 to scale up their charging point offering, with 55 sites by the end of 2022 providing 300 High Power Charging (HPC) charging points across Norway and counting. But meeting demand is only one side of it. St1 also needs to remain competitive in the retail space in order to retain and expand its market share with customers.

For Sandström, achieving this and locking in the gains of the EV transition means tackling the customer experience.

"We're changing what it means to fill up your car. Our stations are destinations in their own right, where we want drivers to want to stay. That's why we're upgrading our sites with stylish, welcoming interiors, focusing on freshly made food, and adding play and even dog parks to our stations," Sandström added.

The numbers suggest this is paying off. Whilst the average charging time at an HPC in Norway is around 15 minutes, customers chose to spend in excess of 20 minutes at Shell energy stations, suggesting that they want to stick around.

"We want to trigger a mindset shift, completely changing how people see the experience of filling up at the station."

## Helping energy systems catch-up

While fresh pastries and cooked-to-order burgers certainly add to the appeal, the infrastructure is the most important aspect. St1 has focused on adding a significant number of high-powered charging points at each station, so that each site can accommodate more customers and reduce queues.

"We want to trigger a mindset shift, completely changing how people see the experience of filling up at the station."

But ensuring that this infrastructure works for everyone is not without its challenges. The energy system also needs to accommodate the shift to EVs.

"To make this work, we need to look at our energy systems holistically. If you're going to throw a bunch of EV charging into the mix, you have to make sure that the grid is equipped to handle it. In addition, you need to add solutions that actively manage down peak demand," Sandström explained.

While there are certainly challenges ahead, Sandström sees these as evidence that we are on the right track towards the energy transition.

"All of this shows that the EV society is coming in full force. It has grown much faster than anyone could have predicted, with even governments' own energy consumption scenarios are having to be revised upwards because they were initially too conversative."

"Critical for this trend to continue is to make the switch to electric as simple as possible. Charging has to be available and accessible to all, which is exactly how we plan to contribute."

CASE

# Working at the forefront of the energy transition

**As the largest per capita electric vehicle (EV) market in the world, Norway offers a glimpse into the future of the energy transition, and the crucial role that EV-equipped refueling stations have to play.**

As part of a licensing agreement with Shell, St1 owns and operates 300 retail stations in Norway. For Øyvind Andreassen, St1's retail operations manager in Norway, stations are the crucial infrastructure driving rapid change.

"People need energy, and we are best equipped to provide them with it. We have the world's highest number of EV's per person here in Norway, and in my hometown of Bergen we have the highest number in the world for one city," explained Andreassen.

Andreassen has been in the business of customer service throughout his career. After working in retail stores during his youth, he went on to become a sales manager for Shell Norway in 2007, progressing to Marketing Manager for the West Coast in 2002. This was followed by a 13-year stint as an entrepreneur, when Andreassen took over 10 Shell stations in Bergen, before returning as regional manager to what had become St1, back in 2019.

Today, Andreassen is responsible for 2500 station employees and 33 million visits a year to the stations under his remit, and is feeling more positive than ever about the energy transition.

"At St1, we're investing so much in EV charging at the moment. We're increasing the number of charging points, increasing the share of biofuels, and we aim to build more wind power in Norway."

"This gives me a lot of energy to continue to be a part of the disruption that needs to happen," he added.


**Øyvind**

## The customer experience is key to the transition

While the stations and people Andreassen are responsible for are a crucial part of the picture, he acknowledges that simply providing the infrastructure is only half of the task at-hand.

"The biggest challenge for us now is to change mindsets and support customers to make changes too."

One of the most interesting insights Andreassen has gained in recent years is that this process of change works both ways, and that facilitating sustainable transport has also required a re-think of the customer experience.

"EV customers tend to stay at the station longer than fossil-fueled drivers as they wait longer for recharging. This has made us realize that the winners in the retail space will be those who can provide an enjoyable station experience, with comfy seating, top-notch toilet facilities, and truly tempting food on offer," he explained.

While Andreassen said that the ability to learn something new every day is his favorite part of his job, what drives him to come to work every day is something deeper.

"The people in our organization and at our stations are the ones making a true difference. During the pandemic, they stood on the front line with nurses, doctors, and retail workers and did an important job to keep society functioning during this incredibly difficult time."

"This is what I am most proud of, as it shows the real value of what we do."

# Value chain enablers

People

# Our strong culture guides our way through the energy transition

**Our Human Resources (HR) operations focused on enhancing processes and tools as well as on reinforcing transparency in our internal communications. One of the highlights of the year was St1's 25th jubilee, celebrated in all our locations.**

Brocklesby Ltd. joined our St1 family at the beginning of 2022, and the role of HR operations in the acquisition was to build bridges between different parts of the organization and bring people closer together. Concrete examples of this work included preparations for the merger as well as onboarding people and processes.

## The value of tools and processes

The progress of our cultural development and the results we achieved are evident in our annual Group-wide Employee Engagement survey, which measures well-being at work, satisfaction, and motivation. The participation rate in the survey remained high, and the results indicate that St1 employees feel that they are on a learning curve and performing at a high level. The outcome is processed in business units and teams and valuable feedback is put into practice.

One of the action points from the Employee Engagement survey has been the need to further develop our common tools and processes. We completed many projects in this area last year and will continue the work to strengthen the ways our organizational capabilities function across all our business units. These efforts reinforce our Culture for Growth, which distinguishes St1 as an organization.

The introduction of our new Group Intranet in the autumn 2022 was a big leap forward in communicating our culture. Through the new service, we have been able to present the cornerstones of our culture in an approachable way as well as invest in storytelling about our people and strategic projects.

Another example of building our culture with common processes and tools is the new Group level Onboarding program that was launched in 2022. The program includes an onboarding plan and a comprehensive content package that is available on the Intranet for new employees.

At St1 we believe that sharing information transparently also creates psychological safety. That's why we have continued investing heavily in enhancing our internal communications in 2022, such as the monthly St1 Townhall events that we organize both locally and Group wide.

Overall, we believe in organic growth through learning and development. This can be seen also at the Open House events where teams and units can educate their fellow employees about their own areas of expertise.

We want everyone to be able to achieve professional growth alongside the growth of the company. We believe that our unique company culture is a competitive advantage in the volatile circumstances in which we operate.

## Continuing the work around our core leadership values

Trust is the foundation for building St1's Culture for Growth, hence, it is important to measure the level of trust in the company. By measuring both trust and performance expectations, we can help ensure that St1 is moving in the right direction. In order to be a high-performing organization, we need to maintain a high level of psychological safety. We want every employee to be involved and to feel safe. These factors are also crucial for us to learn and develop as individuals and as a company driving the energy transition journey.

During 2022, we measured other parameters related to St1's Culture for Growth in our three Pulse surveys. These included psychological safety, information sharing, collaboration between teams and units, and learning.

The main takeaway from the surveys is that teams perform better when people feel safe to express their opinions and when they are held accountable for the work they carry out. We also learned to use the Pulse tool to develop teamwork at St1.

In 2022, we continued our management and leadership training programs in all markets.

## Well-being and safety at work

Maintaining well-being is a key priority for us. We engage in a variety of activities to ensure the physical, mental, social, and organizational well-being of our employees and support employees' own initiatives. Our employees have access to comprehensive occupational health services. Taking our employees as well as our external workforce into consideration, we plan our operations with the aim of maximizing safety. We take a proactive approach in preventing accidents at work regardless of working conditions—from production and logistics facilities to our offices. We review all accidents and dangerous incidents closely to develop our Health, Safety, Security, and Environmental (HSSE) management practices in ways that allow us to continue to avoid high-consequence injuries. During 2022, we set HSSE development as a topic of high importance for all our business units. The work will continue throughout 2023.

> "At St1, we believe that sharing information transparently also creates psychological safety."

We are committed to offering a safe working environment for everyone at St1. Our business is based on equality, and our behaviour toward each other is professional and fair. We have a zero-tolerance policy for harassment and discrimination of any kind.

In 2022, we continued our work on our Code of Conduct, which emphasizes our ethical business principles and our expectations of our partners. We also continued our work on our Human Rights policy, which states our commitment and respect for internationally proclaimed human and labour rights. Our ethical reporting channel SpeakUp was launched in 2021. Through it, suspected breaches of our Code of Conduct can be reported anonymously.

Despite the ongoing war and the energy crisis, we managed the situation well in terms of business operations, productivity, and collaboration. Throughout the year our employees have shown true loyalty, commitment, and resilience in challenging times.

**We adhere to Concawe Health & Safety guidelines in our operations.**

- All Injury Frequency (Total Recordable Case Frequency) which is calculated from the sum of fatalities, LWI, RWI and MTCs divided by number of hours worked expressed in millions of hours.
- Lost Workday Injury is a work-related injury that causes the injured person to be away from work for at least one normal shift because he is unfit to perform any duties.
- Medical Treatment Case is a work-related personal injury which requires treatment by a medical professional and does not result in time away from work or restriction in duties. It excludes all cases involving first aid treatments as specified in OSHA 1904.7(b) (5) even if these treatments are performed by a medical professional.
- Restricted Workday Injury is a work-related injury which causes the injured person to be assigned to other work on a temporary basis or to work his normal job less than full time or to work at his normal job without undertaking all the normal duties.

CASE

# HVO value chain talent program nurtures future leaders in the energy transition

**St1's Hydrotreated Vegetable Oil (HVO) business is embarking on growth. With the Gothenburg Biorefinery about to be completed, the company is entering into the production markets for renewable HVO diesel.**

As the company transforms from a buyer into a relatively large producer of biofuels, the size and complexity of its value chain grows as well.

"In the world of HVO, sustainability is a top priority. It is clear that we need to grow our people's capabilities in operating sustainably along the entire value chain. Sustainability is not just an ambition, but it's the people who make it happen – and who grow along with the company," explains Sampsa Halinen, Director of Energy Trade and Logistics at St1.

St1 has identified a number of key roles, in which new talent is needed in the future. Halinen explains that as the right kind of talent profile could be found inside the company, it made sense to create a program for people already working at St1.

Altogether three participants were selected to take part in the 12-month talent program, which took off during the last quarter of 2022. Throughout the program, the participants will be working in all St1 business areas across the whole value chain. Rotation and locations are planned individually with the participants.

"As a sort of by-product of the application process for the talent program, we found many other talented people who didn't end up taking part in the program itself but to whom we could offer new career opportunities within the field of energy transition," adds Halinen.

## New career paths within the HVO value chain

One of the three participants in the program is Olivia Järvholm. Before joining the program Järvholm had been working at St1 refinery in Gothenburg as Supply Operator since 2018. She mentions the opportunity to live abroad and dive deep into the world of renewable energy as her main motivators for applying to the program.

**Olivia**

**Sampsa**

"I find it inspiring that St1 wants to be at the forefront of the market in energy transition. The fact that as employees we are given the opportunity to learn new capabilities strengthens engagement in the company," says Järvholm.

The goal of the program is that at the end of it, participants will start new career paths at St1. The program maps out each participant's skills that are relevant for future roles. And although the program prepares a participant for a certain role, they are free to choose their own trajectory when finishing the program.

"Since I only just started the program, I don't have a specific role in mind yet. I'm interested in the energy transition in the whole industry. Let's see where it takes me within the company," enthuses Järvholm.

The HVO value chain talent program also serves as a great way to build and strengthen the bridges between different functions, countries, and companies within St1. After the past few years of living in exceptional circumstances the program has acted as a catalyst for people to motivate fellow colleagues and get to know each other again.

"One of the highlights of the program for me so far has been to meet with all the people who I've been working remotely with for many years," says Järvholm.

## Occupational health and safety results 2022, own employees

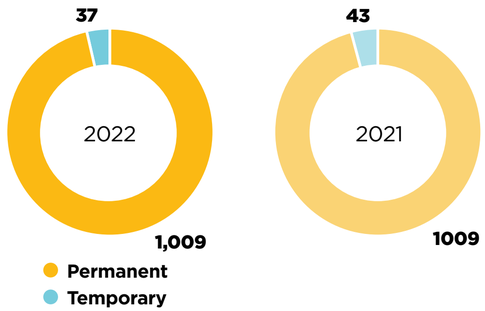
| | |
|---|---|
| Total Recordable Cases (TRC) | 12.0 |
| Total Recordable Cases Frequency (TRCF) | 7.2 |
| Work-related fatalities | 0 |

**Absence rate**
**3.2%**

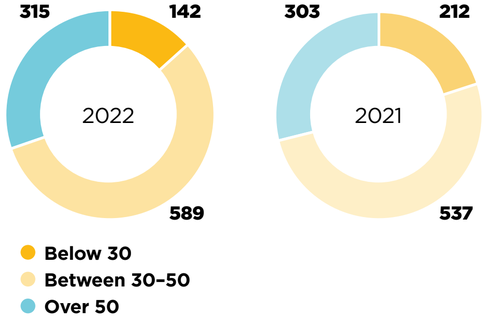
**Safety observations including safety walks**
**3,000**

St1 adheres to Concawe Environmental Science for European Refining guidelines.

### Employees by contract




### Breakdown of employees by age




### Employees by gender


CASE

# Bringing every day a little closer to perfect

**In 2022, we continued to promote and execute our 'Perfect days' concept at the St1 refinery, in which we try to visualize our daily achievements from an HSSE perspective.**

This year, we focused mainly on leaders, making sure they are actively taking responsibility for the topic, and understand the importance of their roles. Leaders were instructed in terms of what it means to be a role model, and how to coach both their teams and the individuals within them on HSSE topics. In addition, safety roles and expectations were defined for the management team, first-line leaders, and employees.

Also in 2022, behavior-based safety training was provided to the entire employee base. This will continue with a program spanning 2023 and 2024, encompassing four distinct modules:

- Risk awareness – how to identify risks by observing the workplace.
- Movement - how to move safely and focus one's attention when walking.
- Hand/eye coordination – monitoring and trying to control reflexes in dangerous situations.
- Routine tasks – executing routine tasks in a safe manner.

**Karin**

"With the St1 Gothenburg Biorefinery starting up after the summer, it's really crucial that we stay focused," says Karin Sandell, HSSE Manager, St1 Refinery. "With new activities comes stress – we really need to work on making sure that we take a step back and think before acting. Safety should stay at the top of our minds."

Karin points to the continuing implementation of the company's updated lifesaving rules as a good example of keeping safety topics active for every employee. From twelve, the rules have been filtered down to the six most important. Six still being a high number for immediate recollection, colors and symbols have been added to each one, making them easier still to memorize.

## Business technology and finance services

# Creating business value with IT architecture

**Business technology and digital services play a key role in enabling the flawless operation of our value chain. We are constantly developing and improving the services we provide our customers, for whom a smooth and swift experience is increasingly important.**

In 2022, we continued to develop a sustainable IT landscape that enables us to build better services for our customers. Our growing operations and the demands they put on business continuity prompted us to strengthen our capabilities through a significant number of recruitments. In general, talent and organizational development were overarching themes for St1 during 2022.

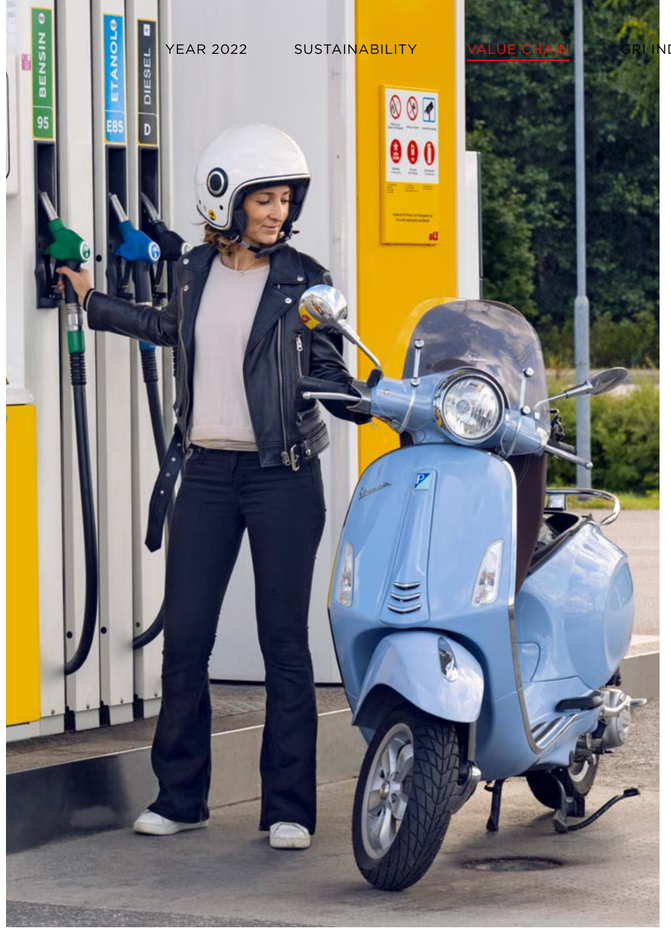
One example of this is the idea of a domain approach where our various business needs are structured into a set of more specific business domains. For each domain, cross-functional teams design, develop, and operate reusable IT components, systems and services needed by our business and customers.

Going forward, the domain approach will bring business and IT people even closer, clarify ownership, and allow more focus and continuity in the development of our IT architecture. This will also facilitate the evolution of various IT products with our changing business needs in the future.

Major efforts were made to evaluate the IT landscape of the newly acquired Brocklesby Ltd. and to design a roadmap to ensure business continuity.

During 2022, many significant projects for business continuity were carried out. For instance, the new ERP system was implemented at the refinery in Gothenburg, and in two markets a new fueling app for B2B customers was launched.

We also started to adopt automation capabilities and replaced several smaller legacy services. All this will help us speed up our development pace in the future.




Our work to enhance our digital workspace continued in 2022. To improve our internal communications, the renewal of St1's Group Intranet was carried out successfully. In addition, we provide continuous training to our employees in effectively using the enhanced communication tools. Providing a constantly evolving digital workplace is a prerequisite for our organization to be able to form agile value chains around the tasks at hand and deliver them successfully.

The reliability of our operations as well as good customer experience hinge on the effectiveness of our business technology. We continuously improve our IT systems to make them more agile to meet the rapidly changing needs of our organization and customers.

Cybersecurity risks are clearly a growing threat, and we guard against them by investing in our Group's cybersecurity capabilities. Cybersecurity is a function that ensures reliability of the entire value chain. It concerns not only our tools and systems, but also the awareness of our employees. We constantly strive towards greater awareness of cyber security threats and best practices for mitigating them.

St1 Finance Oy provides payment services with a license issued by the Financial Supervisory Authority. St1 strives to be a responsible creditor and therefore assesses the credit status of customers diligently and efficiently. The St1 Mastercard service is available in all our markets.

Our Nordic App concept allows our organization to serve our customers with services such the ability to view their transactions and balance online, the option to edit security controls, mobile payments for fuelling, car wash and coffee offers, and Apple Pay in addition to other useful features.

Last year, we continued strengthening our business and service offering with an even stricter focus on safety, security, and responsible credit granting. Our payment services and business technologies, along with their marketing, sales, and customer service, work seamlessly together to fulfil ever-increasing demands for safety, security, and convenience.

CASE

# A refinery that's ready for the future

**St1 has finished its ERP harmonization project by implementing Microsoft Dynamics 365 at its refinery in Gothenburg. The new system means, among other things, reduced costs and greater visibility to data.**

"In the beginning, we were in a situation where each country was running its own separate ERP solution and cross-border collaboration was limited. We started the harmonization first from one country, then rolled it over to direct sales and retail businesses. The implementation at the refinery was the hardest part. That's why we did it last," says Otto Korhonen, Head of Finance and Supply Chain Solutions at St1.

Today, the new system – Microsoft Dynamics 365 – is up and running at the refinery and is an evergreen tool for the refinery's needs. The system will receive incremental updates, but system update projects won't be needed. In addition, St1 has formed a strong Microsoft Dynamics Center of Excellence, supporting the operations and their continuous development.

## Putting it all together – together

"One of the greatest challenges that we faced during the implementation process was our fragmented competence and understanding of all the bits and pieces. No one really had a broad overview of what needed to be done. The project team had to start by building a common understanding of all the perspectives needed and create the way forward from there," says Gustav Staf, CFO at St1 Sweden.

There were other challenges, too. The people required for the project were scattered in three different offices in Gothenburg, Stockholm, and Helsinki. The implementation also started during the global COVID-19 pandemic, which made face-to-face meetings impossible. Despite the circumstances, the solution was to take every step together. One of the main actors in this successful process was Karin Jansson, Supply Manager at the Gothenburg refinery, who coordinated the cooperation between the Supply team, Business Technology unit and Finance.

"We learned a lot about working on Teams during the pandemic. But what I think really made the difference was focusing on key users. We gave them more time for the project by adding more resources for their day-to-day work. This was essential because the business was running as usual throughout the implementation process," she says.

## Refinery on its way to biorefinery

The new system is crucial to the operations of the refinery. In the refining business, where significant capital investments are involved, accuracy is extremely important.

"If you look at the refinery, you see a huge number of pipes and tanks, and inside them is a constant flow of different products and molecules. Keeping track of all this, where everything is and how much everything is worth, is crucial to our business. That's what the new ERP system does," summarizes Gustav.

Accuracy is more important than ever now that St1 is building its new biorefinery, set to start production later in 2023, right next to the old one. The facility will explore new feedstocks and products, and this means that new programs and solutions will be built on top of the existing Microsoft Dynamics 365 platform. But now, the hardest part is done. The current ERP system will serve as a strong foundation for the tasks that lie ahead.

**Otto**

**Gustav**

**Karin**

Partners

# Collaboration is our lifeblood

**Our vision is to be the leading producer and seller of $CO_2$-aware energy, and it's an aspiration we do not pursue alone. Our operations are strengthened by strategic relationships with associated companies and long-term partnerships in various areas.**

## St1 Nordic's associated companies

### NEOT Group

North European Oil Trade Group (NEOT) is a significant independent fuel supply company in the Baltic Sea region operating in the global trading market. NEOT sources oil products from nearby refineries, located mostly in Finland, Sweden, Denmark, and Norway, with St1's oil refinery in Gothenburg, Sweden, as most important source of supply.

NEOT provides approximately 6 billion litres of fuel to Nordic service station chains annually and delivers fuel oils to hundreds of thousands of homes and companies, as well as to the shipping and aviation industry. NEOT is owned by S Group (51%) and St1 Nordic (49%).

NEOT Oy operates in Finland and owns NEOT AB (Sweden) and NEOT AS (Norway). Together NEOT Oy, NEOT AB and NEOT AS form NEOT Group. More information about NEOT's operations can be found in NEOT's Sustainability Report 2022 available here: https://www.neot.fi/en/sustainability/

### Aviation Fuelling Services Norway AS (AFSN)

Owned in equal parts by St1 Nordic and Shell Exploration and Production Holdings B.V., AFSN is a provider of aviation fuelling services at Norwegian airports. AFSN operates at 14 airports in Norway, serving both Norwegian and international customers, ranging from big international airlines to smaller local companies and private owners.

## Partners

SCA and St1 have established a joint venture to produce and sell liquid biofuels. SCA's business is based on the growing forest. Around the unique resource of Europe's largest private forest holding, SCA has built a well-developed value chain based on renewable raw materials from the company's own and others' forests. SCA offers packaging paper, pulp, wood products, renewable energy, services for forest owners, and efficient transport solutions.


### Valio

Valio and St1 have a joint venture to produce renewable biogas from dairy farm manure and other agricultural by-products. Valio is leading brand in Finland and a major player in the international dairy ingredients market. Owned by Finnish dairy farmers, Valio is Finland's biggest food exporter and has subsidiaries in Sweden, the Baltics, USA, and China. The company employs a total of 25,000 people at dairy farms and 4,000 professionals at Valio.

### Vattenfall

St1 and Vattenfall have formed a partnership to produce a large volume of synthetic aviation fuel on the Swedish west coast. Vattenfall is a leading European energy company, that has electrified industries for more than 100 years, as well as supplied energy to people's homes and modernized our way of living through innovation and cooperation. Vattenfall now aims to make fossil-free living possible within one generation. The company drives the transition to a more sustainable energy system through growth in renewable production and climate smart energy solutions for their customers.

### Finnish Ski Association

St1's partnership with the Finnish Ski Association has lasted for more than 20 years. Our collaboration has developed from mere sponsorships into partnership with shared values and a joint passion for sports, as well as towards sustainability.

# Investments in the future

Investments in the future

# A global call to action

**As current policies and mitigation tools are inadequate, to successfully limit global warming to well below 2°C we must accelerate the pace and increase our efforts considerably.**

In the energy system's transition from fossil fuels, the emission targets will require global actions, significant investments, and innovative collaborations.

Phasing out fossil energy will continue to be challenging since the economic well-being of mankind is built on combustion energy. For example, getting rid of oil is problematic because when crude oil is refined, a host of other products are produced as part of the process: petrol, diesel, aviation fuel, marine and heating oil, liquefied petroleum gas, plastic raw materials, bitumen for asphalt, among many others. This is why we must find sustainable substitutes for all those products to reduce the demand for oil.

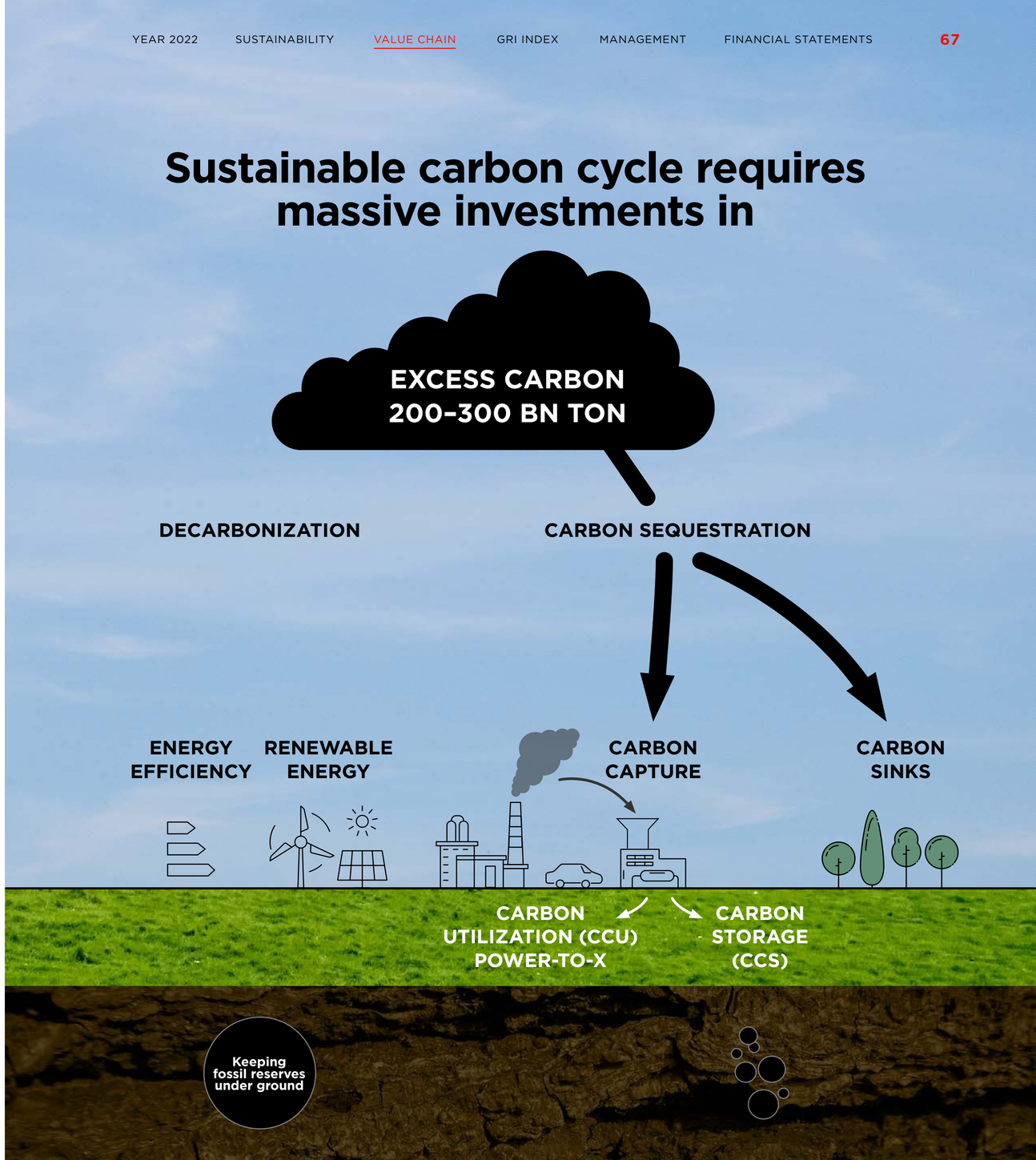
To meaningfully reduce the atmosphere's excess carbon content, we must use all available means and at the same time develop new ones. Besides decarbonizing through energy efficiency as well as developing and producing more renewable energy to replace fossil energy, we need to take significant measures in carbon sequestration through carbon capture and creating carbon sinks.

The vision of St1 is to be a leading producer and seller of $CO_2$ -aware energy. We seek to empower positive societal impacts through our operations and work continuously to enable a more sustainable value chain. We believe that we will achieve our vision by operating a responsible and profitable business that balances economic performance, social responsibility, and environmental sustainability.

In 2022, we continued to work on our existing projects and to set up new initiatives and partnerships to develop sustainable future business opportunities.

## Carbon capture and utilization (CCU) Power-to-X

Power-to-X, a category of technological solutions for converting electricity into energy carriers, offers the possibility to integrate different energy sectors. The idea is that by using renewable electricity to synthesize $CO_2$ and hydrogen, St1 would be able to produce a wide range of hydrocarbon products, including liquid and gaseous synthetic fuels.



By combining our Nordic wind potential with low-carbon fuels and energy carriers, Power-to-X also promises to boost investments and create employment. One of the biggest advantages of these synthetic fuels is their compatibility with existing liquid and gaseous fuel storage and distribution infrastructure.

St1 is setting up new Power-to-X projects and partnerships to move towards our first production site. Furthermore, our Power-to-X projects are advancing on many fronts.

St1 has studied the potential of using and producing various Power-to-X products, such as synthetic methane, green ammonia, and synthetic aviation fuel extensively. Our ambitious projects are results of our long-term determination to solve global energy challenges and partner with key players in the industry. The projects in Finland, Sweden, and Norway proceeded as planned.

## Synthetic methanol pilot plant in Lappeenranta, Finland

St1 is planning the first synthetic methanol plant in Finland adjacent to the Finnsementti factory at the Ihalainen industrial site in Lappeenranta. St1's Power-to-Methanol Lappeenranta project aims to produce renewable synthetic methanol to replace fossil fuels used in maritime and road transport.

St1's goal for the commercial-scale pilot project is to develop a replicable and scalable synthetic methanol production concept. The plant will produce about 25,000 tonnes of synthetic methanol per year.

The Lappeenranta synthetic methanol plant concept is a pioneering new low-carbon Power-to-X technology project which will use the hard-to-abate carbon dioxide emissions from the Finnsementti factory's limestone raw material. The other raw material required is green hydrogen produced in an electrolysis process involving wind power and water.

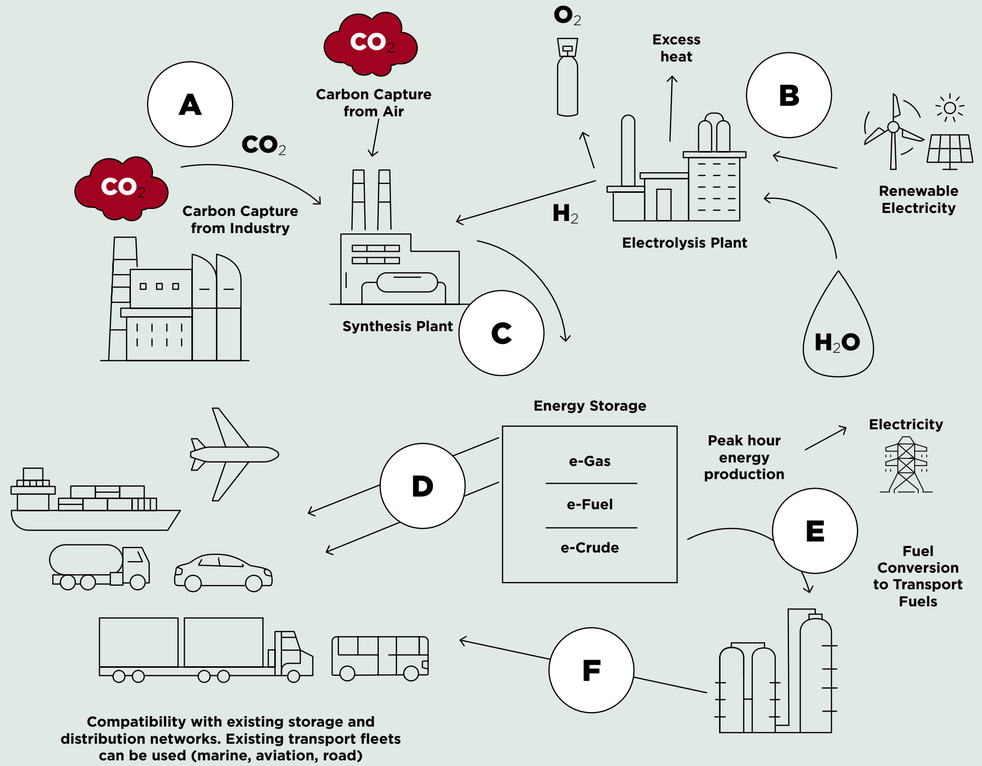
Synthetic methanol is produced in the synthesis of carbon and green hydrogen. Correspondingly, the waste heat generated in the production of synthetic methanol will be used in the district heating network of Lappeenrannan Energia. The synthetic methanol produced in this project will be distributed directly for use in maritime transport through St1's own distribution network. It can also be used as a fuel component for road transport to replace fossil components in the current logistics and distribution network.

Synthetic methanol is an important future low-carbon fuel, and St1 has studied its production with LUT University for years. The concept has shown potential and feasibility and LUT will continue to be heavily involved in the development cooperation within the project.

The Finnish Ministry of Economic Affairs and Employment has granted the project EUR 35.4 million in funding, conditional on approval from the European Commission. The funding will be provided from the European Recovery and Resilience Facility (RRF).

The project will advance to the investment decision phase once the business plan and all of the planning and impact assessment processes required for the permits have been completed. If

# Power-to-X process




**A** Carbon dioxide is captured from air or industrial sites by using carbon capture technologies

**B** Water is split into oxygen and hydrogen by using low-cost renewable electricity. Excess heat can be utilized in district heating networks.

**C** Carbon dioxide and hydrogen are combined into hydrocarbon products

**D** Synthetic hydrocarbon products are stored, thus providing converted solution for electricity storing. Fuels can be used for transportation

**E** e-Crude can replace fossil crude oil in refineries

**F** Refined fuel products for transportation

the project advances successfully, the plant will be operational in 2026.

### Partnership with Vattenfall to produce synthetic aviation fuel on Sweden's west coast

St1 and Vattenfall have signed a Letter of Intent to develop a fossil-free value chain for the production of synthetic fuel. The partners are jointly conducting a feasibility study with the ambition to develop a fossil-free value chain for producing synthetic fuel through offshore wind.

As part of the partnership, Vattenfall aims to develop an offshore wind power-based hydrogen supply infrastructure on the west coast of Sweden. St1 plans to produce one million cubic metres of synthetic fuels, primarily targeted for sustainable aviation fuel using the fossil-free hydrogen. Such volumes will equal the annual aviation fuel demand of Arlanda airport, for example. Production would start in 2029 and increase gradually towards the target of one million cubic metres.

### Green ammonia project in Norway

In 2021, St1 and Horisont Energi began conducting preliminary studies on the potential of green ammonia production in Finnmark based on electrolysis using wind power. In 2022, 17 municipalities in Finnmark were invited to take part in the study, which led to two viable alternatives, located in the Lebesby and Alta municipalities.

By combining the competencies in our respective fields, St1 and Horisont Energi will model a viable low-emission ammonia value chain from feedstock to consumer. The electrolysis will require the wind power that St1 plans to produce in Finnmark. St1 has already submitted a permit application for the development of Davvi wind park (800 MW) in Lebesby Municipality, and a formal notification on Sandfjellet in Gamvik municipality.

### Cooperation with Vantaa Energy in the distribution of synthetic fuel in Finland

The Power-to-Gas plant (P2G) planned for completion by circular economy energy company Vantaa Energy in 2025 in Finland will produce low-emission synthetic methane. The new and innovative production process of the synthetic methane utilizes water and carbon dioxide recovered from the waste treatment process.

Synthetic methane can be used as transport fuel instead of fossil natural gas. St1 has signed a preliminary agreement to cooperate on the distribution of the synthetic gas to end users as well as other related measures.

In addition to offering a significant step towards the goal of cleaner transport, synthetic gas is a natural addition to the company's renewable gas distribution alongside biogas in our future stations. The renewable gas will be easily accessible to end users through St1's service station network.

## Carbon sequestration

A sustainable carbon cycle is achieved by preserving and restoring biological carbon sinks, and to increase and maintain the carbon sequestration potential of forests and soil requires large scale investments.  However, incentives to invest in carbon sinks are far too low because current economic models are inadequate.

Article 6 of the Paris Agreement is expected to accelerate the development of both compliance and voluntary investments in emission reduction and carbon sequestration activities.

Over the past years, St1 has invested in carbon sequestration development through a research project in Morocco and the EU LIFE Carbon Farming Scheme. These investments have enabled our organization to build our capacity and talent for promoting future carbon sequestration projects as a new business.

We are developing our own program called Shift for investing in carbon sinks globally through forests and soil. We seek to invest in locally approved and well-implemented afforestation or other nature-based projects that can transparently disclose their value chain of carbon credits from the producer to the reliable registry.

It is important that, through improved agriculture and enhanced biodiversity, potential projects benefit the local communities that are suffering from land degradation. Furthermore, we are looking to offer a role for companies to invest in such carbon sequestration programs.

Efficient and sustainable economic models for the carbon market are needed for both supply and demand. A successful carbon market would foster private capital investments directed into sequestering carbon from the atmosphere while simultaneously countering deforestation, erosion, and other types of environmental degradation. While carbon sinks should be considered as an incremental tool, and not a substitute one, such a marketplace would also create new business opportunities and economic value in the forestry and agricultural sectors. The multiple benefits of carbon sequestration could be more effectively achieved by enhancing the economic models of the carbon market.

Watch the videos
Carbon Farming
How do carbon credits mitigate climate change

### Afforestation pilot in Morocco

Between 2018 and 2022, St1 ran a pilot project for researching sustainable carbon sequestration through afforestation in Morocco. The project was funded by Business Finland and implemented with the Université Mohammed VI Polytechnique. LUKE, the Natural Resource Institute of Finland, directed and monitored the field tests at the plantation site.

The pilot project examined carbon sequestration potential by planting and growing different tree species under various conditions in semi-arid area. The research testing involved seven tree species and several irrigation and soil improvement methods to find the optimal growth conditions for large-scale, cost-effective carbon sequestration.

The results indicate that with only small amounts of sub-surface irrigation, carbon sequestration is possible in dry areas. The cost of 1 t $CO_2$ sequestered varies depending on the plant species and type of desalinated water used.

In terms of adaptation, we found that the studied species were mostly adapted to the region's harsh conditions and the applied deficit irrigation regimes. The results imply that one good option to maximize carbon sequestration and production

could be mixed systems where carob and moringa are used as the main tree, coupled with shrubs or annual crops such as quinoa and fava beans in alleys. Eucalyptus trees could be used as windbreakers. Afforestation projects should improve local food production in places where it is absolutely needed.

The economic viability for such carbon sequestration projects is challenging mainly due to the initial investment cost of a desalination facility. Carbon market finance could be one solution for scaling up afforestation in arid areas, but additional incentives are also needed to accelerate these climate change mitigation activities. St1's project has increased the interest of the local university to continue the research project and search for opportunities within the carbon market.

In arid areas, afforestation is one of the most sustainable means for addressing the problem of global warming, combating desertification as well as restoring ecologies and ecosystem services. St1 will utilize the results and learnings from the Morocco project in our upcoming carbon sequestration projects and for developing the company's carbon market business.

### LIFE CarbonFarmingScheme

LIFE CarbonFarmingScheme pursued the expansion of carbon sequestration activities by providing best practices and guidance for future carbon farming schemes. The project also sought for incentives for farmers and foresters to implement carbon farming practices in the EU. The objective of the LIFE CarbonFarmingScheme was to bring practical information for the regulation proposal concerning the EU

certification framework for carbon removals. St1 coordinated the 2,5-year endeavour, which received funding from the LIFE Preparatory Programme of the European Union. Preparatory projects addressed specific needs for the development and implementation of EU environmental laws and policies.

Other partners in the project consortium included the Baltic Sea Action Group (BSAG), Tyynelä Farm, the Natural Resources Institute of Finland (LUKE), Puro.earth, and the North European Oil Trade (NEOT).

The project delivered altogether 15 reports and ended in September 2022. The primary report for policy makers provided guidance for future farming schemes that combined findings from all of the work packages.

The key learnings from the LIFE Carbon Farming Scheme project:

- Economic incentives are necessary to stimulate supply and demand and scale up carbon removals.
- Carbon Contracts for Difference (CCfD) is an option for initiating a market around carbon farming.
- Addressing farmers' knowledge gap is essential, and their administrative burdens need mitigation.
- The market pilot using a novel soil amendment methodology achieved 20-year permanence.
- Soil-based carbon sequestration potential can be as high as 280 Mt $CO_2$/year if every farm in the EU were to implement at least one carbon farming method.
- Carbon farming and forestry require robust criteria and common Measurement, Reporting and Verification (MRV) practices.

The final year of the project was busy with workshops, panel discussions, and events for sharing learnings and meeting stakeholders. To conclude the project, the consortium delivered the guidance and key learnings to the European Commission (EC) at a live roundtable event in Brussels after working remotely throughout the project duration due to the COVID-19 pandemic. The guidance was received well and feedback from the funder, the EC's Directorate-General for Climate Action (DG CLIMA) representative was positive.

The future EU certification framework for carbon removals proposal will be ready in 2028. Meanwhile, the voluntary carbon market is evolving, and it is crucial that larger scale pilots are implemented to gain further insight.

Over the short-term, the carbon farming and transport sectors could create a synergy through a well-planned pilot project to scale up cost-efficient $CO_2$ reductions, and in so doing, bring climate benefits and business opportunities to farmers. The transport sector would thus create a significant boost in demand for carbon farming in the near term.
https://www.st1.com/st1-life

## Piloting the Shift program

Shift is a program that offers St1's customers an opportunity to invest in carbon credits

In 2022, St1 initiated a pilot of the Shift program for a voluntary carbon market with our B2B customers. Through the program, St1 aims to support our customers' sustainability work and promote a sustainable carbon cycle. The piloting period gives us a valuable opportunity to gather information from our customers and study the key drivers of the voluntary carbon market.

The pilot for the Shift program began with a minimum viable product (MVP) by offering carbon credits from a reforestation project in Kenya. Reforestation increases natural carbon sinks and is widely recognized as one of the most effective means for mitigating climate change. The carbon credits from Kenya are certified with Verified Carbon Standard (VCS) and Climate, Community and Biodiversity (CCB) standards.

It is vital that the project's ecological impact, including biodiversity, are noted, as well as the issues of human rights in general and workers' rights in particular. It is also of urgent importance that carbon sequestration and transparency of carbon credits are verified.

CASE

# St1's Otaniemi geothermal pilot project's deep geothermal wells to be used for research

St1's pilot project in Otaniemi, Espoo, has explored options for the technical implementation of a geothermal heating plant. Two geothermal wells were drilled to a depth of over six kilometres, where the temperature of the bedrock is about 120 degrees Celsius. The project was halted due to an inability to obtain sufficient water flow from one well to the other, and the thermal output of the planned powerplant would not have been commercially viable. At this stage, St1 is offering the deep geothermal wells for use in research.

The deepest geothermal wells in Finland, drilled into hard Finnish bedrock, have attracted a great deal of interest for research. The wells provide an international and completely unique research environment for everything from the development of geothermal energy and other geosciences to microbiology research. In addition to international parties, the Technical Research Centre of Finland VTT, the Geological Survey of Finland GTK and researchers at the University of Helsinki, among others, have expressed their interest.

"GTK sees the use of the Otaniemi wells for research purposes as a unique opportunity to raise the level of expertise of Finnish and international geothermal energy and other geosciences," says GTK's Chief Expert in Geoenergy, Teppo Arola.

## The Otaniemi project as a trailblazer in geothermal well development

St1 continues to invest strongly in the development of geothermal energy. The unique expertise in geophysics and geology gained from the Otaniemi project provides a strong foundation for development work.

"We have been able to bring the expertise gained from Otaniemi into the development of conventional geothermal wells, which is producing even more competitive solutions for heating of large properties, such as housing companies and shopping centres. The advanced geothermal heat solutions will play a significant role in the transition to emission-free heating. The energy transition requires both open-minded development work and significant investments in new emission-free energy solutions," says Hannes Haapalahti, Director of St1's Heat from the Ground unit.

**Hannes**

> "We have been able to bring the expertise gained from Otaniemi into the development of conventional geothermal wells."

# 04

# GRI index

# GRI standards index

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 102: General Disclosures** | | | | | |
| | **Organisational profile** | | | | | |
| | | 102-1 | Name of the organization | | St1 Nordic Oy | |
| | | 102-2 | Activities, brands, products, and services | Value chain, p. 41 | | |
| | | 102-3 | Location of headquarters | | Helsinki, Finland | |
| | | 102-4 | Location of operations | St1 in brief, p. 9,<br>Value chain, p. 41 | | |
| | | 102-5 | Ownership and legal form | Report on operations, p. 93 | | |
| | | 102-6 | Markets served | St1 in brief, p. 9 | | |
| | | 102-7 | Scale of the organization | Year 2022 in figures, pp. 10–13 | | |

**Products and by-products**

| Ethanol production | 2022 | 2021 | 2020 |
|---|---|---|---|
| Ethanol, t | 7,885 | 8,466 | 10,378 |
| Lignin, t | 2,845 | 7,557 | 11,685 |
| Vinasse, t | 0 | 0 | 0 |
| Furfural, t | 60 | 108 | 192 |
| Turpentine, t | 0 | 0 | 0 |
| Electricity, GWh | 1.7 | 4 | 4 |
| Heat, GWh | 3 | 6 | 6 |
| Feed, t | 51,131 | 48,927 | 45,766 |
| Biogas drank, t | 3,892 | 3,969 | 3,980 |
| Fertilizers, t | 4,187 | 7,821 | 10,915 |

| Biogas production | 2022 | 2021 |
|---|---|---|
| Biofertilizer, t | 167,229 | 84,389 |
| Feed, t | 0 | 90,032 |

| Oil production | 2022 | 2021 | 2020 |
|---|---|---|---|
| Sold refined component, t | 72,200 | 20,600 | 35,800 |
| Petrol, t | 975,700 | 906,800 | 901,000 |
| Diesel, t | 1,275,400 | 1,132,200 | 1,128,400 |
| Other middle distillates, t | 531,800 | 498,300 | 479,900 |
| LPG, t | 80,300 | 81,900 | 100,800 |
| Light fuel oil (JET A1), t | 66,300 | 5,900 | 0 |
| Heavy fuel oil, t | 710,000 | 643,800 | 595,800 |
| Sulphur, t | 3,000 | 2,500 | 2,600 |
| Heat, GWh | 685 | 637 | 628 |

| St 1 Sold fuels | 2022 | 2021 | 2020 |
|---|---|---|---|
| Gasoline, 1,000 $m^3$ | 1,225 | 1,234 | 1,218 |
| Diesel and Light Fuel Oil, 1,000 $m^3$ | 2,843 | 2,836 | 2,767 |
| JET, 1,000 $m^3$ | 332 | 188 | 227 |
| Marine gas oil, 1,000 $m^3$ | 869 | 837 | 895 |
| **Total** | **5,269** | **5,095** | **5,107** |
| Sales of vehicle gas, GWh | 581 | 298 | |

| Brocklesby production | 2022 | 2021 | 2020 |
|---|---|---|---|
| UCOVO, t | 23,241 | | |
| Food Waste, t | 10,052 | | |
| UCOAO, t | 9,171 | | |
| Soap Stock - Bulk, t | 2,701 | | |
| Brown Grease, t | 1,783 | | |
| Tallow (Cat3.), t | 1,238 | | |
| Mixed Veg Oil, t | 815 | | |
| Fish Oil, t | 483 | | |
| Rapeseed Oil Distillate, t | 402 | | |
| Sunflower, t | 77 | | |
| Soya Distillate, t | 51 | | |
| Rapeseed, t | 28 | | |
| Rape Acid Oil - Rapeseed, t | 25 | | |
| Palm Oil, t | 8 | | |

| Wind power production | 2022 | 2021 | 2020 |
|---|---|---|---|
| Electricity produced, GWh | - | - | 1,082 |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | | 102-8 | Information on employees and other workers | People, pp. 59–62 | | |

| **Number of employees, St1 Group** | **2022** | **2021** | **2020** |
|---|---|---|---|
| Total number of employees, Dec 31 | 1,046 | 1,052 | 984 |
| Average number of employees during the year | 1,052 | 970 | 917 |
| **Total number of employees by employment contract** | | | |
| Permanent | 1,009 | 1,009 | 943 |
| Temporary | 37 | 43 | 41 |
| **Total** | **1,046** | **1,052** | **984** |
| **Total number of employees by employment type** | | | |
| Full-time | 1,010 | 1,009 | 831 |
| Part-time | 36 | 43 | 153 |
| **Total** | **1,046** | **1,052** | **984** |

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 102-9 | Supply chain | Energy trade and logistics, pp. 51–52 | | |
| | | 102-10 | Significant changes to the organization and its supply chain | Report on operations, p. 93 | | |
| | | 102-11 | Precautionary Principle or approach | Report on operations, p. 93 | Precautionary principle is included in risk management based on legal requirements | |
| | | 102-12 | External initiatives | Involvements in organizations and joint projects p. 36 | | |
| | | 102-13 | Membership of associations | Involvements in organizations and joint projects p. 36 | | |
| | **Strategy** | | | | | |
| | | 102-14 | Statement from senior decision-maker | CEO's review, pp. 4–6,<br>Statement of the Chairman of the board, pp. 14–16 | | |
| | | 102-15 | Key impacts, risks, and opportunities | CEO's review, pp. 4–6,<br>Statement of the Chairman of the board, pp. 14–16,<br>Sustainability objectives, p. 29,<br>Sustainability framework and objectives, p. 19 & p. 33,<br>Impacts on people, pp. 20–22,<br>Investments in the future, pp. 67–71 | | |
| | **Ethics and integrity** | | | | | |
| | | 102-16 | Values, principles, standards, and norms of behavior | Sustainability objectives, p. 29,<br>Sustainability framework and objectives, p. 19 & p. 33<br>Impacts on people, pp. 20–22,<br>Report on operations, p. 93 | | |
| | | 102-17 | Mechanism for advice and concerns about ethics | Impacts on people, pp. 20–22 | We have had a total of 7 Speak-Up cases in 2022 which were responded to within given timeframe, 7 days. All cases have been investigated and handleded with the utmost discression. | |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **Governance** | | | | | |
| | | 102-18 | Governance structure | Report on operations, p. 93 | | |
| | **Stakeholder engagement** | | | | | |
| | | 103-40 | List of stakeholder groups | Stakeholder engagement, p. 35 | | |
| | | 103-41 | Collective bargaining agreements | | | |
| | | | Employees covered by collective bargaining agreements<br><br>* UK operations have been excluded from the percentage as we have been unable to obtain the data. This is a development area in 2023. | | **2022*:** 99.4%,<br>**2021:** 99.5%,<br>**2020:** 99% | |
| | | 103-42 | Identifying and selecting stakeholders | Stakeholder engagement, p. 35 | | |
| | | 103-43 | Approach to stakeholder engagement | Stakeholder engagement, p. 35 | | |
| | | 103-44 | Key topics and concerns raised | Stakeholder engagement, p. 35 | | |
| | **Reporting practice** | | | | | |
| | | 102-45 | Entities included in the consolidated financial statements | About this report, p. 2,<br>Notes to the financial statement, p. 106 | | |
| | | 102-46 | Defining report content and topic Boundaries | About this report, p. 2 | | |
| | | 102-47 | List of material topics | | Based on St1 materiality assessment the following GRI disclosure topics were considered as material.<br><br>**Economic:**<br>• Economic performance<br>• Indirect economic impacts<br>• Anti-corruption<br>• Anti-competitive behavior<br><br>**Environment:**<br>• Materials<br>• Energy<br>• Emissions<br>• Environmental compliance<br><br>**Social:**<br>• Occupational health and safety<br>• Diversity and equal opportunity<br>• Non-discrimination<br>• Local communities<br>• Public policy<br>• Customer health and safety | |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | | 102-48 | Restatements of information | | Restatements communicated within the data. | |
| | | 102-49 | Changes in reporting | | No major changes | |
| | | 102-50 | Reporting period | | Jan 1 – Dec 31, 2022 | |
| | | 102-51 | Date of most recent report | | Apr 27, 2023 | |
| | | 102-52 | Reporting cycle | | Annual | |
| | | 102-53 | Contact point for questions regarding the report | | https://www.st1.eu/about-st1/contact-us | |
| | | 102-54 | Claims of reporting in accordance with the GRI Standards | | This report has been prepared with reference to the Global Reporting Initiative Standards. | |
| | | 102-55 | GRI content index | GRI index, pp. 73–86 | | |
| | | 102-56 | External assurance | | A limited third-party assurance engagement regarding selected sustainability information data disclosed in the Game Changer for the period of 1st January to 31st December 2022 was performed by PricewaterhouseCoopers OY. | |
| | **Material Topics** | | | | | |
| | **GRI 103: Management Approach** | | | | | |
| | | 103-1 | Explanation of the material topic and its Boundary | About this report, p. 2<br>Sustainability objectives, p. 29,<br>Sustainability framework and objectives, p. 19 & p. 33 | | |
| | | 103-2 | The management approach and its components | Sustainability objectives, p. 29,<br>Sustainability framework and objectives, p. 19 & p. 33 | | |
| | | 103-3 | Evaluation of the management approach | Sustainability objectives, p. 29,<br>Sustainability framework and objectives, p. 19 & p. 33 | | |
| | **GRI 200 Economic Standard Series** | | | | | |
| | **GRI 201: Economic Performance** | | | | | |
| | | 201-1 | Direct economic value generated and distributed | Consolidated income statement, p. 98 | | |

| Economic impact | 2022 | 2021 | 2020 |
|---|---|---|---|
| Renewable energy investments, M€ | 113.8 | 86.9 | 51.3 |
| Investments, M€ | 218 | 197.5 | 121.2 |
| Personnel cost, M€ | 111.5 | 96.7 | 80.0 |
| Excise and property taxes, M€ | 2,065 | 2,146.5 | 1,957.4 |
| Income taxes, M€ | 54 | 42.1 | 16.7 |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 203: Indirect Economic Impacts** | | | | | |
| | | 203-2 | Significant indirect economic impacts | Key figures, p. 10,<br>Investments in the future, pp. 67–71 | | |
| | **GRI 205: Anti-corruption** | | | | | |
| | | 205-1 | Operations assessed for risks related to corruption | Sustainability objectives, p. 29,<br>Sustainability framework and objectives, p. 19 & p. 33,<br>Impacts on people, pp. 20–22 | Assessed as part of Human Rights risk assessment - basic level analysis. Further development to be defined based on due diligence process development | |
| | | 205-2 | Communication and training about anti-corruption policies and procedures | | Topic integrated into St1 Code of Conduct trainings. Furter development to be done in 2023. | |
| | | 205-3 | Confirmed incidents of corruption and actions taken | | No cases in 2022 | |
| | **GRI 206: Anti-competitive behavior** | | | | | |
| | | 206-1 | Legal actions for anti-competitive behavior, anti-trust, and monopoly practices | | No cases in 2022 | |
| | **GRI 300 Environmental Standard Series** | | | | | |
| | **GRI 301 Materials** | | | | | |
| **Within Limited Assurance scope** | | 301-1 | Materials used | Raw materials and production, pp. 42–50,<br>Key figures, pp. 10–12 | | |

| | 2022 | 2021 | 2020 |
|---|---|---|---|
| **Ethanol production feedstock** | | | |
| Biowaste and residues, t | 37,662 | 57,400 | 69,000 |
| **Raw materials** | | | |
| Crude oil, million t | 3.92 | 3.46 | 3.39 |
| **Paraffinic fuels** | | | |
| Paraffinic fuels, million l | 596 | 488 | 538 |
| **Biofuels*** | | | |
| 1st generation biofuels, million l | 94 | 204 | 244 |
| 2nd generation biofuels, million l | 547 | 399 | 260 |

* Biofuels volumes for all three markets only consist of actual bio-based volumes.
This means that only the biovolumes of components like MTBE and ETBE are stated.

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 302 Energy** | | | | | |
| **Within Limited Assurance scope** | | 302-1 | Energy consumption | Raw materials and production, pp. 42–50, Energy trade and logistics, pp. 51–52 | | 7, 8 |

| **Energy consumption in production** | **2022** | **2021** | **2020** |
|---|---|---|---|
| **Ethanol production** | | | |
| Electricity, GWh | 10 | 14 | 16 |
| Heat, GWh | 24 | 33 | 45 |
| | | | |
| **Oil production** | | | |
| Natural gas, GWh | 3 | 221 | 361 |
| Refinery gas, GWh | 2,541 | 1,865 | 1,603 |
| Electricity, GWh | 151 | 74 | 139 |
| | | | |
| **Biogas production** | | | |
| Electricity, GWh | 7 | 4 | - |
| Heat, GWh | 18 | 9 | - |
| | | | |
| **Brocklesby production** | | | |
| Natural gas, GWh | 26 | - | - |
| Electricity, GWh | 2 | - | - |
| Steam GWh | 7 | - | - |
| **Total energy consumption in oil production, GWh** | **2,788** | **2,220** | **2,164** |
| | | | |
| **Energy consumption in supply and logistics** | | | |
| **Terminals in Finland (NEOT)** | | | |
| Electricity, GWh | 5 | 5 | 5 |
| Heat, GWh | 1 | 2 | 1 |
| **Terminals in Norway and Sweden** | | | |
| Electricity, GWh | 7 | 6* | 6 |
| Heat, GWh | 2 | 2 | 2 |
| **Total energy consumption in supply and logistics, GWh** | **15** | **14** | **14** |

Emissions from energy consumption are disclosed and broken down in more detail on page 31.
* The electricity consumption GWh in Norway & Sweden terminals for 2021 has been revised after re-calculation.

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 303 Water and effluents** | | | | | |
| | | 303-1 | Interaction with water as a shared resource | | In the production units water is used as process water and cooling water. Water is utilized mainly from surface water sources (sea, lake). | 7, 8 |
| | | 303-2 | Management of water discharge-related impacts | | There is monitoring of process waste waters of plants and environmental permits are followed. The water use has been decreased by optimizing the process control and circulation of water flows inside the processes. | 7, 8 |
| **Within Limited Assurance scope** | | 303-4 | Water discharge | | | 7, 8 |

| **Wastewater discharges from production** | **2022** | **2021** | **2020** |
|---|---|---|---|
| Wastewater from ethanol production: | | | |
| Process water, 1,000 $m^3$ | 57 | 102 | 118 |
| Cooling water, 1,000 $m^3$ | 701 | 1,712 | 2,002 |
| Wastewater from oil production: | | | |
| Process water, 1,000 $m^3$ | 789 | 739 | 658 |
| Cooling water, 1,000 $m^3$ | 9,203 | 7,652 | 7,485 |
| **Total wastewater, 1,000 $m^3$** | **10,749** | **10,205** | **10,263** |

| **Within Limited Assurance scope** | | 303-5 | Water consumption | | | 7, 8 |
|---|---|---|---|---|---|---|

| **Water use in production** | **2022** | **2021** | **2020** |
|---|---|---|---|
| **Total water consumption, 1,000 $m^3$** | **1,788** | **1,718*** | **2,662** |

* The water consumption in production for 2021 has been revised after re-assessment.

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 305 Emissions** | | | | | |
| **Within Limited Assurance scope** | | 305-1 | Direct (Scope 1) GHG emissions | Raw materials and production, pp. 42–50, Value Chain emissions, pp. 31–32 | | |

| **GHG-emissions (Scope 1) from production** | **2022** | **2021** | **2020** |
|---|---|---|---|
| GHG-emissions from ethanol production, $tCO_2$ | | | 3,809 |
| GHG-emissions from oil production, $tCO_2$ | | | 500,033 |
| GHG-emissions from biofuel production, $tCO_2$ | | | |
| **Total GHG-emissions (Scope 1), $tCO_2e$** | **575,997** | **509,000** | **503,842** |

| **Within Limited Assurance scope** | | 305-2 | Energy indirect (Scope 2) GHG emissions | Raw materials and production, pp. 42–50, Value Chain emissions, pp. 31–32 | | 7, 8 |
|---|---|---|---|---|---|---|

| **GHG-emissions (Scope 2) from production** | **2022*** | **2021** | **2020** |
|---|---|---|---|
| GHG-emissions from ethanol production, $tCO_2$ | | | 4,626 |
| GHG-emissions from oil production, $tCO_2$ | | | 46,953 |
| GHG-emissions from biofuel production, $tCO_2$ | | | |
| **Total GHG-emissions (Scope 2), $tCO_2e$** | **42,840** | **42,000** | **51,579** |
| Market-based emissions, $tCo_2e$ | 42,840 | 42,000 | |
| Location-based emissions, $tCo_2e$ | 20,274 | 15,000 | |

* Please note we have excluded our HQ office locations (Helsinki, Oslo, Stockholm, Brocklesby) from scope 2 calculations as we have been unable to obtain consistent data from all locations. This applies to 2022 reporting.

| **Within Limited Assurance scope** | | 305-3 | Other indirect (Scope 3) GHG emissions | Raw materials and production, pp. 42–50, Value Chain emissions, pp. 31–32 | | |
|---|---|---|---|---|---|---|

| | **2022** | **2021*** | **2020** |
|---|---|---|---|
| **Total GHG-emissions (Scope 3), $tCO_2e$*** | **14,512,380** | **14,090,000** | |

Please see emissions table on page 32 for further infomration regarding Scope 1, 2, 3.
* The metrics and calculations in 2021 for Scope 1, 2, 3 have been upgraded accordingly to match GHG protocol standards. Prior 2021, Scope 1, 2, 3 were broken down accrding to ethanol and oil production.

| | | 305-4 | GHG emissions intensity | | Will be implemented in 2023. | |
|---|---|---|---|---|---|---|

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| Within Limited Assurance scope | | 305-5 | Reduction of GHG emissions | Raw materials and production, pp. 42–50, Investments in the future, pp. 67–71 | | 8, 9 |

| Reduction of GHG-emissions from ethanol production* | 2022 | 2021 | 2020 |
|---|---|---|---|
| Reduction of GHG-emissions according to Renewable Energy Sources Directive, $tCO_2$ | 80% | 80% | 76% |

* Weighted average of reduction percentages of all production units based on RED's fossil fuels comparative.

| Reduction of GHG-emissions from the use of products | 2022 | 2021 | 2020 |
|---|---|---|---|
| $CO_2$-reduction from use of biofuels, $tCO_2$ | 1,654,393 | 1,442,976 | 1,035,883 |

| Within Limited Assurance scope | | 305-7 | Nitrogen oxides (NOX), sulphur oxides (SOX), and other significant air emissions | | | 8 |
|---|---|---|---|---|---|---|

| VOC-emissions from production | 2022 | 2021 | 2020 |
|---|---|---|---|
| VOC-emissions from ethanol production, t | 7 | 10 | 16 |
| VOC-emissions from oil production, t | 919 | 1,077* | 847 |
| **NOx-emissions from production** | | | |
| NOx-emissions from oil production, t | 374 | 303* | 278 |
| **Particulates from production** | | | |
| Particulate emissions from oil production, t | 13 | 13 | 11 |

* VOC and Nox -emissions for 2021 have been revised after re-assessing figures.

| | GRI 306 Effluents and Waste (2016) | | | | | |
|---|---|---|---|---|---|---|
| | | 306-1 | Waste generation and significant waste related impacts | | St1 adheres to strict local and country level environmental laws. All waste generated are disposed according to environmental guidelines. Majority of hazardous and non-hazardous waste utilized takes place in Hämeenlinna, Kajaani and Malmö (Biogas). We are continuously developing ways to use materials more effectively and finding ways to reuse and recycle. The quantity of waste will fluctuate annually according to equipment and fuel tank upkeep and maintenance. | 8 |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | | 306-2 | Management of significant waste related impacts | | Our operations waste is handled by contracted third parties locally and our waste reporting is based on data provided by them. We follow the local waste regulations. | |
| **Within Limited Assurance scope** | | 306-3 | Spills (2016) | | Visby spill – No further action required and no penalties issued. Karlstad spill – Case is open and pending due to Miljökontoret review. Länsstyrelsen has read our report and confirmed no further action necessary. | 8 |

| **Number of significant spills** | **2022** | **2021** | **2020** |
|---|---|---|---|
| from ethanol production | 0 | 0 | 0 |
| from oil production | 2* | 0 | 0 |
| from logistics in Finland (NEOT) | 2** | 0 | 0 |
| from terminals in Sweden and Norway | 0 | 1 | 0 |
| **Total number of significant spills** | **4** | **1** | **0** |

* 2 oil spills in Sweden, Karlstad (approx. 60,000 L) and Visby (270 L), totalling 60,270 L
** 2 oil spills in Finland totalling 11,591 L

306-3 Waste generated (2020)

| **Waste from production** | **2022** | **2021** | **2020** |
|---|---|---|---|
| Non-hazardous waste, utilized, t | 183,056 | 19,013 | 32,455 |
| from ethanol production, t | 5,391 | 3,801 | 4,047 |
| from oil production, t | 173.65 | 15,212 | 28,408 |
| Non-hazardous waste, landfilled, t | 38,873 | 43,675 | 24,992 |
| from ethanol production, t | 0 | 11 | 0 |
| from oil production, t | 38,873 | 43,664 | 24,992 |
| **Total non-hazardous waste, t** | **221,929** | **62,688** | **57,447** |
| Hazardous waste, utilized, t | 148,572 | 13,955 | 12,198 |
| from ethanol production, t | 61 | 138 | 218 |
| from oil production, t | 47,902 | 13,076 | 11,980 |
| Hazardous waste, landfilled, t | 1,883 | 1,026 | 2,041 |
| from ethanol production, t | 43 | 0,27 | 0 |
| from oil production, t | 1,840 | 1,026 | 2,041 |
| **Total hazardous waste, t** | **150,455** | **14,981** | **14,239** |
| | | | |
| **Waste from supply and logistics** | | | |
| Hazardous waste, utilized, t | | | |
| from terminals in Finland (NEOT), t | 302 | 783 | 38 |
| from terminals in Sweden and Norway, t | 609 | 741 | 456 |
| **Total hazardous waste, utilized, t** | **911** | **1,524** | **494** |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 400 Social Standards Series** | | | | | |
| | **GRI 401: Employment** | | | | | |
| | | 401-1 | New employee hires and employee turnover | People, pp. 59–62 | | 6 |

| **Changes in employees** | **2022** | **2021** | **2020** |
|---|---|---|---|
| Total number of new employee hires | 238 | 87 | 223 |
| Total number of leavers | 186 | 64 | 93 |
| Employee turnover, % | 20% | 7.5% | 9.5% |

| | | | | | |
|---|---|---|---|---|---|
| | **GRI 403: Occupational Health and Safety (2018)** | | | | |
| | | 403-1 | Occupational health and safety management system | People, pp. 59–62 | |
| | | | | Raw materials and production, pp. 42–50 | |
| | | 403-2 | Hazard identification, risk assessment, and incident investigation | People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |
| | | 403-3 | Occupational health services | People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |
| | | 403-4 | Worker participation, consultation, and communication on occupational health and safety | People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |
| | | 403-5 | Worker training on occupational health and safety | People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |
| | | 403-6 | Promotion on worker health | People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |
| | | 403-7 | Prevention and mitigation of occupational health and safety impacts directly linked with business relationships | People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |
| **Within Limited Assurance scope** | | 403-9 | Work-related injuries | Impacts on people, pp. 20–22,<br>People, pp. 59–62,<br>Raw materials and production, pp. 42–50 | |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|

| Occupational health and safety results | 2022 | 2021* | 2020* |
|---|---|---|---|
| **Own employees:** | | | |
| Work-related fatalities, own employees | 0 | 0 | 0 |
| Number of high consequence injuries, own employees | 0 | 0 | 1 |
| High consequence injuries frequency, own employees | 0 | 0 | 0.7 |
| Number of lost-time injuries, own employees | 6 | 2 | 3 |
| Lost time injuries frequency, own employees | 3.6 | 1.2 | 2.1 |
| Number of recordable injuries, own employees | 12 | 8 | 6 |
| Recordable injuries frequency, own employees | 7.2 | 4.9 | 4.3 |
| Near-miss reports, own employees | 1,030 | 865 | 741 |
| Safety observations, own employees (including safety walks) | 3,000 | 1,116 | 860 |
| Absence rate, %* | 3.2%** | 3.1% | 1.7% |
| **External workforce:** | | | |
| Work-related fatalities, external workforce | 0 | 0 | 0 |
| Number of high consequence injuries, external workforce | 0 | 0 | 0 |
| High consequence injuries frequency, external workforce | 0 | 0 | 0 |
| Number of lost-time injuries, external workforce | 9 | 5 | 1 |
| Lost time injuries frequency, external workforce | 7.2 | 12 | 4.2 |
| Number of recordable injuries, external workforce | 13 | 7 | 4 |
| Recordable injuries frequency, external workforces | 10.4 | 25.0 | 16.9 |
| Total recordable injuries frequency, all employees | 8.6 | 7.8 | 6.1 |

* Please note that in 2022 St1 began reporting according to Concave guidelines in addition to the with reference GRI standards. Previous years figures have been revised. Recordable injuries frequency for external workforce has decreased due to improvements in collection of working hours.
** Brocklesby operations have been excluded from the Absence rate % calculations.

| | | | | | | |
|---|---|---|---|---|---|---|
| | | 403-10 | Work-related ill health | People, pp. 59–62 | | |
| | **GRI 404: Training and Education** | | | | | |
| | | 404-3 | Percentage of employees receiving regular performance and career development reviews | People, pp. 59–62 | | |

| Performance and career development reviews | 2022* | 2021 | 2020 |
|---|---|---|---|
| Percentage of employees receiving regular performance and career development reviews, % | 94% | 96% | 93% |

* UK operations have been excluded from the percentage as we have been unable to obtain the data. This is a development area in 2023.

| | | | | | | |
|---|---|---|---|---|---|---|
| | **GRI 405: Diversity and Equal Opportunity** | | | | | |
| | | 405-1 | Diversity of governance bodies and employees | People, pp. 59–62 | | |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | | | | 2022 2021 2020 | | 6 |
| | | | **Breakdown of employees by gender, St1 Group** | | | |
| | | | Female | 295 28% 353 34% 321 33% | | |
| | | | Male | 751 72% 699 66% 663 67% | | |
| | | | Total | 1,046 100% 1,052 100% 984 100% | | |
| | | | **Breakdown of employees by age group, St1 Group** | | | |
| | | | Below 30 | 142 14% 212 20% 222 23% | | |
| | | | Between 30-50 | 589 56% 537 51% 477 48% | | |
| | | | Over 50 | 315 30% 303 29% 285 29% | | |
| | | | Total | 1,046 100% 1,052 100% 984 100% | | |
| | **GRI 406: Non-discrimination** | | | | | |
| | | 406-1 | Incidents of discrimination and corrective actions taken | | No cases for 2022. | 6 |
| | **GRI 407: Freedom of association and collective bargaining** | | | | | |
| | | 407-1 | Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk | Sustainability agenda and objectives, p. 33, Impacts on people, p. 20, https://www.st1.com/sustainability/policies-principles | | 3, 4 |
| | **GRI 408: Child labor** | | | | | |
| | | 408-1 | Operations and suppliers at significant risk for incidents of child labor | Sustainability agenda and objectives, p. 33, Impacts on people, p. 20, https://www.st1.com/sustainability/policies-principles | | 5 |
| | **GRI 412: Human rights assessment** | | | | | |
| | | 412-1 | Operations that have been subject to human rights reviews or impact assessments | Sustainability agenda and objectives, p. 33, Impacts on people, p. 20, https://www.st1.com/sustainability/policies-principles | | 1, 2 |
| | | 412-2 | Employee training on human rights policies or procedures | Sustainability agenda and objectives, p. 33, Impacts on people, p. 20, https://www.st1.com/sustainability/policies-principles | | |
| | **GRI 413: Local communities** | | | | | |
| | | 413-1 | Operations with local community engagement, impact assessments, and development programs | Sustainability agenda and objectives, p. 33, Impacts on people, p. 20, https://www.st1.com/sustainability/policies-principles | | 1, 2 |
| | | 413-2 | Operations with significant actual and potential negative impacts on local communities | Sustainability agenda and objectives, p. 33, Impacts on people, p. 20, https://www.st1.com/sustainability/policies-principles | | 1, 2 |

| Limited Assurance scope | GRI-standard | GRI-code | Disclosure | Location in the Report | Additional information | Global Compact Principle |
|---|---|---|---|---|---|---|
| | **GRI 415: Public policy** | | | | | |
| | | 415-1 | Political contributions | | We actively engage in societal discussions but do not offer financial support to political parties and entities associated with them or make any direct or indirect political or religious contributions. (St1 Code of Conduct). | 10 |
| | **GRI 416: Customer Health and Safety** | | | | | |
| | | 416-2 | Incidents of non-compliance concerning the health and safety impacts of products and services | | No cases in 2022. | |
| | **GRI 417: Marketing and Labeling** | | | | | |
| | | 417-2 | Incidents of non-compliance concerning product and service information and labeling | | No cases in 2022. | |
| | | 417-3 | Incidents of non-compliance concerning marketing communications | | No cases in 2022. | |
| | **GRI 418: Customer Privacy** | | | | | |
| | | 418-1 | Substantiated complaints concerning breaches of customer privacy and losses of customer data | | Total 4 cases in 2022. 2 notified to authority and 2 not exceeding notification limit. Notifications are submitted to the Data Protection Ombudsman and the Financial Supervisory Authority. | |
| | **GRI 419: Socioeconomic Compliance** | | | | | |
| | | 419-1 | Non-compliance with laws and regulations in the social and economic area | | No cases in 2022. | |

# Independent practitioner's limited assurance report

To the Management of St1 Nordic Oy

We have been engaged by the Management of St1 Nordic Oy (hereinafter also the "Company") to perform a limited assurance engagement on selected sustainability information for the reporting period 1 January 2022 to 31 December 2022, disclosed in the Company's Sustainability Report 2022 (hereinafter the Selected sustainability information).

## Selected sustainability information

The selected sustainability information within the scope of assurance covers the social and environmental sustainability indicators as identified "within scope of the limited assurance" in the GRI content index which are included in the Company's Sustainability Report 2022.

## Management's responsibility

The Management of St1 Nordic Oy is responsible for preparing the Selected sustainability information in accordance with the Reporting criteria as set out in the Company's internal reporting instructions, the GHG protocol and the criteria to report with reference to the GRI Standards of the Global Reporting Initiative (collectively Reporting criteria) .

The Management of St1 Nordic Oy is also responsible for such internal control as the management determines is necessary to enable the preparation of the Selected sustainability information that is free from material misstatement, whether due to fraud or error.

## Practitioner's independence, other ethical requirements and quality control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

PricewaterhouseCoopers Oy applies International Standard on Quality Control (ISQC) 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

## Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Selected sustainability information based on the procedures we have performed and the evidence we have obtained. We conducted our limited assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (revised) "*Assurance Engagements Other than Audits or Reviews of Historical Financial Information*". This Standard requires that we plan and perform the engagement to obtain limited assurance about whether the Selected sustainability information is free from material misstatement.

In a limited assurance engagement, the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other information in the Selected sustainability information. The procedures selected depend on the practitioner's judgment, including an assessment of the risks of material misstatement of the Selected sustainability information.

Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of the Company.
- Interviewing employees responsible for collecting and reporting the Selected sustainability information at the Group level.
- Interviewing employees responsible for collecting and reporting the Selected sustainability information in the UK, Sweden and Finland.
- Assessing how Group employees apply the reporting instructions and procedures of the Company.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.
- Testing the consolidation of information and performing recalculations on a sample basis.
- Considering the disclosure and presentation of the Selected sustainability information.

## Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that St1 Nordic Oy's Selected sustainability information for the reporting period 1 January 2022 to 31 December 2022 is not properly prepared, in all material respects, in accordance with the Reporting criteria.

When reading our limited assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to St1 Nordic Oy for our work, for this report, or for the conclusions that we have reached.

Helsinki, 26th April 2023
**PricewaterhouseCoopers Oy**

Mikael Niskala
Partner
ESG Reporting & Assurance

Janne Rajalahti
Authorised Public Accountant
Partner

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# Management

# Board of Directors

**Mika Anttonen**
**Chairman of the Board of Directors**
St1 Nordic Oy

**Kati Ihamäki**
**Vice President, Sustainability**
Fiskars Group

**Mikko Koskimies**
**Managing Director**
eQ Varainhoito Oy

**Kim Wiio**
**Managing Director**
Mininvest Oy

# Management 2022

**Henrikki Talvitie**
**CEO**
St1 Nordic Oy
St1 Oy
Director, Sustainability and Future Business (Interim)

**Miika Eerola**
**CEO**
St1 Refinery AB

**Sampsa Halinen**
**Director, Energy Trade and Logistics**

**Henri Halmelahti**
**Director, Business Technology**

**Miika Johansson**
**Director, Renewable Energy**

**Kristine Vergli Grant–Carlsen**
**CEO**
St1 Norge AS

**Hilde Wahl**
**Director, Brands and Sales**
**CEO**
St1 Sverige AB

**Kati Ylä-Autio**
**CFO**

06

# Financial statements

# Report for 1 January 2022–31 December 2022

## Business operations and financial performance of St1 Nordic Oy

St1 Nordic Oy is the parent company to St1 Nordic group which is a versatile player in the energy sector. The group engages in sale of traffic and heating fuels to consumers and the corporate sector in Finland, Sweden and Norway, to the marine sector in Sweden and Norway and to air traffic in Norway, as well as in the sale of biogas in Sweden. The group strengthened its waste feedstock business by acquiring Brocklesby Ltd in the UK on 31 January 2022.

The group operates a total of 1,269 retail stations under the St1 and Shell brands in Finland and Sweden and under the Shell brand in Norway. St1 and Shell service stations and unmanned stations have hundreds of thousands of customer visits daily for refueling as well as food, shop and car wash offering. EV charging is currently offered in Norway and Sweden. In addition, the biogas business St1 BioGas AB, acquired in 2021, produces, trades and supplies biogas to customers through various sales channels.

The group manufactures, develops and refines liquid fuels at its oil refinery in Gothenburg, Sweden. The refinery's annual capacity is 30 million barrels of crude oil. Most of the refinery's production is sold in Sweden through the retail station network and other sales channels.

St1 focuses heavily on the energy transition at the refinery; a renewable diesel facility is under construction at the refinery site, which is expected to start operations in late 2023.

St1 also focuses strongly on other renewable energy initiatives. The group has production facilities producing bioethanol from waste in Kajaani, Vantaa, Lahti and Gothenburg in connection with the refinery. The Kajaani facility focuses particularly on product development. The creation of new synthetic fuel value chains is assessed in Finland, Sweden and Norway. The subsidiary St1 Lähienergia Oy installs devices based on geothermal heat. St1 operates wind parks on a service agreement in Finland. The group has industrial wind power projects in Northern Norway, Sweden and Finland. The Norwegian projects are the largest.

With an objective to maximize the competitiveness of the group's fuel procurement, the purchase of liquid fuels is centralized in the group's associated company North European Oil Trade Oy (NEOT). NEOT group purchases most of the Gothenburg refinery's production.

The group's revenue in 2022 was MEUR 10,474.8, which was MEUR 4,093.3 more than in the previous year. The increase in turnover was due to the sharp increase in oil product prices on

## Key indicators of St1 Nordic Oy´s financial position and results of operations:

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Net sales, MEUR | 35.4 | 30.9 | 41.8 | 51.1 | 50.5 |
| Operating profit/loss, MEUR | -6.7 | -3.7 | 11.0 | 13.0 | 14.8 |
| Operating profit, % of net sales | -18.8 | -11.9 | 26.2 | 25.4 | 29.3 |
| Profit for the period, MEUR | 10.3 | 78.3 | 28.6 | 27.1 | 44.0 |
| Return on equity, % | 1.8 | 14.0 | 5.5 | 5.3 | 8.7 |
| Equity ratio, % | 75.6 | 80.7 | 63.6 | 63.5 | 67.2 |

## Key indicators of St1 Nordic group´s financial position and results of operations:

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Net sales, MEUR | 10,474.8 | 6,381.5 | 4,923.1 | 6,588.0 | 6,885.2 |
| Operating profit/loss, MEUR | 284.4 | 181.4 | 162.9 | 150.1 | 63.1 |
| Operating profit, % of net sales | 2.7 | 2.8 | 3.3 | 2.3 | 0.9 |
| Profit for the period, MEUR | 234.6 | 148.8 | 126.8 | 119.1 | 55.3 |
| Return on equity, % | 19.3 | 14.0 | 13.5 | 14.3 | 7.0 |
| Equity ratio, % | 51.2 | 53.8 | 57.7 | 46.3 | 40.7 |

the world market during the year and to some extent to the increase in service stations and direct sales volumes. An increasing share of liquid fuels are bio products, whose share increased to almost 19%. The share of bio products of the total turnover was 17.4% in 2022. 22% of the revenue came from Finland, 52% from Sweden, 25% from Norway, and 1% from the UK.

The group's operating profit was MEUR 286.9, which was MEUR 105.4 more than in the previous year. The refinery and wholesale margin were significantly above the prior year's level due to the unstable energy market, caused by the global geopolitical situation. As the price competition remains fierce, the result level of Retail and B2B weakened. The bio gas operations result was weaker due to the high market price of gas products, particularly at the end of the year. The subsidiary St1 Oy booked a write-off on the Otaniemi geothermal pilot heat plant investment. St1 provides the wells for scientific research.

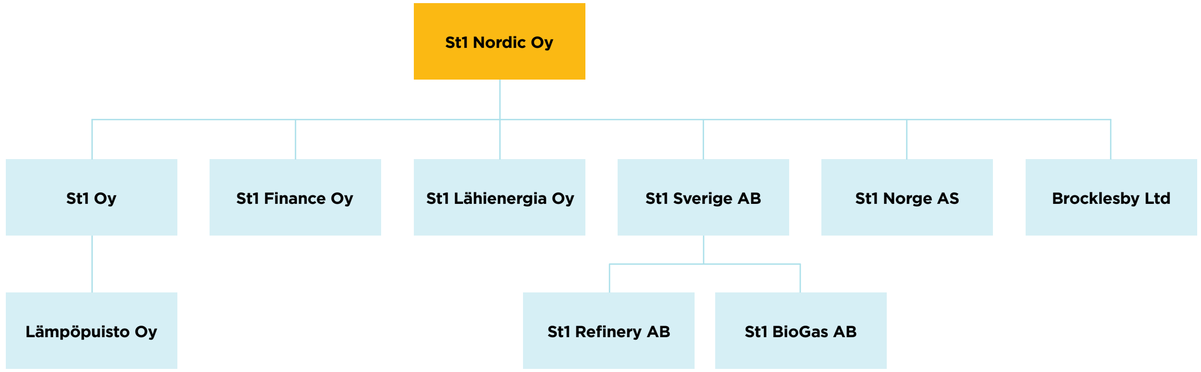
## Group structure

The most notable change in the group structure in 2022 was the above-mentioned acquisition of a waste feedstock company in the UK. The company operates under the name Brocklesby Ltd. In addition to the parent company, the St1 Nordic Oy group also includes the most significant operative subsidiaries St1 Oy, Lämpöpuisto Oy, St1 Finance Oy, St1 Lähienergia Oy, St1 Sverige AB, St1 Refinery AB, St1 BioGas AB and St1 Norge AS.

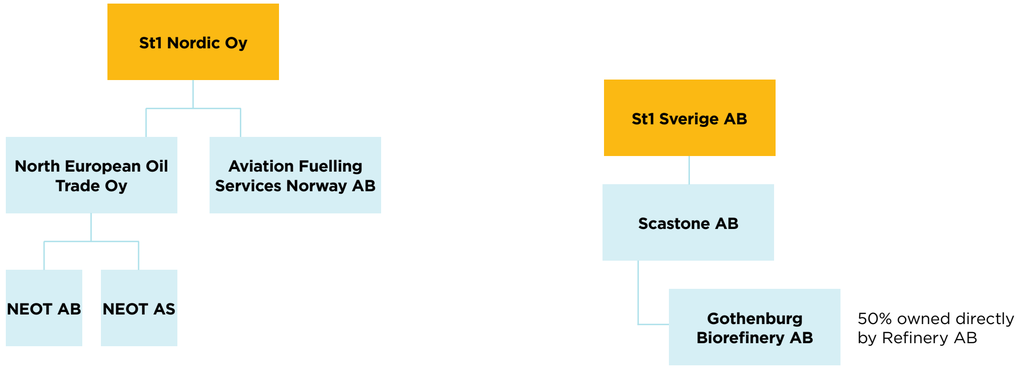
St1 Nordic Oy's most significant associated companies comprise North European Oil Trade Oy and the Norwegian Aviation Fuelling Services Norway AS, of which the latter conducts aircraft refueling in Norway and purchases its products from St1 Norge AS. In addition, St1 Sverige AB and SCA founded the joint company Scastone AB, which acquired 50% of Biorefinery Gothenburg AB, who is building a renewable diesel production plant in connection with the refinery. For its part, Scastone AB will ensure the availability of tall oil-based raw material at the bio refinery. In February, St1 Oy and Valio Oy in Finland founded a joint venture operating under the name Suomen Lantakaasu Oy. The purpose of the joint venture is to produce renewable biogas from manure and side streams from farms to be used as fuel for traffic.

In 2022 the company carried through a directed purchase of own shares. A total on 145.885 shares were purchased. Reasons for the purchase were planning of an incentive program, simplification of ownership structure as well as offering the possibility to sell for interested shareholders.

## Chart of the group's main companies




## Associated companies




## Company shares

| | 31 Dec 2022 | 31 Dec 2021 | 31 Dec 2020 | 31 Dec 2019 | 31 Dec 2018 |
|---|---|---|---|---|---|
| Share capital | 100,000 | 100,000 | 100,000 | 100,000 | 100,000 |
| A-shares | 38,737,118 | 38,737,118 | 38,737,118 | 38,737,118 | 38,737,118 |
| B-shares | | | | | 4,912,285 |

## Investments

The group's largest investment in 2022 was focused on the construction of the renewable diesel plant in Gothenburg. The plant is estimated to be in production in the late 2023.

In January 2022, St1 Nordic Oy acquired the entire share capital of Brocklesby Ltd. The company is located in Hull, UK, and is an expert in recycling waste from the food industry, and the company is also one of the country's leading raw material refineries in this sector.

In the Retail business, the investments were focused on selected growth targets, business development and maintenance. In the biogas business, investments focused on the maintenance of existing production facilities and distribution network as well as in the construction of a new biogas upgrading and liquefaction refinery in Borås, Sweden, as decided in August. Other investments were directed at developing and maintaining current operations.

The group's investments in intangible and tangible assets and daughter company and associated company shares amounted to MEUR 284.6. Of this, investments in renewable energy amounted to MEUR 113.8. In addition, subsidiary St1 Sverige AB acquired 14.5% of the share capital of Scandinavian Biogas AB at the end of 2022.

Technological initialization expenditure includes development projects aimed at developing methods for producing ethanol, methanol and other bio refinery products to be used as advanced traffic fuel and other biorefining products from softwood sawdust and starch production process residues as well as enzyme production technology for decomposing sawdust pulp.

The said expenditure fulfills requirements set for capitalization by the Ministry of Trade and Industry. The capitalized development expenses are shown as a separate item and depreciated over their economic lifetime, however, as a maximum of 10 years. Depreciation starts when the projects are in production. Should an investment decision not be made, the development expenses would be written off.

## Research and development expenses

The research and development expenses of St1 Nordic group were MEUR 39.3 in 2022 (MEUR 83.3 in 2021). Research and development expenses comprise the expenses for development of new production technologies and production methods for fuels from solid biomass, biogas, and synthetic fuels, as well as expenses for the development of geothermal energy.

## Assessment of the most significant risks and uncertainties

### Risk management policy and risk management arrangement

In the St1 Nordic group, risk management refers to a systematic and proactive approach to analyze and manage the threats and opportunities for the operations, rather than solely eliminating the risks. For this purpose, the group's risk management is based on an awareness of the key threats, including strategic, operational and financial risks that can prevent the group from achieving its objectives.

The Board of Directors is responsible for the company's and group's risk management policy and for monitoring its implementation. The Board of Directors approved the updated risk management principles in June 2022. The CEO is responsible for the appropriate organization of risk management measures. Risk management has been integrated into the daily business operations and decision-making of business units and the group's support functions. Thus, each employee shares in the responsibility for identifying risks that might threaten the achievement of the group's objectives and to report them.

### Strategic and operational risks

The group has defined a number of risks that can affect its future profitability and development:

- The ongoing war in Ukraine has a heavy impact on the energy industry. There are significant changes to established delivery chains, which can impact both the price and availability of fuel.
- Prolonged fierce competition in the traffic fuel retail market may reduce profitability also in the future.
- Insufficient refining margins on petroleum products to cover the refining costs.
- Considerable costs due to environmental legislation and regulations, affecting the group's financial performance.
- Political, financial and legislative changes may affect the group's result and demand for products.
- Risks related to the branch, sustainability and climate change may affect the group's result and demand for products in the long-term.

The price risks of petroleum products and refining margins can be managed with derivatives.

In accordance with the nature of the group's business operations, the largest balance sheet items consist of trade receivables and inventories. The credit loss risk of sales receivables is managed through a uniform credit policy and efficient debt-collection. Principles used for the measurement of trade receivables and inventories in the financial statements are consistent with and based on the principle of prudence.

The continuity of the group's business operations is based on functional and reliable information systems. The group seeks to manage the risks of information systems through measures such as duplicating critical information systems and data communications links, paying attention to the selection of partners and standardizing the workstation models and information security practices used in the group. The group continuously takes various measures aiming to protect it from cyber risks. This includes both preventive and continuous monitoring work. External resources are also regularly used to assess cyber risks. The personnel's awareness of cyber security issues is enhanced by regular training.

The group's core competencies are related to business processes comprising oil refining, sales and procurement as well as the requisite support functions, such as information management, finance, human resources, real estate services, logistics, marketing and communications. In addition, the personnel gains significant technical knowledge in renewable energy projects.

Unexpected and significant weakening of the group's core competencies is an identified risk. The group continuously seeks to improve the core competencies and other significant competencies of its personnel by offering opportunities for in-work learning and training, as well as by recruiting competent new employees, as needed.

The most significant portion of the group's revenue consists of retail and wholesale trade of liquid fuels as well as exports. Taking the group's line of business and products into account, factors that may affect the group's revenue include decisions by the government or authorities on how different forms of energy are combined, subsidized or taxed, general economic trends, and, in the case of heating oil, regionally prevailing temperatures.

The war in Ukraine has had a significant impact on the energy industry. This has led to notable volatility on the energy markets, which shows that the group's operations may be subject to surprising and significant impacts.

To eliminate the risk of human casualties or oil spills and the related costs, attention must be paid to safe and environmentally sound operating methods in the group's operations. St1 has systematically evaluated and monitored its environmental obligations, as well as the obligations arising at group operating sites. The group's environmental protection obligations have been defined by legislation and the quality programs applied by the company. The financial statements include a provision for environmental liabilities, that is reviewed for each financial period.

The group seeks to protect itself from significant risks to its assets by regularly reviewing its insurance policies as part of the overall risk management process. The company strives to insure itself against all risks that are financially or otherwise reasonable. The group's insurance coverage is subject to regular reviews.

There are no pending trials or any other legal risks that the Board is aware of, which would materially affect the results of the group's operations.

## Financial risks

**Management of financial risks:** The parent company manages the financing operations for the whole group. In order to secure liquidity, the group has adequate bank overdraft facilities. The Board of Directors approved the financial risk management policy, updated in 2022.

**Interest rate risk:** At the end of the financial year, the group had approximately EUR 49 million of interest rate-sensitive loans (appr. EUR 25 million). Derivative agreements can be used to help in the management of interest rate risks. Interest rate derivates were not in use at the end of the financial year.

**Currency risk:** The group's operative currency risk is mainly driven by crude oil purchases and inventory denominated in USD. In addition, the group is exposed to currency risk through the foreign currency denominated equity items of Swedish and Norwegian subsidiaries as well as eventual currency receivables from and liabilities with these companies. Currency risks can be managed through forward agreements.

## An estimate of probable future development

From the group management's perspective, the business environment will remain challenging and volatile. In the traffic fuels trade, competition in the group's home market remains over emphazised. The group aims to further improve its competitiveness by rationalizing systems and business processes, taking measures to improve the average sales of retail stations as well as making carefully targeted investments. When feasible, refining margin, utilities and end products are price hedged. The group's financing position is strong per se, and the group believes that its liquidity will remain good.

## Significant events after the end of the financial period

After the end of the financial period, there have not been any significant events in the group. We continue to monitor the impact of the war in Ukraine on the energy markets.

In particular, the large price fluctuations of crude oil and energy products are expected to bring uncertainty to the operating environment.

# Personnel

## Key figures describing the group's personnel

| | 2022 | 2021 | 2020 | 2019 | 2018 |
|---|---|---|---|---|---|
| Average number of personnel during the financial period | 1,057 | 970 | 880 | 793 | 774 |
| Wages and salaries during the financial period, MEUR | 80.4 | 72.5 | 60.0 | 58.4 | 53.1 |

## Organisation

The company's Board of Directors comprises Mika Anttonen (chair), Mikko Koskimies, Kim Wiio and Kati Ihamäki. Henrikki Talvitie is the company's Chief Executive Officer.

The company's auditor is PricewaterhouseCoopers Oy and Authorized Public Accountant Janne Rajalahti is the Auditor in charge.

## Disclosure of non-financial information

The vision of St1 is to be a leading producer and seller of $CO_2$-aware energy, thereby enabling positive societal impact through our operations. We work constantly toward enabling a more sustainable value chain. We believe that we will achieve this vision by running a responsible and profitable business where economic performance, social responsibility, and environmental sustainability are balanced. Achieving the results is important, but just as important is the way we reach our goals. We have committed to United Nations Global Compact and its ten principles, which is one step toward making our responsible business principles and sustainability targets more transparent in our daily operations. The corporate management, the Board of Directors, and the personnel shall respect and follow these principles that have been approved by the Board of Directors, in addition to relevant national legislation and other regulation concerning the business operations. Our approach to human rights is based on the United Nations Guiding Principles on Business and Human Rights (UNGP) which states the governments' duty is to protect human rights and the businesses' responsibility is to respect them and offer appropriate and effective remedies if breached. In addition, we are committed to developing our operations in accordance with the OECD's guidelines. We respect the rights laid down in the International Bill of Human Rights as well as the International Labour Organization's (ILO) Declaration on Fundamental Principles and Rights at Work. We expect all our partners, and their respective business partners, to commit to these ethical and sustainable principles within their business operations, and to support their use within their sphere of influence and decision-making.

In 2022, the St1 group's sustainability themes focused heavily on developing and ensuring the sustainability of our delivery chain and implementing measures required by due diligence. Our focus for the year was to develop the company's sustainability risk management and assessment and to increase measures to guarantee transparency alongside the development of continuous impact assessment on our value chain. In addition, we updated the entire organisation's materiality analysis by engaging stakeholder groups. As part of this development work, we will publish our first due diligence report in the spring 2023.

We continue our development endeavors together in strong collaboration with our associated company North European Oil Trade Oy, and other respective partners within our value chain.

St1 Nordic publishes its integrated corporate responsibility report on the company's website www.st1.com on April 30, 2023, at the latest. The report complies, as appropriate, with the Global Reporting Initiative Standards and contains the non-financial information material of St1 as required by the Accounting Act. Our oil refinery in Gothenburg also complies with the ISO 14001 environmental management system requirements.

## Proposal for profit distribution

The Board of Directors proposes to the general meeting that the company will pay a dividend of 38,591,233 euros and transfer the remaining financial year's profit to the Retained earnings account.

There have been no significant changes in the company's financial position after the closure of the financial year. The company's liquidity is good, and the proposed distribution does not, in the board's opinion, put the company's liquidity at risk.

# Consolidated income statement

| In thousand euros | Notes | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|---|
| **NET SALES** | 1. | 10,474,845 | 6,381,515 |
| | | | |
| **Manufacturing for own use** | | 0 | 2 |
| | | | |
| **Other operating income** | 2. | 133,995 | 138,164 |
| | | | |
| **Materials and services** | | | |
| Materials, supplies and products | | | |
| Purchases during the period | | -9,873,952 | -5,877,041 |
| Change in inventories | | 110,604 | 59,547 |
| External services | | -10,143 | -9,069 |
| | | -9,773,491 | -5,826,563 |
| | | | |
| **Personnel expenses** | | | |
| Wages and salaries | | -80,375 | -72,481 |
| Social security costs | | | |
| Pension costs* | | -17,433 | -11,927 |
| Other social security costs* | | -13,745 | -12,322 |
| | | -111,553 | -96,729 |
| | | | |
| **Depreciation and amortisation** | | | |
| Depreciation and amortisation according to plan | 5. | -84,723 | -76,928 |
| Amortisation of goodwill | 5. | -20,724 | -14,383 |
| Reduction in value of noncurrent assets | 5. | -31,002 | -69,902 |
| | | -136,449 | -161,212 |
| | | | |
| **Other operating expenses** | 6. | -302,920 | -253,754 |

| In thousand euros | Notes | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|---|
| **OPERATING PROFIT** | | 284,429 | 181,423 |
| | | | |
| **Finance income and costs** | | | |
| Income from other investments of non-current assets | | | |
| Share of profit of investments using the equity method | 7. | 12,698 | 4,710 |
| Other interest and finance income | 7. | 6,808 | 3,455 |
| Exchange rate gain | 7. | 92 | 2,948 |
| Interest expenses and other finance costs | | | |
| To others | 7. | -5,592 | -4,909 |
| | | 14,006 | 6,204 |
| | | | |
| **PROFIT BEFORE APPROPRIATIONS AND TAX** | | 298,436 | 187,627 |
| | | | |
| Current income tax | 9. | -53,974 | -42,182 |
| Deferred tax | 9. | -9,879 | 3,408 |
| | | -63,852 | -38,774 |
| | | | |
| **PROFIT FOR THE PERIOD BEFORE MINORITY INTEREST** | | 234,584 | 148,853 |
| | | | |
| Minority interest | | -23 | -96 |
| | | | |
| **PROFIT FOR THE PERIOD** | | **234,561** | **148,756** |

* The comparison year figure has been adjusted.

# Consolidated balance sheet

| In thousand euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **ASSETS** | | | |
| | | | |
| **NON-CURRENT ASSETS** | | | |
| | | | |
| **Intangible assets** | | | |
| Capitalised development expenditure | 10. | 886 | 1,175 |
| Intangible rights | 10. | 33,963 | 34,819 |
| Goodwill | 10. | 357 | 1,459 |
| Goodwill on consolidation | 10. | 210,025 | 178,938 |
| Other capitalised long-term expenditure | 10. | 941 | 1,026 |
| | | 246,172 | 217,417 |
| | | | |
| **Tangible assets** | | | |
| Land and water areas | 11. | 207,359 | 210,392 |
| Buildings and structures | 11. | 149,797 | 149,751 |
| Machinery and equipment | 11. | 406,394 | 410,455 |
| Other tangible assets | 11. | 8,135 | 37,248 |
| Advance payments and construction in progress | 11. | 260,166 | 194,515 |
| | | 1,031,851 | 1,002,361 |
| | | | |
| **Investments** | | | |
| Investments in associated companies | 13. | 104,750 | 23,834 |
| Other shares and holdings | 13. | 13,776 | 2,415 |
| Other receivables | 13. | 356 | 357 |
| | | 118,882 | 26,605 |

| In thousand euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **CURRENT ASSETS** | | | |
| | | | |
| **Inventories** | | | |
| Materials and supplies | | 339,589 | 228,985 |
| | | | |
| **Receivables** | | | |
| Non-current receivables | | | |
| Trade receivables | | 1,249 | 1,447 |
| Deferred tax assets | 17. | 12,603 | 13,509 |
| Loan receivables | | 16,935 | 4,225 |
| Other receivables | | 3,771 | 6,129 |
| | | 34,559 | 25,310 |
| Current receivables | | | |
| Trade receivables | | 641,744 | 497,337 |
| Other receivables | | 6,890 | 6,561 |
| Prepayments and accrued income | 19. | 88,821 | 65,036 |
| | | 737,455 | 568,933 |
| | | | |
| **Cash and cash equivalents** | | 46,008 | 26,521 |
| | | | |
| | | **2,554,515** | **2,096,132** |

| In thousand euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **EQUITY AND LIABILITIES** | | | |
| | | | |
| **EQUITY** | | | |
| | | | |
| | | | |
| Share capital | 15. | 100 | 100 |
| Revaluation reserve | 12.,15. | 38,118 | 40,093 |
| | | 38,218 | 40,193 |
| | | | |
| Reserve for invested unrestricted equity | 15. | 54,232 | 54,232 |
| Retained earnings | 15. | 981,185 | 884,283 |
| Profit (loss) for the period | 15. | 234,561 | 148,756 |
| | | 1,269,977 | 1,087,271 |
| | | | |
| **Total equity** | | 1,308,195 | 1,127,464 |
| | | | |
| **MINORITY SHARE** | | 1,325 | 1,532 |
| | | | |
| **PROVISIONS** | | | |
| Other provisions | 16. | 59,790 | 53,289 |
| | | 59,790 | 53,289 |

| In thousand euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **LIABILITIES** | | | |
| | | | |
| **Non-current** | | | |
| Loans from financial institutions | | 8,092 | 9,756 |
| Deferred tax liabilities | 17. | 35,242 | 35,509 |
| Other liabilities | | 45 | 45 |
| Accruals and deferred income | | 7,474 | 8,242 |
| | | 50,853 | 53,551 |
| | | | |
| **Current** | | | |
| Loans from financial institutions | | 41,339 | 15,288 |
| Commercial paper | | 79,500 | 72,000 |
| Advance payments | | 1,147 | 666 |
| Trade payables | | 291,084 | 126,850 |
| Deferred tax liabilities | 17. | 68,088 | 58,312 |
| Liabilities to associated companies | | | |
| Trade payables | | 299,600 | 291,297 |
| Other liabilities | | 41,149 | |
| Other liabilities | | 181,406 | 199,027 |
| Accruals and deferred income | 20. | 131,040 | 96,854 |
| | | 1,134,352 | 860,295 |
| | | | |
| | | **2,554,515** | **2,096,132** |

# Consolidated cash flow statement

| In thousand euros | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|
| **Cash flow from operating activities:** | | |
| Profit (loss) before appropriations and income tax | 298,436 | 187,627 |
| Adjustments: | | |
| Depreciation and amortisation according to plan | 105,447 | 91,310 |
| Other income and expenses with non-cash transactions | -24,097 | -9,004 |
| Other finance income and costs | -855 | -1,494 |
| Impairment of investments in non-current assets | 31,002 | 69,902 |
| Cash flow before change in working capital | 409,932 | 338,341 |
| | | |
| **Change in working capital:** | | |
| Increase (-)/decrease (+) in current non-interest bearing receivables | -210,396 | -184,804 |
| Increase (-)/decrease (+) in inventories | -105,929 | -59,547 |
| Increase (+)/decrease (-) in current non-interest bearing payables | 188,225 | 190,335 |
| Cash flow from (used in) operating activities before financial items and taxes | 281,831 | 284,325 |
| | | |
| Interest paid and charges on other finance costs | -3,935 | -3,130 |
| Interest received | 4,008 | 1,911 |
| Taxes paid | -55,392 | -49,361 |
| **Net cash generated from operating activities (A)** | 226,513 | 233,745 |

| In thousand euros | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|
| **Cash flow from investing activities:** | | |
| Purchase of tangible and intangible assets | -206,189 | -197,529 |
| Acquisitions deducted by acquired cash and cash aquivalents | -66,598 | -81,646 |
| Proceeds from sale of tangible and intangible assets | 5,954 | 26,528 |
| Proceeds from sale of subsidiaries | 29,649 | 0 |
| Investments in associated companies | -11,803 | -661 |
| Proceeds from sale of associated companies | 0 | 4,753 |
| Purchase of other investments | -11,816 | 0 |
| Dividends received | 2,763 | 1,453 |
| **Net cash used in investing activities (B)** | -258,038 | -247,100 |
| | | |
| **Cash flow from financing activities:** | | |
| Acquisition of own shares | -4,254 | 0 |
| Proceeds from current loans | 87,404 | 26,051 |
| Repayment of current loans | -15,288 | 0 |
| Repayment of non-current loans | -899 | 0 |
| Dividends paid and other profit distribution | -15,951 | -15,604 |
| **Net cash used in financing activities (C)** | 51,013 | 10,448 |
| | | |
| **Net increase (+)/decrease (-) in cash and cash equivalents (A+B+C)** | 19,488 | -2,908 |
| | | |
| **Cash and cash equivalents at beginning of period** | 26,521 | 29,429 |
| **Cash and cash equivalents at end of period** | 46,008 | 26,521 |

# Parent company income statement

| In euros | Notes | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|---|
| **NET SALES** | 1. | 35,437,497.31 | 30,861,012.00 |
| | | | |
| **Other operating income** | 2. | 1,592,943.96 | 1,585,416.37 |
| | | | |
| **Raw materials and services** | | | |
| Raw materials and consumables | | | |
| Purchases during the financial year | | 0.00 | -346,080.00 |
| Variation in stocks | | -735.41 | 346,080.00 |
| | | -735.41 | 0.00 |
| | | | |
| **Personnel expenses** | | | |
| Wages and salaries | | -8,802,734.94 | -6,834,115.71 |
| Social security costs | | | |
| Pension costs | | -1,405,038.35 | -1,033,698.32 |
| Other social security costs | | -513,548.17 | -359,685.03 |
| | | -10,721,321.46 | -8,227,499.06 |
| | | | |
| **Depreciation according to plan** | 5. | -8,602,992.08 | -7,471,131.91 |
| | | | |
| **Other operating expenses** | 6. | -24,379,518.77 | -20,409,416.61 |

| In euros | Notes | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|---|
| **OPERATING PROFIT (-LOSS)** | | -6,674,126.45 | -3,661,619,21 |
| | | | |
| **Finance income and costs** | | | |
| Income from shares in group companies | 7. | 16,312,398.73 | 74,353,534.19 |
| Income from shares in associated companies | 7. | 2,763,267.55 | 4,604,197.81 |
| Other interest and finance income | | | |
| From group companies | 7. | 3,607,180.96 | 3,589,712.41 |
| From others | 7. | 1,474,770.09 | 2,290,246.88 |
| Interest expenses and other finance costs | | | |
| To group companies | 7. | -5,270,968.86 | -1,598,785.30 |
| To others | 7. | -1,894,589.49 | -1,249,125.29 |
| | | 16,992,058.98 | 81,989,780.70 |
| | | | |
| **PROFIT BEFORE APPROPRIATIONS AND INCOME TAX** | | 10,317,932.53 | 78,328,161.49 |
| | | | |
| **Appropriations** | | | |
| Change in cumulative accelerated depreciation | 8. | 0.00 | 0.00 |
| | | 0.00 | 0.00 |
| | | | |
| Income taxes | 9. | 0.00 | 1,681.63 |
| | | | |
| **PROFIT FOR THE PERIOD** | | **10,317,932.53** | **78,329,843.12** |

# Parent company balance sheet

| In euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **ASSETS** | | | |
| | | | |
| **NON-CURRENT ASSETS** | | | |
| | | | |
| **Intangible assets** | | | |
| Intangible rights | 10. | 33,467,627.82 | 34,215,653.68 |
| Advance payments and construction in progress | 10. | 5,972,979.08 | 3,363,040.82 |
| Other capitalised long-term expenses | 10. | 131,296.36 | 191,894.59 |
| | | 39,571,903.26 | 37,770,589.09 |
| | | | |
| **Property, plant and equipment** | | | |
| Machinery and equipment | 11. | 331,451.75 | 519,696.89 |
| Advance payments and construction in progress | 11. | 0.00 | 0.00 |
| | | 331,451.75 | 519,696.89 |
| | | | |
| **Investments** | | | |
| Shares in group companies | 13. | 523,588,956.76 | 456,270,198.67 |
| Receivables from group companies | 14. | 1,340,000.00 | 1,340,000.00 |
| Investments in associated companies | 13. | 23,476,917.03 | 23,476,917.03 |
| Other shares and holdings | 13. | 20,765.69 | 20,765.69 |
| | | 548,426,639.48 | 481,107,881.39 |

| In euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **CURRENT ASSETS** | | | |
| | | | |
| **Inventories** | | | |
| Materials and supplies | | 345,344.59 | 346,080.00 |
| | | 345,344.59 | 346,080.00 |
| | | | |
| **Receivables** | | | |
| Non-current receivables | | | |
| Receivables from group companies | 14. | 101,318,960.27 | 101,495,447.50 |
| | | 101,318,960.27 | 101,495,447.50 |
| | | | |
| Current receivables | | | |
| Receivables from group companies | 14. | 45,968,223.12 | 104,816,612.85 |
| Trade receivables | | 87,121.79 | 605,202.15 |
| Other receivables | | 819,813.96 | 879,204.00 |
| Prepaid expenses and accrued income | 19. | 4,212,433.02 | 5,747,399.04 |
| | | 51,087,591.89 | 112,048,418.04 |
| | | | |
| **Cash and cash equivalents** | | 28,786,931.88 | 2,885.71 |
| | | | |
| | | **769,868,823.12** | **733,290,998.62** |

| In euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **EQUITY AND LIABILITIES** | | | |
| | | | |
| **EQUITY** | | | |
| | | | |
| **Share capital** | 15. | 100,000.00 | 100,000.00 |
| | | | |
| Reserve for invested unrestricted equity | 15. | 54,231,561.66 | 54,231,561.66 |
| Retained earnings | 15. | 517,258,090.81 | 459,064,355.97 |
| Profit for the period | | 10,317,932.53 | 78,329,843.12 |
| | | 581,807,585.00 | 591,625,760.75 |
| | | | |
| **TOTAL EQUITY** | | 581,907,585.00 | 591,725,760.75 |

| In euros | Notes | 31.12.2022 | 31.12.2021 |
|---|---|---|---|
| **LIABILITIES** | | | |
| | | | |
| **Current** | | | |
| Loans from financial institutions | | 0.00 | 15,287,554.17 |
| Commercial paper | | 79,500,000.00 | 72,000,000.00 |
| Trade payables | | 3,970,303.37 | 2,951,105.14 |
| Liabilities to group companies | 18. | 99,931,352.73 | 47,685,967.00 |
| Other liabilities | | 236,023.99 | 149,050.17 |
| Accruals and deferred income | 20. | 4,323,558.03 | 3,491,561.39 |
| | | 187,961,238.12 | 141,565,237.87 |
| | | | |
| **TOTAL LIABILITIES** | | 187,961,238.12 | 141,565,237.87 |
| | | | |
| | | **769,868,823.12** | **733,290,998.62** |

# Parent company cash flow statement

| In euros | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|
| **Cash flow from operating activities:** | | |
| Profit (loss) before appropriations and income tax | 10,317,932.53 | 78,328,161.49 |
| Adjustments: | | |
| Depreciation and amortisation according to plan | 8,602,992.08 | 7,471,131.91 |
| Finance income and costs | -16,974,791.25 | -80,926,406.26 |
| Other adjustments | -30,246.17 | 0.00 |
| Cash flow before change in working capital | 1,915,887.19 | 4,872,887.14 |
| | | |
| **Change in working capital:** | | |
| Increase (-)/decrease (+) in inventories | 735.41 | -346,080.00 |
| Increase (-)/decrease (+) in current non-interest bearing receivables | -4,511,967.27 | -1,472,391.95 |
| Increase (+)/decrease (-) in current non-interest bearing payables | 6,733,508.91 | 2,973,564.77 |
| | | |
| Cash flow from operating activities before financial items and taxes | 4,138,164.24 | 6,027,979.96 |
| | | |
| Interest paid and other financial expenses | -4,201,248.63 | -1,788,901.97 |
| Interest received from operating activities | 2,971,607.84 | 570,460.05 |
| Taxes paid (received) | 2,896,489.92 | -3,847,459.13 |
| **Net cash generated from operating activities (A)** | 5,805,013.37 | 962,078.91 |

| In euros | 1.1.–31.12.2022 | 1.1.–31.12.2021 |
|---|---|---|
| **Cash flow from investing activities:** | | |
| Purchase of property, plant and equipment and intangible assets | -10,276,489.94 | -9,740,934.07 |
| Proceeds from sale of property, plant and equipment and intangible assets | 90,675.00 | 0.00 |
| Investments in associated and subsidiary companies | -67,318,758.09 | -16,500.00 |
| Proceeds from sale of associated and subsidiary companies | 0.00 | 4,753,200.00 |
| Loans granted | 0.00 | -50,000.00 |
| Dividends received | 11,975,666.28 | 3,504,465.29 |
| **Net cash used in investing activities (B)** | -65,528,906.75 | -1,549,768.78 |
| | | |
| **Cash flow from financing activities:** | | |
| Increase/decrease in short term receivables* | 57,680,307.86 | 48,897,224.94 |
| Proceeds from current loans | 66,251,294.14 | 27,111,894.71 |
| Repayment of current loans* | -15,287,554.17 | -73,608,644.60 |
| Acquisition of own shares | -4,253,889.90 | 0.00 |
| Dividends paid and other profit distribution | -15,882,218.38 | -15,494,847.20 |
| **Net cash used in financing activities (C)** | 88,507,939.55 | -13,094,372.15 |
| | | |
| **Net increase (+)/decrease (-) in cash and cash equivalents (A+B+C)** | 28,784,046.17 | -13,682,062.02 |
| | | |
| **Cash and cash equivalents at beginning of period** | 2,885.71 | 13,684,947.73 |
| **Cash and cash equivalents at end of period** | 28,786,931.88 | 2,885.71 |

* The comparison year figure has been adjusted.

# Notes to the financial statements 31 December 2022

## Accounting principles for the financial statements

### Financial period
The company's financial period is from 1 January to 31 December.

### Consolidated financial statements
Changes occurred in the group structure during the year 2022 due to acquisitions, establishment of new companies and disposals. St1 Nordic Oy acquired Brocklesby Ltd which operates in the UK in January 2022. In February 2022 St1 Sverige AB sold 50 % of Scastone AB to SCA Wood AB and 50 % of Gothenburg Biorefinery AB to Scastone AB. Furthermore, St1 Sverige AB acquired in February 2022 50 % of Biorefinery Östrand AB from SCA. St1 Oy established the joint venture company Suomen Lantakaasu Oy with Valio Oy in February 2022. In Norway, wind power development companies were rearranged in such a way that St1 Norge AS owns 100 % of St1 Sandfjellet Holding AS, St1 Davvi Holding AS and St1 Nordre Soroya Holding AS. These companies, respectively, own the windparks under development. St1 Oy acquired 23 % of Kiinteistö Oy Uusmarjala shares in December 2022 and now owns the company fully.

The subsidiaries St1 Oy, Lämpöpuisto Oy, St1 Lähienergia Oy, St1 Finance Oy, Tuulivoltti Oy, Kiinteistö Oy Uusmarjala, St1 Renewable Energy (Thailand) Ltd, St1 Sverige AB, St1 Refinery AB, St1 BioGas AB, Falkenbergs Biogas AB, Söderåsens Bioenergi AB, St1 Vind AB (former Wästgöta Wind AB), St1 Norge Group AS, St1 Norge AS, Shell Madla AS, Nemob AS, St1 Davvi Holding AS, St1 Sandfjellet Holding AS, St1 Nordre Soroya Holding AS Grenselandet AS, Gaissa AS as well as Brocklesby Ltd are consolidated in St1 Nordic group financial statements. Gothenburg Biorefinery AB has been consolidated as a joint company according to ownership (75 %). Neither owner has a controlling interest in the joint company. Joint governance of the joint company is based on the articles of association. Associated companies North European Oil Trade Oy, Brang Oy, Suomen Lantakaasu Oy, Aviation Fuelling Services Norway AS, Knapphus Energi Norge AS, Biogas Energi Aksdal AS, Scastone AB as well as Biorefinery Östrand AB are consolidated in the financial statements of St1 Nordic Oy using the equity method.

St1 Nordic Oy's parent company is Keele Oy, which prepares the consolidated financial statements in which St1 Nordic Oy group is included in. Copies of the consolidated financial statements are available at:
Keele Oy, Firdonkatu 2, 00520 Helsinki, Finland.

The group's inter-company transactions, margins, receivables and payables have been eliminated. Internal ownership has been eliminated using the acquisition method. Minority interest has been separated from consolidated equity and profit and it is shown as a separate line item in the consolidated income statement and balance sheet.

The income statements of foreign group companies have been converted into euros at the average foreign rate of exchange rates during the financial period. The balance sheet has been converted into the Finnish currency using the closing date exchange rate. Translation differences resulting from the currency conversions, as well as translation differences in foreign subsidiaries' equity arising from conversion, have been presented in 'retained earnings'.

### Valuation of inventories
Liquid fuel inventories are valued at the last day's purchase price in the group companies. If inventory would be be valued using the FIFO method, the difference would not be material. Other inventories are valued according to the FIFO principle using cost of purchase, or cost of repurchase, or likely sale price, if lower.

### Measurement of non-current assets
Intangible and tangible assets have been capitalised at cost. Depreciation and amortisation according to plan have been recognised on a straight-line basis during the economic life of the assets. Depreciation and amortisation starts in the month when the assets have been taken into use. A revaluation of land has been recognised in the consolidated financial statements based on the land's market value.

### Depreciation and amortisation periods in the group

| | |
|---|---|
| capitalised development expenditure | 5–10 years |
| software programs | 7 years |
| other long-term capitalised expenditure | 5–7 years |
| trademarks | 20 years |
| goodwill | 5–20 years |
| buildings and structures | 20–50 years |
| machinery and equipment | 3–20 years |
| other tangible assets | 10–30 years |

### Goodwill on consolidation
Goodwill on consolidation is amortised on straight-line basis over 10–20 years. In addition, additional amortisation is booked if there is a decrease in the future income expectations of the assets to which goodwill is allocated. Goodwill on consolidation has been compounded of strategically important acquisitions, the effect of which expands over 10–20 years.

### Deferred tax assets and liabilities in the group
A deferred tax asset has been recognised for provisions and a deferred tax liability for appropriations for the part not yet deducted in taxation, by applying the following years' tax rate as confirmed on the closing date.

### Foreign currency items in the group
Receivables and payables denominated in foreign currencies have been converted into the Finnish currency using the closing date exchange rate.

# Notes to the income statement

## 1. Net sales

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **MEUR** | **2022** | **2021** | **2022** | **2021** |
| Fuels | 10,379.5 | 6,347.7 | 0.0 | 0.0 |
| Energy products and electricity | 86.2 | 26.8 | 0.0 | 0.0 |
| Other | 9.1 | 7.0 | 35.4 | 30.9 |
| | **10,474.8** | **6,381.5** | **35.4** | **30.9** |
| | | | | |
| Domestic | 2,257.9 | 1,545.8 | 14.0 | 12.5 |
| Foreign | 8,217.0 | 4,835.8 | 21.4 | 18.3 |
| | **10,474.8** | **6,381.5** | **35.4** | **30.9** |

## 2. Other operating income

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **MEUR** | **2022** | **2021** | **2022** | **2021** |
| Gains on sale of non-current assets and shares | 1.9 | 16.0 | 0.0 | 0.0 |
| Other operating income | 132.1 | 122.2 | 1.6 | 1.6 |
| | **134.0** | **138.2** | **1.6** | **1.6** |

## 3. Average number of personnel

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| | **2022** | **2021** | **2022** | **2021** |
| Personnel on average | 1,057 | 970 | 83 | 66 |
| | **1,057** | **970** | **83** | **66** |

## 4. Management salaries and fees

Wages and salaries paid to the members of the board and the managing directors during the financial period amounted to EUR 2,852,816 (EUR 2,629,878 in 2021).

## 5. Depreciation, amortisation and impairment charges

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Depreciation and amortisation according to plan | | | | |
| Intangible assets | | | | |
| Capitalised development expenses | 357 | 483 | 0 | 0 |
| Intangible rights | 8,613 | 7,563 | 8,381 | 7,240 |
| Goodwill | 953 | 970 | 0 | 0 |
| Other long-term capitalised expenditure | 405 | 400 | 61 | 61 |
| Tangible assets | | | | |
| Buildings and structures | 13,327 | 12,890 | 0 | 0 |
| Machinery and equipment | 59,153 | 51,751 | 161 | 171 |
| Other tangible assets | 1,916 | 2,870 | 0 | 0 |
| | **84,723** | **76,928** | **8,603** | **7,471** |
| | | | | |
| Amortisation /recognition of goodwill on consolidation | 20,724 | 14,383 | | |
| | **20,724** | **14,383** | | |
| | | | | |
| Impairment of investments to non-current assets | | | | |
| Intangible rights | 0 | 46 | 0 | 0 |
| Other long-term capitalised expenditure | 0 | 17 | 0 | 0 |
| Consolidation goodwill | 2,441 | 0 | 0 | 0 |
| Buildings and structures | 512 | 2,065 | 0 | 0 |
| Land and water areas | 601 | 88 | 0 | 0 |
| Machinery and equipment | 2,331 | 7,211 | 0 | 0 |
| Other tangible assets | 25,117 | 60,475 | 0 | 0 |
| | 31,002 | 69,902 | 0 | 0 |
| | | | | |
| **Depreciation and amortisation according to plan, total** | **136,449** | **161,212** | **8,603** | **7,471** |

The subsidiary St1 Oy booked 2021 a write-off on Otaniemi geothermal pilot heat plant investment. During financial year 2022 write off was made for the rest of the investment. ESG technology has proven very challenging. St1 is offering the deep geothermical wells for use in research.

Financial year 2021 the company also made a write-off on the Hämeenlinna Bionolix plant which produces ethanol and biogas as the plant's productivity has remained very low.

## 6. Other operating expenses

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Rents | 39,212 | 36,715 | 1,227 | 1,204 |
| Advertising and sales promotion | 30,482 | 26,656 | 143 | 66 |
| Operating and maintenance expenses | 114,433 | 88,491 | 148 | 112 |
| Other operating expenses | 118,793 | 101,892 | 22,862 | 19,028 |
| | **302,920** | **253,754** | **24,380** | **20,409** |
| | | | | |
| Audit expenses | | | | |
| Audit | 726 | 685 | 110 | 101 |
| Tax consultation | 82 | 364 | 6 | 57 |
| Other services | 59 | 58 | 11 | 0 |
| | **867** | **1,107** | **127** | **158** |

## 7. Finance income and expenses

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| **Income from investments in other non-current assets** | | | | |
| From group companies | 0 | 0 | 16,312 | 74,354 |
| From associated companies | 12,698 | 4,710 | 2,763 | 4,604 |
| | **12,698** | **4,710** | **19,076** | **78,958** |
| | | | | |
| **Other interest and finance income** | | | | |
| From group companies | 0 | 0 | 3,607 | 3,590 |
| From others | 6,900 | 6,404 | 1,475 | 2,290 |
| | **6,900** | **6,404** | **5,082** | **5,880** |
| | | | | |
| **Impairment of investments** | | | | |
| Impairment of investments to non-current assets | 453 | 0 | 0 | 0 |
| Impairment of investments to current assets | 0 | 0 | 0 | 0 |
| | | | | |
| **Interest costs and other finance costs** | | | | |
| To group companies | 0 | 0 | 5,271 | 1,599 |
| To others | 5,138 | 4,909 | 1,895 | 1,249 |
| | **5,138** | **4,909** | **7,166** | **2,848** |
| | | | | |
| **Finance income and expenses, total** | **14,006** | **6,204** | **16,992** | **81,990** |

## 8. Appropriations

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Change in accelerated depreciation | 0 | 0 | 0 | 0 |
| Group contribution received/given | 0 | 0 | 0 | 0 |
| | **0** | **0** | **0** | **0** |

## 9. Income taxes

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Current tax on profits for the financial period | -53,974 | -42,182 | 0 | 2 |
| Change in deferred taxes | -9,879 | 3,408 | 0 | 0 |
| | **-63,852** | **-38,774** | **0** | **2** |

# Notes to the balance sheet

## Tangible and intangible assets

### Capitalised development expenditure and intangible rights

Technological initialisation expenditure includes development projects aimed at developing methods for producing ethanol to be used as advanced traffic fuel as well as other biorefinery products from softwood sawdust and starch production process residues as well as entzyme production technology for decomposing sawdust pulp.

The said expenditure fulfills requirements set for capitalization by the Ministry of Trade and Industry. The capitalised development expenses are shown as a separate item and depreciated over their economic lifetime, however as a maximum in 10 years. Depreciation starts when the projects are in production.

Should investment decision not be made, the development expenses would be written off.

## 10. Intangible assets

| In thousand euros | Intangible rights | Other long-term expenses | Advance payments and construction in progress | Total |
|---|---|---|---|---|
| **Parent company** | | | | |
| Acquisition cost January 1, 2022 | 61,285 | 1,200 | 3,363 | 65,849 |
| Additions | -1 | 0 | 10,244 | 10,243 |
| Disposals | 0 | 0 | 0 | 0 |
| Transfers | 7,634 | 0 | -7,634 | 0 |
| Acquisition cost December 31, 2022 | 68,919 | 1,200 | 5,973 | 76,092 |
| | | | | |
| Accumulated amortisation January 1, 2022 | -27,070 | -1,008 | 0 | -28,078 |
| Amortisation during the financial period | -8,381 | -61 | 0 | -8,442 |
| Accumulated amortisation December 31, 2022 | -35,451 | -1,069 | 0 | -36,520 |
| | | | | |
| Net book value December 31, 2022 | 33,468 | 131 | 5,973 | 39,572 |

| In thousand euros | Goodwill | Development expenses | Intangible rights |
|---|---|---|---|
| **Group** | | | |
| Acquisition cost January 1, 2022 | 15,175 | 4,856 | 70,214 |
| Additions | 0 | 67 | 7,744 |
| Disposals | 0 | 0 | 0 |
| Translation difference | -149 | 0 | -9 |
| Acquisition cost December 31, 2022 | 15,026 | 4,923 | 77,949 |
| | | | |
| Accumulated amortisation January 1, 2022 | -13,716 | -3,681 | -35,395 |
| Amortisation during the financial period | -953 | -357 | -8,591 |
| Accumulated amortisation December 31, 2022 | -14,669 | -4,037 | -43,986 |
| | | | |
| Net book value December 31, 2022 | 357 | 886 | 33,963 |

| In thousand euros | Other long-term expenses | Goodwill on consolidation | Total |
|---|---|---|---|
| **Group** | | | |
| Acquisition cost January 1, 2022 | 16,288 | 258,573 | 365,106 |
| Additions | 341 | 54,415 | 62,567 |
| Disposals | 0 | -2,441 | -2,441 |
| Translation difference | 1 | -164 | -320 |
| Acquisition cost December 31, 2022 | 16,631 | 310,383 | 424,912 |
| | | | |
| Accumulated depreciation January 1, 2022 | -15,262 | -79,634 | -147,688 |
| Depreciation during the financial period | -427 | -20,724 | -31,052 |
| Accumulated depreciation December 31, 2022 | -15,690 | -100,358 | -178,740 |
| | | | |
| Net book value December 31, 2022 | 941 | 210,025 | 246,172 |

## 11. Tangible assets

| In thousand euros | Machinery and equipment | Advance payments and construction in progress | Total |
|---|---|---|---|
| **Parent company** | | | |
| Acquisition cost January 1, 2022 | 1,329 | 0 | 1,329 |
| Additions | 33 | 0 | 33 |
| Disposals | -60 | 0 | -60 |
| Transfers | 0 | 0 | 0 |
| Acquisition cost December 31, 2022 | 1,302 | 0 | 1,302 |
| | | | |
| Accumulated depreciation January 1, 2022 | -809 | 0 | -809 |
| Depreciation during the financial period | -161 | 0 | -161 |
| Accumulated depreciation December 31, 2022 | -970 | 0 | -970 |
| | | | |
| Net book value December 31, 2022 | 331 | 0 | 331 |

| In thousand euros | Land | Buildings | Machinery and equipment |
|---|---|---|---|
| **Group** | | | |
| Acquisition cost January 1, 2022 | 140,746 | 297,250 | 806,367 |
| Additions | 1,861 | 18,814 | 79,323 |
| Disposals | -144 | -522 | -2,606 |
| Translation difference | -2,174 | -4,920 | -21,700 |
| Acquisition cost December 31, 2022 | 140,289 | 310,623 | 861,384 |
| | | | |
| Accumulated depreciation January 1, 2022 | 0 | -169,558 | -419,705 |
| Depreciation during the financial period | 0 | -13,327 | -59,153 |
| Accumulated depreciation December 31, 2022 | 0 | -182,885 | -478,858 |
| | | | |
| Revaluations January 1, 2022 | 69,646 | 22,059 | 23,793 |
| Additions | 0 | 0 | 75 |
| Disposals | -2,577 | 0 | 0 |
| Revaluations December 31, 2022 | 67,069 | 22,059 | 23,868 |
| | | | |
| Net book value December 31, 2022 | 207,359 | 149,797 | 406,394 |

| In thousand euros | Other tangible assets | Advance payments and construction in progress | Total |
|---|---|---|---|
| **Group** | | | |
| Acquisition cost January 1, 2022 | 71,544 | 194,515 | 1,510,422 |
| Additions | 1,452 | 138,471 | 239,921 |
| Disposals | -28,318 | -63,354 | -94,944 |
| Translation difference | -332 | -9,465 | -38,590 |
| Acquisition cost December 31, 2022 | 44,347 | 260,166 | 1,616,809 |
| | | | |
| Accumulated depreciation January 1, 2022 | -36,940 | 0 | -626,203 |
| Depreciation during the financial period | -1,916 | 0 | -74,395 |
| Accumulated depreciation December 31, 2022 | -38,855 | 0 | -700,598 |
| | | | |
| Revaluation January 1, 2022 | 2,644 | 0 | 118,142 |
| Additions | 0 | 0 | 75 |
| Disposals | 0 | 0 | -2,577 |
| Revaluation December 31, 2022 | 2,644 | 0 | 115,641 |
| | | | |
| Net book value December 31, 2022 | 8,135 | 260,166 | 1,031,851 |

Disposals include 28,560,869 EUR reduction in value of tangible assets and 2,440,840 EUR reduction in intangible assets.

## 12. Revaluations

The revaluation is based on discounted cash flow calculation made by the company, income value and in some cases on building rights which are supported by an independent third-party expert's valuation on the likely sale price of the land.

## 13. Investments

| Group companies | Group ownership | Parent ownership |
|---|---|---|
| St1 Oy | 100.00% | 100.00% |
| St1 Lähienergia Oy | 100.00% | 100.00% |
| St1 Sverige AB | 100.00% | 100.00% |
| St1 Refinery AB | 100.00% | 0.00% |
| St1 Vind AB | 100.00% | 0.00% |
| St1 BioGas AB | 100.00% | 0.00% |
| Falkenbergs Biogas AB | 65.00% | 0.00% |
| Söderåsens Bioenergi AB | 63.25% | 0.00% |
| St1 Norge AS | 100.00% | 0.00% |
| St1 Norge Group AS | 100.00% | 100.00% |
| Lämpöpuisto Oy | 100.00% | 0.00% |
| St1 Finance Oy | 100.00% | 100.00% |
| Kiinteistö Oy Uusmarjala | 100.00% | 0.00% |
| Tuulivoltti Oy | 100.00% | 100.00% |
| Shell Madla AS | 100.00% | 0.00% |
| Gaissa AS | 60.72% | 0.00% |
| Grenselandet AS | 100.00% | 0.00% |
| Nemob AS | 100.00% | 0.00% |
| St1 Sandfjellet Holding AS | 100.00% | 0.00% |
| St1 Davvi Holding AS | 100.00% | 0.00% |
| St1 Nordre Soroya Holding AS | 100.00% | 0.00% |
| Brocklesby Ltd | 100.00% | 100.00% |
| St1 Renewable Energy (Thailand) Ltd | 100.00% | 0.00% |

| Associated companies | Group ownership | Parent ownership |
|---|---|---|
| North European Oil Trade Oy -Group, Helsinki<br>Equity EUR 53,784,683.81 and<br>profit for the period EUR 26,758,930.59 | 49% | 49% |
| Brang Oy, Turku<br>Equity EUR 212,502.16 and profit for the period EUR 53,807.89 | 25% | 0% |
| Aviation Fuelling Services Norway AS<br>Equity EUR 15,851,303.21 and<br>profit for the period EUR 7,760,172.51,<br>remaining goodwill on consolidation EUR 3,755,623,11 | 50% | 50% |
| Biogass Energi Aksdal AS<br>Equity EUR 103,313.16 and<br>profit for the period EUR 0,<br>remaining goodwill on consolidation EUR 496,187,08 | 33.3% | 0% |
| Knapphus Energi Norge AS<br>Equity EUR 37,309.03 and profit for the period EUR<br>-28,699.80 | 49% | 0% |
| Suomen Lantakaasu Oy<br>Equity EUR 1,958,244.10 and profit for the period EUR<br>-41,755.90 | 50% | 0% |
| Scastone AB<br>Equity EUR 112,602,348.70 and profit for the period EUR<br>201,002.01 | 50% | 0% |
| Gothenburg Biorefinery AB<br>Equity EUR 116,611,939 and profit for the period EUR<br>-1,786,840 | 75% | 0% |
| Biorefinery Östrand AB<br>Equity EUR 15,174,001.31 and<br>profit for the period EUR -501,346.35,<br>remaining goodwill on consolidation EUR 1,549,859.75 | 50% | 0% |

## Investments, parent company

| | Shares | | | |
|---|---|---|---|---|
| In thousand euros | Group companies | Associated companies | Others | Total |
| Acquisition cost January 1, 2022 | 456,270 | 23,477 | 21 | 479,768 |
| Additions | 67,319 | 0 | 0 | 67,319 |
| Disposals | 0 | 0 | 0 | 0 |
| Acquisition cost December 31, 2022 | 523,589 | 23,477 | 21 | 547,086 |
| | | | | |
| Net book value December 31, 2022 | 523,589 | 23,477 | 21 | 547,086 |

## Investments in the group

| | Shares | | Receivables | |
|---|---|---|---|---|
| In thousand euros | Associated companies | Others | Others | Total |
| Acquisition cost January 1, 2022 | 23,834 | 2,416 | 263 | 26,513 |
| Additions | 80,916 | 11,815 | 93 | 92,824 |
| Disposals | 0 | -454 | 0 | -454 |
| Acquisition cost December 31, 2022 | 104,750 | 13,776 | 356 | 118,882 |
| | | | | |
| Net book value December 31, 2022 | 104,750 | 13,776 | 356 | 118,882 |

## 14. Receivables from group companies

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| **Current** | | | | |
| Trade receivables | 0 | 0 | 4,191 | 3,435 |
| Other receivables | 0 | 0 | 63 | 63 |
| Equity loans | 0 | 0 | 1,340 | 1,340 |
| Loan receivables | 0 | 0 | 41,714 | 101,319 |
| | **0** | **0** | **47,308** | **106,157** |
| **Non-current** | | | | |
| Loan receivables | 0 | 0 | 101,319 | 101,495 |

## 15. Equity

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Share capital January 1 | 100 | 100 | 100 | 100 |
| Increase in the share capital | | | | |
| Share capital December 31 | 100 | 100 | 100 | 100 |
| | | | | |
| Revaluation reserve January 1 | 40,093 | 40,093 | 0 | 0 |
| Change | -1,975 | 0 | 0 | 0 |
| Revaluation reserve December 31 | 38,118 | 40,093 | 0 | 0 |
| | | | | |
| Reserve for invested unrestricted equity January 1 | 54,232 | 54,232 | 54,232 | 54,232 |
| Change | 0 | 0 | 0 | 0 |
| Reserve for invested unrestricted equity December 31 | 54,232 | 54,232 | 54,232 | 54,232 |
| | | | | |
| Retained earnings January 1 | 1,033,039 | 902,145 | 537,394 | 474,559 |
| Dividend distribution | -15,882 | -15,495 | -15,882 | -15,495 |
| Acquisition of own shares | -4,254 | 0 | -4,254 | 0 |
| Changes in Group stucture | 29,513 | 0 | 0 | 0 |
| Changes in accounting principles | 5,269 | 0 | 0 | 0 |
| Adjustment to prior period taxes | -4,116 | 0 | 0 | 0 |
| Translation differences of foreign subsidiaries | -62,383 | -2,367 | 0 | 0 |
| Retained earnings December 31 | 981,185 | 884,283 | 517,258 | 459,064 |
| | | | | |
| Profit for the period | 234,561 | 148,756 | 10,318 | 78,330 |
| | 1,269,977 | 1,087,271 | 581,808 | 591,626 |
| Capitalized development expenditure | -886 | -1,175 | 0 | 0 |
| Distributable earnings December 31 | 1,269,091 | 1,086,095 | 581,808 | 591,626 |
| | | | | |
| Equity total | 1,308,195 | 1,127,464 | 581,908 | 591,726 |

| The company's share capital by type of shares | 31.12.2022 | 31.12.2021 |
|---|---|---|
| Shares, amount | 38,737,118 (100%) | 38,737,118 (100%) |
| Shares outstanding, amount | 38,591,233 | 38,737,118 |

In 2022 the company carried through a directed share purchase in which 145,885 shares were acquired. Background to the share purchase was the planning of an incentive program, simplification of ownership structure as well as offering possibility to sell shares for those shareholders who were interested. The Board of Directors proposes to the general meeting that the company pays a dividend on the previous financial year's profit of EUR 38,591,233 (1,00 EUR/share) and transfers the profit for the financial period to account "retained earnings". Dividend will not be paid to shares company owns. There has been no material change in the company's financial position after the end of the financial period. The company's liquidity is good and it is the board's opinion that the proposed dividend distribution does not put the company's liquidity at risk.

## 16. Provisions

| | Consolidated | |
|---|---|---|
| **In thousand euros** | **2022** | **2021** |
| Certain retirement pensions for which company is liable | 33,968 | 34,353 |
| Other provisions | 953 | 648 |
| Expected environmental obligations | 24,869 | 18,289 |
| **Total provisions** | **59,790** | **53,289** |

Environmental obligations: The total liability cannot be reliably determined. A provision has been recognised for known liabilities, for which the company is likely to be responsible for in the near future. These liabilities relate mainly to the environmental obligations concerning soil decontamination. Change in the provision has been recognised in other operating expenses against actual costs.

Pension provision is mainly composed of pension provisions in St1 Sverige AB and St1 Refinery AB as well as pension provision in St1 Oy.

## 17. Deferred tax assets and liabilities

| | Consolidated | |
|---|---|---|
| **In thousand euros** | **2022** | **2021** |
| **Deferred tax assets** | | |
| From provisions | 12,603 | 13,509 |
| | **12,603** | **13,509** |
| | | |
| **Deferred tax liabilities** | | |
| From appropriations | 68,088 | 58,312 |
| From revaluations and goodwill allocations | 35,242 | 35,509 |
| From consolidation | 0 | 0 |
| | **103,330** | **93,821** |

## 18. Liabilities to group companies

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Non-current loans | 0 | 0 | 0 | 0 |
| Current loans: | | | | |
| Trade payables | 0 | 0 | 419 | 534 |
| Other liabilities | 0 | 0 | 98,803 | 47,151 |
| Accruals and deferred income | 0 | 0 | 709 | 0 |
| | **0** | **0** | **99,931** | **47,686** |

## 19. Adjusting entries for assets/Receivables carried forward

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Financing cost allocations | 276 | 90 | 276 | 90 |
| Tax receivables | 1,958 | 6,877 | 0 | 2,896 |
| Other adjusting entries | 86,587 | 58,069 | 3,937 | 2,761 |
| | **88,821** | **65,036** | **4,212** | **5,747** |

## 20. Accrued expenses

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Personnel cost accruals | 35 490 | 33 991 | 3 748 | 2 630 |
| Interest accruals | 61 | 85 | 0 | 0 |
| Tax accruals | 20 128 | 25 935 | 0 | 0 |
| Other accrued expenses | 75 361 | 36 842 | 576 | 862 |
| | **131 040** | **96 854** | **4 324** | **3 492** |

## 21. Financial instruments

### Commercial paper program

St1 Nordic launched a Commercial paper program in November 2016. Maximum size of the program is 200 MEUR and it is used for short-term working capital purposes. Outstanding amount at the end of the year was 79,5 MEUR (72 MEUR in 2021 financial period).

### Revolving Facility Agreement

St1 renewed in 2022 its 200 million euro revolving credit facility agreement for a new 3-year term. The facility also includes two option years. The agreement includes sustainability covenants.

### Green Loan Facility Agreement

Subsidiary St1 Refinery AB signed in March 2020 a EUR 150 million financing agreement for the financing of the Gothenburg renewable diesel plant. The facility also includes two option years the use of which has already been decided upon. The agreement includes a green loan element.

### Oil financing facility

St1 Sverige AB has a 100 million dollar oil financing facility. The facility was not drawn at year-end.

### Recourse factoring

St1 Sverige AB has 600 MSEK factoring-limit. Outstanding amount at the end of the year was 459 MSEK.

## 22. Commitments and contingencies

The group has not given business mortgages, real estate mortgages or shares as collateral.

| **Guarantees** | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Bank guarantees | 7,226 | 7,937 | 0 | 0 |
| | | | | |
| Guarantees on behalf of group companies | | | | |
| Other guarantees | 367,813 | 155,540 | 367,159 | 154,877 |

Oil has been pledged as against the oil financing facility (EUR 183,864,283) and oil (EUR 191,786,972) and oil products receivables (EUR 141,937,597) have been pledged against account payables of oil. The oil financing facility was not in use at year end. In addition, a guarantee was given for the associated company North European Oil Trade Oy's accounts payable amounting to EUR 58,822,888,10 derivatives liabilities EUR 55,901, L/C liabilities EUR 79,702,301 and Financial liabilities 25,000,000 on 31 December 2022.

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Rent liabilities | | | | |
| No later than one year | 26,431 | 25,955 | 1,380 | 1,230 |
| Later than one year | 155,244 | 164,547 | 8,317 | 9,038 |

| | Consolidated | | Parent company | |
|---|---|---|---|---|
| **In thousand euros** | **2022** | **2021** | **2022** | **2021** |
| Future leasing payments: | | | | |
| No later than one year | 2,294 | 2,006 | 393 | 381 |
| Later than one year | 2,721 | 1,943 | 361 | 287 |
| Total | **5,015** | **3,949** | **754** | **668** |
| | | | | |
| Residual value liability | | | | |
| | 41 | 50 | 8 | 7 |

In addition, guarantees have been given for lease agreements of the subsidiaries. The subsidiaries may also have environmental liabilities which materialize over the long-run and the amount of which can not be calculated in a reliable way. These are not included on the balance sheet.

## Derivatives

**Price hedging of compulsory storage obligation**

The group can use long-term commodity derivatives to hedge against price risk associated with inventory kept for the compulsory storage obligation in Sweden. Price of compulsory storage obligation inventory is in such case fixed with a commodity hedge. The hedge has been assessed efficient. The hedged part of compulsory storage obligation inventory and the commodity derivatives hedging it would be handled with the net practice according to KILA 1912/2014 opinion. There were no open price hedges at the closing date.

In addition, and in accordance with its risk management policies, the group may hedge the variations in inventory levels of operating activities with short-term commodity derivatives in different oil products. The changes in the value of the short-term commodity derivatives are reconciled daily against the counterparty, and they are recognised as income or expense in the income statement.

**Refinery margin hedges**

Part of the future refining margins consisting of the price difference between refined end products and crude oil price have been hedged for 2023. There are contracts with several counterparties. Fair values at the closing date are presented in the table.

**Gas, propane and electricity price hedges**

The price of gas, propane and electricity have an impact on the group's margin. Part of price risk has been hedged for year 2023 and 2024.

| **Commodity derivatives** | Consolidated | | Parent company | |
|---|---|---|---|---|
| | **2022** | **2021** | **2022** | **2021** |
| Refinery margin, volume, mill. bbl | 0,3 | 3,5 | 0,0 | 0,0 |
| Gas and propane, volume, GWh | 296 | 0 | 0 | 0 |
| Electricity, volume, GWh | 42 | 0 | 0 | 0 |
| Fair value, thousand euro | -19,851 | 522 | 0 | 0 |
| | | | | |
| **Foreign exchange derivatives** | | | | |
| Volume, mill. Eur | 145 | 182 | 18 | 85 |
| Fair value, thousand euro | 152 | -58 | 7 | -247 |

Unrealized positive fair value changes are not booked to the income statement.

# Signatures to the financial statements and the report on operations

Helsinki, 28 March 2023

**Mika Anttonen**
Chairman of the board

**Kim Wiio**
member of the board

**Mikko Koskimies**
member of the board

**Kati Ihamäki**
member of the board

**Henrikki Talvitie**
CEO

**Auditor's Note**
Our auditor's report has been issued today.

**PricewaterhouseCoopers Oy**
Authorised Public Accountants

**Janne Rajalahti**
Authorised Public Accountant (KHT)

# Auditor's Report
## (Translation of the Finnish Original)

To the Annual General Meeting of St1 Nordic Oy

## Report on the Audit of the Financial Statements

### Opinion
In our opinion, the financial statements give a true and fair view of the group's and the company's financial performance and financial position in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements.

**What we have audited**
We have audited the financial statements of St1 Nordic Oy (business identity code 2082259-7) for the financial period 1.1–31.12.2022. The financial statements comprise the balance sheets, the income statements, cash flow statements and notes for the group as well as for the parent company.

### Basis for Opinion
We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

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

**Independence**
We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

### Responsibilities of the Board of Directors and the Managing Director for the Financial Statements
The Board of Directors and the Managing Director are responsible for the preparation of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. 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 financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or to cease operations, or there is no realistic alternative but to do so.

### Auditor's Responsibilities for the Audit of the Financial Statements
Our objectives are to obtain reasonable assurance about whether the financial statements as a whole are free from material misstatement, whether due to fraud or error, and to issue an auditor's report that includes our opinion. Reasonable assurance is a high level of assurance, but is not a guarantee that an audit conducted in accordance with good auditing practice 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 financial statements.

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

## Other Reporting Requirements

### Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information that we have obtained prior to the date of this auditor's report is the report of the Board of Directors.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. With respect to the report of the Board of Directors, our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

If, based on the work we have performed on the other information that we obtained prior to the date of this auditor's report, we 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.

Helsinki 29 March 2023

**PricewaterhouseCoopers Oy**
Authorised Public Accountants

**Janne Rajalahti**
Authorised Public Accountant (KHT)

**St1 Nordic Oy**

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