
Game
Changer
YEAR 2018 / St1 Nordic Oy
st1

Content

About this Report

THIS IS THE SECOND INTEGRATED corporate responsibility report by St1 Nordic and it is published to recount our most material disclosure topics in corporate responsibility as well as our business activities. The corporate responsibility reporting follows the same principles of consolidation as our Financial Statement and the report includes all Group companies.

St1 Nordic carried out the materiality assessment of corporate responsibility issues in 2016 by organizing internal workshops in all its countries of operation, supplemented by further interviewing employees in the stakeholder interface and by analyzing queries from stakeholders. In the light of St1 Group's planned merger into St1 Nordic Oy in the end of 2017, the materiality assessment was extended to cover the whole value chain based on the results of the St1 Value Chain project. The whole personnel of both groups and our supply company North European Oil Trade Oy participated in the project. The materiality assessment resulted our main themes of corporate responsibility: Renewable energy solutions, Investments in the future, World-class expertise and Customers now and in the future.

The corporate responsibility work continued in 2018 by analyzing further the results of the first round of reporting and deciding on action plan. In 2019, the further development of the RESPECT Corporate Responsibility Program for the entire Group will be extended to the Business Units to select the most important development goals and to plan related objectives and implementation. The RESPECT-program will be launched to the whole personnel in the autumn 2019.

St1 Nordic's second integrated corporate responsibility report has been prepared in accordance with the second Global Reporting Initiative (GRI) Standards (2016): Core option. Additionally, our oil refinery in Gothenburg complies both with ISO 14001 and EMAS environmental management system (the Eco-Management and Audit Scheme) and publishes EMAS report after auditing in June 2019.

Culture for Growth

ST1'S VISION IS to be the leading producer and seller of CO_2-aware energy. Our goal is to grow in the Nordic energy market and at the same time create scalable solutions to produce energy from climate friendly sources. The bar is set ambitiously high. Achieving these goals demands a highly qualified and innovative team, and an effective and efficient organization.

Over the past 20 years St1 has grown rapidly both organically and through various acquisitions. Small organizations tend to work efficiently, but with our continued growth managing several subsidiary companies has required additional resources. This is why we have during the past few years focused on merging our subsidiaries and developed the Group toward more a unified operation and rulebook. The major change during 2018 happened in our organization structure. Following along with the plan already in action, we gave up some of our country-specific organizational structures and created an organizational structure

more appropriate for our business. Despite this, we in many aspects continue to operate with local and country-specific practices in mind, and with decision-making always happening in close proximity to our clients.

The organizational restructuring has given me a more in-depth experience to the width and breadth of St1's operations and the people behind the company. I started in this role last summer and the restructuring began in earnest immediately in autumn. The changes have affected many of my colleagues and demanded a lot from our staff. Some new implementations we have approached with on a trial-and-error basis to discover optimal solutions. Our aim has been to avoid focusing all the decision-making to a centralised organizational core, rather we have strived to maintain the independence of our various teams to define the extent of their respective control and responsibilities.

Supporting our future growth

I strongly believe that with the new organizational structure we will be able to reach our goals more efficiently. Unity and cohesion will help us to create a more accurate overview and to react to the needs of the market faster. In developing renewable energies, sharing and combining our various specialist knowledge and skills is the key to new innovative solutions. Our internal efficiency will increase as we are able to save on recourses through a common administrative team and unified practices. And most important of all, our unified company culture will be better able to support our future growth.

Challenging market

Our operational environment in 2018 was in many ways challenging. On one hand the Nordic retail market is in a constant change as the bio mandates grow year by year. On the other hand overall volumes are stagnant and expected to decrease in the coming years. Refining environment was also tougher compared to the previous years. The Group's turnover rose to 6.885 million euros. Compared to our pro forma turnover actual growth was 5 percent. 50 percent of turnover was derived from Sweden, 23 percent from Finland, and 27 percent from Norway. Our operating profit decreased to 63 million euros (2017: 177 million euros, pro forma 263 million euros). The weakened profitability was largely a result of lower oil inventory valuation due to lower oil prices, revaluation of future year refinery margin hedges and refining margins being lower than in previous years.

Game Changers

Climate change is a challenge that threatens the whole planet, yet the plans and actions to combat this are still far too inadequate. The use of fossil fuels continues to grow. Our goal at St1 is to be a part of slowing down climate change, so we see a great importance in our work. There is no individual solution to this challenge, and we need an arsenal of new and innovative solutions. Ethanol and biogas from waste, converting solid biomass to transportation fuels, creating a market place for carbon sinks and arctic wind power, are just some of the CO_2-aware energy projects we are developing. For people who think of us as just a company that sells fuel, these can be quite surprising topics. And drilling a borehole 6,4 kilometers down into the bedrock in the heart of the Helsinki Metropolitan area really is a gutsy project. In reality, we are able to develop these ground-breaking pilot projects supported by the revenue from our conventional fuel business, in order to help decrease the use of fossil fuels in the future. Promoting sustainable and responsible ways to develop our energy system is part of our DNA here at St1.

During my 10 months at St1, I have noticed that I am surrounded by a group of ecologically very forward-thinking people. Our value chain demonstrates how in order to achieve this, we need a diverse range of specialists, activities, and solutions for our clients. Striving together towards a common goal and sharing a mutual respect for each other are among the important themes for this year, which will extend to the whole Group with the launch of our Respect responsibility programme.

I would like to give my warmest thanks to our employees for the humble work effort and the team spirit I have felt during the organizational restructuring. We are by no means ready yet, but we are making good progress. I would also like to extend my thanks to our clients and our partners for your trust in our services and activities.

Our goal is to grow in the Nordic energy market and at the same time create scalable solutions to produce energy from climate friendly sources."

Henrikki Talvitie
CEO

St1 in Brief

ST1 IS A NORDIC energy company that operates in Finland, Sweden, Norway and Thailand. In our operations we implement our vision to be the leading producer and seller of CO_2-aware energy. We research, develop and invest in economically viable, environmentally sustainable energy solutions.

Our goal is to increasingly replace fossil energy imports with domestic renewable options. Our production of renewable electricity exceeds the amount needed to compensate the fossil emissions of the energy we need for the functions of our Group.

St1 focuses on fuels marketing activities, oil refining and renewable energy solutions such as waste-based advanced ethanol fuels and industrial wind power. The Group has 1 300 St1 and Shell branded retail stations in Finland, Sweden and Norway. Headquartered in Helsinki, St1 employs currently more than 770 people. Our operations are strengthened by strategic long term partnerships in various areas.

Retail Stations

- The fuel distribution network provides quality food and other convenience retailing services in Finland, Sweden and Norway
- In all, 1 300 St1 and Shell stations: unmanned and service stations as well as HGV sites
- Increasingly environmentally friendly liquid fuel products and high-quality services for customers
- Secure mobile payment services

Direct Sales

- A wide range of energy products and services for both private and corporate customers
- Premium class heating oils and liquid fuels for machinery
- Marine fuels
- Fuel cards for private and corporate use

Renewable Energy

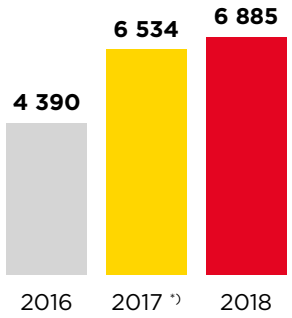
- Biorefining advanced biofuels for transport
- Production of clean electricity from wind power
- Sustainable, energy-efficient geothermal heat production pilot
- Ground source heating solutions

Supply & Logistics

- Oil refinery in Gothenburg with an annual capacity of appr. 30 million barrels of crude oil
- The refinery's products include petrol, sulphur-free MK-1 diesel, other middle distillates, liquid gas – mostly sold through our own network
- Together with NEOT, a comprehensive logistics chain in all of our operating countries consisting of terminals for storing the products and a wide transport network

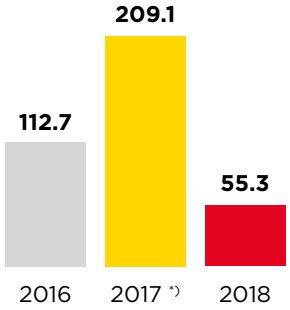
Year 2018 in Figures

Net sales
MEUR



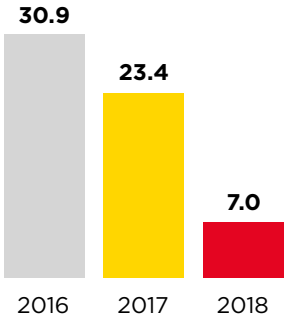
*) pro forma

Profit for the period
MEUR

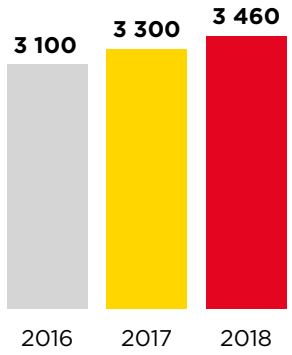


*) pro forma

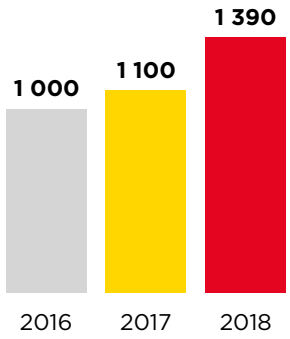
Return on equity
%



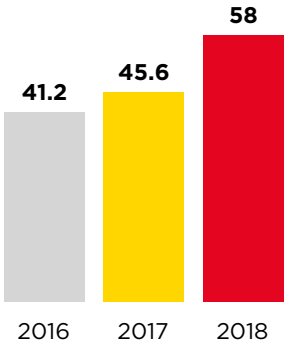
Retail net sales
MEUR



Direct sales, net sales
MEUR

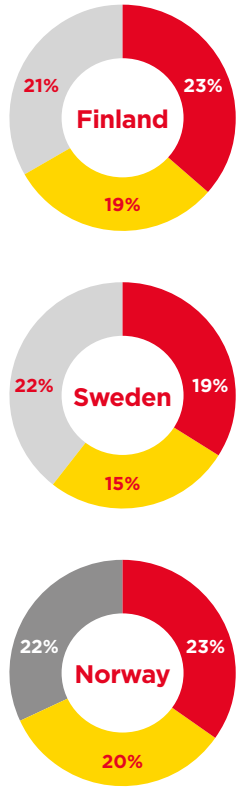


Renewable energy, net sales MEUR



Supply & Logistics, net sales MEUR

Market shares



Personnel

774

Investments MEUR

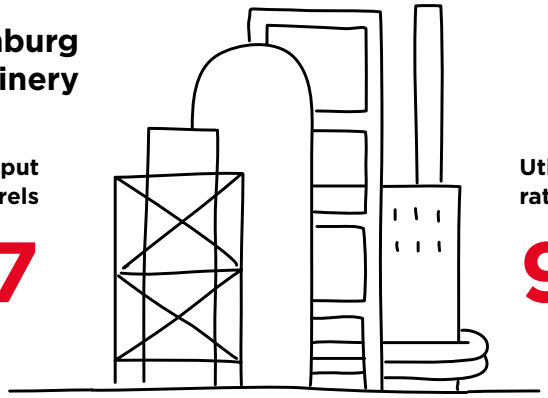
132

Renewable energy investments MEUR

(incl. TuuliWatti)

42

Gothenburg refinery



Throughput million barrels

28.7

Utilization rate

90.4%

Excise & property taxes

MEUR

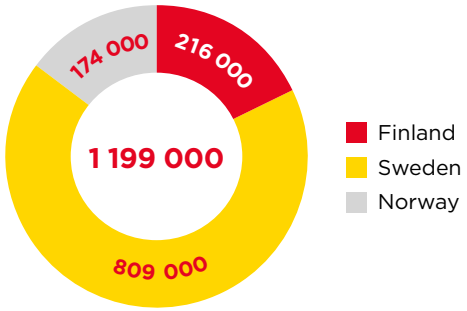
2177

Income taxes

MEUR

15.3

CO_2 -reduction from use of biofuels, tons



CO_2-reduction equalled more than

467 000

passenger cars (*

(* a car with an annual mileage of 17 000 km and emissions of 151 g CO/km

Biorefineries

100%

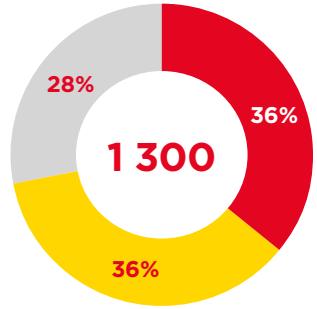
of the feedstock of our advanced ethanol production is waste and residues

Wind power production

GWh

628

Retail station network



Events 2018

JANUARY

ST1 and Finnish Ski Sport Foundation agreed to continue their long and extensive sponsorship cooperation with a strong focus on the youth and anti-doping work

ST1 LOCAL ENERGY won the Energy Solution of the year 2017 competition

APRIL

ST1'S PILOT to produce advanced ethanol from cassava waste started in Thailand

MAY

NEW HELMISIMPUKKA EXPRESS concept launched to St1 stations in Finland

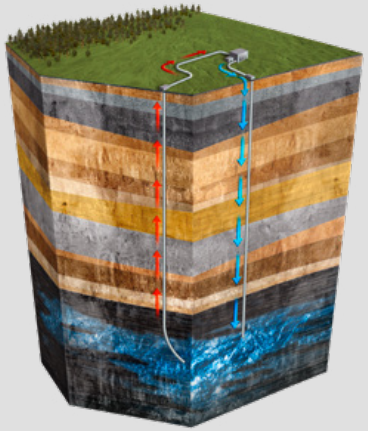
ST1 AND SCA formed a partnership to produce renewable fuels from tall oil

TUULIWATTI STARTED TO BUILD market-based wind farm in Viinamäki

JUNE

HENRIKKI TALVITIE as the new CEO

JULY



STIMULATION STAGE of St1's geothermal project at Otaniemi successfully completed

SEPTEMBER

ST1 LAUNCHED RED95 renewable fuel for the trucking industry in Norway

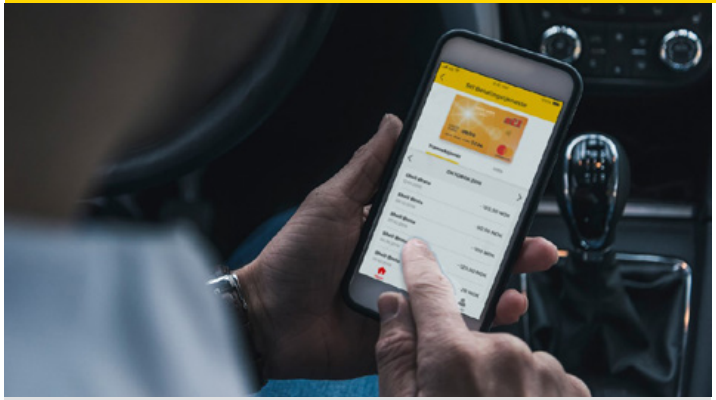
OCTOBER

ST1 STARTED A PILOT for sustainable carbon sequestering in Morocco.

ST1 LAUNCHED a new store and car wash chain under the Shell brand in Sweden

ST1 AND VTT launched an experiment aiming to produce hydrocarbons from industrial carbon dioxide

DECEMBER



APPLE PAY in use at St1 and Shell stations in Norway

ST1, WÄRTSILÄ, TIETO, FORTUM AND DEMOS HELSINKI introduced Innovation Committed initiative to speed clean energy targets

ST1 COMPLETED the purchase of Statoil Fuel & Retail Marine AS in Norway

Solidarity on Behalf of Our Climate

CLIMATE CHANGE has placed in front of us a new kind of challenge. In the past, problems were largely restricted to specific geographic areas. Now, we are living with a challenge, that is enormous and global in its scale. Our planet's atmosphere is compromised, affecting us all, especially the future generations. We cannot meet this challenge by taking local action alone. We need global and extensive co-operation. We must show solidarity – solidarity toward other people, solidarity for the whole planet.

The scale of climate change is so great that it is sometimes difficult to grasp. Since the beginning of the industrial age, far too much carbon has been released into the air and the situation is becoming more and more critical by moment. Various forecasts of the future create an additional cause for concern. Population growth will accelerate, economic growth will continue, and along with these the demand in energy will increase exponentially. Our use of fossil energies is only continuing to grow, even though the direction we should be going in is exactly the reverse.

What is needed now, are solutions on a completely new scale and with the complete perspective in mind. Climate action needs to happen fast and we need to involve everyone. With international co-operation we can create a common vision for a new energy system. Wise political decisions, guidance from the scientific community, innovations developed by companies, and individual consumer choices this vision can be realized and the direction changed. To understand the situation is needed the right kind of information. Thus, the special feature article in our report seeks to provide a brief overview of our common climate challenge.

As the problem affects all humans across the globe, we need to be open-minded about the solutions. In fact, the same amount of euros can yield a tenfold result, when applied to solutions in the developing countries rather than locally. Therefore, for climate action in Europe, Africa should be the main target area for funding, because it yields the highest results.

The planet's ecosystem is offering us solutions to return to a sustainable carbon cycle, through plants that sequester carbon back to the soil. Reforestation of desertified land would allow us to create carbon sinks, and simultaneously support the habitability of those areas. Launching these types of projects will first require a way to measure the effectiveness of carbon sinks and the creation of a carbon market. Another effective method to balance out the carbon cycle, in addition carbon sinks, could be technologies that use solar or wind power to produce hydrogen from water. This hydrogen can be attached to carbon dioxide; resulting in oxygen, and more importantly, hydrocarbon which can be used to produce synthetic fuels. With this in place, we will have a lot of climate solutions to choose from.

We at St1 are passionately involved in solving the climate challenge. Most of our business continues to come from fossil fuels, but with the profits from this business, we are developing renewable energy solutions, biofuels, and growing forests in Morocco. We hope to encourage everyone to become involved in climate action. We all make the effort.

Mika Anttonen
Chairman of the Board

Solving Global Climate Challenge

Global Climate Challenge

OUR ATMOSPHERE acts like the glass of a greenhouse, helping keep our planet warm. The CO_2 consistency of the atmosphere determines how strong this warming effect is. The effects of the human activity, namely the use of fossil fuels, land use change and deforestation throughout the centuries has accumulated an alarming level of CO_2 into the atmosphere which has devastating effect on our climate. The CO_2 concentration has climbed to 405 ppm in 2017 from the estimated level of 277 ppm in 1750. And the level keeps rising at an unprecedent pace.

Global Carbon Cycle

The planet releases carbon dioxide into the atmosphere from the earth, sea, and plants (see the figure: Balancing Global Carbon Cycle). Likewise plants and the sea also act to absorb carbon dioxide from the atmosphere. Based on nature's own balancing cycle carbon dioxide quantities should be in harmony. But due to human activities the level of atmospheric carbon has increased by 185 gigatons since ppm measuring started in 1959, and it continues to grow annually by around 5 gigatons, which equates to 18.4 gigatons of carbon dioxide.

Our largest carbon dioxide emissions are caused by fossil fuels, and the largest industrial producer of carbon emissions is the cement industry, since cement production demands massive quantities of energy and one of its main raw materials, limestone, releases carbon as it is heated to change its composition.

Population, GDP and Energy demand

The population growth and GDP growth are the key drivers of our increased energy demand, and the steep upward trend of these factors will continue for decades to come. In 2017, the global population reached almost 7,6 billion. Its growth is exponentially fast – the last billion in growth occurred in only twelve years. Based on forecasts this global population growth seems inevitable. According to a UN report, there will be over 8,5 billion people by 2030, over 9,7 billion people by 2050, and over 11 billion by the year 2100.

Carbon Cycle

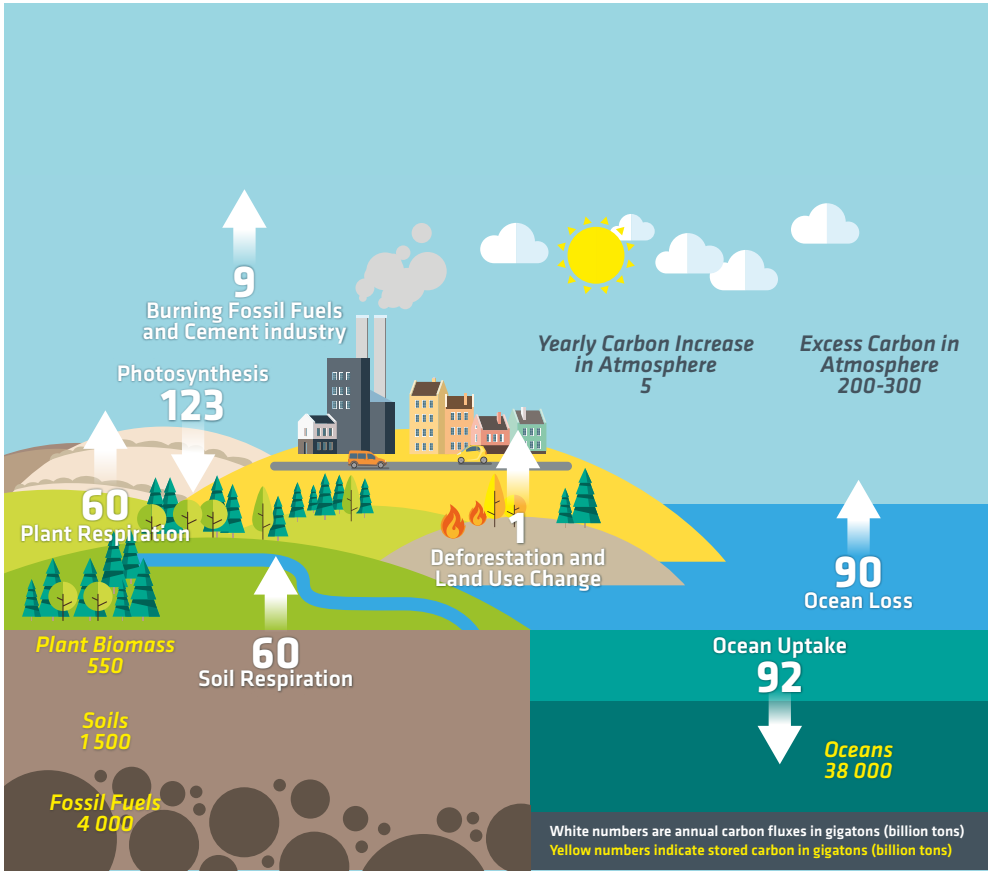


Image: St1 Oy

Simultaneously, the global economy is growing at a strong pace. According to the IMF forecast global GDP will double by the year 2040. The growing population is likely to consume more and more with an increasing amount of people attaining middle-class earnings. A growing wealthy population will be seen particularly in China and India, where the population sizes are already extremely large.

Primary Energy consumption and CO_2 emissions

According to the International Energy Agency (IEA), global energy consumption grew by 2.3 percent in 2018. This growth was faster than any time before during this decade. Of this energy, 33 percent was produced from oil, 30 percent from coal, and 24 percent from natural gas; thus the total amount of energy produced from non-renewable sources was 87 percent. The share of hydro power was 7 percent, nuclear power 4 percent, and other renewable sources 2 percent. Although the growth of renewable energy sources has been relatively strong, the majority of the new demand in energy is being met with fossil fuels, not to talk about turning down the use of it.

China is the world's largest consumer of energy, with the US, India, and Russia sharing the second place. China also has the fastest growth in energy demand, 3,5 percent during 2018. When comparing per capita consumption, the US are the 9th largest consumer of energy, but China only the 52nd largest. In wealthy countries, energy consumption is equivalent to more than 4000 kilograms of oil per person, whilst in the least wealthy countries the average is under 200 kilograms per person. We can therefore assume, that in developing countries growth in energy consumption is going to be steep. In many undeveloped countries the energy consumption is also growing at rapid pace, as there are still 1,5 billion people globally living entirely without electricity.

According to IEA, the carbon emission from fossil fuels in 2018 were the highest ever, approximately 33,1 gigatons. The largest emissions from the energy consumption were caused by electricity and heating (28%), agriculture (14%), industry ja building (16%) and transport (12%)

Summary

The coming years and decades are the most crucial in solving the climate crisis, as we must make rapid progress to reverse the direction of climate change. The need to address all the factors contributing to the current carbon cycle imbalance demonstrates the scale of this task. The average temperature of the planet has risen already by almost one degree and estimates suggest that the temperature will continue to rise during the next

Figure 1, Population Billion

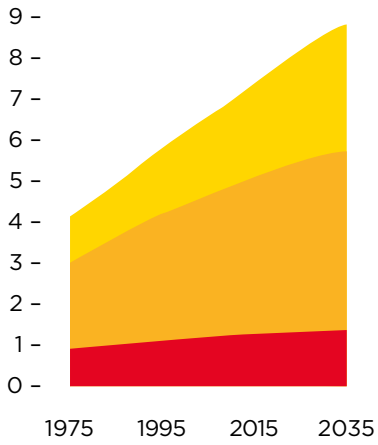


Figure 2, GDP Trillion, $2011 PPP

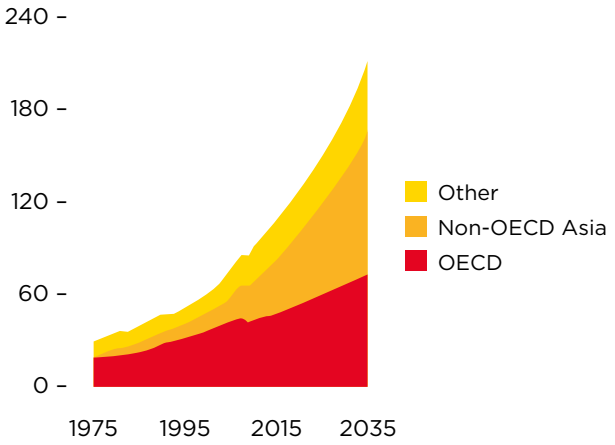
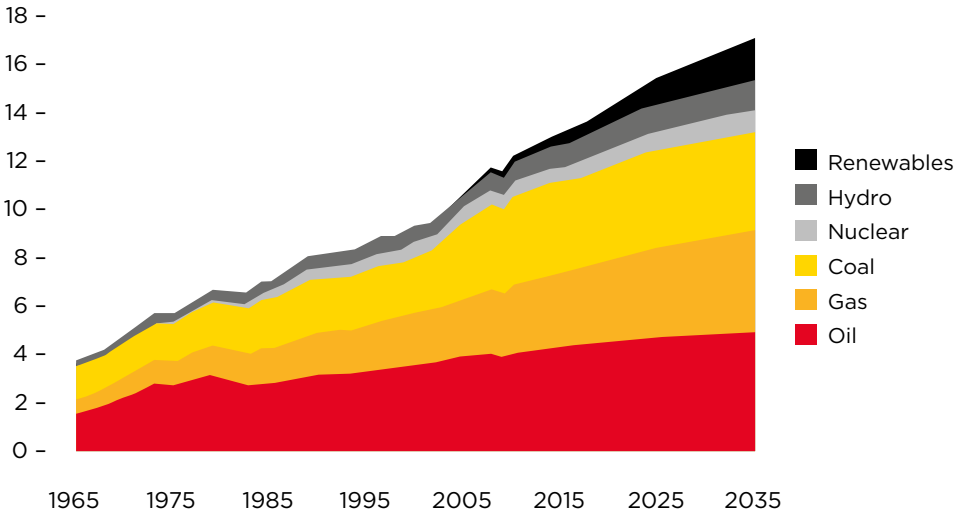


Figure 3, Primary energy consumption by fuel Billion toe



Source for figures 1,2 and 3: BP Energy Outlook – 2016 edition

decades by a pace of 0,2 degrees per decade. Once begun, the rising global temperature is impossible to halt quickly, as warming oceans create huge heat vents in the climate cycle. This is because the warming of the oceans will result in a several-decade delayed increase in greenhouse gases. Cutting greenhouse gases will, only after some time, begin to slow down global warming; thus the urgency to act now.

Goals

In December 2015, the international climate accord signed in Paris, was a significant step toward stopping climate change. The participating countries committed to the goal of ensuring that the global temperature will not rise over a maximum of 1,5 degrees beyond the pre-industrial temperature. However, the Paris Climate Agreement has shown itself to be very ambitious, as various scenarios have demonstrated, maintaining the global temperature change even below 2 degrees is likely to fail.

Solutions

Solving the climate challenge is extremely challenging, as the endeavor is truly global and the scale of changing the global energy system is extreme. Indeed, extensive cooperation and many types of varying activities need to be undertaken. We must develop renewable forms of energy, invest heavily in the research and development of new technologies and seek out innovative solutions and increase awareness of the issues at hand. Listening to the scientific community is crucial in order to find effective solutions.

It is impossible for us to give up fossil fuels in a brief period, for the simple reason that it is a key element of the global food production cycle. We can create change through political decision-making, however CO_2-emissions trading and regulation alone cannot solve the crisis. Realistic goals and clear plans are needed to create confidence in the chances of solving this problem. We must also invest resources where they can affect the largest change. When the problem is global, local solutions are not necessarily the most effective response. We all share the climate on this planet, so we must involve everyone in the effort.

Carbon Market

The EU Emissions Trading Scheme (ETS) has not triggered the necessary investments fast enough. An international, or at least an EU-wide Carbon Market, i.e. a market for sequestrated and emitted carbon, combined with binding emission reduction targets for the emitting companies, would incentivize investments also in projects that absorb CO_2 from the atmosphere. A key element of the Carbon Market is to enabling flexibilities between the different sectors, in other words, to allow a company to fulfil its' obligation with activities in another sector. This system would ensure that investments are steered, where they will maximize the positive impact for the climate. The growth of emission rates is the largest in developing economies, and investments in these areas would create other beneficial effects in addition to lowering emissions. A reliable carbon market needs to be based on international standards for measuring the carbon emission and absorption rates of various projects.

Carbon Sink

Forests are advantageous carbon sinks, binding large quantities of CO_2 from the atmosphere. Deforestation has been one of the major factors aggravating the pace of climate change, and has also resulted in serious desertification in many regions. This has increased the number of climate refugees. Afforestation is a low-tech solution, which could address both the climate crisis and help to significantly improve the living conditions in these regions. It's one of the most effective ways to re-establish a balanced and sustainable carbon cycle.

Renewable energy sources

The production of renewable forms of technology is growing. But, investments to new renewable energy production would have to grow with a factor of ten from the current level, to simultaneously meet the growing energy demand and to halve the use of fossil fuels every decade, enabling the world to have a chance to stay within the carbon budget of 580 gigatons.

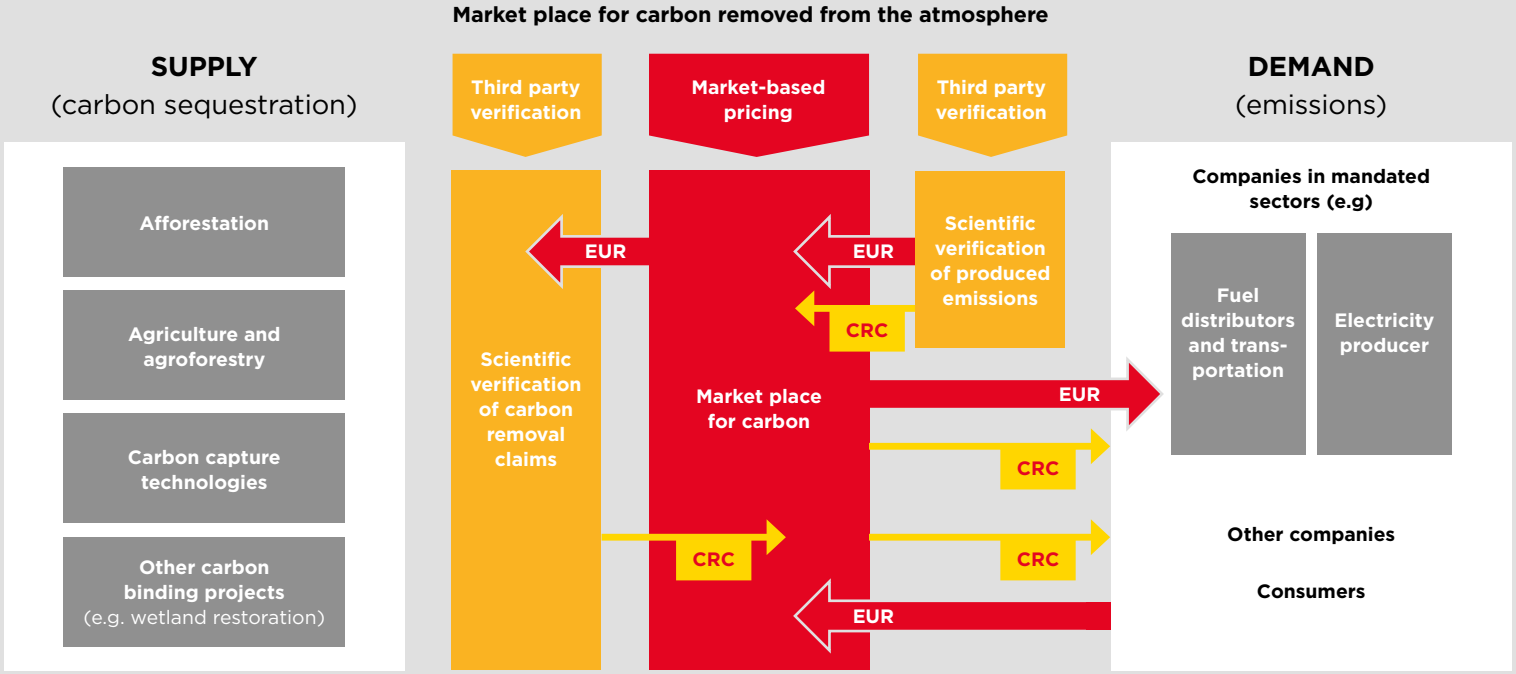
Significant investments and incentives for R&D, demonstration units and most importantly to energy production facilities are needed to speed up the transition. Renewable energy sources such as solar and wind power will provide us with significant energy potential in the future. But, not every industry, such as transport or petrochemicals to name a few, can be electrified in the decades to come, if ever. Thus, there would still be a need for low carbon hydrocarbons in several applications. As the sustainably available biomass can't cover all the needs, the only remaining source of carbon at the scale, is the atmosphere and fossil fuel using facilities. Therefore, technologies for carbon capture and use (CCU) would need to be developed and invested in many times the current levels. Technically, CCU is a fully possible solution. But, the major bottlenecks are the cost level and access to renewable electricity at the level needed. Transition to these renewable energies can be greatly sped up with support from political decisions.

New technologies

The world does not yet have the technological solutions needed to annihilate climate change. Major technological breakthroughs are needed in every sector, which underlines the need to step up R&D investments significantly from our current levels. For example, technologies for carbon recovery, storage and, reuse would be a significant help in addressing the problem.

CO_2 waste management

World tries to solve the climate change, mainly with the business logic of the energy industry. Clean energy must compete with the fossil energy, with or without subsidies. It means that we pollute less, but we still do it. Clearly, it's not enough. What if we applied the business logic of the waste management, instead? Firstly, a company is set an obligation to stop polluting. There, it has two options, either to stop polluting (emitting CO_2) or to clean up the mess (capture CO_2). If the company is not able to capture the CO_2 itself, it would have to buy the service from a "CO_2 waste management company", who would do it e.g. through afforestation or technical CO_2 capture. As in the "real waste management", a polluter pays a specialized company to clean up its mess. With a changed business logic, we could have a solution at hands.



CRC (*Carbon Removal Credit*) traceability ensures the authenticity and traceability of carbon credits

CASE

The necessity for a carbon market

THE PARIS AGREEMENT set the goal to halting global warming at 1.5 degrees. With the currently planned and implemented actions, achieving this goal is impossible. Their potential to reduce emissions is far too low, their implementation is happening far too slowly, and their social cost is unfeasible. However, with a new approach, we could achieve more change, faster and more efficiently. What we need is an international marketplace for carbon.

Global CO_2 emissions in 2017 were approximately 40 billion tons, of which the EU accounted for 10%. The growth of emissions in the rest of the world, over the next 10 years, will exceed the current EU emissions. It is clear, therefore, that it is not enough to simply set an example within the EU. This is why the EU needs to allow its companies, to use emission reductions in other countries, as a way to fulfil their emission reduction obligations. This would develop emission reduction methods that can be implemented in emerging economies, where emissions growth is the highest. Simultaneously, this would facilitate an international approach and market for emission reductions, in the regions and sectors where their impact would be greatest in relation to cost.

The problem with the current EU climate strategy is that it rigidly encapsulates emission sources to three separate sectors: the emissions trading, effort-sharing, and land-use sectors. Each sector being required to reduce its emissions, by a politically determined rate, without cross-sector flexibility. To a certain point the approach makes sense, until the low hanging fruits are picked. However, beyond that, focusing only on reducing emission within each sector, leads to suboptimisation, and unnecessarily increases the cost for society. In other words, the cost of additional emission reductions can rapidly escalate out of control, often without the achieving the desired climate benefits.

In theory the solution to this is simple. First, polluting companies must be made subject to CO_2 emission reduction obligations, which ultimately aim for zero emissions, for example by 2050. Without a binding reduction target, it's hard to see, how the companies would be incentivized to target to the net zero emissions Secondly, companies should be allowed to fulfil their obligations outside their own sector, including in the land-use sector or in third countries. This would drive companies to invest in the most cost-effective emission reduction projects. Naturally, all emission reductions, e.g. carbon sinks, need be calculated or measured with standardized methods, verified and fulfil all sustainability criteria. Thirdly, we need to create an at least EU-wide common marketplace, i.e. a carbon market for carbon dioxide emissions and reductions. Carbon market would be pivotal in enabling companies to trade CO_2 emissions at the one hand and eligible CO_2 reductions at the other. Thus, allowing the market efficiencies to steer towards most effective reduction methods, at any given point in time.

Carbon Farming video

CASE

Carbon sequestrating through afforestation in Morocco

IN ACCORDANCE WITH THE INTERGOVERNMENTAL PANEL on Climate Change (IPCC) report, St1 is committed to limit global warming to less than 1.5°C. Sufficient emission reductions will not be achieved with only the current policies and mitigation tools. To examine and improve the utilization of carbon sinks, St1 has started a pilot project for researching sustainable carbon sequestering through afforestation in Morocco. The pilot project is implemented together with the Université Mohammed VI Polytechnique in Morocco and its affiliated fertilizer company, OCP.

Over a period of three years, the pilot project will examine the carbon sequestration by trees under various controlled conditions in Morocco. The research project involves testing seven tree species and various irrigation and soil improvement methods. The aim is to find the optimal growth conditions for large-scale, cost-effective afforestation and carbon sequestering.

In the course of the pilot project, over 10 000 seedlings will be planted in the four-hectare research area. Planting has started in February 2019, and the first results will be obtained in a year's time. The field tests are directed and monitored by LUKE, the Natural Resource Institute Finland.

St1 wants carbon sinks to be seen as an incremental tool, not a substitutive one. If carbon sinks are to become an official and commercial method of reducing carbon dioxide emissions, an internationally accepted verification method of carbon sequestration is also needed. The University of Helsinki has started a conceptual measurement project that aims to create an internationally accepted measurement method for commercial carbon sequestration projects.

Climate change does not know national borders. Increasing carbon sinks through afforestation of arid and semi-arid, unused areas can both remove carbon emissions and help people in areas affected by drought and desertification.

St1 Corporate Responsibility Framework

St1 Nordic's Corporate Responsibility Framework

THE VISION OF ST1 IS to be the leading producer and seller of CO_2-aware energy. We believe we will attain this vision by running a responsible and profitable business where economic performance, social responsibility and environmental impact are balanced. Our accompanying value creation model is presented in the infographics.

A responsible company must ambitiously take in the big picture at all times. We must keep abreast of what's going on in the world and understand what clients will need in the future. We base our growing energy business in Nordic society values. As a Nordic corporate citizen, we believe in transparency, fairness, responsibility and equal opportunities, resulting social security, equal education and health care. While fossil fuels are still our main source of income, it allows us to build world-class expertise in introducing more and more renewable energy to the market.

The key enablers of our solid performance are our world-class people, partners, business technology, financing services, and cash flow together with our return on equity. Our financial performance enables new sustainable investments in the renewable energy. Passion for replacing fossil fuels also powers our research and development of new, sustainable and innovative CO_2 -aware energy solutions. Our customers benefit from the competitive edge we gain by managing the complete value chain from raw materials and energy sources to service at the pump.

Based on such an understanding and on demand, we are solving global energy challenges by taking steps into direction where we move ourselves from fossil world into renewable world. We try to ensure that everything we do in our whole value chain is based on world-conquering mentality and passion.

> **Our financial performance enables new sustainable investments in the renewable energy."**

Sustainability governance and management

Sustainability is integrated in our daily work. The Board of Directors has the joint responsibility in matters and decision-making related to sustainability; economic, environmental and social issues. Business unit management decides on the sustainability approach and support the Board of Directors in these matters. Public Affairs -unit is coordinating and developing sustainability matters at Group level.

Sustainability management at St1 Nordic is based on the realization of the company's vision, values and strategy. The company management and personnel are expected to comply with the principles of business code of conduct approved by the board, together with the laws and other regulations of the countries where we operate.

We respect the United Nations Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work, which aim at promoting sustainable and fair business. We expect our business partners and their business partners to be committed to ethical and sustainable business principles and actively supporting their use within their own sphere of influence.

The most significant risks and uncertainties related to sustainability are assessed in the annual report page.

Our oil refinery in Gothenburg complies both with 14001 and EMAS environmental management system (the Eco-Management and Audit Scheme) and publishes EMAS report.

In 2019, the further development of the new RESPECT Corporate Responsibility Program for the entire Group will be extended to the Business Units to select the most important development goals and to plan related objectives and implementation.

Our sustainability focus areas are:

RENEWABLE ENERGY SOLUTIONS
Sustainable raw materials such as waste and other sources of energy, energy efficiency, circular economy, CO_2-reduction, R&D, pilots, production concepts.

INVESTMENTS IN THE FUTURE
Financial performance, traditional fuels business generating income to enable investments in renewable energy, commercializing the pilots.

WORLD-CLASS EXPERTISE
Employee satisfaction, well-being, skills, development, remuneration, safety.

CUSTOMERS NOW AND IN THE FUTURE
Understanding of what clients will need in the future, customers benefit from the competitive edge we gain by managing the complete value chain, provide customers with innovative, sustainable and affordable energy solutions.

Stakeholder Engagement

STAKEHOLDER DIALOGUE is important to ensure the success of all our operations and it is thus vital part of the daily work of Group's management and employees. We engage with our many stakeholder groups continuously in a variety of formal and informal settings across the markets where we operate. Examples of engagement cover from day-to-day interaction with our customers and employees to memberships of business and industry associations, community meetings and organizing seminars. Active and open dialogue helps us to live up to our stakeholders' expectations related to our business environment and sustainability matters.

Stakeholder Group	Expectations	Our Engagement Actions
CUSTOMERS • Consumers • Companies • Public entities	• Develop sustainable and safe products, services and solutions that fulfill their needs • Help customers to make sustainable choices • Superior customer service	• New renewable fuel for commercial transport in Norway (RED 95) • Mobile App, which enables secure digital payment, mobile fueling and multiple other benefits displayed in a single App. • Introduced Fuel Pay in Sweden, St1 Mastercard in Norway • Introduced new shop concepts and products
EXTENDED PERSONNEL AND MANAGEMENT • More than 770 employees in Group's and its subsidiaries' offices, terminals and production facilities in Finland, Sweden and Norway • More than 70 employees in associated companies • 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 • A fulfilling and inspiring work place • Open communication and dialogue • Company culture that enhances involvement, professional development and respect • Successful and sustainable business conduct	• Yearly Retail and Sales Kick Off -events • St1 Value Chain engagement • St1 Story day for employees • Employee surveys • Regular performance development and training opportunity reviews • Group Intranet, Nordic and local Town Halls, review sessions
PARTNERS • Distribution chain entrepreneurs and traders • Strategic product and service providers • Business partners • Organizations • Research organizations and universities	• Long-term partnerships • Successful and sustainable business conduct • Mutual development opportunities	• Yearly Retail and Sales Kick Off -events • Meetings, seminars, direct interaction

Stakeholder Group	Expectations	Our Engagement Actions
FINANCIERS • Banks and financial institutions • Investors • Analysts	• To provide timely and consistent data about St1's progress • To highlight significant topics affecting St1's financial performance	• Company releases, direct communication with financiers, presentations, Annual report
MEDIA • Domestic and international media • Social media	• To provide transparent fact-based information • To contribute to general discussion • To be easily approachable and available	• Press releases, company releases, social media posts, web-site, newsletter, regular updates and events, site visits, presentations at seminars, interviews • Immediate response to media requests • Transparent dialogue also on challenging topics
SOCIETY • Local communities • Authorities, decisionmakers and legislators • Academy • Non-governmental organizations, industry associations and cooperation bodies • National Emergence Supply Agency	• To provide market specific and general information on energy to further enhance the basis for decision making • Technological and scientific challenges for research • Local presence • Social responsibility • Job creation	• Forum for Future Energy Policy (Energiapoliittinen tulevaisuusfoorumi), one-to-one meetings, hosting site and company visits, meetings, seminars, round-tables, articles, excursions to St1 sites • Service segment training program • Recruitement channel for service segment • Various university research projects • Access to work life learning for young people • National catastrophy trainings

Involvement in Organizations and Joint Projects

Trade associations and industry platforms

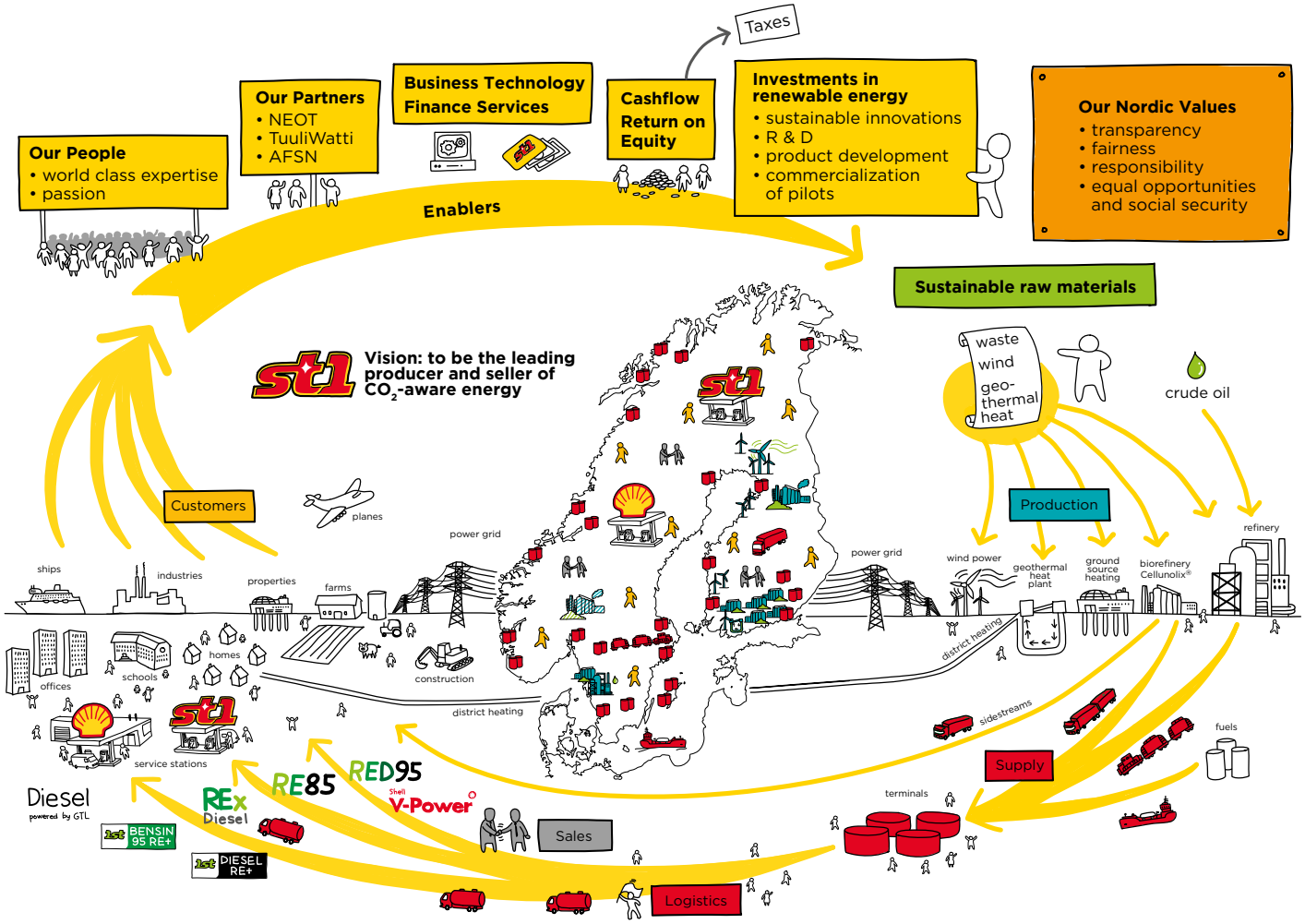
- Leaders of Sustainable Biofuels
- Chemical Industry Federation of Finland
- World Energy Council Finland
- FuelsEurope (previously "Europia" or European Petroleum Industry Association), represent the interests of companies conducting refinery operations in the EU
  - Also consists of Concawe, the oil companies' European association for environment, health, and safety in oil refinining
- Svenska Petroleum och Biodrivmedel Institutet (SPBI)
- Drivkraft Norge
- Lähienergialiitto (Finnish Clean Energy Association)

Sustainability and environmental initiatives

- CLC (Climate Leadership Council), the purpose is to improve the Finnish businesses' and research organizations' competitiveness and ability to respond to climate change and the scarcity of natural resources
- Helsinki Metropolitan Smart & Clean Foundation, collaboration aims at making the metropolitan area a global reference area for intelligent and ecologically sustainable solutions
- Responsible Care, a voluntary initiative by the global chemical industry aimed at supporting sustainable development in the industry
- Sustainable Use of Natural Resources Advisory Board at Technical Research Centre of Finland (VTT)
- Bio4Fuels aims to develop viable technologies that are relevant for the sustainable commercial conversion of biomass feedstocks to biofuels and other products.
- Biodrivstoff 2030 (homepage) (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.)
- ZERO (ZERO is an independent, ideal environmental foundation that believes that climate is the most important environmental issue and is working to drive zero emissions solutions and prevent investments in emissions solutions.)
- Bellona (The Bellona Environmental Foundation is an independent, non-profit foundation that works to solve the world's climate challenges by, among other things, identifying and implementing sustainable climate solutions.)
- Norwea (The Norwegian Wind Energy Association (NORWEA) is the voice of the Norwegian wind and ocean energy industry.
- F3- Fossil Free Future (Coordination program together with Energimyndigheten)
- 2030 sekretariatet(National secretariat for follow up of Government target Fossil Free Vehicle fleet 2030)
- Mekanisterna – Swedish mechanists national organization (Member at lubricant and fuels committee)
- SIS – Swedish Standards Institute. Coordinate standardisation in Sweden and also member of Europe standardization organization CEN.

St1 Value Chain 2018

VALUE CHAIN



St1 value chain video

Raw Materials

OUR VALUE CHAIN BEGINS with the raw materials. We produce and invest in CO_2-aware energy in our home markets in Finland, Sweden, and Norway. Wind power, geothermal heat, ground source heating, biorefineries are therefore our strategic focus areas, as well as oil refining. Still the majority of our raw materials are of fossil origin, our goal is to increase the share of renewable energy sources in our production with our new and enhanced technologies.

The objective of our long-term advanced renewable fuels strategy is to enhance our competitiveness when fulfilling the renewable energy and GHG reduction requirements in our domestic market. We are also looking for new renewable energy sources to power research and development for new CO_2-aware energy solutions.

Crude oil

St1 purchases all the crude oil used in production, we do not own any companies that produce crude oil, nor are we engaged in oil exploration or drilling. Purchasing of crude oil is done in co-operation with our partner NEOT, however the contracts are made directly between St1 and the seller. The crude oil is mainly sourced from the North Sea and only from identifiable sources. During 2018 the purchasing quantities remained the same as the previous year. Global crude oil demand increased approximately 1.5 percent during 2018 driven by the growth In Asia and North America.

The price of crude oil continued to rise from the start of the year until October, and at its peak the price per barrel rose to over 80 USD, contrasted with the price of 65 USD at the beginning of year. Toward the end of the year, the price plumented dramatically ending at 51 USD. Many factors affect the price of crude oil, however the 2018 price developments were largely due to the large supply of US shale oil.

We also sell fuels that our partner NEOT supplies us with from other refineries mainly located in Finland, Denmark, Norway, and Poland. High quality and fit for purpose is emphasized in the selection of fuels from these refineries.

Waste and residue

We are a pioneer in waste and residue-based ethanol production technologies. 100 percent of the feedstock of our advanced ethanol production comes from waste and residue.

We have been building a network of advanced ethanol production since 2007, and today have three types of biorefineries producing advanced ethanol from various kinds of fermentable waste and residue. In 2018, we used 133 000 tons of waste and residue into advanced ethanol, that is ready for use in high blend ethanol fuels or as a bio component in low blends. Thanks to this feedstock, production has no direct or indirect impacts on food security, biodiversity, or land use.

The use of waste and residue into fuel is partly based on the national laws in several Nordic countries, which demand that a certain percentage of any marketed fuel must be produced using bio components. Due to the tightening of these laws, the demand for bio components is growing, the prices are increasing, and they are being imported from further a field. Also the growing trend for circular economy and rational use of resources has resulted in a decreased supply of waste sources. Waste and residue streams are utilized more widely e.g. in biogas production, district heating, and animal feed. At the same time, the suppliers of feedstock are more environmentally aware and want to secure their feedstock to companies, whose operations are sustainable.

Contrary to our other waste-based feedstock materials, there is an ample supply of sawdust. Sawmilling is a stable industry, and the demand for sawdust has not increased. In fact, the demand for sawdust for example at CHP plants has decreased, since the production of CHP has lost profitability due to a decline in electricity prices. This means that the supply of raw material for our Cellunolix® plant in Kajaani, as well the proposed new plants, is secured.

In the increasingly competitive feedstock market, we have moved our focus on improving our production to yield more advanced ethanol from the same amount of feedstock. By using new manufacturing technologies and chemical additives, we have been able to increase our yields substantially.

We are also continuously looking for new potential sustainable raw materials for the production of ethanol both in our own R&D activities and by participating in partnership-funded R&D projects. For example, recycled wood, bark, and waste streams from the chemical forest industry and cassava waste are potential new raw materials for us in the future. As a new field, in 2018 St1 started a pilot project to produce advanced ethanol for transportation using cassava pulp as feedstock. The pilot plant will be operated for a year in several starch factories to test different environments, conditions, and seasonal changes. Read more about biorefining feedstocks in St1 Biorefineries section p. 30 St1's advanced ethanol produced from waste and residues has a uniquely low CO_2 balance; it generates up to 90 percent lower fossil emissions than conventional fossil fuels.

Wind Power

Wind power is a renewable energy form, which decreases the need for the production of electricity with fossil fuels. Compared to other sources of renewable energy in use today, wind power is the most cost-efficient way to produce electricity. Wind is free of charge, and there are almost no limitations to its utilization.

From all sources of renewable energy, wind power has the most potential in the Nordic countries, where the wind conditions are sufficient for building wind power production. Especially the conditions in the arctic areas in northern Norway may in the future offer renewable energy for needs in the Nordic region.

Geothermal Heat

Geothermal heat is a sustainable, low carbon, energy efficient, and chimneyless form of energy and there lies great potential for the energy production deep in the bedrock. Several countries, such as U.S, Indonesia, Philippines, N.Z, Turkey, Germany, France, and Iceland, are already successfully using geothermal energy in heat and electricity production.

We are active in two types of geothermal energy production. In our ground source heatpump solutions, the production wells are typically drilled to a depth of 250–350 mtrs. In larger projects, the wells have extend down to 600 meter, where the temperature difference between the input and output circulating fluid temperature gives more eco efficiency and the heatwells field manage lesser amount of wells, hence with smaller footprint. In the development of a deep geothermal heat plant in Espoo, the drilling has extended over 6 kilometers down into the bedrock, where the temperatures reach 120 degrees. This temperature enables the circulating water to be used as such in district heating network without the need to utilize heatpump in the process, but simply use the transferred heat from the bedrock as such.

CASE

Targets and tools are not in balance – the Role of Palm Oil?

THE NORDICS HAVE HIGH MANDATES FOR BIOFUELS. By 2030, 30% of fuels sold in Finland must be biofuels, and it has been proposed that the Norwegian target for 2030 should be 40%. In 2017, some 40% of the global HVO supply went to the Nordics, and approximately half of that volume came from palm or PFAD.

Certified and sustainable palm oil is one of many feedstocks used in biofuels sold by St1. Biofuels continues to be the only industry having binding legislation to ensure the sustainability of palm oil.

The EU sustainability criteria requires that feedstock can be traced back to the point of origin. This ensures that production of feedstocks did not take place on land that has been converted for biofuel purposes after 2008, i.e. does not contribute to deforestation, and that biofuels fulfil the minimum greenhouse gas reductions

All biofuels sold by St1 are sourced by our associated supply company NEOT (North European Oil Trade). NEOT sources renewable fuels only from suppliers that comply with official EU sustainability criteria; either approved EU voluntary schemes, such as International Sustainability and Carbon Certification (ISCC) or nationally accepted sustainability schemes. Sustainability schemes verify compliance with the EU's biofuels sustainability criteria and they include a third-party audit process. More information about ISCC can be found here.

The great majority of the palm oil based renewable fuel sold by St1 comes sources where the supply chain information is publicly available e.g. in online traceability tool.

Based on known and EU RED2 compliant feedstocks, the potential to increase HVO production from the current 4 mt only by some 10 mt/a by 2030. The estimated demand for HVO only in the Nordic countries would be in 2030 ca. 4 – 5 mt. So, there is a clear imbalance between the Nordic biofuel mandates and the outlook for HVO production capacity with accepted feedstocks. With further restriction on the feedstock pool, there are obvious challenges for meeting the Nordic biofuels mandates.

The way St1 sees it, the solution to this challenge consists of several elements. The first of these is the implementation of a sectoral GHG-reduction obligations, as has been implemented in Sweden. In Sweden, this means that all fuel suppliers will need to reduce greenhouse gas emissions from gasoline and diesel with 40 percent by 2030. A GHG-reduction obligation does not bind itself to a specific volume, but rather targets a percentage-based decrease of emissions.

The second element are flexibility mechanisms between sectors. It should be possible to reduce emissions in another sector and count it against the reduction obligation.

For this idea to work, there should exist a Carbon Market where Carbon Credits created e.g. by carbon sequestration through afforestation or through a technical solution can be bought and sold to meet GHG-reduction obligations. The key element is that a Carbon Credit can only be created against an actual, measured and verified reduction or sequestration of CO_2. And once purchased, a Carbon Credit would be retired. This would lead to actual reductions of atmospheric CO_2.

When designing policy on biofuels, one should always have in mind the relationship between feedstock availability and mandates. If there is a discrepancy, one should think seriously about how to increase the available sustainable feedstock supply, and how to ensure that the highest amount of emissions is cut from the transport sector. We believe our briefly explained three-step solution is a very good alternative for how to reduce emissions, not only from the transport sector, but also from other GHG-emitting sectors.

Production

Gothenburg refinery

The majority of the fuels we sell come from our own oil refinery in Gothenburg, which has an annual refining capacity of approximately 30 million barrels of crude oil. In 2018, the refinery output was 28.7 million barrels. The utilization rate, which describes the utilization of all different units in the refinery, was as high as 90.4 percent. The operations have continued at an excellent level in terms of safety and environmental emissions.

Our fuels contain one or several bio components, that are mainly sourced from the global market, with the objective to maximize the use of waste and residue-based biofuels. The blends of fossil and bio components in our products vary by operating country, depending on national regulations and demand factors. We constantly aim to develop and bring to the market new products, that enable better fuel economy and are more environmentally friendly.

The proportion of renewable components used at the Gothenburg refinery in 2018 was 10.2 percent (4562200 m^3 fossil /466493 m^3 renewable). In recent years, the share of renewable components has increased by the introduction of larger volumes of components such as ETBE and HVO-naphtha. Additional renewable components are as well added to the fuels at the oil depots.

The procurement and use of raw materials of the Gothenburg refinery

Production mainly for the Nordic market, with some volumes for export as well

2018

Crude oil of North Sea origin: ..... 4 432 700 m^3 out of 4 562 200 m^3in total

Bio blending as part of the refinery production:

HVO: ..... 217 199 m^3
FAME: ..... 110 710 m^3
Ethanol: ..... 100 393 m^3
ETBE: ..... 21 728 m^3
HVO-Naphtha: ..... 16 463 m^3

The refinery's products include petrol, sulphur-free MK-1 diesel, and other middle distillates, as well as, liquid gas – most of these products are sold through our own network in Sweden, Finland, and Norway. All the products comply with the applicable environmental requirements.

St1 refinery is very energy efficient with a high degree of heat recovery. Nearly a third of the heat generated by the production equipment is recycled to Gothenburg's district heating network to heat almost 70 000 homes in the city area.

St1 Refinery was the first refinery in Europe to acquire ISO 14001 environmental management certification and was registered according to the EMAS (Eco-Management and Audit Scheme) in 1997. It also has in place a HSE Management System to minimize risk of incidents. External audits of the environmental management system are carried out annually by accredited bodies. Internal audits are carried out by trained St1 personnel and cover the entire management system for health, safety, and environment. The audits are conducted so that the entire system is reviewed within a three-year period, with specially selected areas are inspected every year.

The volume of refined crude oil at the Gothenburg refinery is expected to remain stable in the near future, however the ratio of renewable raw material is expected to continue to increase, as we plan to start our own production of renewable diesel in next few years.

Renewable energy production

Our vision is to be the leading producer and seller of CO_2-aware energy. We create innovations and new ways of working in order to move from a fossil energy system to a renewable energy system.

We have identified three focus areas in our renewable business development:

1. Biorefining renewable fuels, especially focusing on advanced waste-based ethanol and renewable diesel
2 Geothermal heat, both ground source heating and deep heat
3. Industrial wind power to produce electricity

St1 Biorefinery solutions

The objective of our long-term advanced renewable fuels strategy is to competitively fulfil the 2030 regulations planned in our domestic market in Finland, Sweden, and Norway. In Sweden the industry will face a challenging GHG reduction obligation, whilst Finland and Norway it must meet tightening biofuels mandates.

St1's advanced ethanol produced from waste and residue has a uniquely low CO_2 balance; it generates up to 90 percent less fossil CO_2 emissions than conventional fossil fuels. Life cycle emissions have been cut down by using waste and process residue as feedstock. Renewable energy is used in production and energy efficiency has been one of the top priorities in developing our technologies.

St1's *Etanolix®* solution produces advanced ethanol from fermentable waste and process residue, which is rich in starch and sugar. Currently the feedstock includes bakery waste and process residue, e.g. dough, brewery waste, and residue such as excess yeast and confectionery production waste. Also packaged feedstock, such as surplus bread can be utilized. The feedstock base used in ethanol production also produces animal feed as a co-product. There is also one Etanolix® biorefinery integrated into our Gothenburg refinery.

St1's *Bionolix®* solution produces advanced ethanol biofuel from municipal and commercial biowaste. Pre-handling of packaged biowaste enables more efficient recycling. Thus, the amount of biodegradable waste ending up in landfills can be minimized. The Bionolix® biorefinery meets the criteria set by EU legislation for the treatment of out-of-date food. Instead of mere energy recovery, biowaste can be treated as feedstock for advanced ethanol production. The stillage residue from the process can be used in biogas production. Biogas can be utilized for local electricity and district heating or other local energy needs. The biorefining process also results in organic soil improvers and fertilizers as co-products.

Our *Cellunolix®* solution enables the use of forest industry side products, like saw dust and chips, in advanced ethanol production. We have developed a technology to utilize saw dust from soft wood, such as pine and spruce. The Cellunolix® produces valuable co-products such as lignin, vinasse, furfural and turpentine. Technical difficulties relating to the pre-treatment module of the Kajaani plant has led to a postponement of the up-scaling and construction of a full-size biorefinery.

***Etanolix*® biorefineries:**

Lahti, Finland
- Integrated with the Oy Hartwall Ab brewery
- Production capacity of 1.25 Ml/a advanced ethanol
- Feedstock: brewery, bakery waste, and process residue packed and unpacked bread waste
- Co-products: liquid animal feed

Hamina, Finland
- Integrated with a dehydration plant
- Production capacity of 1 Ml/a advanced ethanol
- Feedstock: waste and process residue from brewery, bakery and confectionery industries
- Co-products: liquid animal feed

Vantaa, Finland
- Stand alone plant
- Production capacity of 1.25 Ml/a advanced ethanol
- Feedstock: bakery waste and process residue, packed and unpacked bread waste
- Co-products: liquid animal feed

Jokioinen, Finland
- Integrated with the DuPont enzyme production facilities
- Production capacity of 9 Ml/a advanced ethanol
- Feedstock: process residue of enzyme production, waste sugar
- Co-products: liquid animal feed

Gothenburg, Sweden
- Integrated with St1 Oil Refinery
- Production capacity of 5 Ml/a advanced ethanol
- Feedstock: bakery industry and retail waste, packed and unpacked
- Co-products: liquid animal feed, feedstock for biogas production

***Bionolix*® biorefinery: Hämeenlinna, Finland**
- Integrated with a biogas plant
- Production capacity of 1 Ml/a advanced ethanol
- Feedstock: municipal biowaste collected by Kiertokapula Oy, biowaste from retail and industry, packed and unpacked
- Co-products: renewable electricity, heat, organic soil conditioner and liquid fertilizer

***Cellunolix*® biorefinery: Demonstration plant in Kajaani, Finland**
- 2018 development of the plant's pre-treatment phase continued
- Production capacity of 10 Ml/a advanced ethanol
- Feedstock: local sawdust
- Co-products: currently, solid and liquid boiler fuels; in the future: renewable products for various industries

Dehydration plant Hamina: Finland
- Production capacity of 88 Ml/a of 99.8 percent ethanol
- Dehydration of hydrous ethanol produced in St1 biorefineries in Finland and from third party producers
- Dehydration in Gothenburg is done on-site

Renewable diesel production in Gothenburg
- St1's aim is to start production of renewable diesel in the early 2020's. As the first step, the construction work of the new hydrogen unit in Gothenburg is in the final stages. The investments target to enable a 200 000 tons annual capacity of renewable diesel production.

Wind Power

Our associated company company TuuliWatti is responsible for our wind power production. TuuliWatti has thirteen wind farms with 131 wind power plants in different parts of Finland. The wind power capacity is close to 500 MW. In 2018 TuuliWatti produced 1.26 TWh, i.e. approximately 21 percent of the wind power produced in Finland. The annual production equals the total electricity used on lighting yearly in Finland. This reduces the need for imported energy by approximately 40 million EUR and the costs of international emissions trading with approximately 4 million EUR. Our share of TuuliWatti's production of renewable electricity exceeds the amount needed to compensate the fossil emissions of the energy we need for the functions of our Group.

Tuuliwatti's aim is to expand its production into neighbouring countries. According the new Nordic strategy, the company will expand its operations to the Nord-Pool electricity market in Sweden and Norway. During 2018, Tuuliwatti refined the business plans and models, as well as, business goals concerning the expansion. The aim is to utilize the expertise gained in the development, financing, construction, and operation of wind power projects and to build a geographically decentralized and cost-effective production.

During 2018, Tuuliwatti also made a decision to invest in the Viinamäki wind park in the municipality of Ii, in northern Finland. The project comprises of five 4,2 MW power plants,

which utilize the latest technology. The project is market-driven and realized without government subsidies, the site is estimated to be completed during autumn 2019.

Nordic countries have supported the development of renewable energy production, in order to achieve their energy and climate goals. During 2018, Tuuliwatti took part in a bidding competition for the funding of renewable energies, organized by the Finnish Energy Authority. The Energy Authority's 12-year funding is intended to support the increasing of the sustainable energy capacity by up to 1,4 terawatt-hours. All of the bids made involved wind energy. The result of the bidding competition was announced in March 2019 and TuuliWatti's tender was among the most cost-competitive ones and the windfarm designed for Sarvisuo in the municipality of Simo by TuuliWatti is one of the winners.

The production of wind power is gradually reaching the cost level needed for being profitable without public subsidies. The increased cost-efficiency has been achieved by advances in production technology. The diameter of the wind turbines has multiplied during the past years, and the turbine towers have become taller. It is estimated that the decrease in production costs will continue.

"The potential of geothermal energy is significant and can be a major contributor to convert heat and electricity production to chimneyless, sustainable production."

Geothermal Heat

Ground source heatpump

In ground source heatpump segment, our subsidiary St1 Lähienergia Oy (St1 Local Energy) sells, drills, installs, and offers services for ground source heat pump solutions for real estates, such as larger housing properties and public buildings. The project will also be eligible for funding via Lähienergia leasing finance. Lähienergia has built over 200 plants, which utilize ground source heating to replace fossil energy such as coal and oil.

Deep geothermal heat plant project

In 2016, we made the decision to invest in a deep geothermal heat plant in Otaniemi, Espoo. The goal is to build Finland's first industrial scale deep geothermal heat plant by using the natural heat of the bedrock existing in more than 6 kilometers below ground. Energy company Fortum will act as a partner and distribute the energy for the city of Espoo's district heating network.

Being the first of the kind in many ways, not just in Finland but also globally, the challenge is Finland's hard bedrock which requires specially designed and manufactured drilling tools and technologies. The Project started in 2016, and in early 2017 it was halted for a few months to develop and test drilling tool and technology. During 2018, we executed successfully the water stimulation phase followed by 3D water flow analysis to determine the precise location where to drill the final route to the second well. The target is to create an optimal waterflow between the two boreholes to enable the best thermal outtake of the underground heat exchanger. As expected, the stimulation caused several controlled micro-earthquakes, of which some were heard on the groundlevel. The stimulation was successfully conducted in a controlled manner according to and within the limitations approved by the authorities. In 2019 1'st half the pumping station will be build followed by final drilling of the OTN2 well, now in 3,3 km depth, to the production depth extending to over 6 km. The target is to bring the plant into production mid 2020.

Geothermal energy has been utilized globally for several years. The potential is significant and can be a major contributor to convert heat and electricity production to chimneyless, sustainable production. The Otaniemi pilot project is in many ways the-first-of-its-kind particularly in terms of drilling and stimulation technology in hard Nordic bedrock as well as offering seismological knowhow how similar kind of projects can be executed in a controlled manner. The goal of the Otaniemi project is to define financially feasible solutions for all phases of the deep geothermal plants so that they can be multiplied and scaled to replace fossil energy, first in the Nordics but also globally.

CASE

Advanced ethanol from cassava starch waste for transportation

ST1 IS PILOTING ITS OWN TECHNOLOGY to produce advanced ethanol using cassava starch mill waste as feedstock. Last year, St1 completed the construction of Etanolix® pilot unit at Ubon Bio Ethanol Ltd's starch and ethanol plant site in Ubon Ratchathani, Thailand. During the one-year pilot, seasonal changes are tested in several local starch factories to finalize an investment proposal for a full-scale ethanol production plant that turns underutilized cassava starch mill waste into sustainable ethanol.

Etanolix® piloting will enable ethanol production from the by-products of starch production, i.e. wet pulp. With more than 100 starch production plants in Thailand, there are significant volumes of feedstock. The amount of cassava waste generated by Thailand's largest starch production plants would enable producing 10–30 million liters of ethanol per year. The potential is up to 20 Etanolix® plants in Thailand.

Fibrous consistency makes cassava waste a challenging feedstock for ethanol production. St1's experiences of using the Cellunolix® technology to produce ethanol from saw dust has helped to solve the challenges of cassava waste. The construction work has been carried out in good operation with local partners, utilizing their valuable know-how. St1 has commissioned a social and environmental impact assessment (SEIA) scoping study to be able to conduct the SEIA assessment before the investment decision.

St1's cassava Etanolix® piloting is financially supported through Finnpartnership Business Partnership program funded by the Ministry for Foreign Affairs. St1 manufactures ethanol from waste and residues from the food industry, household and commercial biowaste, and sawdust. The waste from cassava starch production has proven to be one of the best raw material sources for St1 technology.

Supply & Logistics

THROUGHOUT OUR SUPPLY AND LOGISTICS chains, we co-operate closely with our associated company North European Oil Trade Group (NEOT). Co-owned by us and the Finnish S Group, NEOT is a significant fuel procurement company in the Baltic Sea area. The purpose of NEOT's operations is to enable its owners to prosper by providing them with competitive and sustainable fuel solutions in a manner that secures the relative competitive advantage of the customer chains in the market. More information about NEOT's operations can be found from NEOT's Sustainability Report 2018 available here.

Supply

NEOT acquires fuels from the global trading markets and handles their storing and transport from refineries to terminals. Our Gothenburg refinery is the most important source of supply for NEOT, but the company also sources oil products from other refineries in the Baltic Sea region, mainly from Finland, Norway, Denmark and Poland. NEOT supplies St1 Gothenburg refinery with biofuels that are increasingly used in fuel blends. NEOT sources renewable fuels globally from suppliers that comply with official EU sustainability criteria, such as ISCC (International Sustainability & Carbon Certification), or nationally accepted sustainability schemes. NEOT sources bio components from the world market and buys 100% of our waste and residue-based advanced ethanol production.

The supply chain of renewable fuels supplied by NEOT complies with sustainability scheme that follows the principles of the European Directive on Renewable Energy. The scheme has been approved as a Finnish national sustainability scheme and as an ISCC trading scheme.

Logistics

Together with NEOT, we have a comprehensive logistics chain in all of our operating countries consisting of terminals for storing the products and a wide transport network. Quality, safety, and environmental aspects are taken into careful consideration throughout the logistics chain.

The terminals are located in six cities in Finland, eight in Sweden, and eleven in Norway. The transport network includes shipping as well as road and rail transports. The biofuel

components from producers to refineries, as well as, the end products and clean petroleum products from the refineries to terminals are delivered by sea mainly with time-charter vessels.

The main activities focus on the Baltic Sea area. The road transport is taken care of by a co-operation partner network. In Finland, NEOT is responsible for the logistics chain from the refinery all the way to the fuel stations and hundreds of thousands of homes and companies. In Sweden and Norway other transportation operators are responsible for deliveries to St1 stations and direct sales customers.

Railways are used for the transportation of motor fuels between Hamina seaport terminal and Varkaus inland terminal in Finland, using trains leased from the government owned railway company VR. In Sweden products are delivered by train from Gothenburg to Karlstad and Jönköping, and from Gävle to Arlanda Airport.

EU sustainability criteria ensures that:

Biofuel production did not take place on land with high biodiversity

Land with high carbon stock was not converted for biofuel production

Biofuel production leads to a minimum of 50% greenhouse gas (GHG) emission savings, 60% if plant has been started after 2015

Sales & Customers

WE ARE COMMITTED TO continuously improving our customers' experience by offering high quality Premium fuels, products, and services. Our customers are the top of our value chain. More than 600 000 daily customers visit our station network, in addition to our direct sales customers; this sets a high demand for us to understand and fulfil our customers' needs now and in the future.

According to our customers we have a very positive brand image. St1 is seen as a pioneer, particularly with its activities to combat climate change have gained wide interest. St1's responsibility and reliability as a partner is increasingly highlighted as a significant positive factor among our corporate customers. St1 conducts a quantitative brand image survey of its various brands twice a year in Finland. The Net Promoter Score (NPS) received by St1 were the second highest compared to its competition. St1 is perceived as an affordable petrol station, with branches located alongside convenient routes. Our Shell-branded network was given high points for its affordability and high quality of service.

Our customers benefit from the competitive edge we have created, by managing the complete value chain from raw materials and energy sources to service at the pump. In accordance with St1's vision, our goal is to keep introducing more renewable energy solutions to the market. For conventional vehicles we offer more environmentally friendly fuels with better fuel economy and performance.

All St1 biofuels meet these criteria:

- Fulfil EU and National sustainability criteria set by the law
- Are covered by officially approved sustainability scheme(s):
  - ISCC EU or other EU Voluntary Scheme
  - National sustainability schemes (Finland, Sweden, Norway)
- Fulfil the minimum GHG reduction requirement of 50 percent set by the law
- Are produced with traceable sources

Retail station operations

Our retail business has its foundation in a strong nationwide petrol station network that comprises approximately 1300 St1 and Shell petrol stations in Finland, Sweden, and Norway. The network serves the different needs of hundreds of thousands of people on the go. The Retail network consists of unmanned stations and service stations with convenience stores, restaurants, and car washes, which fulfil customer needs; from just filling up the car to having break and enjoying high quality food.

We have continued the development of the full service convenience store concept in all our operating countries. In Finland we launched the 'HelmiSimpukka Express' store concept in 2018. The cooperation agreement with Reitan Group was concluded and as a result, St1 took over the 104 convenience stores in Sweden, where the new Välkommen in' store concept was launched and the 87 petrol stations, being managed St1 in Norway, were returned to Reitan Group's management. The development of our other convenience stores in Norway has continued successfully.

Forecourt attendance, which is provided at around 50 stations in Finland, is one of the factors differentiating us from our competition and its annual use has risen to 500 000. Also the demand for our Premium products has increased at a good rate. The St1 mobile refueling concept, already in use in Finland, was extended to Sweden and Norway. Its popularity is visible in an increased number of customers. Also the St1 Mastercard is now available across all countries.

The extent of the fueling station network, and the price, quality, and safety of our products and services are major factors affecting which fueling station our customers prefer. Increasingly the environmental impact of products is driving customer behavior, although the dominant factor remains to be the price of products. In fact, 2018 saw fierce price competition in the Finnish and Norwegian markets, which resulted in weaker profitability at fueling stations. In Sweden, the market remained stable. In July 2018, Sweden introduced a new mandate on fuel distributors to reduce GHG emissions of the fuel mix supplied. The reduction targets increase to 21 percent and 4.2 percent for diesel and gasoline, respectively, by 2020.

Direct sales

Along with our retail operations, we are engaged in direct sales of fuels. We provide private and corporate customers with a wide range of products and services. The main products sold are Premium class heating oils, middle distillates for machinery, and marine fuels. Direct sales focus areas also include a wide range of enhanced payment cards, methods and services, both for fleet customers and commercial road transportation customers, as well as for consumers.

We have invested heavily into services for the offshore industry, cruise liners and fishing industry. In December 2018, we completed the acquisition of Norwegian Statoil Fuel and Retail Marine AS, a company that delivers fuel to Marine sector along the Norwegian coast. The company was named St1 Norge Marine AS.

Business Technology and Finance Services

The Group's Enterprise Resource Planning system was instated in all the countries during last year, and we will continue to improve upon it's efficiency during 2019. Additionally, the payment application designed for the Norwegian market was successfully launched. In the future, the Group's focus will be on designing comprehensive and cross-business solutions and developing their customers' service systems.

St1 Finance Oy provides payment services with the license issued by the Financial Supervisory Authority. St1 strives to be a responsible creditor and therefore assesses the credit status of customers with diligence and efficiency. The customer experience is an important part of the service, and is therefore constantly being developed and improved. Protecting customer data security is another priority, during 2018 St1 Finance ensured that its practices comply with the GDPR-regulations, which came into force last May. Payments and their security continue to be an increasingly regulated industry.

The St1 Mastercard was launched in Finland and Sweden in 2017, and in Norway in 2018. The amount of issued credit cards is constantly growing. The St1 Mastercard allows the use of the St1 Way mobile application and Apple Pay. The St1 Way app, downloaded onto a smart phone, facilitates the introduction of mobile payment of fueling and other useful features, which is in use for close to 200 000 customers in the three countries.

CASE

A responsible store and car wash concept of the future

IN OCTOBER 2018, St1 launched a new store and car wash chain for people on the go in Sweden. During the six months following the launch, the new concept has been introduced in the 104 filling stations operated under the Shell brand in Sweden. The previously partner-driven stores are now running on their own and have been brought together under the theme of "Välkommen in".

The aim has been to diversify the market with a store and car wash concept that gives the best customer experience and most value for people on the go. The vision is to create the most enjoyable and carefree break. The focus is also in the future: St1 believes that customer satisfaction and sustainability go hand in hand.

Food and beverage sector is a growing market among people on the road. However, the industry does not fully respond to customers' needs. Both quality and variety often leave a lot to be desired for. St1 wants to ensure both in a way that also protects the environment. The positive feedback from customers indicates that the change has been welcome.

For many, a good break is all about coffee. In cooperation with Johan & Nyström roastery, the new chain has produced its own coffee mixture, made only of carefully selected beans. The coffee has full traceability from plant to cup. The selection follows seasons and is organic and Fairtrade branded.

St1 wants to offer its customers a unique quality coffee that cannot be obtained anywhere else on Sweden's roads – but it is just one step on the path to an even stronger focus on environmental thinking. The ambition is to provide best value and push the chain forward so the customers have a lot to expect in the future. Both responsibility and delight consist of small acts. Even a sip of coffee matters.

CASE

The busiest electric vehicle charging station

THE SHELL STATION AT MORTENSRUD, located south of Oslo, is not just another filling station. Every third passenger car stopping there chooses electric energy instead of petrol or diesel. The station has ten charging points, and every day more than 220 drivers stop by to charge their electric vehicles there.

Shell Mortensrud is the most used EV charging site for passenger cars in Norway, the country with the highest rate of electric vehicle ownership in the world. Therefore, it is probably not far-fetched to call it the busiest electric vehicle charging station in the world by number of charging points.

As an electric charge takes about 20–30 minutes, St1 has also invested in the services and design of the station. Enjoying a cup of coffee and fresh bakery goods in a cozy environment can make charging a relaxing activity.

The electric vehicles are particularly good at reducing emissions that contribute to smog. In Oslo, the positive impact for the local environment is already observable: preliminary measurements indicate a clear improvement in air quality. The change has not happened by itself. Norway has subsidized the owners of electric vehicles with tax reliefs, reduced road toll fees and free parking. With a strong support from private sector, Norway has set an encouraging example for other countries. One in three new cars sold in Norway is now battery electric.

Energy companies like St1 also play an important role in the expansion of electric cars though improving the charging infrastructure. At the same time, St1 also invests in the development of environmentally friendly biofuels. Together they can change the way of moving.

People

ST1'S GOAL IS to be a highly sought after employer that offers employees meaningful and motivating work, positive working environments, and the opportunity to develop oneself and the company. We are solving global energy challenges, by taking steps to move ourselves from a fossil world into a renewable world. Our traditional oil business generates cash flow enabling us to develop and invest is new CO_2-aware energy solutions. Thus, our employees working in the oil sector are strategy enablers, and our employees working in renewable energy are strategy executors – both equally important roles to reach our goals.

As we are currently working to consolidate our business practices and systems to become a truly Nordic operator, we are also unifying the practices, processes and measurements related to personnel. We are building a strong Nordic organization, which has a common organizational culture, but which also takes into account local issues. During 2018, we completed a sizable organizational restructuring, during which we gave up some country-specific organizational structures to enable growth.

The need for competence development and training of our employees is identified through annual performance and career development reviews and daily managerial work. In 2018, 98 percent of our employees participated in performance and career development reviews.

During 2018 we began using a unified bonus model across the St1, which takes into account Group ROE, cross-national, local as well as personal goals as performance criteria. In addition, we began the Culture for Growth development initiative to create a desired corporate culture to ensure, e.g. appropriate qualifications and quality managerial skills. A unified employment engagement survey will replace the various country-specific surveys by autumn 2019.

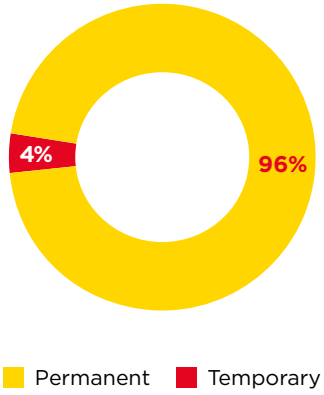
Well-being and safety at work

Our long employment relationships signify that St1 is a working community that employees enjoy being a part of. Maintaining well-being at work 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 actively support their own initiatives to that end. Our employees also have access to comprehensive occupational health services. In 2018, the absence rate among our employees remained low at 3.3 percent (absence hours per average working hours).

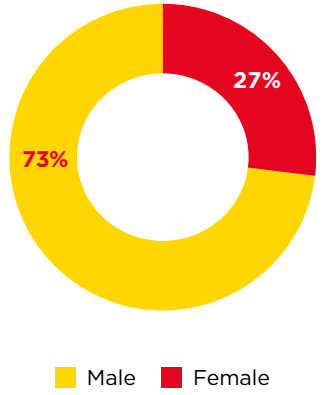
Our operations are planned with a view of maximizing safety and we take a proactive approach to preventing accidents at work. In 2018, the incident and accident rates remained similarly low in all of our operating countries, and there were no work-related fatalities. We review all accidents and dangerous occurrences closely in order to avoid them in the future. We have zero tolerance for harassment of any kind.

"Our employees working in the oil sector are strategy enablers, and our employees working in renewable energy are strategy executors – both equally important roles to reach our goals."

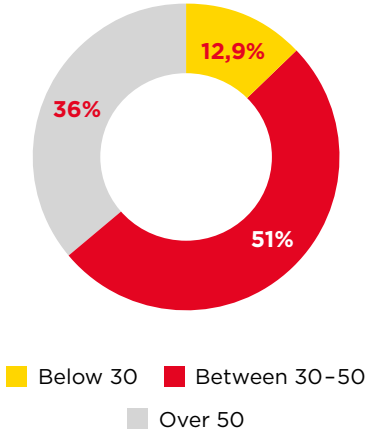
Employees by Contract



Employees by Gender



Breakdown of employees by gender



Occupational Health and Safety Results

Number of lost-time injuries	**6**
Lost time injuries frequency	**5.3**
Work-related fatalities	**0**
Absence rate, %	**3.3**

CASE

Knowing the story links vision to work

AT ST1, EMPLOYEES ARE SEEN as a crucial link in realizing the company's vision of being the leading producer and seller of CO_2-aware energy. Understanding the full value chain from raw materials to consumers is central, not only to the company's strategy, but in allowing employees to connect to the company's story.

Every person has a unique perspective that deserves to be heard. That is why St1 started looking for a creative way to allow employees to connect with the vision and to put their own St1 stories into words.

The aim of visualizing the St1 story was to find a way to express the diversity of the company's over 770 employees. An idea of a story card deck started to develop. Cards would make it possible for each person to put together their story. The card deck's box has a picture of a mirror that reflects the storyteller, St1 employees who make the story.

St1 Sweden was the first one to try the new method in November of 2018. All the employees gathered together to spend an afternoon working on St1's story. Each employee got a deck of cards with pictures and facts that all have a place in the value chain and in St1's story. From company culture to key business areas, and from founder Mika Anttonen to a refinery plant, the cards visualize both abstract and concrete aspects of St1's vision and work.

Each employee could pick cards that best told their own St1 story. They then used the cards to practice different scenarios. For example, employees were asked to use the cards to introduce St1 to a potential customer or a hypothetical new employee.

Feedback from the employees has been very positive, and the process will continue in other countries. *"Talking about our story this way makes everyone take ownership and connect to their own St1 stories. When our employees understand what we are all about as a company, it allows them to feel proud about their work."* Comments HR manager Maria Zellén.

Partners

NEOT Group

North European Oil Trade Group (NEOT) is significant independent fuel supply and distribution company in the Baltic Sea area. NEOT acquires fuels from the global trading markets and handles the fuels' storing and transport from the refineries to terminals. Transportation of fuels to stations and direct customers is done by NEOT in Finland and by St1 in Sweden and Norway. NEOT provides approximately 7 billion liters of fuels annually to Nordic service station chains. In Finland, NEOT delivers fuels to ABC, St1 and Shell stations; in Sweden and Norway it delivers fuels to St1 and Shell stations. NEOT also delivers fuel oils to hundreds of thousands of homes and companies, as well as, fuels for sea vessels and the aviation industry. North European Oil Trade is owned by S Group (51%) and St1 Nordic (49%). More information about NEOT's operations can be found from NEOT's Sustainability Report 2018 available here.

TuuliWatti Oy

Wind power company TuuliWatti is owned in equal parts by St1 and S-Voima Oy. The company aims to offer its owners with cost efficient wind power. TuuliWatti operates in the business of industrial scale project development of wind farms, construction and wind power production. By the end of 2018 TuuliWatti Oy operated 131 wind power plants, with a total of almost 500 MW of wind power capacity and an electricity production of 1.26 TWh, i.e. approximately 21 percent of wind power produced in Finland. Until now, the company has operated only in Finland, but has an aim is to gain a foothold in other Nordic countries.

Aviation Fueling Services Norway As

Owned in equal parts by St1 Nordic and Shell Exploration and Production Holdings B.V. AFSN is a provider of aviation Fueling at Norwegian airports. AFSN is present at 11 airports in Norway serving both Norwegian and international customers, ranging from big international airline companies to smaller local companies and private owners.

Investments in the Future

WE ARE SOLVING GLOBAL ENERGY CHALLENGES by taking steps to move ourselves from a fossil world into a renewable world. Our passion for replacing fossil fuels powers our research and development of new, sustainable and innovative CO_2 -aware energy solutions.

New raw materials

St1's research and development laboratory is testing and screening new potential raw materials to be used as feedstock in biorefining. The research is focused on waste-based feedstock, the main feasibility criteria being the availability and cost-efficiency of the raw material and the sustainability of the biorefining process. According to EU regulations, advanced bioethanol can be produced from limited variety of feedstock outside the food chain. Especially in the Nordic countries there are plenty of non-food materials available – such as sawdust and forest industry residue.

St1 is also looking at Thailand, where there is great potential in utilizing the waste from cassava starch production. Our pilot tests in the laboratory have discovered that waste from cassava starch production is one of the best feedstock sources for our *Etanolix*® technology.

St1 has ongoing research program to develop our own enzyme for cellulosic ethanol production. Enzyme use cost is one of the major cost components in cellulosic ethanol production. Our aim is to set up our own onsite enzyme production facility in the next *Cellunolix*® biorefinery investment.

Production optimization

St1 scientists are working closely together with process engineers and business developers to realize future biorefineries. New processes are first studied in a bench scale laboratory at very small scales, until they are ready to be transferred to the process engineers for the design of industrial scale plants.

St1's biorefineries also refine many co-products from the advanced ethanol production. These are important to the overall cost efficiency of the process. For example, one co-product of our St1 *Cellunolix*® process is lignin – a residue of the enzyme hydrolysis

step, which can be used to produce biocrude and co-fed into the traditional oil refinery for renewable diesel production. Other valuable co-products are turpentine and furfural. As our production volumes increase, we are researching higher-added-value applications of these co-products e.g. in the steel, concrete, fertilizer or plastics industries. Obtaining additional income from co-products is important for us to secure the profitability of biorefining.

Cellunolix® biorefinery concept optimization and construction

We continue to develop new advanced ethanol production technologies with a strong focus on ligno-cellulosic feedstock. The demonstration plant, built in Kajaani in 2017, is the first of its kind in the world to produce advanced ethanol from soft wood sawdust. The demonstration plant is facing technical challenges relating to the pre-treatment module and we are working on the solution with our partners. St1 has prepared various locations in the Nordics as potential candidates for a larger Cellunolix® biorefinery with the annual capacity of 50 million liters. The final decisions will be made when the concept is finalized, based on business case after the success in demonstration in Kajaani.

Production of advanced ethanol from cassava waste

In 2017, we launched a pilot project for the production of bioethanol from cassava starch waste, with the aim of setting up a joint venture for ethanol production in Thailand. The amount of cassava waste generated by Thailand's largest starch production plants is great enough to supply 20 units producing 40 million liters of ethanol per year. The pilot plant was finished in 2018 and will be operated for a year in several starch factories to test different environments, conditions, and seasonal changes. The pilot phase is essential to finalize the concept for a full-scale ethanol production plant using cassava pulp into an investment proposal.

Renewable diesel production

In 2017, a decision was made to invest in a new hydrogen manufacturing unit to be built in the Gothenburg refinery. This is the first step in the series of planned investments, which will enable the refinery to start the production of renewable diesel in the early 2020's. The target is to produce 200 000 tons of renewable diesel annually.

Renewable fuels from tall oil

In 2018 we and the forest products company SCA formed a partnership to develop large-scale production of renewable fuels from tall oil. The planned production site will be our refinery in Gothenburg. The aim is to construct a new facility to produce advanced renewable fuels from tall oil with a capacity of 100 000 tons per annum. Tall oil is a residual product from the production of kraft pulp in SCA's mills Östrand, Obbola and Munksund. SCA is presently expanding its kraft pulp mill Östrand and as a result the production of tall oil from the mill will increase by more than 100 per cent. Between the two partners, the parties constitute the full value-chain from the raw material to the refining process, distribution and sale of the renewable fuel to the customers.

Our passion for replacing fossil fuels powers our research and development of new, sustainable and innovative CO_2 -aware energy solutions."

Wind energy

We are developing wind energy solutions with our associated companies Tuuliwatti Oy and Grenselandet AS, where St1 is a minority shareholder. Tuuliwatti owns several wind power plants in Finland and is planning to expand its operations to the Nord-Pool power market area in Sweden and Norway. Grenselandet AS is aiming to develop a wind park project in the Finnmark area of northern Norway. At the first stage, Grenselandet will focus on the development work and the environmental impact assessment. Based on the outcome of this process further steps will be determined. The wind farm development work consists of two planning areas with a total production capacity of 800 MW.

The Finnmark area bordering Finland is considered one of the best in Norway in terms of wind conditions. The location would also enable investigation of the possibility of connecting the farms to both the Norwegian and Finnish grids. When in production, the farms would generate up to 4 TWh annually. The project will be developed without governmental subsidies, and marks a step change for the renewable energy industry in Finnmark.

Carbon Sequestrating

We have been preparing a Carbon Sequestrating pilot in Morocco since 2018. Afforestation is an effective way to sequestrate the carbon from atmosphere and thus to slow down global warming. The aim of the pilot project is to test fast growing tree species in two different locations in Morocco. Irrigation and soil improvement are included in the test and the target is to find the most suitable combination of all above mentioned.

Besides the pilot project, the carbon capture measurement and verifying methods are studied. The entire process needs to be regularly verified and audited to ensure legislative compliance. Widely accepted verification method of carbon sequestration will be the prerequisite for economic basis and wider use of the Carbon Sequestrating concept.

Geothermal heating plant

The global geo-energy installed capacity reached over 14 GW in 2018. There are well known technologies which enable the steady rise of the geothermal effect annually. Most of the conventional plants utilize heat pump technology, hence requiring sustainably produced electricity to run the heat pumps. For larger, deep heat units utilize the existing water deposits deep, several kilometers under the ground level. Plant utilizing these basins are called hydrothermal plants.

In Otaniemi project, St1 will be utilizing deep dry bedrock heat which is being water stimulated from above ground creating a natural underground heat exchanger. This advanced technology is called petrothermal plant, which can be utilized especially in the Nordic countries but also in various parts in the world were the bedrock structure and the thermal conditions are favorable for such geo-energy production. The petrothermal technology has been recognized as most lucrative technology for St1 to the develop and to create world class expertise. Once the Otaniemi R&D project has been completed and proven, the building of consecutive plants will follow. St1 has pre-agreements for next plants both in Finland and elsewhere in the Nordics.

Given the tightening emission regulations, decision to ban coal and combined with need for increasing heating and cooling in the expanding cities, St1 Deep Heat technology is offering a sustainable and scalable mean to replace burning energy forms with extremely small space requirements, requiring no primary energy transportation with trucks and offering 24/7 energy production regardless weather conditions.

CASE

Combining carbon farming and sustainable biofuels in Colombia

ST1 NORDICS' SUBSIDIARY ST1 NORGE AS has signed a letter of intent with C2Biotrade to explore the afforestation of low alternative land in Colombia. The aim is to combine the sequestration of atmospheric carbon and an increase of sustainable supply of feedstock for biofuels production. The companies want to increase the supply of biofuels in an environmentally, socially and economically sustainable way, respecting the principles of UN Sustainable Development Goals.

Planting oil plantations on unfertile and low-productive land can capture carbon from the atmosphere and produce feedstock for climate friendly biofuels. The goal is to plant 60 000 hectares of African palm which can yield up to 250 000 metric tons of palm oil a year. The palm trees capture more CO_2 emissions than the current grass. The plantations are located in low-productive land on the natural savannah of the Altillanura region in the eastern part of Colombia.

The global demand for climate friendly biofuels is growing significantly. To reach the targets set for emission cuts in the transport sector, increased production of sustainable feedstock is required. Reaching the full potential of renewable biofuels would require a regulatory framework that encourages reducing the CO_2 emissions of the fuel, instead of volumetric mandates.

When successful, the project would also help to increase the employment levels in the region, and thereby contribute to maintaining the peace attained a few years ago.

Carbon capture biodiesel by C2 Biotrade video

GRI Content Index

St1 GRI Content Index

GRI-code	Disclosure	Location in the Report	Additional information	
	GRI 102: General Disclosures			
	Organizational profile			
102-1	Name of the organization		St1 Nordic Oy	
102-2	Activities, brands, products, and services	St1 in brief, p. 5, Value chain, p. 26		
102-3	Location of headquarters		Helsinki, Finland	
102-4	Location of operations	St1 in brief, p. 5, Value chain, p. 26		
102-5	Ownership and legal form	Report on operations, p. 61–62		
102-6	Markets served	St1 in brief, p. 5		
102-7	Scale of the organization	Year 2018 in figures, p. 6–7		
	Products and by-products			
	Ethanol production		**2018**	**2017**
	- Ethanol, t		11 010	14 300
	- Lignin, t		14 800	9 800
	- Vinasse, t		1 800	2 400
	- Furfural, t		76	260
	- Turpentine, t		0	9
	- Electricity, GWh		5	5
	- Heat, GWh		6	6
	- Feed, t		76 200	64 300
	- Biogas drank, t		3 600	10 700
	- Fertilizers, t		9 400	7 800
	Oil production			
	- Sold refined component, t		73 700	74 500
	- Petrol, t		969 000	936 300

	- Diesel, t		1 242 800		1 100 800	
	- Other middle distillates, t		568 500		686 900	
	- LPG, t		119 200		117 000	
	- Light fuel oil (JET A1), t		30 200		20 100	
	- Heavy fuel oil, t		621 900		632 900	
	- Sulfur, t		4 500		4 000	
	Heat, GWh		671		668	
	Wind power production					
	- Electricity produced, GWh		628		574	
	St 1 Sold fuels:					
	- Gasoline, 1000 m^3		1 430		1 468	
	- Diesel and Light Fuel Oil, 1000 m^3		3 195		3 938	
	- JET, 1000 m^3		587		436	
	- Marine gas oil, 1000 m^3		394		351	
102-8	Information on employees and other workers	Enablers, p. 40–41				
	Number of employees, St1 Group		**2018**		**2017**	
	- Total number of employees, 31.12		774		757	
	- Average number of employees during the year		788		761	
	Total number of employees by employment contract					
	- Permanent		743	96,0%	730	96%
	- Temporary		31	4,0%	27	4%
	- Total		774	100%	757	100%
	Total number of employees by employment type					
	- Full-time		759	98,1%	749	99%
	- Part-time		15	1,9%	8	1%
	- Total		774	100%	757	100%
102-9	Supply chain	Supply and logistics, p. 34–35				
102-10	Significant changes to the organization and its supply chain	Report on operations, p. 61–62				

102-11	Precautionary Principle or approach	Report on operations, p. 63-64	Precautionary principle is included in risk management based on legal requirements	
102-12	External initiatives	Involvement in organizations and joint projects, p. 23		
102-13	Membership of associations	Involvement in organizations and joint projects, p. 23		
	Strategy			
102-14	Statement from senior decision-maker	CEO's review, p. 3–4, Statement of the Board, p. 10,		
102-15	Key impacts, risks, and opportunities	CEO's review, p. 3–4, Statement of the Board, p. 10, Global climate challenge, p. 11–17, Corporate responsibility Framework, p. 19–20		
	Ethics and integrity			
102-16	Values, principles, standards, and norms of behavior	Corporate responsibility, p. 19–20, Report on operations, p. 64–65		
	Governance			
102-18	Governance structure	Report on operations, p. 64		
	Stakeholder engagement			
103-40	List of stakeholder groups	Stakeholder engagement, p. 21–22		
103-41	Collective bargaining agreements		**2018**	**2017**
	Employees covered by collective bargaining agreements		85,1%	84,5%
103-42	Identifying and selecting stakeholders	Stakeholder engagement, p. 21–22		
103-43	Approach to stakeholder engagement	Stakeholder engagement, p. 21–22		
103-44	Key topics and concerns raised	Stakeholder engagement, p. 21–22		
	Reporting practice			
102-45	Entities included in the consolidated financial statements	About this report, p. 2, Notes to the Financial Statement, p. 77		
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. *Economic:* • Economic performance • Indirect economic impacts • Anti-corruption *Environment:* • Materials • Energy • Water • Emissions • Effluents and waste • Environmental compliance *Social:* • Employment • Occupational health and safety • Training and education • Diversity and equal opportunity • Non-discrimination • Customer health and safety • Marketing and labeling • Customer privacy • Socio-economic compliance.
102-48	Restatements of information		No significant restatements of information
102-49	Changes in reporting		No major changes
102-50	Reporting period		1.1–31.12.2018
102-51	Date of most recent report		30.4.2018
102-52	Reporting cycle		Annual
102-53	Contact point for questions regarding the report		http://www.st1.eu/contact-us
102-54	Claims of reporting in accordance with the GRI Standards		This report has been prepared in accordance with the GRI Standards: Core option.
102-55	GRI content index	GRI index, p. 49–58	
102-56	External assurance		This report is not externally assured by an independent third-party.
	Material Topics		
	GRI 103: Management Approach		
103-1	Explanation of the material topic and its Boundary	About this report, p. 2, Corporate responsibility, p. 19–20	
103-2	The management approach and its components	Corporate responsibility, p. 19–20	
103-3	Evaluation of the management approach	Corporate responsibility, p. 19–20	
	GRI 200: Economic Standard Series		

	GRI 201: Economic Performance			
201-1	Direct economic value generated and distributed	Consolidated income statement, p. 68–69		
	Economic impact		**2018**	**2017**
	- Renewable energy investments, M€		41,8	84,2
	- Environmental investments, M€		13,4	9,4
	- Investments, M€		132	103,3
	- Personnel cost, M€		72,9	72,0
	- Excise and property taxes, M€		2 176,9	2 116,4
	- Income taxes, M€		15,3	51,7
	GRI 203: Indirect Economic Impacts			
203-2	Significant indirect economic impacts	Year 2018 in figures, p. 6–7, Investments in the future, p. 44–47		
	GRI 205: Anti-corruption			
205-3	Confirmed incidents of corruption and actions taken		No cases in 2018	
	GRI 300: Environmental Standard Series			
	GRI 301: Materials			
301-1	Materials used	Raw materials, p. 27–28, Production, p. 29–33		
	Ethanol production feedstock		**2018**	**2017**
	- Biowaste and residues, t		133 000	154 000
	Raw materials			
	- Crude oil, million t		3,82	3,74
	Paraffinic fuels			
	- Paraffinic fuels, million l		630	740
	Biofuels			
	- 1st generation biofuels, million l		215	357
	- 2nd generation biofuels, million l		356	326
	GRI 302: Energy			
302-1	Energy consumption	Production, p. 29–33, Supply and logistics, p. 34–35		
	Energy consumption in production		**2018**	**2017**
	Ethanol production			
	- Electricity, GWh		20	20
	- Heat, GWh		67	79

	Oil production			
	- Natural gas, GWh		217	258
	- Refinery gas, GWh		2 174	2 140
	- Electricity, GWh		150	144
	- Heat, GWh		0	0
	Total energy consumption, GWh		**2 628**	**2 641**
	Energy consumption in supply and logistics			
	Terminals in Finland (NEOT)			
	- Electricity, GWh		4	5
	- Heat, GWh		3	2
	Terminals in Norway and Sweden			
	- Electricity, GWh		6	7
	- Heat, GWh		2	3
	Total energy consumption in supply and logistics, GWh		**14**	**17**
	GRI 303: Water			
303-1	Water withdrawal			
	Water use in production		**2018**	**2017**
	- Water use in ethanol production, 1000 m^3		169	200
	- Water use in oil production, 1000 m^3		715	605
	Total water consumption, 1000 m^3		**884**	**805**
	GRI 305: Emissions			
305-1	Direct (Scope 1) GHG emissions	Global climate challenge, p. 11–17, Production, p. 29–33		
	GHG-emissions (scope 1) from production		**2018**	**2017**
	- GHG-emissions from ethanol production, tCO_2		8 800	8 400
	- GHG-emissions from oil production, tCO_2		546 800	522 500
	Total GHG-emissions (scope 1), tCO_2		**555 600**	**530 900**
305-5	Reduction of GHG emissions	Global climate challenge, p. 11–17, Production, p. 29–33, Sales and customer, p. 36–37		
	Reduction of GHG-emissions from production		**2018**	**2017**
	- Reduction of GHG-emissions according to Renewable Energy Sources Directive, tCO_2		21 000	18 400

	Reduction of GHG-emissions from the use of products			
	-CO_2-reduction from use of biofuels, tCO_2		1 199 000	1 367 000
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions			
	VOC-emissions from production		**2018**	**2017**
	- VOC-emissions from ethanol production, t		10	11
	- VOC-emissions from oil production, t		939	937
	- VOC-recovery from oil production, t		11,9	20,5
	Nox-emissions from production			
	- Nox-emissions from oil production, t		230	283
	Particulates from production			
	- Particulate emissions from oil production, t		17	12
	GRI 306: Effluents and waste			
306-1	Water discharges			
	Waste water discharges from production		**2018**	**2017**
	-Waste water from ethanol production:			
	- Process water, 1000 m^3		202	216
	- Cooling water, 1000 m^3		3 366	3 210
	- Waste water from oil production:			
	- Process water, 1000 m^3		648	646
	- Cooling water, 1000 m^3		7 706	7 753
	Total waste water, 1000 m^3		11 922	11 825
306-2	Waste by type and disposal method			
	Waste from production		**2018**	**2017**
	Non-hazardous waste, utilized, t		5 113	11 504
	- from ethanol prodcution, t		3 471	10 189
	- from oil production, t		1 642	1 315
	Non-hazardous waste, landfilled, t		1 279	1 778
	- from ethanol prodcution, t		6	463
	- from oil production, t		1 273	1 315
	Total non-hazardous waste, t		**6 392**	**13 281**

	Hazardous waste, utilizied, t		2 812	462
	- from ethanol production, t		101	81
	- from oil production, t		2 711	381
	Hazardous waste, landfilled, t		2 264	4 328
	- from ethanol production, t		0	0
	- from oil production, t		2 264	4 328
	Total hazardous waste, t		**5 076**	**4 790**
	Waste from supply and logistics			
	Hazardous-waste, utilized, t			
	- from terminals in Finland (NEOT), t		230	151
	- from terminals in Sweden and Norway, t		634	1 086
	Total hazardous waste, utilized, t		**864**	**1 237**
306-3	Significant spills	Report on operations, p. 64		
	Number of significant spills		**2018**	**2017**
	- from ethanol production		0	0
	- from oil production		0	3
	- from logistics in Finland (NEOT)		0	1
	- from terminals in Sweden and Norway		3	0
	Total number of significant spills		**3**	**4**
	The spills were reported to the authorities and they didn't cause any significant environmental impacts.			
	GRI 307: Environmental compliance			
307-1	Non-compliance with environmental laws and regulations		No cases in 2018	
	GRI 400: Social Standards Series			
	GRI 401: Employment			
401-1	New employee hires and employee turnover	Enablers, p. 40–41		
	Changes in employees		**2018**	**2017**
	- Total number of new employee hires		134	78
	- Total number of leavers		99	94
	- Employee turnover, %		13 %	12,9

	GRI 403: Occupational Health and Safety					
403-2	Types of injury and rates of injury, occupational diseases, lost days, and absenteeism, and number of work-related fatalities	Enablers, p. 40–41				
	Occupational health and safety results		**2018**		**2017**	
	- Number of lost-time injuries		6		4	
	- Lost time injuries frequency		5,3		2,6	
	- Work-related fatalities		0		0	
	- Absence rate, %		3,3		2,1	
	GRI 404: Training and Education					
404-3	Percentage of employees receiving regular performance and career development reviews	Enablers, p. 40–41				
	Performance and career development reviews		**2018**		**2017**	
	- Percentage of employees receiving regular performance and career development reviews, %		98,0		88,0	
	GRI 405: Diversity and Equal Opportunity					
405-1	Diversity of governance bodies and employees	Enablers, p. 40–41				
	Breakdown of employees by gender		**2018**		**2017**	
	- Female		209	27,0%	205	27,1%
	- Male		565	73,0%	552	72,9%
	- Total		774	100,0%	757	100,0%
	Breakdown of employees by age group					
	- Below 30		100	12,9%	96	12,7%
	- Between 30–50		395	51,0%	409	54,0%
	- Over 50		279	36,0%	252	33,3%
	- Total		774	100,0%	757	100,0%
	GRI 406: Non-discrimination					
406-1	Incidents of discrimination and corrective actions taken		No cases in 2018			
	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 2018			
	GRI 417: Marketing and Labeling					
417-2	Incidents of non-compliance concerning product and service information and labeling		No cases in 2018			

417-3	Incidents of non-compliance concerning marketing communication		No cases in 2018
	GRI 418: Customer Privacy		
418-1	Substantiated complaints concerning breaches of customer privacy and losses of customer data		No cases in 2018
	GRI 419: Socioeconomic Compliance		
419-1	Non-compliance with laws and regulations in the social and economic area		No cases in 2018

Financial Statements 2018

Table of Contents

Report for 1 January 2018–31 December 2018

1. Business operations and financial performance of St1 Nordic Oy

St1 Nordic Oy is the parent company to St1 Nordic group which is a versatile Nordic player in the energy sector. The group manufactures, develops and refines liquid fuels at its oil refinery in Gotherburg, Sweden. The refinery's annual capacity is 30 million barrels of crude oil. The majority of the refinery's production is sold in Sweden through the retail station network and other sales channels. The group engages in sale of traffic and heating fuels to consumers and the corporate sector in Finland, Sweden and Norway. The group operates a total of 1,310 retail stations under the St1 and Shell brands in Finland and Sweden and under the Shell brand in Norway. St1 Nordic's subsidiaries St1 Renewable Energy Oy and North European Bio Tech Oy which focus on biofuels as well as St1 Deep Heat Oy which builds a geothermal heat plant, merged to St1 Oy at the turn of the year. Thereby the Finnish operations are now largely concentrated to one subsidiary, St1 Oy. In addition, the subsidiary St1 Lähienergia Oy sells and installs devices based on renewable energy sources. The group also simplified its structure in Sweden by concentrating all activities in St1 Sverige AB and its subsidiary St1 Refinery AB which refines oil for the account of its parent company. In Norway, the group concluded the transaction signed in 2017 as St1 Norge Marine AS (former Statoil Fuel & Retail Marine AS) was acquired in the beginning of December 2018.

Through its associated company Tuuliwatti Oy, the group participates in the production of industrial wind power.

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

The group's revenue in 2018 was MEUR 6,885.2 which was MEUR 1,791.7 more than in the previous year. The increase in revenue was mainly due to the merger of St1 Group at the end of 2017. Compared to the pro forma*) revenue, revenue increased by MEUR 350.8. 23% of the revenue came from Finland, 50% from Sweden and 27% from Norway.

The group's operating profit was MEUR 63.1 which was MEUR 113.5 less than in the previous year and MEUR 200.0 less than the pro forma*) revenue in the year 2017. The main factors contributing to the decline of operating profit were oil price which declined sharply at the end of 2018 as well as refinery margin and future year margin hedges. The impact of the price change and margin hedges for the years 2020–2021 during the financial period was approximately MEUR -61 and compared to previous year pro forma result approximately MEUR -39. Refinery and wholesale margin was approximately MEUR -75 less than in the prior year's pro forma result. On the Retail market price competition tightened in addition to Finland also in Norway and to some extent in Sweden which also had a decreasing impact on operating profit. Furthermore, the 2017 result included a one-off sales profit from the sale of St1 Norge Automat AS.

*) Unaudited 2017 pro forma income statement figures and the principles for compiling them are shown at the end of the report in section 12.

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

	2018	2017	2016	2015	2014
Net sales, MEUR	50.5	37.5	30.3	7.8	3.5
Operating profit/loss, MEUR	14.8	15.8	6.6	7.7	-0.6
Operating profit, % of net sales	29.3	42.2	21.7	97.6	-16.6
Profit for the period, MEUR	44.0	159.4	172.8	37.6	28.2
Return on equity %	8.7	40.1	69.0	31.3	27.3
Equity ratio	67.2	65.0	50.8	29.8	35.5

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

	2018	2017 pro forma	2017	2016	2015	2014
		unaudited				
Net sales, MEUR	6 885.2	6534.4	5093.5	4390.4	3602.4	2720.8
Operating profit/loss, MEUR	63.1	263.1	176.6	150.5	86.7	45.3
Operating profit % of net sales	0.9	4.0	3.5	3.4	2.4	1.7
Profit for the period, MEUR	55.3	209.1	372.8	112.7	72.4	38.2
Return on equity %	7.0		23.4 *)	30.9	28.0	24.0
Equity ratio	40.7		42.7	31.3	26.7	28.3

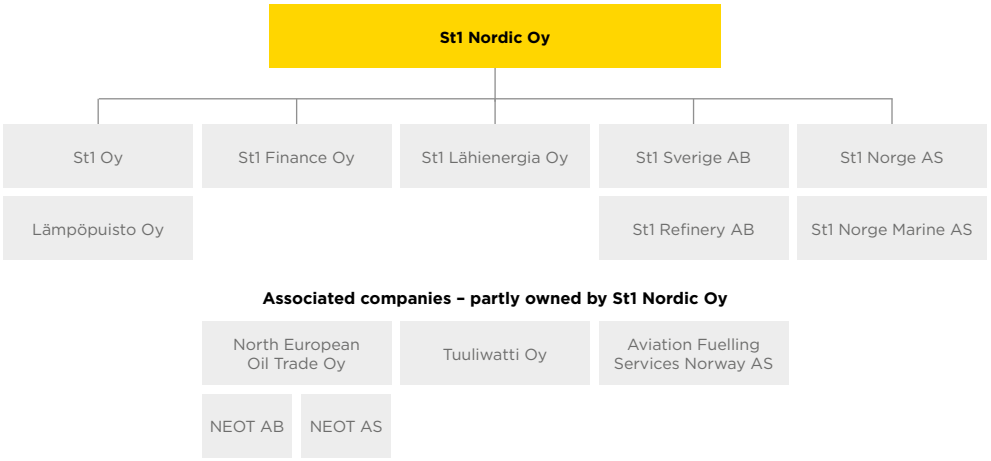
*) Calculated without merger profit

2. Group structure

St1 continued to simplify its group structure in 2018. In Finland St1 Renewable Energy Oy and St1 Deep Heat Oy were merged to their sister company St1 Oy on 31 December 2018, and North European Oil Trade Oy on 1 January 2019. In Sweden North European Bio Tech AB was merged to St1 Refinery AB and St1 Sweden Holding AB as well as St1 Supply to St1 Sverige AB. All mergers were carried through during the autumn. In addition, St1 Nordic acquired full ownership of St1 Finance Oy which provides payment services.

In Norway the share purchase transaction signed in 2017 to acquire Statoil Fuel & Retail Marine AS from Alimentation Couche-Tard was concluded in December. The company sells marine fuels and was renamed St1 Norge Marine AS.

Chart of the group's main companies



In addition to the parent company, St1 Nordic group consists now of the operative subsidiaries St1 Oy, Lämpöpuisto Oy, St1 Finance Oy, St1 Sverige AB, St1 Refinery AB, St1 Norge AS, St1 Norge Marine AS, St1 Lähienergia Oy, as well as Kiinteistö Oy Olarinluoman huoltamo.

St1 Nordic Oy's most significant associated companies comprise North European Oil Trade Oy, Tuuliwatti Oy and Aviation Fuelling Services Norway AS. The associated company is engaged in the aircraft refuelling in Norway and purchases its products from St1 Norge AS.

3. Company shares

	31 Dec 2018	31 Dec 2017	31 Dec 2016	31 Dec 2015	31 Dec 2014
Share capital	100,000	100,000	100,000	100,000	100,000
A-shares	38,737,118	38,737,118	20,000,000	20,000,000	20,000,000
B-shares	4,912,285	4,912,285	4,912,285	4,912,285	

In 2018 the company acquired the remainder of its B-shares and therefore owned 4,912,285 B-shares. The board decided to cancel the shares on 30 November 2018 and it was registered on 3 January 2019.

4. Investments

The group's largest investment in 2018 was the construction of a hydrogen unit in St1 Refinery AB. The unit is estimated to be ready in 2019. Drilling activity at St1 Deep Heat Oy's geothermal heat plant continued and during the summer stimulation of bed rock was done to test the flow of water. Other investments focused on business development and maintenance and new IT systems.

In the beginning of December St1 Norge AS completed the transaction signed in 2017 where Statoil Fuel & Retail Marine AS was acquired. The company was renamed St1 Norge Marine AS.

The group's investments in intangible and tangible assets and daughter company and associated company shares amounted to MEUR 159.

The subsidiaries St1 Renewable Energy Oy and St1 Deep Heat Oy which have merged with St1 Oy have capitalized development expenses. The costs of St1 Renewable Energy Oy's development project "Conceptualisation of the new dispersed ethanol plant" have been capitalised into capitalised development expenditure. Technological initialisation expenditure includes developmental projects aimed at developing methods of utilising waste and process residues in the production of ethanol and energy. St1 Renewable Energy Oy has received as apport property the rights to the process to produce the water and ethanol mix. A patent has been granted for said process. The item is presented in intangible rights.

The development costs for the construction of St1 Deep Heat Oy's geothermal pilot heat plant have been capitalized into capitalized development expenditure.

5. Assessment of the most significant risks and uncertainties

5.1 Risk management policy and arranging risk management

In the St1 Nordic group, risk management refers to a systematic and proactive approach to analyse and manage the opportunities and threats related to operations, rather than solely eliminating the risks. For this purpose, the group's risk management is based on awareness of the key threats, including strategic, operational and financial risks as well as risk of loss or damage, which have the potential to prevent the group from achieving its objectives.

The Board of Directors is responsible for the company's and group's risk management policy and monitors its implementation. 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 a responsibility to identify risks that might threaten the achievement of the group's objectives.

5.2. Strategic and operational risks

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

- Prolonged unhealthy competition in the traffic fuel retail market may reduce profitability also in the future
- Refining margins on petroleum products may turn out to be insufficient to cover the costs related to refining.
- The company may incur considerable costs due to environmental legislation and regulations, affecting the group's financial performance.
- Political, financial and legislative changes may affect demand for the company's products.
- The price risks related to 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 related to sales receivables is managed through a uniform credit policy and efficient debt-collection activities. Principles used for the measurement of trade receivables and inventories in the financial statements are consistent and based on the principle of prudence.

The group's business operations are based on functional and reliable information systems. The group seeks to manage the risks related to information systems through measures such as duplicating critical information systems and data communications links, paying attention to the selection of partners and standardising the work station models, software and information security practices used in the group. To mitigate risks and improve efficiency, the group is continuing an extensive program, initiated in 2015, to integrate IT solutions.

The group's core competencies are related to business processes comprising oil refining, sales and procuremen and to the requisite support functions, such as information management, finance, human resources, real estate services, logistics, marketing and communications. Unexpected and significant weakening of the group's core competencies would present a risk. The company 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. Historically, the demand for these products has not been subject to sudden, drastic changes. Taking the company's line of business and products into account, factors that might affect the company's revenue include decisions by the government or the authorities on how different forms of energy are combined, subsidised or taxed, as well as general economic trends and, with regard to heating oil, regionally prevailing temperatures. All of these factors may influence demand across the whole sector.

5.3. Risks of loss or damage

The company 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 cover with insurance all risks which are financially or otherwise reasonable. The group's insurance portfolio's 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 company's operations.

5.4. 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 bank overdraft facilities.

Interest rate risk: At the end of the financial year, the share of interest rate-sensitive loans

in the group's whole interest-bearing loan portfolio was approximately EUR 101 million, compared to approximately EUR 105 million in the previous year. 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 year.

Currency risk: The group's operative currency risk is mainly driven from 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.

5.5. Environmental risks

In order 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 company's operations. St1 Nordic Oy has systematically evaluated and monitored its environmental obligations, as well as the obligations arising at group operating sites. Environmental protection obligations have been defined within the scope of legislation and in the quality programmes applied by the company. The financial statements include a provision for environmental liabilities, which is reviewed for each financial period.

5.6 Cyber risks

The group has initiated various measures aiming to protect it from cyber risks. Preventive work is conducted continuously and personnel is trained on topics related to cyber security.

6. An estimate of probable future development

In the view of the group management, the business environment will remain challenging and volatile. In the traffic fuels trade, competition in the group's home market, particularly in Finland, remains over-emphasised. The group aims to further improve its competitiveness by rationalising systems and business processes, by measures to improve the average sales of retail stations as well as through carefully targeted investments. When feasible, refining margin is hedged.

7. Significant events after the end of the financial period

St1 Nordic decided to move its headquarters to Tripla in Pasila, Helsinki and signed a 10-year lease agreement for the office space.

8. Personnel

Key figures describing the group's personnel

	2018	2017	2016	2015	2014
Average number of personnel during the financial period	774	556	537	419	286
Wages and salaries during the financial period, MEUR	53.1	40.4	40,2	37.9	18.2

9. Organization

The company's Board of Directors consisted of Mika Anttonen (chair), Mikko Koskimies and Kim Wiio. Kim Wiio acted as the company's Chief Executive Officer until 11 June 2018 and there after Henrikki Talvitie. The company's auditor is PricewaterhouseCoopers Oy.

10. Disclosure of non-financial information

The vision of St1 is to be a leading producer and seller of CO_2 -aware energy. We believe we will attain this vision by running a responsible and profitable business where economic performance, social responsibility and environmental impact are balanced. Attaining goals is important, but so are the means for attaining them. The company management and personnel are expected to comply with the principles of business code of conduct approved by the board, together with the laws and other regulation of the countries where we operate. We respect the United Nations Universal Declaration of Human Rights and the ILO Declaration on Fundamental Principles and Rights at Work, which aim at promoting sustainable and fair business. We expect our business partners and their business partners to be committed to ethical and sustainable business principles and actively supporting their use within their own sphere of influence.

St1 Nordic carried out the materiality assessment of corporate responsibility issues in 2016 by organizing internal workshops in all its countries of operation, supplemented by further interviewing employees in the stakeholder interface and by analyzing queries from stakeholders. In the light of St1 Group's planned merger into St1 Nordic Oy in the end of 2017, the materiality assessment was extended to cover the whole value chain based on the results of the St1 Value Chain project. The whole personnel of both groups and our supply company North European Oil Trade Oy participated in the project. The corporate responsibility work continued in 2018 by analysing further the results of the

first round of reporting and deciding on action plan. In 2019, the further development of the RESPECT Corporate Responsibility Program for the entire Group will be extended to the Business Units to select the most important development goals and to plan related objectives and implementation. The RESPECT program will be launched to the whole personnel in the autumn 2019.

St1 Nordic publishes its integrated corporate responsibility report at its internet site www.st1.eu on 30 April 2019. The report complies, as appropriate, with the Global Reporting Initiative Standards and contains the non-financial information material to St1 as required by the Accounting Act. Additionally our oil refinery in Gothenburg complies both with 14001 and EMAS environmental management system (the Eco-Management and Audit Scheme) and publishes EMAS report after auditing in June 2019 the latest.

11. Proposal for profit distribution

The Board of Directors proposes that the company will pay a dividend of EUR 12,008,506.58 to the A-shares and transfer the remaining financial year's profit to the 'Retained earnings account'.

There has 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.

12. Pro forma income statement information

St1 Group Oy merged with St1 Nordic Oy on 31 December 2017 and its assets and liabilities were transferred to St1 Nordic Oy. The company has prepared a pro forma income statement to illustrate what St1 Nordic group result could have been if St1 Group Oy had merged with St1 Nordic on 1 January 2017. The unaudited pro forma income statement information for the financial period 1 January 2017 to 31 December 2017 has been compiled by aggregating St1 Group consolidated income statement information for the same financial period with St1 Nordic group income statement. Internal income and expenses between the group have been eliminated in pro forma income statement information. During the financial year 2017 St1 Group Oy and its subsidiaries belonged to the same owner, the Keele group, and therefore the accounting policies applied by the companies have already been aligned and no adjustments related to the differences between accounting policies are needed. The assets and liabilities transferred in connection with the merger have been included in the consolidated balance sheet of St1 Nordic as of 31 December 2017 and therefore no pro forma balance sheet information has been presented.

Because of its nature, this pro forma income statement information addresses a hypothetical situation, and therefore neither presents the actual results of the operations of St1 Nordic group for the year ended 31 December 2017 nor is intended to project the results of St1 Nordic operations for any future period.

Pro Forma Consolidated Income Statement

1000 euros	1.1.–31.12.2017
NET SALES	6 534 402
Manufacturing for own use	6 256
Other operating income	140 790
Materials and services	
Materials, supplies and products	
9Purchases during the period	-6 175 036 *)
Change in inventories	127 084
External services	-11 406
	-6 059 358
Personnel expenses	
Wages and salaries	-52 618
Social security costs	
Pension costs	-8 072
Other social security costs	-11 352
	-72 042
Depreciation and amortisation	
Depreciation and amortisation according to plan	-58 352
Amortisation of goodwill	-11 437
	-69 789
Other operating expenses	-217 125 *)

*) non profit impacting meur 50.2 transfer from row Other operating expenses to row Purchases during the period

1000 euros	1.1.–31.12.2017
OPERATING PROFIT	263 134
Finance income and costs	
Income from other investments of non-current assets	
Share of profit of investments using the equity method	1 889
Other interest and finance income	4 592
Impairment of investments in non-current assets	-821
Interest expenses and other finance costs	
To others	-9 110
	-3 450
PROFIT BEFORE APPROPRIATIONS AND TAX	259 684
Current income tax	-51 778
Deferred tax	1 201
	-50 578
PROFIT FOR THE PERIOD	**209 106**

Consolidated Income Statement

1000 euros	Notes	1.1.–31.12.2018	1.1.–31.12.2017
NET SALES	1.	6 885 201	5 093 516
Manufacturing for own use		4 768	6 256
Other operating income	2.	116 100	132 300
Materials and services			
Materials, supplies and products			
Purchases during the period		-6 484 556	-4 915 191 *)
Change in inventories		-75 131	170 977
External services		-10 680	-11 406
		-6 570 368	-4 755 620
Personnel expenses			
Wages and salaries		-53 082	-40 386
Social security costs			
Pension costs		-8 497	-7 830
Other social security costs		-11 431	-5 253
		-73 010	-53 469
Depreciation and amortisation			
Depreciation and amortisation according to plan	5.	-60 380	-44 522
Amortisation of goodwill	5.	-11 489	-10 915
Reduction in value of noncurrent assets		-1 806	0
		-73 675	-55 437
Other operating expenses	6.	-225 882	-190 932 *)

*) non profit impacting meur 41.5 transfer from row Other operating expenses to row Purchases during the period

1000 euros	Notes	1.1.–31.12.2018	1.1.–31.12.2017
OPERATING PROFIT		63 134	176 614
Finance income and costs			
Income from other investments of non-current assets			
Share of profit of investments using the equity method	7.	4 263	1 889
Income from group undertakings	7.	0	0
Other interest and finance income	7.	8 006	4 591
Merger profit	7.	0	231 761
Impairment of investments in non-current assets	7.	-301	-821
Interest expenses and other finance costs			
To others	7.	-10 603	-8 558
		1 364	228 862
PROFIT BEFORE APPROPRIATIONS AND TAX		64 498	405 476
Current income tax	9.	-15 353	-33 275
Deferred tax	9.	6 126	625
		-9 227	**-32 649**
PROFIT FOR THE PERIOD BEFORE MINORITY INTEREST		55 271	372 826
PROFIT FOR THE PERIOD		**55 271**	**372 826**

Consolidated Balance Sheet

1000 euros	Notes	31.12.2018	31.12.2017
NON-CURRENT ASSETS			
Intangible assets			
Capitalised development expenditure	10.	2 415	2 401
Intangible rights	10.	29 930	19 087
Goodwill	10.	1 503	120
Goodwill on consolidation	10.	175 792	181 784
Other capitalised long-term expenditure	10.	1 971	3 271
		211 612	206 664
Tangible assets			
Land and water areas	11.	196 003	196 264
Buildings and structures	11.	132 077	127 034
Machinery and equipment	11.	286 071	322 083
Other tangible assets	11.	28 968	24 139
Advance payments and construction in progress	11.	166 122	66 004
		809 242	735 524
Investments			
Investments in associated companies	13.	91 072	88 611
Other shares and holdings	13.	965	1 130
Other receivables	13.	215	33
Other investments	13.	32 307	30 771
		124 559	120 545

1000 euros	Notes	31.12.2018	31.12.2017
CURRENT ASSETS			
Inventories			
Materials and supplies		126 205	194 746
Receivables			
Non-current receivables			
Trade receivables		2 668	0
Deferred tax assets	17.	1 395	1 600
Loan receivables		13 416	5 733
Other receivables		4 652	0
		22 131	7 333
Current receivables			
Trade receivables		508 125	443 318
Receivables from Group companies:	14.		
Other receivables		0	117
Loan receivables		7	10
Deferred tax assets		63	0
Other receivables		10 452	34 140
Prepayments and accrued income	19.	71 930	61 606
		590 577	539 191
Cash and cash equivalents		47 819	79 324
		1 932 144	1 883 327

1 000 euros	Notes	31.12.2018	31.12.2017
EQUITY AND LIABILITIES			
EQUITY			
Share capital	15.	100	100
Revaluation reserve	12.,15.	40 093	40 093
		40 193	40 193
Reserve for invested unrestricted equity	15.	54 232	95 253
Retained earnings	15.	637 036	291 873
Profit (loss) for the period	15.	55 271	372 826
		746 539	759 953
Total equity		786 732	800 146
PROVISIONS			
Other provisions	16.	51 765	54 403
		51 765	54 403

1 000 euros	Notes	31.12.2018	31.12.2017
LIABILITIES			
Non-current			
Loans from financial institutions		101 122	105 365
Bonds		0	100 000
Liabilities to Group companies		3 915	0
Liabilities to associated companies		50	0
Deferred tax liabilities	17.	35 816	15 066
Other liabilities		614	220
Accruals and deferred income		8 806	0
		150 322	220 651
Current			
Loans from financial institutions		0	111
Bonds		100 000	0
Commercial paper		100 000	55 000
Advance payments		12	7 598
Trade payables		212 246	284 126
Liabilities to Group companies:			
Trade payables	18.	0	175
Deferred tax liabilities	17.	40 512	65 587
Liabilities to associated companies:			
Trade payables		194 424	165 909
Other liabilities		219 051	129 959
Accruals and deferred income	20.	77 080	99 661
		943 326	808 127
		1 932 144	**1 883 327**

Consolidated Cash Flow Statement

1000 euros	1.1.–31.12.2018	1.1.–31.12.2017
Cash flow from operating activities:		
Profit (loss) before appropriations and income tax	64 498	405 476
./. Merger profit	0	-231 761
Profit (loss) before appropriations and income tax	64 498	173 715
Adjustments:		
Depreciation and amortisation according to plan	71 868	55 437
Other income and expenses with non-cash transactions	-27 211	-38 963
Other finance income and costs	-2 146	4 788
Impairment of investments to non-current assets	1 187	0
Cash flow before change in working capital	108 196	194 977
Change in working capital:		
Increase (-)/ decrease (+) in current non-interest bearing receivables	-2 843	-68 435
Increase (-)/ decrease (+) in inventories	71 358	11 701
Increase (+)/ decrease (-) in current non-interest bearing payables	8 970	-23 753
Cash flow from (used in) operating activities before financial items and taxes	185 681	114 490
Interest paid and charges on other finance costs	-6 528	-6 800
Interest received	1 757	3 153
Taxes paid	-38 625	-30 792
Net cash generated from operating activities (A)	142 284	80 050

1000 euros	1.1.–31.12.2018	1.1.–31.12.2017
Cash flow from investing activities:		
Purchase of tangible and intangible assets	-131 892	-84 897
Acquisitions deducted by acquired cash and cash aquivalents	-25 814	-21 920
Proceeds from sale of tangible and intangible assets	73	2 174
Investments in associated companies	-1 602	0
Loans granted	-6 850	0
Purchase of other investments	-1 718	-31 992
Proceeds from other investments	0	39 314
Dividends received	3 036	6 363
Net cash used in investing activities (B)	-164 767	-90 957
Cash flow from financing activities:		
Purchase of own shares	-40 640	0
Proceeds from current loans	45 000	5 000
Repayment of current loans	-111	0
Proceeds from long-term loans	0	-3 365
Repayment of non-current loans from financial institutions	-4 829	0
Dividends paid and other profit distribution	-8 442	-5 632
Net cash used in financing activities (C)	-9 022	-3 996
Net increase (+) / decrease (-) in cash and cash equivalents (A+B+C)	-31 505	-14 903
Cash and cash equivalents at beginning of period	79 324	60 928
Cash and cash equivalents received from merger	0	33 299
Cash and cash equivalents at end of period	47 819	79 324

Parent Company Income Statement

€	Notes	1.1.–31.12.2018	1.1.–31.12.2017
NET SALES	1.	50 457 276.42	37 516 378.31
Other operating income	2.	17 440 798.46	17 554 124.15
Raw materials and services			
Raw materials and consumables			
Purchases during the financial year		-28 336 499.50	-18 014 707.12
Personnel expenses			
Wages and salaries		-3 719 567.24	-4 015 870.64
Social security costs			
Pension costs		-735 711.06	-787 196.63
Other social security costs		-79 697.14	-148 540.17
		-4 534 975.44	-4 951 607.44
Depreciation according to plan	5.	-4 646 020.93	-2 821 859.22
Other operating expenses	6.	-15 615 244.79	-13 433 861.70
OPERATING PROFIT		14 765 334.22	15 848 466.98
Finance income and costs			
Income from shares in group companies	7.	23 864 070.26	111 398 667.71
Income from shares in associated companies	7.	3 035 785.88	6 363 359.10
Other interest and finance income			
From group companies	7.	9 291 728.76	3 957 363.72
From others	7.	4 051 604.43	38 710 389.98
Impairment of investments in non-current assets	7.	0	-821 342.45
Interest expenses and other finance costs			
To group companies	7.	-2 659 022.87	-4 752 035.00
To others	7.	-4 655 040.62	-4 471 430.96
		32 929 125.84	150 384 972.10
PROFIT BEFORE APPROPRIATIONS AND INCOME TAX		47 694 460.06	166 233 439.08
Appropriations			
Change in cumulative accelerated depreciation	8.	21 072.44	-66 674.15
Received (+), given (-) group contributions	8.	0	-5 000 000.00
		21 072.44	-5 066 674.15
Income taxes		-3 732 731.02	-1 753 503.71
PROFIT FOR THE PERIOD		43 982 801.48	159 413 261.22

Parent Company Balance Sheet

€	Notes	1.1.–31.12.2018	1.1.–31.12.2017
ASSETS			
NON-CURRENT ASSETS			
Intangible assets			
Intangible rights	10.	29 811 595.32	18 851 678.01
Other capitalised long-term expenses	10.	271 505.35	602 305.13
		30 083 100.67	19 453 983.14
Property, plant and equipment			
Machinery and equipment	11.	743 752.87	809 986.75
		743 752.87	809 986.75
Investments			
Shares in group companies	13.	453 248 578.00	447 645 198.57
Receivables from group companies	14.	33 940 000.00	38 111 392.55
Investments in associated companies	13.	67 729 124.31	66 126 917.03
Other shares and holdings	13.	32 293 507.01	30 507 641.09
		587 211 209.32	582 391 149.24

€	Notes	1.1.–31.12.2018	1.1.–31.12.2017
CURRENT ASSETS			
Receivables			
Non-current receivables			
Loan receivables	14.	119 310 416.18	167 758 336.60
		119 310 416.18	167 758 336.60
Current receivables			
Receivables from group companies	14.	355 861.53	311 526.83
Loan receivables		10.20	8 951.39
Other receivables	19.	412 150.29	0
Prepaid expenses and accrued income	19.	6 004 711.16	6 185 902.18
		6 772 733.18	6 506 380.40
Cash and cash equivalents		128 633.27	1 113 244.96
		744 249 845.49	778 033 081.09

€	Notes	31.12.2018	31.12.2017
EQUITY AND LIALIBITIES			
EQUITY			
Share capital	15.	100 000.00	100 000.00
Reserve for invested unrestricted equity	15.	54 231 561.66	94 871 713.04
Retained earnings	15.	402 009 074.74	251 037 969.97
Profit for the period		43 982 801.48	159 413 261.22
		500 223 437.88	505 322 944.23
TOTAL EQUITY		500 323 437.88	505 422 944.23
APPROPRIATIONS			
Cumulative accelerated depreciation		45 601.71	66 674.15

€	Notes	31.12.2018	31.12.2017
LIABILITIES			
Non-current			
Bonds		0	100 000 000.00
Liabilities to group companies	18.	36 195 613.94	104 262 416.75
		36 195 613.94	204 262 416.75
Current			
Commercial paper		100 000 000.00	55 000 000.00
Bonds		100 000 000.00	0
Trade payables		2 809 465.14	1 844 199.76
Liabilities to group companies	18.	629 150.39	5 995 276.11
Other liabilities		437 789.94	1 094 655.49
Accruals and deferred income	20.	3 808 786.49	4 346 914.60
		207 685 191.96	68 281 045.96
Total liabilities		243 880 805.90	272 543 462.71
		744 249 845.49	778 033 081.09

Parent Company Cash Flow Statement

€	1.1.–31.12.2018	1.1.–31.12.2017
Cash flow from operating activities:		
Profit (loss) before appropriations and income tax	47 694 460.06	166 233 439.08
Adjustments:		
Depreciation and amortisation according to plan	4 646 020.93	2 821 859.22
Unrealised exchange rate profits and losses	-708 738.61	2 500 412.66
Finance income and costs	-23 499 239.51	-148 960 973.15
Other adjustments	-9 572 521.74	-8 646 253.10
Cash flow before change in working capital	18 559 981.13	13 948 484.71
Change in working capital:		
Increase (-)/ decrease (+) in current non-interest bearing receivables	4 319 367.89	6 630 512.66
Increase (+)/ decrease (-) in current non-interest bearing payables	-5 595 854.00	3 731 609.13
Cash flow from operating activities before financial items and taxes	17 283 495.03	24 310 606.50
Interest paid and other financial expenses	-4 634 976.58	-4 405 905.66
Interest received from operating activities	4 028 996.73	367 950.69
Taxes paid (received)	-4 601 532.79	-3 204 923.16
Net cash generated from operating activities (A)	12 075 982.39	17 067 728.37

€	1.1.–31.12.2018	1.1.–31.12.2017
Cash flow from investing activities:		
Other investments	0	-32 137 806.92
Purchase of property, plant and equipment and intangible assets	-15 208 904.58	-10 032 195.70
Proceeds from sale of property, plant and equipment and intangible assets	0	43 147 718.20
Investments in associated and subsidiary companies	-7 205 586.71	-4 653 926.44
Loans granted	0	-88 690 857.07
Dividends received	26 899 856.14	117 762 026.81
Repayment of loan receivables	5 918 618.14	0
Net cash used in investing activities (B)	10 403 982.99	25 394 958.88
Cash flow from financing activities:		
Purchase of own shares	-40 640 151.38	0
Proceeds from current loans	45 000 000.00	5 000 000.00
Repayment of current loans	0	0
Repayment of long-term loans	-19 382 269.23	-40 918 000.00
Dividends paid and other profit distribution	-8 442 156.45	-5 631 588.75
Net cash used in financing activities (C)	-23 464 577.06	-41 549 588.75
Net increase (+) / decrease (-) in cash and cash equivalents (A+B+C)	-984 611.69	913 098.50
Cash and cash equivalents at beginning of period	1 113 244.96	33 188.46
Cash and cash equivalents received from merger	0	166 958.00
Cash and cash equivalents at end of period	128 633.27	1 113 244.96

Notes to the Financial Statement 31 December 2018

Accounting principles for the financial statements

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

Consolidated financial statements
St1 further simplified its group structure during 2018 by merging companies in Finland and Sweden. In Finland St1 Renewable Energy Oy and St1 Deep Heat Oy merged with the sister company St1 Oy on 31 December, 2018. In addition, North European Bio Tech Oy merged into St1 Oy on 1 January, 2019. St1 Nordic Oy acquired the full share capital of St1 Finance Oy during 2018. In Sweden St1 Sweden Holding AB merged into St1 Sverige AB in October and St1 Supply AB in December. North European Bio Tech AB merged into St1 Refinery AB in October. St1 Polska Sp z.o.o, which had terminated its operations already earlier, was dissolved at the end of 2018. The subsidiaries St1 Oy, Lämpöpuisto Oy, St1 Lähienergia Oy, St1 Finance Oy, North European Bio Tech Oy, Kiinteistö Oy Olarinluoman Huoltamo, St1 Sverige AB, St1 Refinery AB, St1 Norge Group AS, St1 Norge AS, St1 Norge Marine AS and Shell Bilbyen AS are consolidated in St1 Nordic group financial statements. Associated companies North European Oil Trade Oy, Tuuliwatti Oy, Aviation Fuelling Services Norway AS, Lamia Oy, Brang Oy, Knapphus Energy AS and Grenselandet AS 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, Purotie 1, 00380 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 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	10 years
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	**2018**	**2017**	**2018**	**2017**
Liquid fuels	6824.1	5 055.4	0	0
Energy products and electricity	47.9	38.5	27.6	18.0
Other	13.2	5.9	22.9	19.5
	6885.2	5 099.8	50.5	37.5
Domestic	1 574.9	1 430.2	50.5	37.5
Foreign	5 310.3	3 669.5	0	0
	6 885.2	5 099.7	50.5	37.5

2. Other operating income

	Consolidated		Parent company	
Meur	**2018**	**2017**	**2018**	**2017**
Gains on sale of non-current assets and shares	0.1	38.2	0	0
Other operating income	116.0	94.1	17.4	17.6
	116.1	132.3	17.4	17.6

3. Average number of personnel

	Consolidated		Parent company	
	2018	**2017**	**2018**	**2017**
Personnel on average	774	556	47	51
	774	556	47	51

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 1,658,848 (1,186,737 in 2017).

5. Depreciation, amortisation and impairment charges

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Depreciation and amortisation according to plan				
Intangible assets				
Capitalised development expenses	288	299	0	0
Intangible rights	4 626	3 050	4 169	2 521
Goodwill	625	845	0	0
Other long-term capitalised expenditure	607	1 670	331	171
Tangible assets				
Buildings and structures	12 384	10 789	0	0
Machinery and equipment	38 811	24 936	146	130
Other tangible assets	3 039	2 933	0	0
	60 380	44 522	4 646	2 822
Amortisation of goodwill on consolidation	11 489	10 915		
	11 489	10 915		
Impairment of investments to non-current assets	1 806	0		
Depreciation and amortisation according to plan, total	73 675	55 437	4 646	2 822

6. Other operating expenses

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Rents	49 320	46 869	744	736
Advertising and sales promotion	25 107	25 782	44	61
Operating and maintenance expenses	75 920	52 936	147	89
Other operating expenses	75 536	23 962	14 680	12 547
	225 882	149 549	15 615	13 434

7. Finance income and expenses

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Income from investments in other non-current assets				
From group companies	0	0	23 864	111 399
From associated companies	4 263	1 889	3 036	6 363
	4 263	1 889	26 900	117 762
Other interest and finance income				
From group companies	0	0	9 292	3 957
Merger profit	0	231 761	0	0
From others	8 006	4 591	4 052	38 710
	8 006	236 352	13 343	42 668
Impairment of investments				
Impairment of investments to non-current assets	301	821	0	821
Interest costs and other finance costs				
To group companies	0	0	2 659	4 752
To others	10 603	8 558	4 655	4 471
	10 603	8 558	7 314	9 223
Finance income and expenses, total	1 364	228 862	32 929	150 385

8. Appropriations

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Change in accelerated depreciation			21	-67
Group contribution received/given	0	0	0	-5 000
	0	0	21	-5 067

9. Income taxes

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Current tax on profits for the financial period	15 353	33 275	3 733	1 754
Change in deferred taxes	-6 126	-625	0	0
	9 227	32 649	3 733	1 754

Notes to the Balance Sheet

Tangible and intangible assets in the group

Capitalised development expenditure and intangible rights

The costs of St1 Renewable Energy Oy's (merged into St1 Oy on 31 December 2018) development project "Conceptualisation of the new dispersed ethanol plant" have been capitalised into capitalised development expenditure. Said expenditure fulfills requirements set by the Ministry of Trade and Industry. Depreciation for the capitalised development expenses has been recognised for the current year starting from the initialisation of the first ethanol plant.

Technological initialisation expenditure includes developmental projects aimed at developing methods of utilising waste and process residues in the production of ethanol and energy.

St1 Renewable Energy Oy has received as apport property the rights to the process to produce the water and ethanol mix. The item is presented in intangible rights. A patent has been granted for the said process. The anticipated return of the capitalised development expenditure significantly exceeds 5 years.

The development costs for the construction of St1 Deep Heat Oy's (merged into St1 Oy on 31 December 2018) geothermal pilot heat plant have been capitalized into capitalized development expenditure. The said expenditure fulfills requirements set for capitalization by the Ministry of Trade and Industry. Planned depreciation for the development costs is 10 years straight-line depreciation. During the financial year depreciation was accounted for a full year.

Current development expenditure confirms the transition into the actual investment and investment is in progress. The longer planned depreciation period is founded on income expectations which significantly exceed 5 years. Should actual construction be interrupted, 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, 2018	22 329	897	0	23 226
Additions	15 129	0	0	15 129
Disposals	0	0	0	0
Acquisition cost December 31, 2018	37 457	897	0	38 355
Accumulated amortisation	-3 477	-295	0	-3 772
Amortisation during the financial period	-4 169	-331	0	-4 500
Accumulated amortisation December 31, 2018	-7 646	-626	0	-8 272
Net book value December 31, 2018	29 812	272	0	30 083

In thousand euros	Development expenses	Intangible rights	Goodwill
Group			
Acquisition cost January 1, 2018	3 679	29 798	10 053
Additions	302	15 476	2 246
Disposals	0	-6	0
Translation difference	0	-1	-238
Acquisition cost December 31, 2018	3 981	45 267	12 061
Accumulated amortisation	-1 278	-10 711	-9 933
Amortisation during the financial period	-288	-4 626	-625
Accumulated amortisation December 31, 2018	-1 566	-15 337	-10 558
Net book value December 31, 2018	2 415	29 930	1 503

In thousand euros	Goodwill on consolidation	Other long-term expenses	Total
Acquisition cost January 1, 2018	210 844	15 825	270 198
Additions	5 680	319	24 022
Disposals	0	-984	-990
Translation difference	0	-27	-266
Acquisition cost December 31, 2018	216 523	15 133	292 965
Accumulated depreciation	-29 242	-12 554	-63 718
Depreciation during the financial period	-11 489	-607	-17 635
Accumulated depreciation December 31, 2018	-40 731	-13 161	-81 353
Net book value December 31, 2018	175 792	1 971	211 612

11. Tangible assets

In thousand euros	Machinery and equipment	Advance payments and construction inprogress	Total
Parent company			
Acquisition cost January 1, 2018	976	0	976
Additions	80	0	80
Disposals	0	0	0
Acquisition cost December 31, 2018	1 056	0	1 056
Accumulated depreciation	-166	0	-166
Depreciation during the financial period	-146	0	-146
Accumulated depreciation December 31, 2018	-312	0	-312
Net book value December 31, 2018	744	0	744

In thousand euros	Land	Buildings	Machinery and equipment	Other tangible assets
Group				
Acquisition cost January 1, 2018	126 618	223 307	540 389	46 170
Additions	1 174	19 644	36 281	9 789
Disposals	-667	-745	-26 785	-1 868
Translation difference	-769	-1 473	-6 696	-54
Acquisition cost December 31, 2018	126 357	240 733	543 189	54 038
Accumulated depreciation	0	-118 332	-242 099	-24 675
Depreciation during the financial period	0	-12 384	-38 811	-3 039
Accumulated depreciation December 31, 2018	0	-130 715	-280 911	-27 714
Revaluation January 1, 2018	69 646	22 059	23 793	2 644
Additions	0	0	0	0
Disposals	0	0	0	0
Revaluation December 31, 2018	69 646	22 059	23 793	2 644
Net book value December 31, 2018	196 003	132 077	286 072	28 968

In thousand euros	Advance payments and construction in progress	Total
Acquisition cost January 1, 2018	66 004	1 002 489
Additions	117 923	184 811
Disposals	-17 660	-47 725
Translation difference	-145	-9 135
Acquisition cost December 31, 2018	166 122	1 130 439
Accumulated depreciation	0	-385 106
Depreciation during the financial period	0	-54 233
Accumulated depreciation December 31, 2018	0	-439 340
Revaluation January 1, 2018	0	118 142
Additions	0	0
Disposals	0	0
Revaluation December 31, 2018	0	118 142
Net book value December 31, 2018	166 122	809 242

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%
Kiinteistö Oy Olarinluoman huoltamo	100.00%	100.00%
St1 Lähienergia Oy	79.11%	79.11%
St1 Sverige AB	100.00%	100.00%
St1 Refinery AB	100.00%	0%
St1 Norge AS	100.00%	0%
St1 Norge Marine AS	100.00%	0%
St1 Norge Group AS	100.00%	100.00%
Shell Bilbyen AS	100.00%	0%
North European Bio Tech Oy	100.00%	100.00%
Lämpöpuisto Oy	100.00%	0%
St1 Finance Oy	100.00%	100.00%

Associated companies	Group ownership	Parent ownership
Tuuliwatti Oy, Helsinki	50%	50%
Equity EUR 85,462,532.71 and profit for the period EUR 515.70		
North European Oil Trade Oy, Helsinki	49%	49%
Equity EUR 12,128,143.44 and profit for the period EUR 4,043,003.96		
Brang Oy, Turku	25%	0%
Equity EUR 177,660.78 and profit for the period EUR 34,488.96		
Lamia Oy, Helsinki	20%	20%
Equity EUR 1,543,760.60 and profit for the period EUR 1,227,811.77		
Aviation Fuelling Services Norway AS, Oslo	50%	50%
Equity EUR 12,324,890.83 and profit for the period EUR 6,778,747.38, remainin goodwill on consolidation EUR 9,557,967		

Knapphus Energi Norge AS, Vindafjord	49%	0%
Equity EUR 53,575.02 and profit for the period EUR 3,512.84 (year 2017)		
Grenselandet AS, Harstad	22%	0%
Equity EUR -577,650.07 and profit for the period EUR -580,849.89 (year 2017)		

Investments, parent company

Shares

In thousand euros	Group companies	Associated companies	Others	Total
Acquisition cost January 1, 2018	447 645	66 127	30 508	544 280
Additions	5 609	1 602	1 786	8 997
Disposals	-5	0	0	-5
Acquisition cost December 31, 2018	453 249	67 729	32 294	553 271
Net book value December 31, 2018	453 249	67 729	32 294	553 271

Investments in the group

	Shares		Receivables	
In thousand euros	Associated companies	Others	Others	Total
Acquisition cost January 1, 2018	88 611	31 901	33	120 545
Additions	2 461	1 371	182	4 014
Disposals	0	0	0	0
Acquisition cost December 31, 2018	91 072	33 272	215	124 559
Net book value December 31, 2018	91 072	33 272	215	124 559

14. Receivables from group companies

	Consolidated		Parent company	
In thousand euros	2018	2017	2018	2017
Current				
Trade receivables	0	0	356	312
Other receivables	0	117	0	0
Equity loans	0	0	33 940	38 111
Loan receivables	0	0	0	0
	0	117	34 296	38 423
Long-term				
Loan receivables	0	0	119 310	167 758

Receivables from associated companies

	Consolidated		Parent company	
In thousand euros	2018	2017	2018	2017
Equity loans	0	0	0	0
Current				
Trade receivables	0	0	0	0

15. Equity

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
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	0	0	0	0
Revaluation reserve December 31	40 093	40 093	0	0
Reserve for invested unrestricted equity January 1	95 253	58 801	94 872	58 670
Change	-41 022	36 452	-40 640	36 201
Reserve for invested unrestricted equity December 31	54 232	95 253	54 232	94 872
Retained earnings January 1	664 699	309 854	410 451	256 670
Dividend distribution	-8 442	-5 632	-8 442	-5 632
Translation differences of foreign subsidiaries	-19 221	-12 350	0	0
Retained earnings December 31	637 036	291 873	402 009	251 038
Profit for the period	55 271	372 826	43 983	159 413
	746 539	759 953	500 223	505 323
Capitalized development expenditure	-2 415	-2 401	0	0
Distributable earnings December 31	744 124	757 551	500 223	505 323

The company's share capital by type of shares

	31.12.2018	31.12.2017
Shares, amount		
A-shares (1 vote / share)	38,737,118 (88.7%)	38,737,118 (88.7%)
B-shares (no voting rights)	4,912,285 (11.3%)	4,912,285 (11.3%)

B-shares carry a 5-fold dividend right compared to A-shares. At the end of the accounting period the company owned all of its B-shares. It was decided to cancel the B-shares on 30 November 2018. The decision was registered at the Patent and Registration office on 3 January 2019.

The Board of Directors proposes to the general meeting that the company will pay a dividend of EUR 12,008,506.58 to the A-shares and transfer the remaining financial year's profit to the 'Retained earnings' account. There has 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.

16. Provisions

	Consolidated	
In thousand euros	**2018**	**2017**
Certain retirement pensions for which company is liable	35 975	38 154
Other provisions	1 607	2 929
Expected environmental obligations	14 183	13 320
Total provisions	51 765	54 403

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	**2018**	**2017**
Deferred tax assets		
From provisions	1 458	1 600
	1 458	1 600
Deferred tax liabilities		
From appropriations	24 376	26 278
From revaluations and goodwill allocations	35 816	40 904
From consolidation	16 136	13 471
	76 327	80 653

18. Liabilities to group companies

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Non-current loans	0	0	36 196	104 262
Current loans:				
Trade payables	0	175	629	272
Other liabilities	0	0	0	0
Accruals and deferred income	0	0	32	5 723
	0	175	36 857	110 258

19. Adjusting entries for assets/Receivables carried forward

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Cost allocations	3 865	54 770	4 577	3 665
Financing cost allocations	34	682	737	682
Tax receivables	22 994	2 433	613	1 839
Other adjusting entries	45 038	3 721	77	
	71 930	61 606	6 005	6 186

20. Accrued expenses

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Personnel cost accruals	11 702	20 683	435	445
Interest accruals	2 373	2 645	2 373	2 373
Cost provisions	5 675	3 190	997	1 524
Tax accruals	546	43 676	0	0
Other accrued expenses	56 784	29 468	4	4
	77 080	99 661	3 809	4 347

21. Financial instruments

Bond

St1 Nordic Oy issued its first bond on June 4th, 2014. The size of the issue was 100 MEUR and the bond is listed on First North Bond Market Finland. The bond (ISIN FI4000097191) matures in 5 years and has an annual coupon of 4.125%. The bond matures on 4 June 2019 at which point it will paid repaid.

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 100 MEUR.

Revolving Facility Agreement

St1 renewed its 150 million euro revolving facility agreement in 2018 for a new 3-year term. The facility also includes two option years.

Oil financing facility

St1 Sverige AB has a 100 million dollar oil financing facility. The facility was not drawn at year-end.

22. Commitments and contingencies

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Liabilities for which business mortgage, real estate mortgage or shares have been given as collateral				
Loans from financial institutions	0	209	0	0
Total	0	209	0	0
Mortgages given as collateral				
Business mortgages	0	6 000	0	0
Bearer bonds and mortgage bonds	0	0	0	0
Mortgage on lease agreement on a place of business	0	3 700	0	0
Shares	0	0	0	0
Other guarantees	0	4 200	0	4 200
Total	0	13 900	0	4 200
Guarantees given				
Other guarantees	0	8 276	0	7 500
	0	8 276	0	7 500

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Mortgages and guarantees on own operations				
Business mortgages	0	6 000	0	0
Bearer bonds and mortgage bonds	0	0	0	0
Mortgage on lease agreement on a place of business	0	3 700	0	0
Shares	0	0	0	0
Other guarantees	0	4 976	0	0
Total	0	14 676	0	0
Guarantees on behalf of others	0	7 500	0	7 500
Guarantees on behalf of group companies				
Other guarantees	178 778	91 567	178 778	91 567

Oil has been pledged as against the oil financing facility (EUR 52,443,329) and oil (EUR 55,929,602) and oil products receivables (EUR 89,145,648) 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 26,122,790, derivatives liabilities EUR 5,178,012 and L/C liabilities EUR 41,283,009 on 31 December 2018. St1 Nordic Oy has also pledged for Tuuliwatti Oy's loans receivables from any balance responsible party acting on the electricity market (FI: tasevastaava). According to an investor undertaking issued by the St1 Nordic Oy and S-Voima Oy, Tuuliwatti and/or the agent of the finance parties may require the shareholders to make an equity investment into Tuuliwatti to enable it to ensure that any leasehold registered to Tuuliwatti remains in force if any mortgages registered to the relevant real estate are enforced.

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Rent liabilities				
No later than one year	23 251	37 195	545	534
Later than one year	135 821	127 232	1 075	1 650

St1 Nordic Oy has in February 2019 signed a 10-year lease agreement for the office space of new headquarters.

	Consolidated		Parent company	
In thousand euros	**2018**	**2017**	**2018**	**2017**
Future leasing payments:				
No later than one year	1 620	1 537	256	114
Later than one year	1 586	1 280	312	128
Total	3 206	2 816	568	242
Residual value liability	180	128	27	0

In addition, guarantees have been given for environmental obligations related to the lease agreements of the subsidiaries.

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 2019 to 2021. There are contracts with several counterparties. Fair values at the closing date are presented in the table.

	Consolidated		Parent company	
	2018	**2017**	**2018**	**2017**
Volume, mill. bbl	26.2	25.1	0	0
Fair value, thousand euro	-50 791	-36 884	0	0
Foreign exchange derivatives				
Volume, mill. Eur	124	128	0	0
Fair value, thousand euro	699	260	0	0

Unrealized positive fair value changes are not booked to the income statement.

Signatures to the Financial Statements and the Report on Operations

Helsinki, 27 March 2019

Mika Anttonen
Chairman of the Board

Kim Wiio
Member of the Board

Mikko Koskimies
Member of the Board

Henrikki Talvitie
CEO

Auditor's Note

Our auditor's report has been issued today.

Helsinki, 28 March 2019

PricewaterhouseCoopers Oy
Authorised Public Accountants

Johan Weckman
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 year ended 31 December 2018. 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 comprises 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. 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, we conclude that there is a material misstatement of the report of the Board of Directors, we are required to report that fact. We have nothing to report in this regard.

Helsinki 28 March 2019

PricewaterhouseCoopers Oy
Authorised Public Accountants

Johan Weckman
KHT

Board of Directors

Mika Anttonen
Chairman of the Board of Directors
St1 Nordic Oy

Mikko Koskimies
Managing Director
eQ Varainhoito Oy

Kim Wiio
Managing Director
Mininvest Oy

Management

Henrikki Talvitie
CEO

Mika Wiljanen
Director, Sales
CEO St1 Oy, St1 Finance Oy

Hilde Wahl
Director, Brands
CEO St1 Sverige AB

Kati Ylä-Autio
CFO

Mika Aho
Director, Public Affairs

Timo Jokinen
Director, Supply & Logistics

Bo-Erik Svensson
CEO
St1 Refinery AB

Kristine Vergli Grant–Carlsen
CEO
St1 Norge AS

St1 Nordic Oy
Visiting address: Purotie 1, FI-00380 Helsinki, Finland
Postal address: P.O. Box 100, FI-00381 Helsinki, Finland
Tel. +358 10 557 11
Fax +358 9 803 0004
www.st1.eu