2021

GASUM SUSTAINABILITY REPORT

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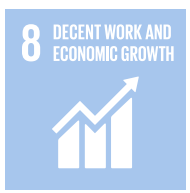
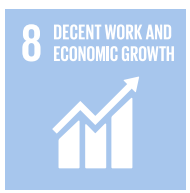
Sustainability highlights 2021

Growth in demand for cleaner energy in industry, maritime and road transport segments



Continuous employee pulse survey as a tool to develop employee experience

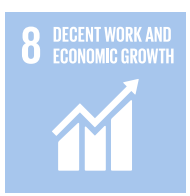


1.6% employee absence rate

Increased focus in the future solutions for decarbonization pathways

100%
The share of renewable electricity utilized in our operations

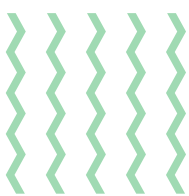
Availability of biogas increased: production up by 25% year on year



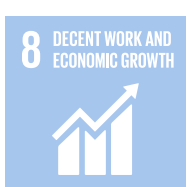
Safety and business continuity ensured during Covid-19 pandemic

Operational excellence: Coverage of certified management systems extended

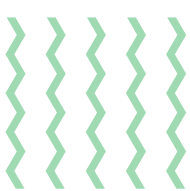
The amount of GHG emissions our customers reduced with biogas: 345,000 t

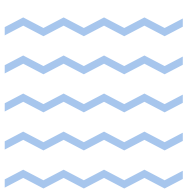


Wind power promoted with long-term agreements



Safety performance: Lost time injury frequency (LTIF) down by 3.7%





Cleaner urban air: A network of about 100 gas filling stations

880,000 t of waste and residues and 4,000,000 t of wastewater utilized in biogas production

Gasum in brief

The energy company Gasum is a Nordic gas sector and energy market expert that, together with its partners, promotes development towards a carbon-neutral future.

The energy company Gasum is a Nordic gas sector and energy market expert. We offer cleaner energy and energy market expert services for industry and cleaner fuel solutions for road and maritime transport.

We produce biogas in our Nordic biogas plant network and source biogas from the production of certified European partners. Besides biogas, the plants also produce recycled nutrients for agricultural and industrial uses. Gasum is the leading provider of biogas in the Nordic countries.

Gasum imports natural gas and is the biggest liquefied natural gas (LNG) actor in the Nordic countries. We strengthen the position and infrastructure of LNG and supply LNG for maritime transport, industry and heavy-duty vehicles in the Nordic countries. Gasum has expanded the maritime LNG distribution operating area further to Central Europe, including the Amsterdam-Rotterdam-Antwerp (ARA) area. We have a Nordic gas filling station network that also serves heavy-duty vehicles.

We help our customers to reduce their own carbon footprint and that of their customers. Together with our partners, we promote development towards a carbon-neutral future on land and at sea. The Gasum Group has around 360 employees in Finland, Norway, Sweden and Germany. Gasum is fully owned by the State of Finland.

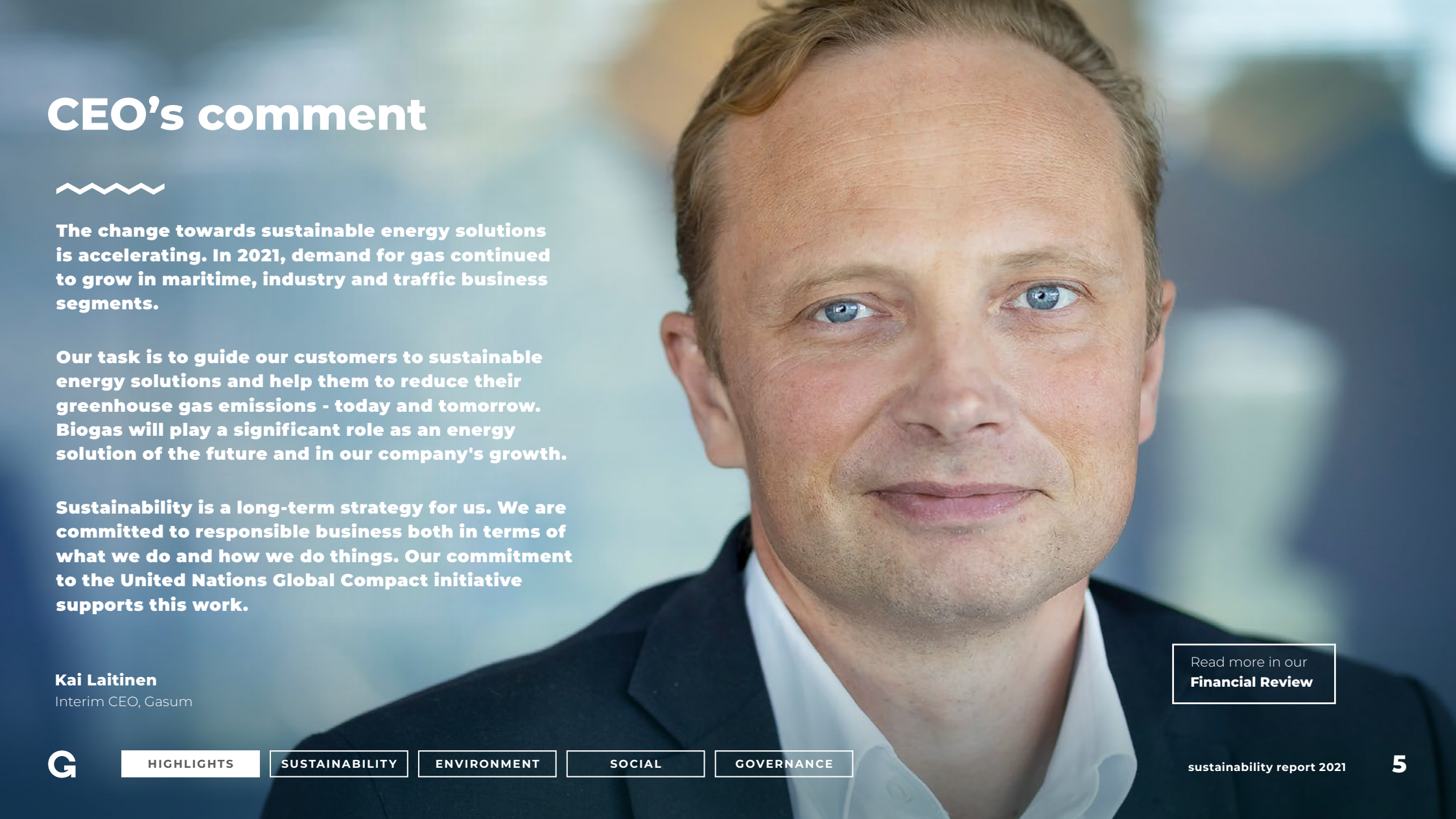
CEO’s comment

The change towards sustainable energy solutions is accelerating. In 2021, demand for gas continued to grow in maritime, industry and traffic business segments.

Our task is to guide our customers to sustainable energy solutions and help them to reduce their greenhouse gas emissions - today and tomorrow. Biogas will play a significant role as an energy solution of the future and in our company's growth.

Sustainability is a long-term strategy for us. We are committed to responsible business both in terms of what we do and how we do things. Our commitment to the United Nations Global Compact initiative supports this work.

Kai Laitinen
Interim CEO, Gasum



Read more in our **Financial Review**

Strategy

As a Nordic energy company, our aim is clean mobility of people and goods on land and at sea. We offer industry and combined heat and power production clean energy and raw materials, and help our customers to master the energy market. Sustainability is an integral part of our strategy and business operations.

Cleaner energy

Our growth strategy provides the guidelines for our journey towards new business opportunities and a low-carbon future. We believe that the expansion of the energy market and new innovations are prerequisites for a cleaner tomorrow. Renewal and agile leadership are key elements of our strategy as we are purposefully and responsibly moving towards new opportunities.

We are committed to operating sustainably, which is summed up in the single proposition of our purpose: “Cleaner energy”. We create value by developing a low-carbon society together with customers and partners. We help our customers in industry and in road and maritime transportation to reduce their own carbon footprint and that of their customers. We respond to global challenges by developing gas distribution logistics, infrastructure, and the company’s production and procurement portfolios on land and at sea. Renewal and agile management and leadership are key components of the Gasum strategy.

Towards a cleaner tomorrow

The EU and national climate policies are driving a rapid decrease in greenhouse gas emissions. Promoting the production of renewable gases and strengthening their position are key to achieving climate goals. Gasum is committed to helping customers in their decarbonization.

The circular economy is seen as a necessity in supporting climate change mitigation, resource efficiency and sustainable growth. The European Green Deal provides an action plan to boost the efficient use of resources by switching to a clean, circular economy. The European Commission's Fit for 55 package and proposed gas market decarbonization package highlight the role of renewable gases and wider use of biogas. In addition, the Nordic countries have introduced several national measures to support the production and use of biogas.

The use of gas is projected to grow strongly in the years ahead. Gas as a low-emission energy source has an important role, particularly in segments that are difficult to electrify, such as heavy-duty traffic, maritime and industry. For several years, Gasum has been preparing for this growth by investing in the development of the Nordic gas infrastructure, which facilitates the increased production and use of biogas. So far, only a fraction of the biogas production potential is in use.

As a diverse and clean energy source and material of industry, natural gas will continue to be an important part of energy consumption over the coming years, helping phase our coal and oil in energy production. At the same time, demand for renewable electricity among industrial actors is growing. We strive to increase the procurement and availability of renewable Nordic wind energy and enable our customers to reduce their emissions with long-term power purchase agreements (PPAs). The capacity to operate more broadly in the energy market strengthens Gasum's position comprehensively as an energy company of the future.

Maritime transport contributes up to 3% of the world's total greenhouse gas emissions. Our services for maritime operators all over Europe are becoming even more relevant as demand for cleaner energy solutions grows strongly. Liquefied natural gas (LNG) is recognized as one of the most viable alternative fuels in reducing emissions and replacing the use of petroleum-based fuels in shipping. We help our customers to meet tightening international regulations which will steer the maritime industry towards emission reductions.

Transport represents almost a quarter of Europe's greenhouse gas emissions, where the share of road transport accounts for more than 70%. Transition to more extensive use of biogas and natural gas in road transport is advancing at a rapid rate. Awareness of low emissions and cost-effectiveness of gas vehicles has increased, and national support measures promote development of vehicle fleets and the distribution infrastructure. Liquefied biogas (LBG) is becoming an increasingly popular fuel for heavy-duty vehicles (HDVs), enabling greenhouse gas emissions reduction averaging 70–90%.

Solutions that reduce emissions and help adapting to climate change create new business opportunities for us during the transition to a low-carbon future. In addition to existing solutions, - i.e. natural gas and LNG, biogas and LBG, and renewable electricity and related services - we are developing new solutions for the future based on customer needs. This includes opportunities for clean hydrogen for industrial needs, power-to-gas (synthetic methane) for maritime, traffic and industrial use, and electrification through energy switching between gas and electricity.

Value-creation

INPUTS

Comprehensive infrastructure
- 5 LNG terminals
- 5 Bunkering vessels
- 17 Biogas plants, 1 under construction
- 3 Partner biogas plants
- About 100 gas filling stations

Human resources
- 356 employees in 4 countries
- 97% of employees permanent

Resources enabling our business
- Natural gas, LNG
- Biogas, LBG
- Wind power
- ~1,000,000 t waste and residues for biogas production
- 100% renewable electricity used in all operations

Relationships with external stakeholders
- Strong customer focus
- Circular economy and industrial ecosystem partnerships
- Cooperation with suppliers and industry networks

OUR BUSINESS

Cleaner Energy
We offer cleaner energy and services to help our customers to reduce their own carbon footprint as well a that of their customers.

Our services and solutions are used in maritime, road transport, industry and energy production.

Energy products
Biogas, LBG, natural gas, LNG, windpower, power

Services
- Gas filling station network
- Bunkering services
- Energy Market Services
- Portfolio Management Services
- Trading services
- Circular Economy Solutions

OUTCOMES

Value to customers through long-term, low-carbon solutions
- Reliable supply of energy products and services to customers
- High customer satisfaction
- Sustainable solutions and reduced GHG emissions

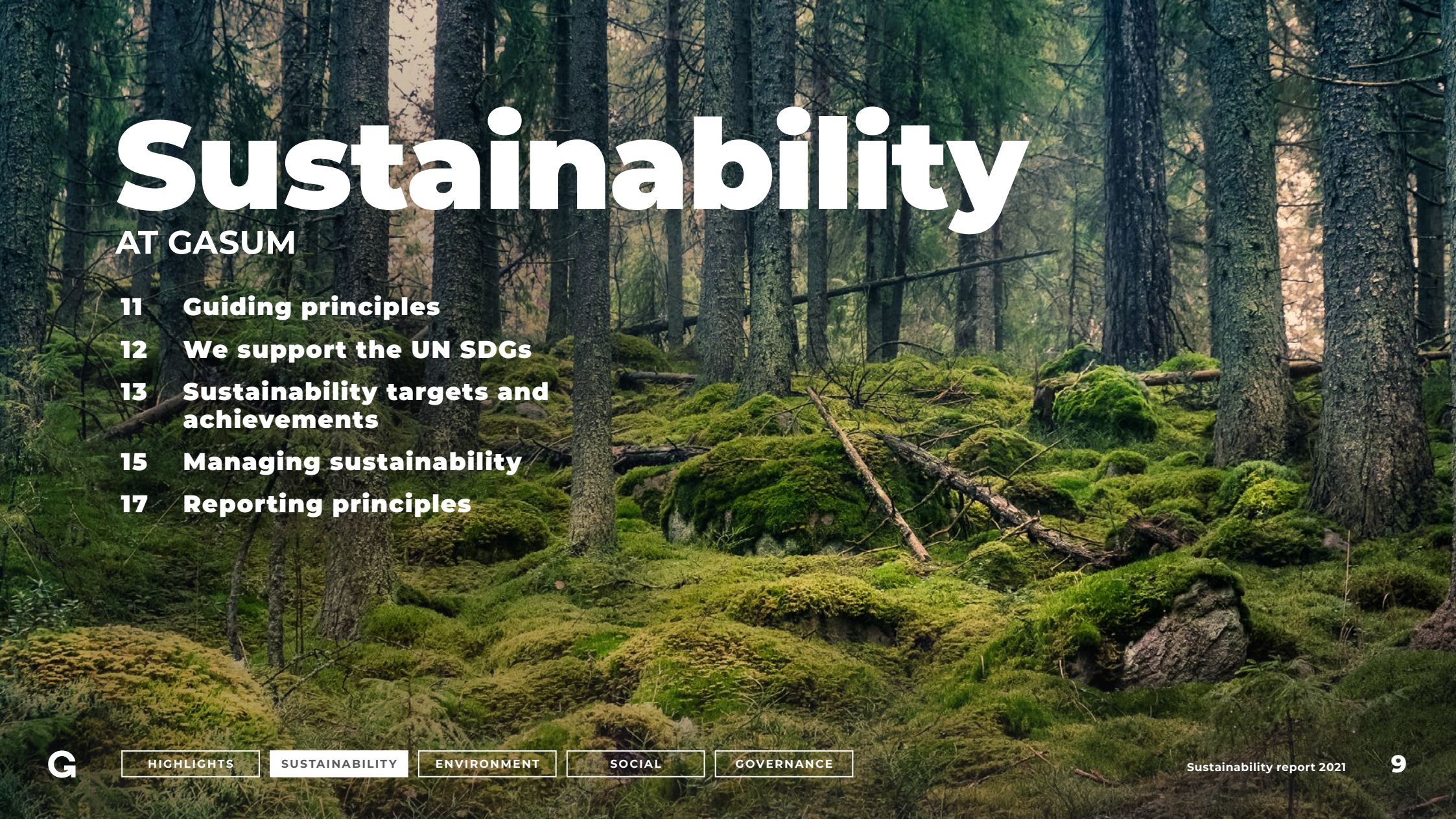
Financial footprint
- €1571 million net sales
- €31 million salaries and fees
- €44 million investments
- €256 million taxes paid and collected

Wellbeing and safety of employees and contractors
- Focus on safety first-culture
- Employee and contractor safety, 5 LTI
- Absence rate <1.6%
- Continuous employee pulse survey
- Ensuring an agile working culture with leadership principles

Climate change mitigation
- Increased availability of renewable energy replacing fossil fuels
- 345,000 t CO2eq emission reduction to customers with biogas
- Reduced local air emissions in urban areas and at sea
- Continuous energy saving measures
- Scope 1, direct CO_2 emissions 44,000 t
- Scope 2, emissions from purchased energy, 9,000 t
- Scope 3, indirect emissions from up/downstream supply chain, 5,900,000 t

Supporting circular economy
- Conserving and creating value from existing resources
- Promoting nutrient recycling

Contribution to UN Sustainable Development Goals



Sustainability

AT GASUM

Sustainability at Gasum

We increase the availability of low-carbon energy products and promote the circular economy. This is the most significant sustainability impact and handprint of our operations. At the same time, we aim at minimizing the environmental impacts of our operations. We work to increase energy efficiency and continue to use 100% renewable electricity in all our operations.

While committed to combating climate change and promoting the circular economy, we also acknowledge our impact on people. Safety is a key element in Gasum's operations. We continue to expand our safety-first culture and promote the safe production, handling, and use of gas. Our goal is that all Gasum Group employees can do their work well and be inspired in a safe and energizing environment. We are committed to respecting human rights and do not tolerate human rights violations in any form. Gasum Code of Conduct further elaborates our responsible business practices and ways of working with our customers and stakeholders, and together as an organization. Economic responsibility and corporate governance are the cornerstones for our operations.

We have identified several environmental, social and governance related topics that are relevant for our business and support the global **UN Sustainable Development Goals** (SDGs). These material topics form the building blocks for our **sustainability program** and guide our work in all operating countries.

In 2021, we continued to execute our strategy and develop the Nordic gas market as planned. Despite that the exceptional circumstances caused by the Covid-19 pandemic, we were able to ensure business continuity and progress in projects and continued to offer low-emission energy solutions in response to growing demand among industrial as well as road and maritime transport customers.

Our guiding principles

We are committed to responsible business both in terms of what we do and how we do things.

Our aim is to maintain good business ethics and profitability, and ensure responsible business partnerships with zero unplanned disruptions in energy supply. Our framework for responsible business is an integral part of our management system and includes elements such as understanding our risks, having clear policies and procedures, providing training and communication as well as processes for raising and reviewing possible violations of our Code of Conduct.

COMPLIANCE AND BUSINESS ETHICS

Our Code of Conduct sets the core principles for how we work with our customers, stakeholders and together as a company. We expect our business partners to comply with same standards on transparent and ethical business.

- Comply with laws and regulations
- Avoid conflicts of interest, corruption and unfair competition
- Speak up in any concerns and dilemmas
- Respect the environment, human rights and trade obligations
- Protect confidential and personal information

INTEGRATED MANAGEMENT SYSTEM

The Integrated management system (IMS) enables us to improve our customer focus, continuous improvement, agile way of working and to achieve operational excellence. IMS covers our certified management systems:

- ISO 9001 Quality
- ISO 14001 Environment
- ISO 50001 Energy
- ISO 45001 Occupational health and safety
- Sustainability schemes

SUSTAINABILITY PROGRAM

The Sustainability program steers sustainability work in all our operations. It defines the sustainability priorities and sets the key performance indicators and measurable targets for each theme.

- Safety and security
- Climate
- Circular economy
- Access to cleaner energy
- Responsible business
- People

We support the UN SDGs

Gasum as a provider of cleaner energy supports the UN Sustainable Development Goals (SDGs) of the UN 2030 Agenda.

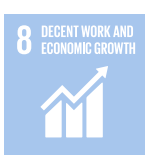
The SDGs are global goals adopted by the UN in 2015 as a universal call to action to solve by 2030 the urgent economic, social, and environmental challenges facing our world. Gasum has identified six priority SDGs towards which we can contribute the most in our operations: Goal 7 Affordable and cleaner energy, Goal 8 Decent work and economic growth, Goal 9 Industry, innovation and infrastructure, Goal 11 Sustainable cities and communities, Goal 12 Responsible consumption and production and Goal 13 Climate action.

Gasum is a signatory of UN Global Compact

Gasum joined the United Nations Global Compact initiative on corporate sustainability during 2021. The UN Global Compact is a voluntary, international corporate sustainability initiative administered by the United Nations, which calls for businesses worldwide to adopt and implement ten principles relating to human rights, labor, environment and anti-corruption.

AFFORDABLE AND CLEAN ENERGY

We offer and develop low-carbon and renewable energy products and energy market services for our customers. Our investment outlook improves the availability of renewable energy. We increase access to cleaner fuels in the Nordics, above all in the maritime and heavy-duty road transport segments.



DECENT WORK AND ECONOMIC GROWTH

We respect human rights and promote the well-being, work ability and competence of our personnel. We have a strong safety culture and aim at zero harm for our employees and contractors.

INDUSTRY, INNOVATION, AND INFRASTRUCTURE

We develop infrastructure for cleaner energy. We advance innovations, build partnerships, and participate in the activities of various research and development networks in circular economy, cleaner energy, decarbonization and resource-efficiency.

SUSTAINABLE CITIES AND COMMUNITIES

We increase the availability of our low-carbon and renewable energy products for the transport and industry segments, which positively impacts the local air quality in urban areas. We help cities to be more sustainable with partnerships in circular economy and clean energy solutions.

RESPONSIBLE CONSUMPTION AND PRODUCTION

We treat a substantial share of society's biodegradable waste and residues and produce biogas and recycled nutrient products from it. We participate in activities promoting the further development of technologies, feedstocks, and partnerships in this field.

CLIMATE ACTION

We are committed to help our customers to reduce their climate emissions. We aim at 1,000,000 t CO_2 reduction for our customers with biogas by 2025 and develop to expand future decarbonisation pathways. We use 100% renewable electricity in all our operations and are committed to continuous energy-saving actions.

Sustainability targets and key achievements 2021

	MATERIAL ASPECT		OBJECTIVE	KPI & TARGET	ACHIEVEMENTS IN 2021
ENVIRON-MENT	**Climate**	Handprint of our products	Enabling GHG emission reductions for our customers	1,000,000 t CO_2 of cumulative emission reductions for customers achieved with biogas by 2025	· Growth in demand for cleaner energy in industry, maritime and road transport. · 345,000 t CO_2eq emission savings enabled for our customers with renewable biogas. · Further emission savings enabled with other low-carbon fuels, renewable power, and circular economy solutions.
		Footprint of our operations	Improving energy efficiency and decreasing GHG emissions with optimized supply chain operations	1% energy savings annually during 2017-2025	· Total energy consumption decreased by 3.5% year on year. · Several projects completed during 2019-2021 to increase energy efficiency.
				Decreasing trend in LNG and biogas supply chain GHG emission intensity	· 100% renewable electricity used in all operations. · 4.4% decrease in GHG emission intensity of Gasum's operations year on year. · Participation in UN Global Compact's Climate Ambition Accelerator program.
	Circular economy	Biogas and recycled nutrient products	Utilizing feedstocks in biogas production that enable to develop market for recycled nutrients	Increased availability of biogas in the Nordics, 4 TWh by 2025	· Biogas production volume increased by 25% year on year. · New biogas plants started operations in Lohja and Nymölla and several new projects are at planning phase. · 880,000 t of waste and residues, and 4,000,000 t of wastewater utilized in biogas production. · ~1,000,000 t of recycled nutrients produced. · Innovation advanced in R&D partnerships.
				Sustainable biogas production	· 100% of production fulfills sustainability criteria in accordance with the EU Renewable Energy Directive.
	Environment	Environmental management	Minimizing environmental impacts of operations	Zero environmental breaches and increased number of energy-related and environmental observations	· No environmental breaches or permit violations. · More than 200 energy and environment related observations to improve daily operations. · Investments in energy efficiency, process efficiency and reducing odor nuisances from biogas plants. · Extended certification of biogas plants (ISO 9001, 14001, 45001, 50001).
SOCIAL	**Safety and Security**	Safety	Zero harm for people	Ensuring safe operations: Zero LTI (lost-time injury) and MTI (medical treatment injury) for own employees and contractors	· 5 LTI, 2 MTI (own personnel and contractors). LTIF decreased by 3.7%. · Active safety culture program. · Increased reporting of observations and identifying corrective and preventive safety measures. · No serious incidents nor interruption in production or supply related to the pandemic.
	People	Well-being	Promoting a healthy working environment	Absence rate <1.5%	· Absence rate of 1.6%.
		Leadership and culture	Developing an agile culture and employee experience	Continuous assessment of the employee experience through the pulse survey, min. employee participation rate of 75%	· Employee pulse survey participation rate of 72%. · The Leading for impact -journey initiated to strengthen our leadership culture.
		Personal development	Growing Gasum's professional talent	Development discussions are held and agreed development plans implemented	· 94% of employees participated in development discussions. · HR processes developed to ensure high quality competence. · Training sessions organized for the personnel to develop feedback culture, agility, and wellbeing.

ECONOMIC

MATERIAL ASPECT		OBJECTIVE	KPI & TARGET	ACHIEVEMENTS IN 2021
Responsible business	Business ethics and compliance	Ensuring compliance and accountability in own operations and in business partnerships	Employees: Participation in Gasum Code of Conduct e-learning training	· A total of 2 suspected misconducts reported via the whistleblowing channel. · 59% of personnel participated in Code of Conduct training
			Suppliers: Continuous supplier assessments and audits based on a systematic risk approach. Critical suppliers identified and evaluated	· Critical suppliers identified and evaluated to ensure compliance with our principles.
			Customers: Strong focus in offering a wide range of energy solutions to help customers to reach their emission reduction targets	· Advancing sustainability together with customers. · Launch of continuous customer pulse surveys. · Launch of traffic customer portal and Mobile app.
	Economic profitability	Creating value for the owner and society	Reach the set financial targets	· Reporting in the financial statements 2021.
Access to energy	Industry	Enabling long-term, low-carbon energy solutions for industry	Expand offering in carbon neutral power and gas solutions	· Delivery volume of cleaner energy to industry up by 11% year on year. · Several wind power PPAs signed with new customers. · Green services: 6.2 TWh Guarantees of Origin of renewable power traded.
	Maritime	Expanding supply solutions and services in the maritime segment	Increased LNG/LBG offering in the maritime segment	· Demand for cleaner shipping fuel increased: delivery volume up by 32% year on year. · Supply network extended geographically. · More than 1,300 ship-to-ship and truck-to-ship deliveries for the growing vessel fleet.
	Traffic	Promoting awareness and availability of gas as a road fuel	A Nordic network of 50 heavy-duty vehicle filling stations the early of 2020s	· Expanding network of gas filling stations, altogether around 100 stations. · Growth in gas vehicle fleets. Delivery volume of gas to traffic up by 61% year on year. · Strategic partnerships with logistics companies.
	Supply certainty	Ensuring reliable energy supply	Zero unplanned interruptions in energy supply to customers	· High delivery performance in gas supply to customers.

Managing sustainability

In day-to-day operations, we are all responsible for managing efforts to advance Gasum's sustainability

Sustainability program and materiality analysis

We have formulated Gasum's Sustainability program to promote sustainability and guide our responsibility work. The program applies to the company in all operating countries. The program addresses the most material social, environmental, and economic aspects of Gasum's responsibility: safety and security, climate, circular economy, access to cleaner energy, people, and responsible business. **Key performance indicators** and targets are set for each focus area. We track our achievements, and regularly report on performance. The annual Sustainability report addresses our progress with our Sustainability program and towards the targets set.

Sustainability materiality assessment is conducted regularly to ensure that we focus on the most important sustainability topics. The selected topics are based on our own and our stakeholder's views of the significance of the impacts of our operations on the company and the society. The latest update of the materiality assessment was released in 2019. Reassessment is planned for 2022.

Our **Code of Conduct** describes our overall approach to sustainability and applies to everyone at Gasum. The integrated management system further elaborates the policies and guidelines on specific sustainability topics. We have identified the most significant **sustainability risks**.

Sustainability management

The Board of Directors has the ultimate oversight of Group-level corporate responsibility, covering the environmental, social and governance matters. The Board of Directors approves the Code of Conduct of Gasum Group as well as annual sustainability reporting.

The CEO oversees the implementation of sustainability within the Group. Gasum Management Team provides the strategic policies and management perspectives for sustainability, reviews and adopts the Sustainability program, KPIs and targets annually, and monitors their implementation and progress.

In Gasum's business units and support functions, sustainability is implemented through everyday operations and leadership. Management Groups of the business units oversee implementation of sustainability. Annual planning, target-setting, and the integrated management system support successful implementation. The business units monitor progress and report monthly on their safety and environmental performance.

VP Communications and Sustainability oversees the Group-level Sustainability unit, which prepares the Sustainability program KPIs and targets and develops and coordinates the Group-level sustainability work and communication. Health, Safety, Environment and Quality (HSEQ), Human Resources and Legal units are responsible for managing their respective focus areas.

Integrated management system

We aim at operational excellence. Certified management systems support our continuous improvement process and provide a common HSEQ system baseline. We employ an integrated management system (IMS) that covers quality (ISO 9001:2015), environmental (ISO 14001:2015), energy (ISO 50001:2018), and occupational health and safety (ISO 45001:2018) management system requirements as well as a biomethane sustainability scheme as an integrated entity. The IMS is applied to the Gasum Group companies and operations as well as products and services sold by the Group.

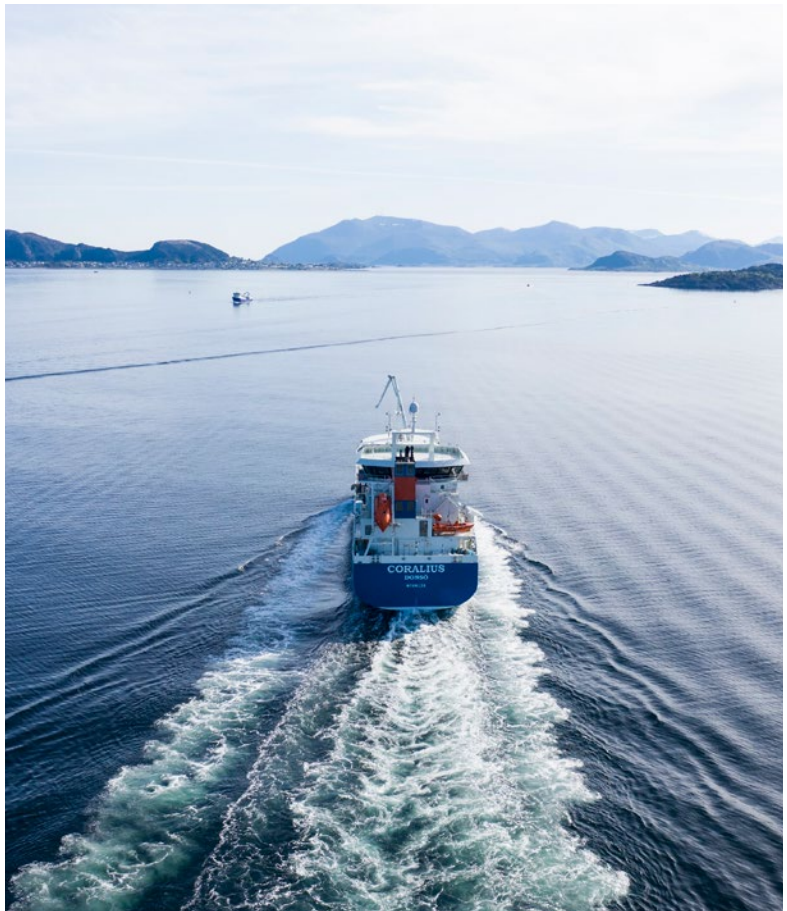
The IMS consists of systematic approaches that translate decisions made by the senior management into practical operations. We have established the IMS to document, implement, maintain, and continuously improve our business regarding the quality, safety, security, sustainability, energy and environmental objectives, and to ensure safety, occupational health and quality in our daily operations. The IMS helps us improve our customer focus, agile way of working, and achieve operational excellence.

IMS conformity is evaluated annually through internal audits as well as audits conducted by an external organization. In

2021, the internal audits covered altogether 13 sites with a focus on risk management and compliance. The status of the IMS and related performance indicators as well as progress made in development actions are presented in management reviews. Compliance with laws and regulations is tracked and managed with a compliance tool that allows us to identify and assess effects of changes in regulatory requirements.

In addition, several procedures, policies, instructions, and guidelines have been set to control operational activities, reporting, training, communication as well as review and approval processes. Other internal control frameworks include Group governance, risk management policies and business continuity.

Sustainability is an integral part of our strategy and business operations, and applies to everyone at Gasum.



CASE

Integrating responsible practices into everyday operations

Gasum extended the certification of its Finnish biogas plants and is the first operator in biogas industry in Finland to have received certification under all four management systems: ISO 9001, ISO 14001, ISO 45001 and ISO 50001. Integrating harmonized practices in quality, environment, occupational health and safety, and energy management into everyday operations has been found to have increased individual and environmental safety as well as energy efficiency. Compliance with standards will improve Gasum's competitiveness and also benefit customers.

Reporting principles 2021

This sustainability report presents Gasum's the most significant sustainability performance topics, including impacts on the climate and environment as well as the social agenda.

The report has been prepared in accordance with the GRI (Global Reporting Initiative) Standards, core option. The most relevant disclosures related to the Company's operations, products and stakeholders have been selected based on the assessment of the most significant sustainability topics for Gasum and its stakeholders, according to the materiality assessment released in 2019.

The reporting takes place under the guidelines issued by the Ownership Steering Department in the Prime Minister's Office of Finland. Gasum is a signatory to the United Nations Global Compact initiative since 2021. This sustainability report includes information of how the Ten Principles of the Global Compact initiative related to human rights, labor, environment and anti-corruption are implemented in our operations. The reported GRI indicators and the Global Compact Principles are listed in connection with the **GRI Content Index**.

Reporting period and scope

The reporting period for this report is the same as that of the Financial Statements, i.e. from January 1 to December 31, 2021. The report was published in English on the Gasum website on April 23, 2022. The previous report was published in March 2021, and our next reporting will be published in spring 2023.

Reporting boundaries cover all functions of Gasum Group unless otherwise stated. Information from previous years is presented on the basis of the organization of each year and the impacts of ownership changes have not been updated afterwards in the figures.

Data

Gasum utilizes a sustainability management software tool to collect and manage environmental data. The sites are trained for collecting site-level data and the Group level sustainability unit is responsible for the compilation, analysis and reporting of the data. Plant information is reported according to the share of ownership. In 2021, the scope has been updated to cover all new operations started during 2021, including new filling stations and the biowaste transfer station in Vantaa, Finland. Additionally, a more thorough scope 3 coverage has been implemented by the inclusion of, for example, production of all major chemicals and energy use of all offices.

Employee related data originates from human resources (HR) management system. Various systems are used to gather occupational safety and health-related data. Designated individuals collect the information and deliver it to the Group's Sustainability unit in the format recommended by the GRI Standards.

In addition to this Sustainability report, we report on our sustainability activities in Gasum's interim reports. Information concerning many of the reported disclosures can also be found in Gasum's Year 2021 news feed, Gasum Financial Review 2021, Gasum Governance and Remuneration 2021, Gasum Green Funding Impact Report 2021, and Gasum sustainability highlights 2021. Gasum's tax footprint is published in the Financial Review. All publications are available online at **www.gasum.com - Key figures**.

COMMUNICATION ON PROGRESS

UN GLOBAL COMPACT

This is our **Communication on Progress** in implementing the Ten Principles of the **United Nations Global Compact** and supporting broader UN goals.

We welcome feedback on its contents.

Environment

CLIMATE AND CIRCULAR ECONOMY

Cleaner energy

We offer cleaner energy and energy market expert services for industry as well as cleaner fuel solutions for road and maritime transport. We have a versatile infrastructure in place to produce, transmit, and liquefy gas, as well as the logistics for delivery.

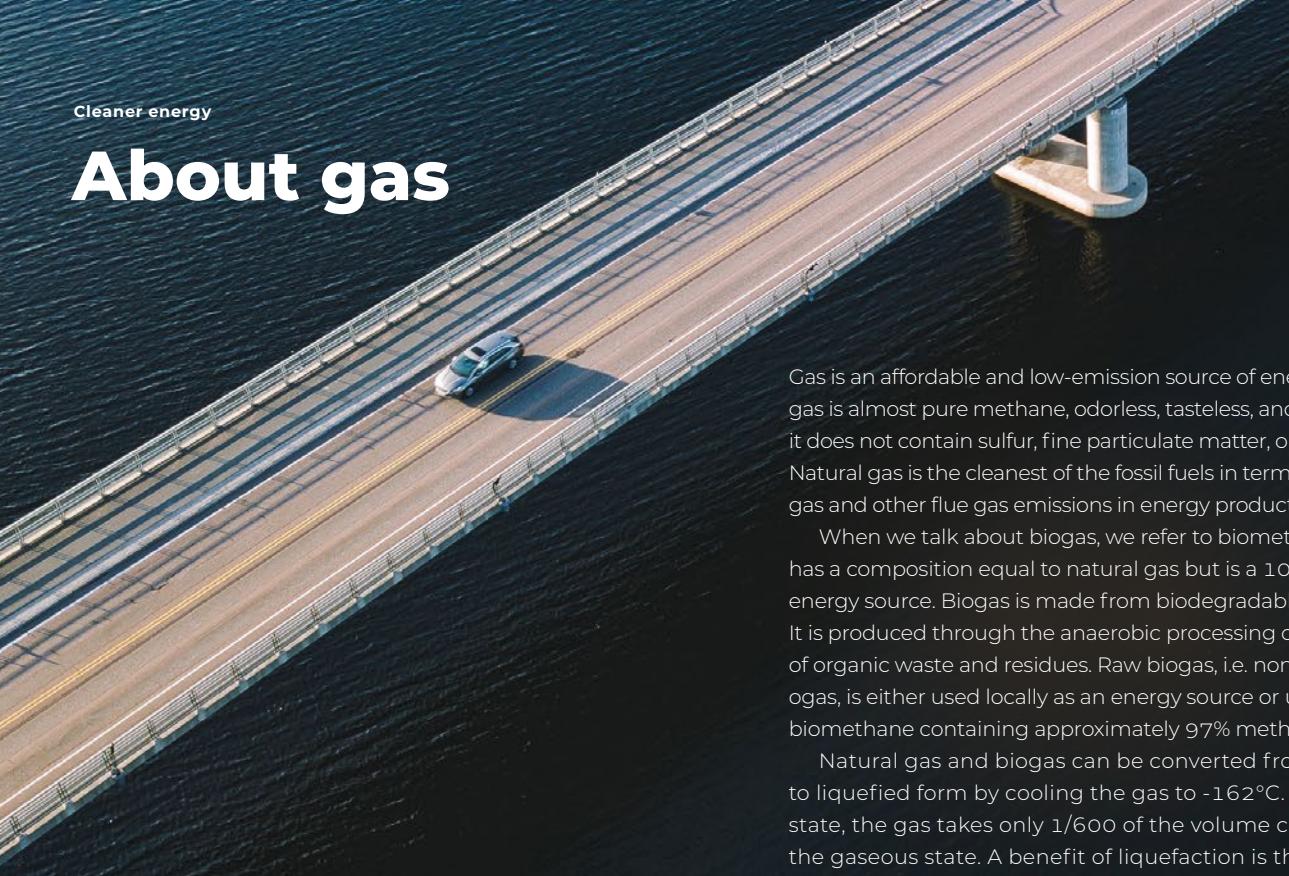
We offer and develop low-carbon and renewable energy products and energy market services for our customers. Our investment outlook improves the availability of renewable energy. We increase access to cleaner fuels in the Nordics, in the maritime and heavy-duty road transport segments, and in industry.

We develop infrastructure for cleaner energy. We advance innovations and build partnerships in the circular economy, cleaner energy, decarbonization and resource-efficiency.

We are committed to help our customers to reduce their climate emissions. We develop to expand future decarbonization pathways.

WHAT WE AIMED FOR	WHAT WE ACHIEVED IN 2021
Cleaner energy	**Growth in demand for cleaner energy** in industry, maritime and road transport. **Availability of biogas increased**. We expanded our biogas production capacity and sourced biogas from certified partners. **Future decarbonization pathways**, including opportunities for clean hydrogen and power-to-gas are in focus of our work together with partners.
Industry: Expanding our offering in carbon neutral power and gas solutions	**Gas in industry.** Renewable biogas is increasingly attracting interest. **Sustainable wind power.** We entered into long-term power purchase agreements (PPAs) with several new partners, which contributes to increasing wind production capacity in the Nordics. **Green services.** We traded a total of 6.2 TWh GoOs for electricity for renewable electricity generated by hydro, wind or solar power or bioenergy.
Maritime: Expanding supply solutions in maritime segment	**Bunkering services and solutions.** Supply network for the vessel fleet was extended geographically. We performed over 1,300 ship-to-ship and truck-to-ship deliveries. **Growing LNG vessel fleet and** new partnerships contributed to emission cuts. Increased interest in renewable LBG as a maritime fuel.
Road transport: Promoting awareness and availability of gas as a road fuel	**Expanding network of gas filling stations.** A network of about 50 filling stations for long-haul LNG/LBG trucks has been developed together with other actors. Altogether there are around 100 Gasum filling stations. **Development of gas vehicle market.** Remarkable growth in gas vehicle fleet and new strategic partnerships with logistics companies. Customer portal and Mobile app were launched for traffic customers. International actors were enabled to fill up in our filling station **network.**

About gas



Gas is an affordable and low-emission source of energy. Natural gas is almost pure methane, odorless, tasteless, and non-toxic, and it does not contain sulfur, fine particulate matter, or heavy metals. Natural gas is the cleanest of the fossil fuels in terms of greenhouse gas and other flue gas emissions in energy production.

When we talk about biogas, we refer to biomethane, which has a composition equal to natural gas but is a 100% renewable energy source. Biogas is made from biodegradable raw materials. It is produced through the anaerobic processing of various types of organic waste and residues. Raw biogas, i.e. non-upgraded biogas, is either used locally as an energy source or upgraded into biomethane containing approximately 97% methane.

Natural gas and biogas can be converted from gaseous to liquefied form by cooling the gas to -162°C. In the liquid state, the gas takes only 1/600 of the volume compared to the gaseous state. A benefit of liquefaction is that the gas can be stored, transported, and used conveniently and cost effectively outside the gas pipeline network.

Natural gas and biogas - or liquefied natural gas (LNG) and liquefied biogas (LBG) are interchangeable with each other, as they both consist mainly of methane. This means that the two gases can be mixed, and they work in the same engines.

Renewable gases, i.e., biomethane and synthetic gas from the gasification and power-to-gas processes, as well as renewable hydrogen will play a significant role in Europe's transition to a carbon neutral future. Gas has an important role particularly in segments that are difficult to electrify, such as heavy-duty traffic, maritime transport, and industry.

As a diverse and clean energy source and industrial material, natural gas will continue to be an important part of energy consumption in future decades. In terms of synergies between electricity and heat, the usage of natural gas will be increasingly emphasized as a reserve fuel that is used to meet extra demand for electricity during periods of peak energy consumption.

Serving the Nordic LNG market through our supply chain

We operate a complete value chain in liquefied natural gas (LNG) to serve the Nordic markets. We want to secure stable energy deliveries to industry, shipping, and logistics companies.

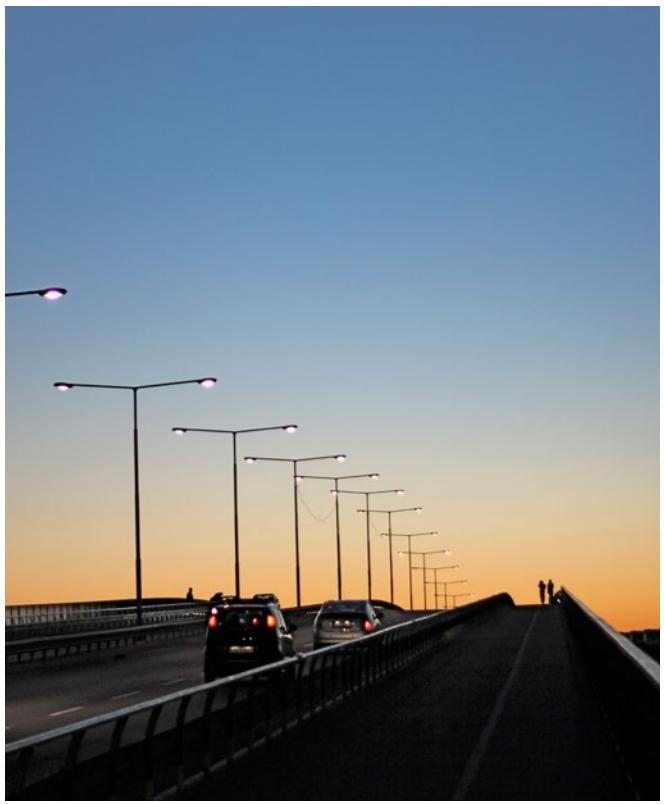
We have prepared for the growth in demand for cleaner energy by investing in the development of the Nordic gas infrastructure for several years already. Major leaps forward have been taken in the availability of gas as our network of terminals, traffic filling stations and maritime supply solutions have grown significantly.

We import natural gas to Finland and are the biggest liquefied natural gas (LNG) actor in the Nordic countries. We strengthen the position and infrastructure of LNG and supply LNG for maritime transport, industry, and heavy-duty vehicles in the Nordic countries.

Our LNG gas supply chain consists of 5 import terminals, 1 joint venture terminal, 2 bunkering vessels, 3 carrier vessels and dozens of road tankers and gas containers. The infrastructure serves the distribution of both liquefied natural gas and liquefied biogas (LBG).

In November 2021, we divested the Risavika LNG liquefaction plant in Norway to North Sea Midstream Partners (NSMP). We continue to ensure deliveries of LNG and LBG to our customers from Risavika through an extensive tolling agreement with NSMP.

The LNG we deliver to customers is sourced from different partners in Europe and from the Risavika liquefaction plant in Norway. LNG from the Risavika production plant is delivered to Gasum's local terminals in Norway (Øra), Sweden (Lysekil and Nynäshamn), and Finland (Pori and Tornio) by chartered vessels. From these terminals, the LNG is delivered by tanker truck to industrial premises with customers' terminals or as natural gas by local gas grids near to industrial customers. For maritime customers, we have the option to deliver LNG by truck-to-ship, terminal-to-ship or bunker by ship-to-ship. The Tornio terminal is a joint venture of the industrial companies Outokumpu, SSAB Europe, EPV Energy and Gasum.



Boost for biogas

We are increasing biogas availability by building biogas production capacity and procuring volumes from partners throughout our gas infrastructure. By 2025, we will make 4 TWh of biogas available to our customers.

We produce biogas in our Nordic biogas plant network and source biogas from the production of certified European partners. Gasum is the leading provider of biogas in the Nordic countries. Besides biogas, the plants also produce recycled nutrients for agricultural and industrial uses.

We offer biogas production and biogas availability on an industrial scale. We own 17 biogas plants and have 1 plant under construction. In addition, we have 3 partner plants. Our biogas production capacity is 800 GWh/p.a. In 2021, our biogas production volume increased by 25% year on year. Biodegradable feedstocks for biogas production are sourced from industry, retail, municipalities, and agriculture.

The importance of biogas as a low-emission energy source will increase further as the Nordic countries transition towards carbon-neutral energy production. EU and national level regulation support growth in the production and use of biogas. Biogas has great potential in the Nordics and just a fraction of this potential has been harnessed.

Gasum has prepared for the growth in gas demand by investing in the development of the Nordic gas infrastructure. We strive actively to increase biogas production capacity by building new biogas plants, increasing the performance of the existing ones and by procuring biogas from certified European partners. We aim to have 4 TWh/p.a. available to our customers in 2025 consisting of developing both our own biogas production and utilizing our partners' production network. In 2021, our biogas availability was about 1.2 TWh.

Expanding the Nordic biogas ecosystem

Our work to expand biogas production capacity is proceeding as planned. Recent key events include ramping up LBG production in Turku in 2020 and opening new biogas plants in 2021 in Nymölla, Sweden and Lohja, Finland.

In Sweden, we are doubling our own biogas production capacity in a few years. The newly opened LBG production plant in Nymölla is the first in Sweden to produce LBG from industrial process water from the pulp and paper industry. In addition, a permit process is ongoing to have a new industrial-scale biogas plant in Götene operational in 2023. The planned LBG plant will have a capacity of 120+40 GWh/p.a. with manure as the main feedstock.

Furthermore, we are progressing with the planning of additional LBG production in Borlänge, in Skåne and Kalmar with investment subsidy granted under Klimatklivet, the Swedish climate investment aid program. The two plants in Skåne would increase biogas production in Skåne County by around 50%, creating value out of biodegradable materials in Sweden's most heavily farmed region.

In Finland, the new Lohja biogas plant opened during 2021 and processes biodegradable feedstocks from the Helsinki Region into 40 GWh of biogas and produces organic fertilizers for agriculture. Gasum also started cooperation with Metsä Fibre, part of Metsä Group, in biogas deliveries as part of Metsä Fibre's Äänekoski bioproduct mill in Finland.

At the biogas network building stage, national support systems, unifying permit processes and close cooperation with decision-makers play an important role in supporting growth in biogas production and use.

CASE

Gasum and Stora Enso lead the way in locally produced biogas

Gasum's cooperation with Stora Enso in Nymölla, Sweden is an innovative way to invest in circular economy and promote biogas' local production. In spring 2021, Gasum started producing liquefied biogas using organic matter from the wastewater of Stora Enso's pulp and paper mill. The Nymölla plant, located right next to the pulp and paper mill, will produce 75–80 GWh of biogas a year. As Gasum's nearest LBG filling station in Kristianstad is just some 20 km away, the project has created an opportunity to produce biogas for local use. In the future the renewable fuel may very well be produced next door.

Future solutions

The need for carbon neutral energy solutions is predicted to grow strongly in coming years to keep in pace with the global objectives to limit climate change. Hydrogen and power-to-gas are possible solutions for expanding decarbonization pathways.

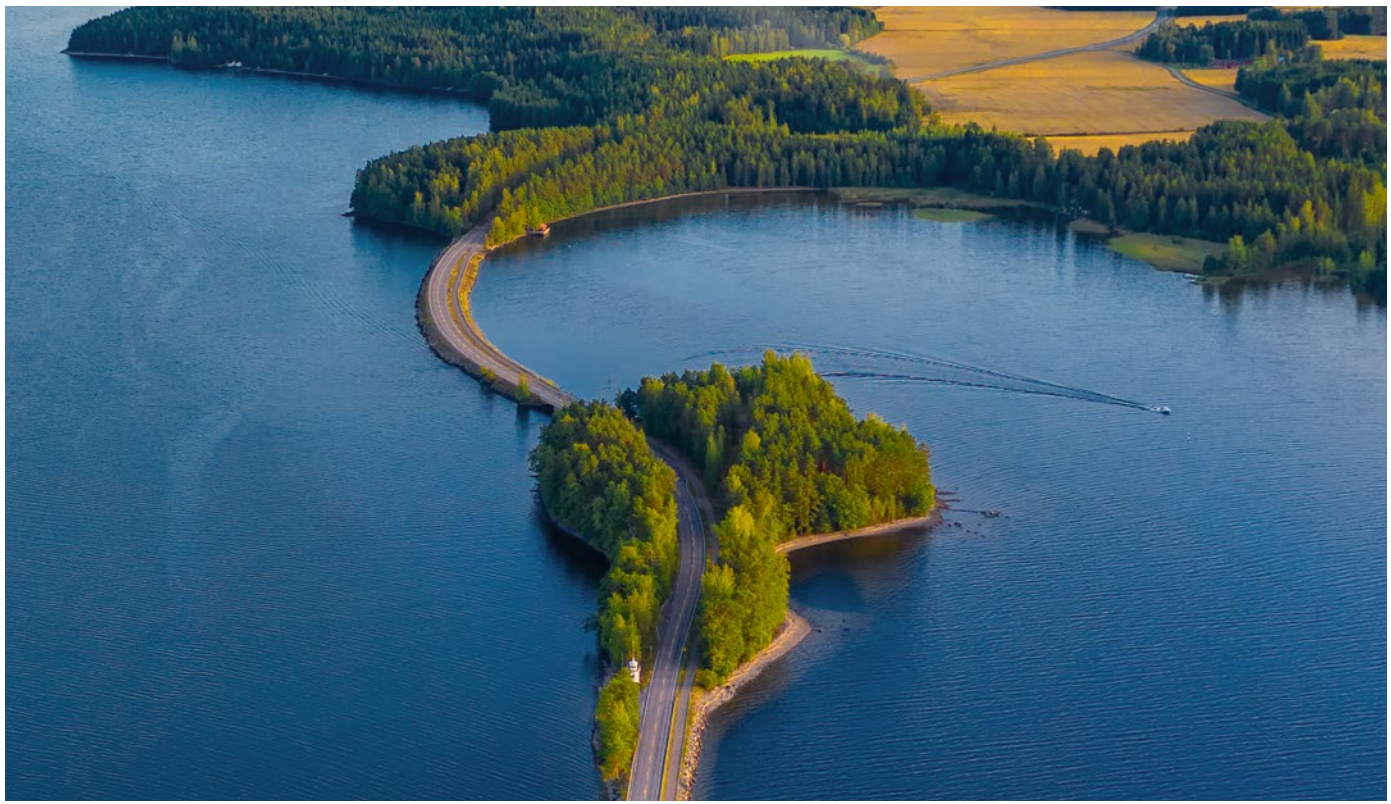
Achieving global climate goals requires a combination of energy solutions. The level of electrification across the economy is increasing. Gas has an important role particularly in segments that are difficult to electrify, such as heavy-duty traffic, maritime transport, and industry. Renewable gases i.e., biomethane and synthetic gas from the gasification and power-to-gas processes, as well as renewable hydrogen will play a significant role in Europe transitioning to a carbon neutral future.

Gasum is committed to helping customers in decarbonization. In addition to existing solutions, i.e., natural gas and LNG, biogas, and renewable electricity and related services, Gasum is developing new solutions for the future, based on customer needs. This includes opportunities for clean hydrogen for industrial needs, power-to-gas (synthetic methane) for maritime, traffic and industrial use, and electrification through energy switching between gas and electricity.

In 2021, Gasum and Hycamite agreed to explore the potential of a new technology for sustainable production of hydrogen and carbon from gas. Pure carbon can be used as a raw material in e-vehicle batteries, for example, and hydrogen can be used in clean energy production and as an industrial raw material. In addition, Gasum is involved in the HYGCEL (Hydrogen and Carbon Value Chains in Green Electrification) research and consortium project headed by LUT University. The project seeks to study Finland's green electrification hydrogen and carbon value chains as well as the transformation of the energy system at the system level.

Gasum is commited to helping customers in decarbonization. This includes opportunities in clean hydrogen and power-to-gas.

Serving the industry segment



We sell gas, power, and energy solutions as well as energy market services to industry in the Nordic countries.

We offer our customers industrial fuels comprising natural gas, liquefied natural gas (LNG), biogas, liquefied biogas (LBG) and renewable power (from hydro, wind, solar or bioenergy sources) as well as energy market services, including Guarantees of Origin for electricity, power market portfolio management and brokering services, 24/7 control room services for risk management and price optimization, expert services in emissions trading, and demand-side management services for consumption optimization.

We offer our industrial customers flexible alternatives to reach their greenhouse gas emission targets. Read about the **climate impact of our products and services**.

Gas in industry

The diverse properties of natural gas and LNG come into their own particularly well in a variety of process applications. Gas flames and clean flue gases can be utilized in the heating, drying, or cooking of products, and as a raw material in the process industry. Natural gases are particularly suitable for use as a fuel for combined heat and steam production as well as in combined heat and power (CHP) production. Liquefied natural

gas and biogas (LNG and LGB) bring the benefits of gas to areas outside the gas pipeline network across the Nordic countries.

Natural gas continues to be a largely utilized energy source for the industry segment. Renewable biogas is increasingly attracting interest among leaders in the industry. During the year we entered into new partnerships in the industry segment:

- We signed a contract with Nynäs AB, which is connected to the Swedish gas grid, to deliver natural gas to their refinery in Gothenburg.
- We supported Essity in switching from LNG to LBG and becoming the first in the world with large-scale tissue production without fossil CO2 emissions.
- We delivered biogas during a sustainability week for Uddeholms AB, one of the world's leading manufacturers of tool steel.
- We will support Sucros Oy sugar beet factory in switching from coal and oil to natural gas and biogas, and significantly reduce their emissions.

Sustainable power procurement

We aim at expanding our offering in carbon-neutral power. We are a major actor in the wind power segment and strive to increase the procurement and availability of renewable Nordic wind power, enabling true additionality in renewable energy production by advancing the construction of new wind power capacity in the Nordics. In 2021, the demand for renewable wind power continued to grow in the industry segment and we entered into long-term power purchase agreements (PPAs) for the delivery of wind power to new partners. Renewable wind power helps companies to reach their climate targets, **read more**.

- We signed a 10-year agreement to deliver wind-generated renewable energy to Borealis AB's facility in Sweden. Generated by our partner Stena Renewable AB, the wind power will reduce Borealis' direct carbon dioxide emissions at its Stenungsund plant by approximately 10,000 tonnes a year.
- We will supply K Group with an annual amount of around 50 GWh of power produced by a wind farm under construction in North Ostrobothnia.
- In addition, we entered into long-term wind power agreements with Nokian Tyres, Uponor, Outokumpu, and Kerava Energy, helping these companies to achieve their climate targets. The wind power will be generated by Gasum's partners in Finland.

Green services in gas and energy markets

Our Energy Market Services operates in the risk management of and trading relating to emission allowances, gas trading and electricity Guarantees of Origin (GoO). During 2021, we continued to assist our customers to operate in the energy market, providing the strategic planning of long-term sourcing and production and the risk management strategy as well as a prompt response to changes in the market situation. Our control room monitors the energy market around the clock, which enables careful power and gas balance management, power price optimization in the intraday markets and access to the reserve markets. We provide our customers with day-ahead forecasts and carry out trading in the day-ahead market, offering their adjustable capacity in the reserve markets and taking care of communication between the transmission system operator and the customer. In addition, Gasum provides brokerage and consulting services for labeling electricity with the international EKOenergy ecolabel and offers alternatives for voluntary emission offsetting.

During 2021, we continued to work with our existing partners and our new partnerships furthered Gasum's strategy to provide cleaner energy to industry.

- Gasum helped Leijona Catering to voluntarily offset emissions that cannot be avoided in the company's food procurement.
- Our Energy Market Services continued serving long-time partners operating in e.g., the mining and metals industries, and wind power producers and utilities.
- Our physical power market services continued to operate in the power market on our partners' behalf by taking care of their daily power trading, power balance monitoring, and communicating with production plants.

Serving the maritime segment

We sell fuel for maritime transport and are building a maritime gas market in Northern Europe.

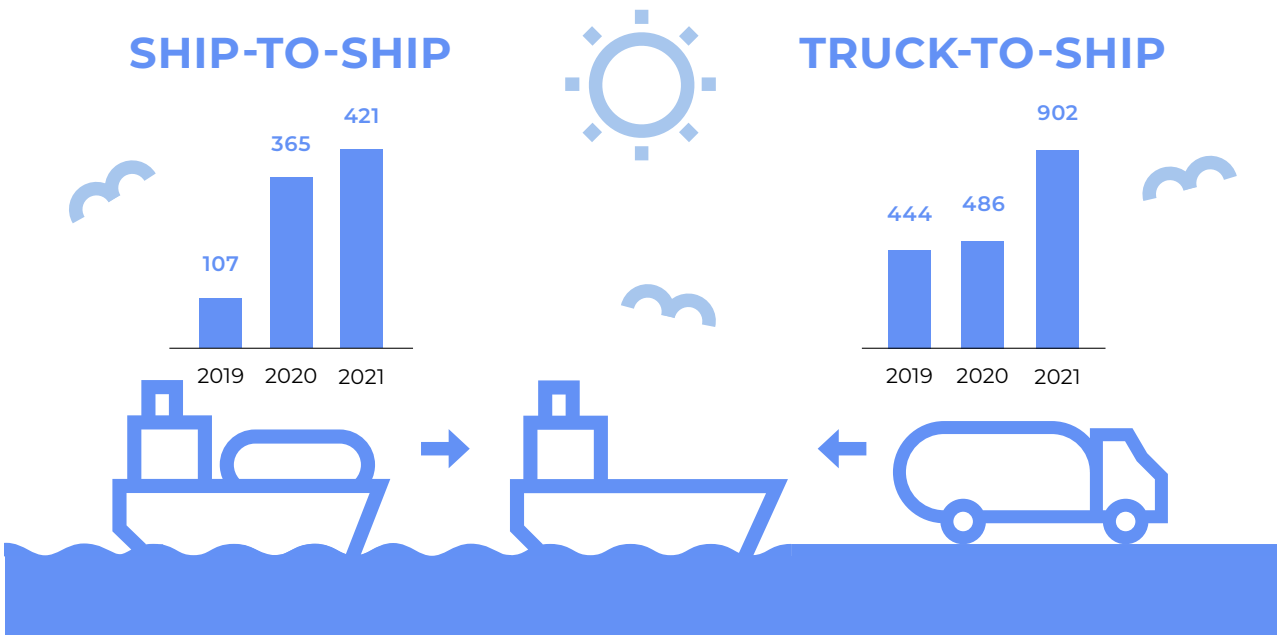
We offer liquefied natural gas (LNG) and liquefied biogas (LBG) for ferries, passenger ships, tankers, bulk carriers, platform supply vessels and container vessels. We offer bunkering services for a global maritime transport customers in the Baltic Sea, North Sea and ARA areas as well as in France.

Our LNG and LBG products help our maritime customers to achieve greenhouse gas emission reductions. Read about the **climate impact of our maritime solutions**.

Providing the best bunkering solutions

We deliver LNG and LBG to our customers by truck-to-ship, terminal-to-ship, or ship-to-ship at sea and in ports, which increases our flexibility and responsiveness to our customers. During 2021, we continued to extend our services for the global LNG-fueled fleet. Positive demand development for cleaner energy increased the number of LNG deliveries year on year. A total of more than 1,300 ship-to-ship deliveries and truck operations were made to our maritime customers. In addition, we delivered several hundred times to vessels directly via pipe from our terminals.

We increased the number of deliveries to the maritime industry



Expanding geographic outreach

We are continuously expanding our geographic outreach and the quality of our offering in response to the growing needs of maritime transport. Our bunkering area extends from the Nordics to the Antwerp, Rotterdam, and Amsterdam (ARA) region, to Germany and France. In 2021, we obtained a distribution license for LNG in France. The first LNG delivery in France was to PONANT, as their latest LNG-fueled newbuilt polar explorer, Le Commandant Charcot, was bunkered in the port of Le Havre. In November 2021, we allocated our bunkering vessel Kairos in ARA to increase the availability of LNG in the area. Kairos is a large bunker supply vessel, with about 7,700 cbm capacity.

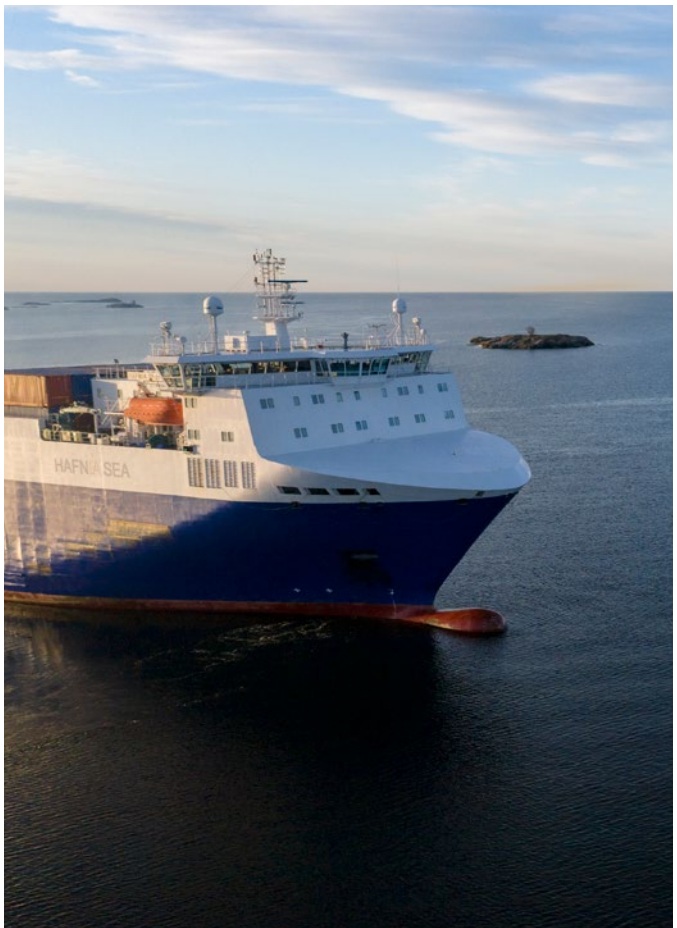
Growing LNG vessel fleet

According to the LNG vessel orderbook published by DVV, the next three years will see the delivery of more than 350 new LNG tankers, while Gibson Shipbrokers reports that already 23% of the current global tanker orderbook is for LNG-fuelled new buildings. The share of LNG in shipping has increased strongly despite the recent increases in gas prices. Companies regard environmental aspects as a competitive advantage when moving towards the stricter emission reduction targets.

Partnerships in the maritime segment

During 2021, we cooperated with several partners in the maritime segment:

- We delivered test consignments of LBG to the Finnish Border Guard from the Turku biogas plant in Finland and from the Risavika liquefaction plant in Norway. The test deliveries were made to demonstrate the use of biogas on an offshore patrol vessel and the biogas delivery logistics.
- We entered into a framework agreement on LNG and will supply LNG to the Finnish Transport Infrastructure Agency and the Finnish Border Guard.
- We entered into an agreement with the City of Vaasa, NLC Ferry Oy and Wärtsilä Finland Oy to supply LNG to Wasaline, which operates the Vaasa-Umeå ferry route, and for use in Wärtsilä's new Smart Technology Hub.
- We bunkered LNG to cruise operator PONANT's new polar explorer in Le Havre, expanding Gasum's network to France
- We bunkered LBG for the first time to an offshore supply vessel in Norway. The fuel was delivered to Lundin Energy Norway's supply vessel Island Crusader.
- Renewable LBG was increasingly attracting interest among forerunners in maritime transport.
- 10% of all delivered volumes to Destination Gotland were LBG and the intention is to continuously increase the amount over the next few years.



Serving road transport

LNG and LBG help heavy-duty transport efficiently to reduce emissions.

We sell fuels for road transport, build and maintain the gas filling station network and develop the road fuel gas market in the Nordic countries.

We offer our customers liquefied natural gas (LNG) and liquefied biogas (LBG) as well as compressed natural gas (CNG) and compressed biogas (CBG). The products are used in heavy-duty long-haul transport as well as in delivery and passenger vehicles, including buses, waste management vehicles and cars.

Our traffic fuels help our customers in road transport to achieve greenhouse gas emission reductions. Read about **reducing emissions in road transport**.

Strong expansion of the gas filling station network

In response to the rapidly growing demand for gas in heavy-duty transport in the Nordics, we have succeeded, together with other actors, in our target to develop a network of about 50 filling stations for long-haul LNG/LBG gas trucks in Finland, Sweden, and Norway. Altogether Gasum has a comprehensive network of around 100 gas filling stations serving heavy-duty vehicles as well as lighter traffic, such as passenger cars, delivery vehicles, refuse vehicles and buses. In 2021, we opened 12 new stations in high-traffic areas. Besides building new gas filling stations, we had development projects across the station network to increase capacity at existing filling stations.

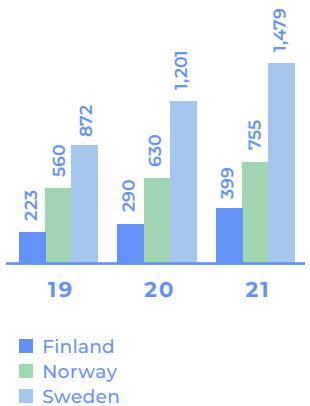
In 2021, we developed a customer portal intended for business customers, as well as **Mobile app** to serve gas drivers. In addition, we enabled international actors to use their international DKV and Eurowag cards to fill up in our filling station network. This is part of the development of the gas vehicle market and supports our target of connecting the Nordic and Central European markets and enabling low emission logistics for international players in the Nordics.

Growing number of heavy-duty gas vehicles

The number of gas vehicles continued to grow in the Nordics. In 2021, new registrations of gas vehicles totaled 2,100 in Sweden, about 2,200 in Finland. About 580 heavy-duty vehicles powered by gas started operating on Finnish, Swedish and Norwegian roads. At year-end 2021, the number of all gas-fueled vehicles totaled about 16,000 in Finland and more than 49,000 in Sweden. In Norway, there were about 1,600 trucks and buses.

The rise in orders for gas-fueled heavy-duty vehicles continued in the Nordics. During 2021, a global shortage of components and the pandemic situation significantly stretched the delivery time of new gas trucks.

GAS TRUCK FLEET SIZE



Partnerships in the traffic segment

During 2021, we continued to collaborate and develop new partnerships with several logistics companies and logistics buyers.

- HKScan's Swedish subcontractor Green L Equipment AB started to use a biogas-fueled truck in its logistics. The new truck will help the company to progress towards its climate targets and to considerably lower its carbon footprint.
- In Sweden, we worked with MaserFrakt logistics companies in testing the use of liquefied biogas (LBG) in six of their trucks. The logistics company's user experiences of the tests were positive.
- The logistics company DACHSER Finland invested in ten biogas delivery trucks, which reduced CO_2 emission of certain routes by as much as 70%.
- Flixbus chose biogas for their Stockholm to Oslo route to support sustainable mobility and their goals in emission reductions.
- Tamro, Finland's leading medicine and health product distributor, chose to reduce logistics emissions with biogas together with its partner, Postnord.
- Several logistics companies carried out gas truck testing periods together with logistics buyers. Positive testing results demonstrated the emission reduction potential achieved with gas trucks and lead to the acquisition of new trucks.

Climate

We create value by developing a low-carbon society and helping our customers to reduce their own carbon footprint and that of their customers. We are committed to enabling our customers to reduce their CO_2 emissions by 1,000,000 t with the help of biogas by 2025. At the same time, we aim at decreasing the climate impact of our own operations.

We increase availability of cleaner energy for our customers.

We develop infrastructure and build partnerships in cleaner energy and decarbonization.

We contribute to cleaner urban air.

Our products help our customers and society at large to reduce GHG emissions. We reduce our own carbon footprint.

WHAT WE AIMED FOR	WHAT WE ACHIEVED IN 2021
Increasing handprint of our products 1,000,000 t CO_2eq cumulative emission reduction for customers achieved with biogas by 2025.	**345,000 t CO_2eq emission savings** enabled for our customers with renewable biogas, up by 28% year on year. Further emissions savings were enabled with other low-carbon fuels, renewable power, and circular economy solutions. **Growth in demand for cleaner energy in industry, maritime and road transport** facilitated CO_2 emission savings. Strong growth in wind power demand in industry and growing fleets of gas-powered maritime vessels and heavy-duty vehicles played a key role. Biogas is increasingly popular as a road fuel. **Availability of gas increased.** We brought 1.2 TWh of biogas to market and increased the production volumes of our biogas plant network by around 25%. We extended our gas filling station network and expanded our bunkering services geographically.
Decreasing footprint of our operations 1% energy savings annually during 2017-2025. Decreasing trend in LNG and biogas supply chain GHG emission intensity.	**100% renewable electricity used in all operations.** **Total energy consumption decreased by 3.5% year on year.** Several investment projects completed during 2019-2021 have increased energy efficiency at our LNG terminals and biogas plants significantly. **4.4% decrease in GHG emission intensity** of Gasum's operations year on year. **We participated in the UN Global Compact Climate Ambition** accelerator initiative to further work on ambitious company climate targets.

Creating a carbon handprint

We create a carbon handprint by reducing the carbon footprint of our customers as well as that of their customers. An efficient way of mitigating climate change is to increase the availability and use of renewable and low-carbon fuels in road and maritime transport and in industry.

We have set a target to increase the availability of biogas and reduce our customers' cumulative greenhouse gas emissions by million tonnes of CO_2eq by 2025. We intend to make 4 TWh of biogas available on the market from our own production and that of our certified European partners within the set timeframe. In 2021, we brought 1.2 TWh of biogas to market and increased the production volumes of our biogas plant network by around 25%. We helped our customers to reduce greenhouse gas emissions by a total of 345,000 t CO_2eq (270,000 in 2020) with biogas. In addition, with our portfolio of other low-carbon fuels such as LNG and renewable power, and our circular economy solutions we helped our customers to further reduce their climate impact in road and maritime transport, and in industry.

We measure the climate impact of our products over their entire life cycle. The calculation considers the value chain from raw material sourcing to production, distribution, and use of product.

Biogas makes it possible for users to cut greenhouse gas emissions on average by 70-90% compared to the well-to-wheel emissions from a 100% fossil-based fuel as defined in the EU Renewable Energy Directive (RED2 2018/2001/EU). The emission reduction % varies depending on the place of production, used feedstock and the distribution logistics. There is potential to reduce emissions even further when animal manure is used as a feedstock in biogas production.

Our efforts to expand the gas infrastructure provide a sound platform for climate change mitigation, where LNG already reduces CO_2 emissions effectively compared to traditional fuels. The increasing availability of LBG use will further push decarbonization. Natural gas and LNG enable greenhouse gas emission reduction of about 20% compared with the life cycle emissions of other fossil-based fuels.

Our **recycled fertilizer products** utilised in agriculture and in industry provide over 90% greenhouse gas emission reduction compared with mineral fertilizers use.

FACT

CO_2 emissions from biogas use amount to zero

When biogas is combusted, CO_2 is generated. However, CO_2 is not counted as a greenhouse gas in the context of renewables. Why? Because an equal amount of carbon is released into the atmosphere during combustion as has earlier been adsorbed in photosynthesis by the biomass feedstock. This is the foundation of the so-called fast carbon cycle. On the contrary, in the slow carbon cycle, fossil carbon is transferred from reserves millions of years old and adds to the amount of atmospheric CO_2. Of the fossil fuels, combustion of natural gas emits the least CO_2 due to its low carbon content.

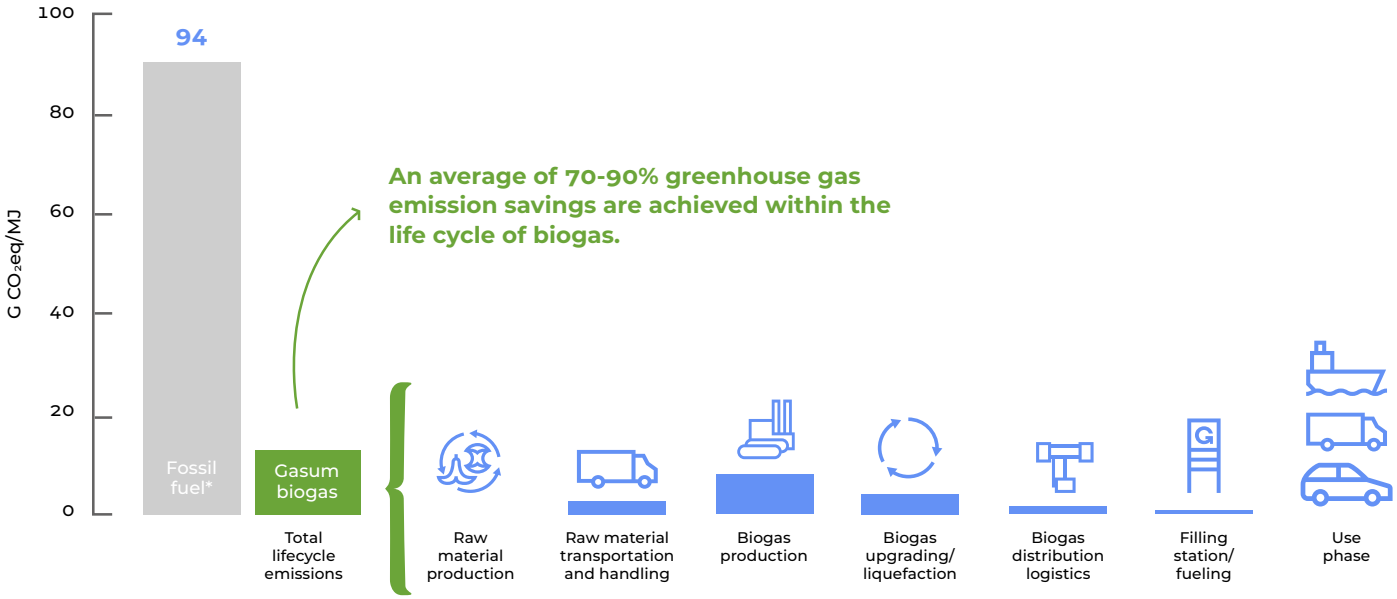
FACT

Biogas can reduce emissions by more than 100%

Biogas reduces emissions significantly by replacing fossil fuels. When animal manure is used as a feedstock for biogas, the benefit is even greater. Manure generated by livestock naturally produces a significant amount of methane during storage. When manure is taken to a biogas plant for controlled digestion, the methane released into the atmosphere from traditional manure management is avoided. In fact, the impact is so significant, that it can lead to a negative carbon footprint of biogas. This means that more greenhouse emissions are avoided than are emitted during the life cycle of biogas*.

**In accordance with the European regulation (RED2 2018/2001/EU), a bonus of 45 g CO_2eq/MJ manure is attributed for improved agricultural and manure management where animal manure is used as a substrate for the production of biogas and biomethane.*

Greenhouse gas emission savings with biogas



**Calculation method and fossil fuel comparator are based on the guidelines on the determination of greenhouse gas emission reductions in accordance with the EU Renewable Energy Directive (RED2, 2018/2001/EU).*

Cleaner urban air

Use of gas as a fuel can help to reduce local air emissions in urban areas. Cleaner burning than other fossil fuels, the combustion of natural gas, as well as biogas, produces negligible amounts of sulfur and small particulates, and up to 85% lower levels of nitrogen oxides (NO_x), which are precursors to smog.

Biogas complies with sustainability criteria

In 2021, 100% of the biomethane and liquefied biomethane (LBG) we delivered to our customers fulfilled the sustainability criteria laid down in the EU Renewable Energy Directive (RED2, 2018/2001/EU). Compliance with the sustainability criteria is demonstrated with certified sustainability systems, which cover entire supply chains of CBG and LBG. The sustainability systems ensure that sustainable raw materials are used in the biogas production and that the required level of greenhouse gas emission reduction is met. Traceability is maintained by applying an appropriate chain of custody method. Compliance with the sustainability criteria is audited and verified by independent third-party certification bodies and reported to the energy authorities in Finland and Sweden and to ISCC voluntary certification scheme.

In October 2021, it became obligatory in Sweden to display fuel environmental information at filling station pumps. Information of the climate intensity, raw materials, and country of origin of biogas was made available at Gasum's gas filling stations in Sweden. The initiative is overseen by the Swedish energy agency.

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Biogas fulfils Nordic Swan Ecolabel criteria

Gasum biogas has been awarded the Nordic Swan Ecolabel. The label covers most of the Finnish biogas production used as a transport fuel. The ecolabel makes it easy for consumers and professional buyers to choose the environmentally best goods and services. To get awarded, biogas must fulfill strict environmental requirements throughout the life cycle, such as

- 70% GHG emission reduction (60% for sewage sludge-based biogas)
- No palm oil, soybean oil, sugar cane used as feedstock
- No genetically modified plants used as feedstock.

In general, the sustainability characteristics of a Nordic Swan ecolabeled product outperform the average product on the market. Based on recent surveys in Finland, proof of reliable and credible sustainability performance is one of the main reasons for companies to apply for the ecolabel, and for customers to choose eco-labeled products. The Nordic Swan ecolabel is a well-known and a valued brand in the Nordics.

Cleaner energy to industry

We offer our industrial customers versatile alternatives to achieve their greenhouse gas emission targets. Natural gas and LNG enable greenhouse gas emission reduction of about 20% compared with the lifecycle emissions of other fossil-based fuels. The use of biogas helps to reduce greenhouse gas emissions in the production of heating or cooling on average by 65–90%, based on the European regulation (RED2 2018/2001/EU) calculation method.

The role of electricity is growing in the efforts of our customers to reach environmental targets and reduce carbon dioxide emissions through actions such as process electrification and investments in energy efficiency. In 2021, demand for renewable wind power continued to grow in industry. We entered long-term supply contracts on wind power with several partners. We traded a total of 6.2 TWh of Guarantees of Origin for renewable electricity generated by wind, hydro or solar power or bioenergy and helped our customers to reduce their carbon footprint.

In 2021, **our new partnerships** with industrial operators and continued cooperation with the existing partners furthered our strategy to provide cleaner energy to industry segment.

We aim to reduce our customers' CO_2 emissions by million tonnes by 2025.

CASES

Renewable wind power helps companies reach climate targets

K-Group, Uponor, Nokian Tyres, Outokumpu, Kerava Energy, and Borealis Ab are different companies from different industries, but they have one thing in common. They all have signed a long-term supply contract on wind power with Gasum in 2021. The wind power will be produced by Gasum's partners at wind farms in Finland and Sweden. Choosing renewable wind power allows the companies to reach their climate targets and significantly decrease their CO_2 emission. Wind power is also a vital part of Gasum's portfolio in renewable energy. It will have a significant role in the transition to a cleaner future.

Leijona Catering offset emissions that cannot be avoided

We offer our customers voluntary emissions offsetting, which enables companies to support emission reduction projects and at the same time offset emissions from their own operations. Gasum brokers voluntary emission reductions (VERs) approved and supervised in compliance with well-known standards. In 2021, Gasum helped Leijona Catering offset emissions that could not otherwise be avoided in their food procurement the previous year. Companies partner also in the circular economy: Gasum processes Leijona's bio- and food waste into renewable biogas for road transport.

Essity becomes first tissue production in the world without fossil CO_2 emissions

As of January 2022, the Swedish-based hygiene and health company Essity became the first in the world to produce tissue paper on a large scale without any fossil-based CO_2 emissions. Together with Gasum, Essity's production facility in Lilla Edet, Sweden successfully switched over from natural gas to biogas, allowing carbon dioxide emissions to be reduced to zero under normal operations. Biogas is produced from food waste, manure, or other biodegradable raw materials, and is therefore a 100% renewable fuel that can reduce CO_2 emissions over its life cycle by up to 90% compared to conventional fuels.

Sustainable solutions for maritime

About 3% of global greenhouse gas emissions are generated in maritime transport. In addition, ships emit nitrogen oxides (NO_x), sulfur and particulate emissions, which are harmful to the environment and human health.

Demand for cleaner energy solutions is currently growing in maritime transport. LNG is recognized by the shipping industry as one of the most viable alternative fuels to reduce emissions. We help our customers to meet the international regulation that steers shipping companies towards the use of cleaner fuels. The International Maritime Organization (IMO) sets ambitious targets to reduce greenhouse gas emissions from vessels, as well as NO_x and sulfur emissions.

LNG offers several benefits by reducing local and global pollution. Use of LNG reduces the climate impact by approximately 20% and generates close to zero emissions of sulfur oxides (SO_x) and particulate matter (PM), and a reduction in nitrogen oxides (NO_x) emissions of up to 85% compared with current conventional petroleum-based maritime fuels.

During 2021, we increased the availability of LNG at sea and extended our fuel supply network geographically. We continued to develop our offering and services to meet the maritime sector's needs. We entered into several **new partnerships with maritime operators** which enabled them to reduce their carbon footprint.

Fully renewable LBG is increasingly attracting interest among forerunners in shipping, which demonstrates maritime industry's commitment of working towards cleaner solutions. During 2021, we bunkered LBG for the first time to an offshore supply vessel in Norway, Lundin Energy Norway's supply vessel Island Crusader. Since LBG works in the same engines as LNG, it can be used immediately without the need for any additional investments, thereby speeding up the further decarbonization of the maritime industry.

Fully renewable LBG is increasingly attracting interest among forerunners in shipping.

CASE

The Finnish Government chose LNG for maritime transport

Maritime transport has a leading role in changing course towards a cleaner tomorrow. Gasum supplies LNG to the Finnish Transport Infrastructure Agency and the Finnish Border Guard in 2021–2022. The framework agreement won in a competitive tendering process was preceded by a well-functioning cooperation. In May 2021, Gasum also performed two biogas test deliveries for the Finnish Border Guard's vessel Turva. Both actions support Finland's goal for carbon neutrality in 2035. Using biogas alongside with LNG in maritime transport is also a step forward in decarbonising the shipping industry.

CASE

DACHSER Finland invested in circular economy

The demand for sustainable supply chains is constantly growing in the Nordic countries. The logistics company DACHSER Finland responded to the demand by switching two thirds of its fleet in one go into biogas-fuelled vehicles. The company invested in ten biogas delivery trucks that will operate on short routes in the Helsinki region. The decision was supported by DACHSER Finland's previous experiences with biogas. The company was able to reduce its CO_2 emissions on certain routes by 70%, when compared to its emissions in 2019, after switching to biogas-fuelled delivery trucks.

Reducing emissions in road transport

Transport accounts for almost a quarter of Europe's greenhouse gas emissions. Within the transport sector, road transport accounts for more than 70% of all greenhouse gas emissions. The EU and national targets are driving a rapid decrease in emissions. In the EU, carbon dioxide emissions from new HDVs must be cut by 15% from the 2019 level by 2025, and the reduction target for 2030 is 30%. The Nordics countries are all committed to significantly reducing carbon dioxide emissions from road transport by 2030.

Transition to more extensive use of biogas and natural gas is advancing at a rapid rate due to the increased awareness of low emissions and cost-effectiveness of gas vehicles. National support measures targeted at gas-fueled transport are promoting the development of vehicle fleets and a distribution infrastructure. In Finland, biogas was included in the national blending mandate for transport fuels from the beginning of 2022.

The use of biogas helps to reduce greenhouse gas emissions in transport on average by 70–90%, based on the European regulation (RED2 2018/2001/EU) calculation method. Switching to LBG does not require any modifications to gas-fueled vehicles. Use of LNG can help to reduce carbon dioxide emissions by more than 20% compared with fossil diesel use.

Liquefied biogas (LBG) is becoming an increasingly popular fuel for heavy-duty vehicles (HDVs). In addition, almost all gas car drivers choose to fuel with biogas at our filling stations.

Responding to the growing demand for road fuel gas, we continued expanding our network of gas filling stations with 12 new stations during 2021 and increased the capacity of several existing stations. Gasum's expanding Nordic network currently consists of around 100 gas filling stations – including LNG/LBG stations for heavy-duty vehicles – in Finland, Sweden, and Norway.

The rise in orders for and registrations of gas-fueled heavy-duty vehicles continued in Finland, Sweden and Norway in 2021. Already, several thousand LNG-powered trucks are in operation in Europe, with numbers expected to increase steadily. Development of vehicle technology in heavy-duty vehicles is further driving the growing demand for gas. In addition to the HDV segment, we see promising growth potential in local distribution and transportation, and in passenger cars. Gasum is investing in all these segments.

The rise in orders for and registrations of gas-fueled heavy-duty vehicles continued in the Nordics.

Our carbon footprint

We aim to decrease the climate impact of our operations. We work systematically to optimize our supply chain and improve the energy efficiency of LNG terminals and biogas plants. We use 100% renewable electricity in all our operations.

We measure our carbon footprint regularly. The climate impact of our LNG and biogas supply chains is assessed using a life cycle approach. The GHG Protocol standard and the related three scopes (scope 1, scope 2, and scope 3) set the framework in quantifying and reporting our corporate level GHG emissions. Scope 1 emissions are direct emissions from our operations and scope 2 includes emissions which are generated in the production of electricity purchased by Gasum. Scope 3 emissions are a consequence of Gasum's activities but occur from sources that are not owned or controlled by us.

Our Scope 1 and 2 (market-based) greenhouse gas emissions in 2021 totaled 53,000 t CO_2eq (54,000 in 2020). Of the scope 1 and scope 2 (market-based) greenhouse gas emissions, 47% originated from our operations in Norway, 34% in Sweden, and 19% in Finland. Most of the direct emissions were generated in our Nordic LNG supply chain. Our reported scope 3 emissions are mostly generated in the use of sold products. Our greenhouse gas emissions consist of carbon dioxide and methane emissions.

GHG emission intensity of Gasum's operations decreased by 4.4% year on year. The emission intensity has been calculated by dividing scope 1 and 2 GHG emissions of our LNG and biogas supply chain operations with the energy content of the products delivered.

During 2021, we participated in the UN Global Compact's Climate Ambition Accelerator program. We aim to further develop our climate ambition and explore the oil and gas sector specific methodology for setting science-based targets. The sector specific methodology was under development during 2021 by the Science Based Targets initiative (SBTi).

100% renewable electricity used

In 2021, we continued to use 100% renewable electricity in all our operations. A full switch to renewable electricity was made already from the start of 2018. Electricity consumed by Gasum during 2021 was generated mostly by Nordic hydropower. A significant share of the electricity in 2021 was utilized in the production of liquefied natural gas (LNG) in Risavika, Norway. The Risavika plant was divested from our operations in November 2021.

Biogas plants use heat energy in their processes. Process heat is produced from non-upgraded biogas, natural gas, and landfill gas. Part of the process heat is purchased as district heat.

Reducing methane emissions

Management and reduction of methane emissions across the gas value chain is among the top priorities for the gas industry.

Value chain emissions, total 5.95 Mt CO_2e

0.7%

SCOPE 1

Direct emissions from own operations

0.2%

SCOPE 2

Purchased energy

99.1%

SCOPE 3

Use of sold products **80.2%**

Purchased goods and services **18.0%**

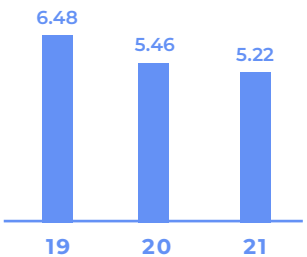
Downstream transportation and disribution **0.7%**

Upstream transportation and distribution **0.1%**

Other* **0.1%**

* Fuel and energy related activities, business travel, waste generated in operations

CARBON INTENSITY OF GASUM'S OPERATIONS
tCO_2e/GWh



Gasum has for years been actively working to reduce methane emissions by implementing effective technologies and practices through mandatory and voluntary programs. The emissions of our LNG terminals and biogas plants are conducted to the flare of the plant and the methane is measured before being combusted into CO_2. This means that pure methane emissions are very limited in relation to LNG and biogas production and handling.

The EU Methane Strategy aims to reduce methane emissions, and will have a positive impact on biogas production, delivery, and use. The strategy concretely highlights that biogas and biomethane production are key parts of the solution to reduce methane emissions in Europe. Especially in the agriculture sector significant emissions can be avoided, when methane-emitting feedstock, such as manure, is brought to the controlled environment of a biogas plant. This enables us to capture and utilize the methane instead of it being naturally released into the atmosphere during manure storage.

Emissions into air

tons	2021	2020	2019
Direct CO_2e emissions (Scope 1)	44,000	45,000	66,000
Indirect CO_2e emissions (Scope 2, location-based)	16,000	15,000	15,000
Indirect CO_2e emissions (Scope 2, market-based)	9,000	9,000	8,000
Other indirect CO_2e emissions (Scope 3)	5,900,000	36,000	28,000
Direct CH_4 emissions (included in Scope 1 emissions)	306	158	459
Direct biogenic CO_2 emissions	81,000	75,000	80,000
NO_x (Scope 1)	12	12	29
NO_x (Scope 3)	622	564	454

We work systematically to improve energy efficiency

Our continuous focus in decreasing emissions from our operations is related to improving energy efficiency. We have set a company level target of increasing energy efficiency by 1% annually during 2017–2025. In 2021, our total energy consumption decreased by 3.5% year on year.

We participate in the voluntary Finnish Energy Efficiency Agreement for Industries under the Energy-Intensive Industry Action Plan. The Action plan is an important part of Finland's Energy and Climate Strategy and a primary tool for the promotion of efficient energy use in Finland. Our savings target for the agreement period for the Finnish operations is 8 GWh, which we have achieved ahead of time.

During 2019–2021, we invested in several measures to optimize our operations, which have greatly improved our energy

Indirect CO_2e emissions from electricity and heat procurement are determined based on the location-based and market-based methods. Location-based calculation reflects the average emission intensity of grids on which energy consumption occurs. Market-based calculation reflects emissions from electricity that organization has purposefully chosen.

Global warming potential (GWP) of methane is 28 times that of carbon dioxide based on the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC).

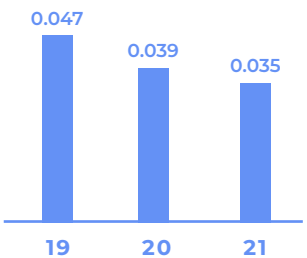
Direct biogenic CO_2 emissions are generated in the combustion of biogas and landfill gas for energy production, in flaring, and in the biogas upgrading process. Biogenic CO_2 emissions are not counted in the total GHG emissions of the company.

Scope 3 emissions in 2021 were extended to include use of sold products and purchased goods and services.

NO_x scope 3 emissions are generated in vessels transporting Gasum's products.

The EU Methane Strategy highlights that biogas production is a key part of the solution to reduce methane emissions in Europe.

ENERGY INTENSITY OF GASUM'S OPERATIONS
GWh/GWh



efficiency. Projects have included the commissioning of a biogas upgrading and liquefaction unit in Turku and biogas upgrading units in Oulu and Huittinen, Finland. Energy efficiency has been in a key role also in the odor gas boiler investment at the Riihimäki biogas plant and in choosing filling station technologies. Recent investments made in Finland decreased flaring 33% year on year. In 2020 alone, we achieved group level energy savings of 44.5 GWh. Our Group level energy intensity has decreased steadily over the years. The energy intensity has been calculated by dividing the energy consumption of our gas supply chain operations with the energy content of the products delivered.

During autumn 2021, energy prices were at a high level, which largely impacted the cost of operations of energy intensive industry and highlighted the importance of energy efficiency. In 2021, we focused on ensuring that our recent investments enable production improvements and energy savings also going forward. Our energy investment at the Pori LNG terminal in Finland was handed over. The new boil-off gas reliquefaction unit significantly reduced the energy consumption and direct CO_2 emissions at the terminal.

During 2021, we also focused on developing an energy data analysis process, which is crucial to improving the energy efficiency of our operations. During the annual Gasum Energy Savings Week, we shared information about our actions, and increased awareness of what we can do to improve energy efficiency in Gasum.

To develop and manage our energy efficiency measures and actions, we maintain a voluntary energy management system, which is certified in accordance with ISO 50001:2018. The energy management system comprehensively covers our supply, production, and delivery of gas products, as well as the processing of biodegradable waste, and production of recycled nutrient and fertilizer products.

An important part of our energy management is to identify, implement and follow up energy efficiency improvements at our LNG terminals and biogas plants. Day-to-day energy observations help us to identify deviations such as air or energy leakages and bring up saving ideas in electricity, fuel, or water consumption, or in heating and cooling. The observations are recorded, and actions taken accordingly.

Energy consumption

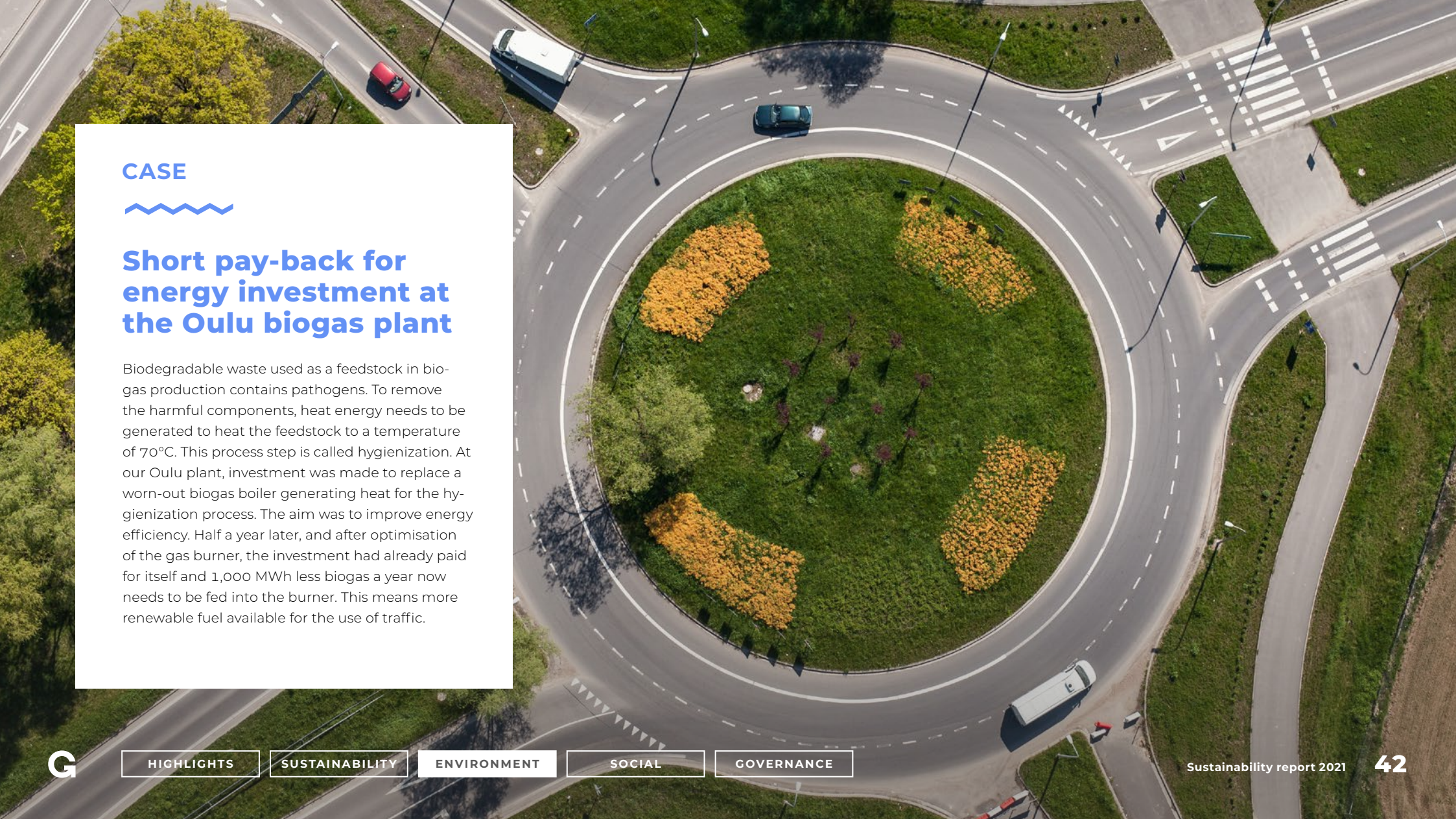
GWh	2021	2020	2019
Fossil fuel consumption	87	113	158
Renewable fuel consumption	76	88	97
Electricity consumption	182	164	154
District heat consumption	16	9	32
Steam consumption	31	34	32
Heat sold	4	4	7
Electricity sold	2	5	5
Total energy consumption	386	400	460

Fossil fuel consumption includes natural gas, LNG, light fuel oil and diesel. Renewable fuel consumption includes biogas used in the plants' own processes. Amount of cooling energy is negligible and is not reported separately.

We have invested in several measures to optimize the energy efficiency of our operations.

Changes in the scope of environmental and energy data compared to the previous year:

The scope has been updated to cover all new operations started during 2021, including new filling stations and the biowaste transfer station in Vantaa, Finland. Additionally, a more thorough scope 3 coverage has been implemented by the inclusion of, for example, the production of all major chemicals and energy use of all offices.



CASE

Short pay-back for energy investment at the Oulu biogas plant

Biodegradable waste used as a feedstock in biogas production contains pathogens. To remove the harmful components, heat energy needs to be generated to heat the feedstock to a temperature of 70°C. This process step is called hygienization. At our Oulu plant, investment was made to replace a worn-out biogas boiler generating heat for the hygienization process. The aim was to improve energy efficiency. Half a year later, and after optimisation of the gas burner, the investment had already paid for itself and 1,000 MWh less biogas a year now needs to be fed into the burner. This means more renewable fuel available for the use of traffic.

Circular economy

We are a major processor of biodegradable fractions of waste and residues generated in society. We boost the availability of biogas and develop the market for the recycled nutrient and fertilizer products. The circular economy is seen as a necessity in supporting climate change mitigation, resource efficiency and sustainable growth.

We develop, offer, and invest in cleaner energy products and related infrastructure.

We advance innovation and build partnerships in the circular economy, decarbonization and resource-efficiency.

Our energy products impact positively on local air quality in urban areas.

We process a substantial share of society's biodegradable waste and residues.

We help our customers to reduce their climate emissions.

WHAT WE AIMED FOR	WHAT WE ACHIEVED IN 2021
Increasing availability of biogas in the Nordic market.	**Increased biogas production capacity.** Our biogas production volume increased by 25% year on year. We built new biogas production plants in Lohja, Finland and Nymölla, Sweden. In total, we brought about 1.2 TWh of biogas to market, including sourced volumes from partners. **Scale-up continues.** We have a permit process ongoing to construct a plant in Götene, Sweden and are planning to build new biogas plants in Borlänge, Kalmar, and two in Skåne in Sweden.
Ensuring sustainability of the biogas	**Sustainability criteria fulfilled.** 100% of the biomethane production fulfills EU Renewable Energy Directive sustainability criteria.
Utilizing feedstocks in biogas production that enable us to develop the market for recycled nutrients.	**880,000 t of biodegradable feedstocks and 4,000,000 t of wastewater treated.** We prepare for increased use of animal manure in our forthcoming large-scale biogas production. **950,000 t of recycled nutrients and fertilizers produced,** offering huge emissions reduction potential, enhanced crop growth and sustainable soil improvement. **Building partnerships in the circular economy.** We advanced close collaboration with the pulp and paper industry. We committed to treat sewage from cargo ships, decreasing nutrient loading in the Baltic Sea. **Innovation in circular economy concepts.** We advanced projects focusing on hydrogen and carbon value chains in future energy systems, and nutrient recycling.

Taking circularity to its extreme

We consider organic waste as a truly valuable resource. Converting waste and residues into energy and recycled nutrients is an efficient way of mitigating climate change while promoting the circular economy.

Biogas production plants are bio-refineries at their best. They are excellent examples of the circular economy by turning waste into energy for industry, fuel for road and maritime transport, as well as raw materials for industry, agricultural and horticultural use.

For example, our liquefied biomethane (LBG) production plant in Turku processes the region's wastewater effluent into ammonia water for use as a process chemical in industry to clean flue gases. Recycled fertilizers are recovered from the side streams of our biogas production and further refined by partners for use in the agricultural and horticultural sectors. In a more integrated biogas production such as our Nymölla LBG production plant, there are no redundant material flows since they are returned back to the provider or used internally in the production process.

Growing biogas volumes

The potential of Nordic biogas production volumes is estimated to be around 20–40 TWh/p.a. based on feedstock availability. We aim to have 4 TWh/p.a. available to our customers in 2025

by developing both our own biogas production and utilizing our partners' production network. **The expansion** of production capacity is proceeding as planned, where the recent key events include the ramping-up of LBG production in Turku and Nymölla, and CBG production at our Lohja plant. There are several new biogas plants currently at the planning phase. In Sweden, we are doubling our total biogas production capacity with new plants over the coming few years.

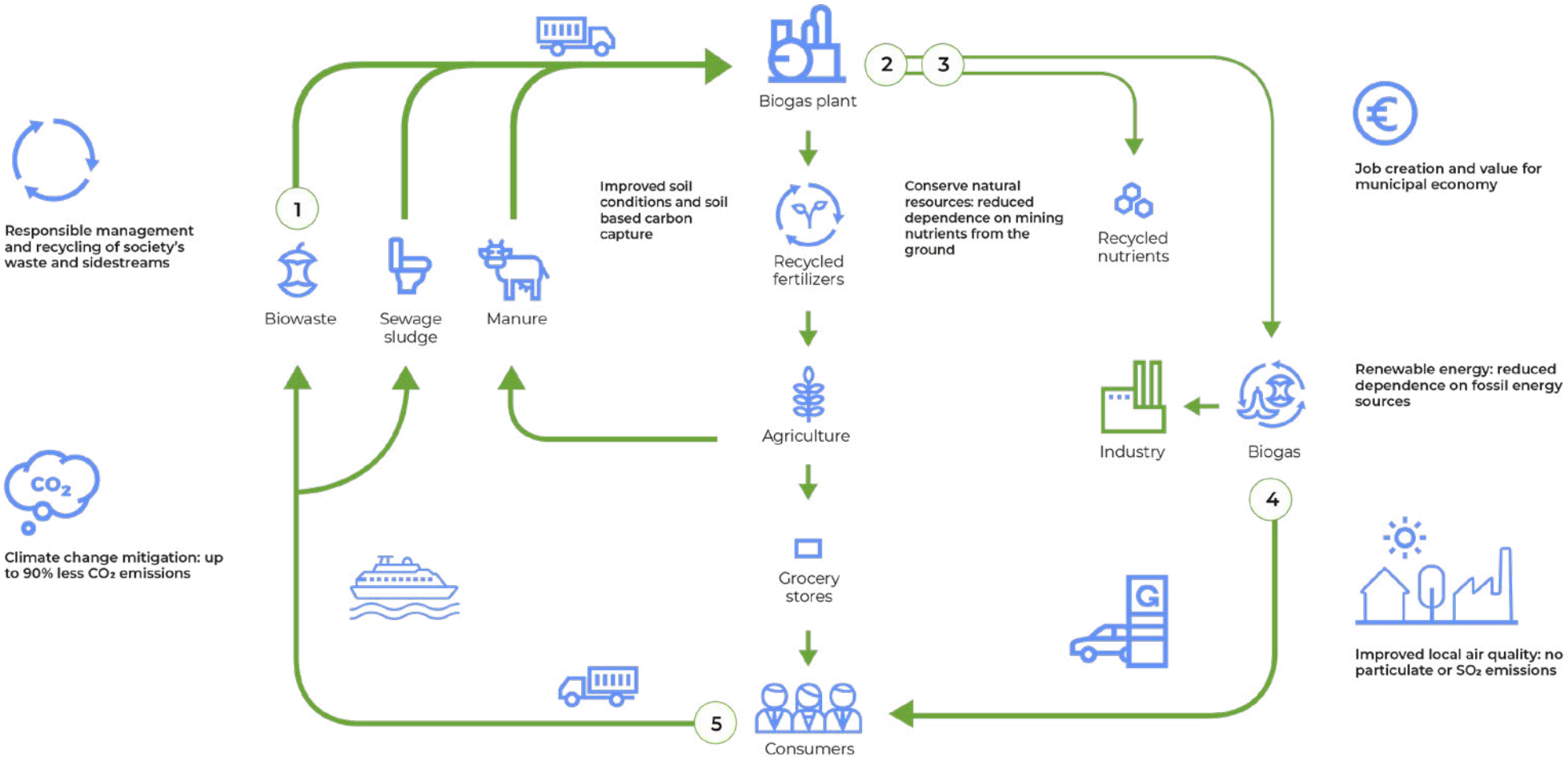
Join the cycle

We promote the circular economy together with partners across the value chain. In Finland, we produce biogas from side streams of companies such as the food company Valio – and Valio in turn uses that biogas in its own logistics. There are similar partnerships with companies such as IKEA and Lidl. In 2021, we expanded our circular economy partnership with Arla, enabling a significant increase in manure-based biogas for transport use in Sweden.

In 2021, we strengthened our partnerships in the pulp and paper industry. In Sweden, Gasum started producing gas from the wastewater of Stora Enso's pulp and paper mill in **Nymölla**. The biogas plant is the first in Sweden to produce liquefied biogas from industrial process water from a pulp and paper mill. In Finland, we started cooperation with Metsä Fibre, part of Metsä Group, in biogas processing as part of Metsä Fibre's Äänekoski bioproduct mill. The biogas plant is owned by Metsä Fibre and uses wood-based sludge from the bioproduct mill as a biogas feedstock. Gasum processes the biogas from the plant and sells the fuel for road transport through its filling station network.

Another excellent example of the advantages of the circular model can be found in Turku, Finland. The municipal sewage sludge from around 300,000 residents is used as a feedstock for renewable liquefied biogas, fulfilling the annual fuel need of 150 trucks. In addition, compost for roadside landscaping as well as recycled nutrient product (ammonia solution), are produced. The ammonia solution can be used for water purification in the paper industry and for the removal of nitrogen oxides from flue gases at industrial production facilities. On top of all that, the City of Turku gains a significant cost benefit from the partnership.

We will double our biogas production capacity in Sweden over the coming few years.


Responsible management and recycling of society's waste and sidestreams
Climate change mitigation: up to 90% less CO_2 emissions
1
Biowaste
Sewage sludge
Manure
Biogas plant
2
3
Improved soil conditions and soil based carbon capture
Recycled fertilizers
Conserve natural resources: reduced dependence on mining nutrients from the ground
Recycled nutrients
Job creation and value for municipal economy
Agriculture
Industry
Biogas
Renewable energy: reduced dependence on fossil energy sources
4
Grocery stores
Improved local air quality: no particulate or SO_2 emissions
5
Consumers

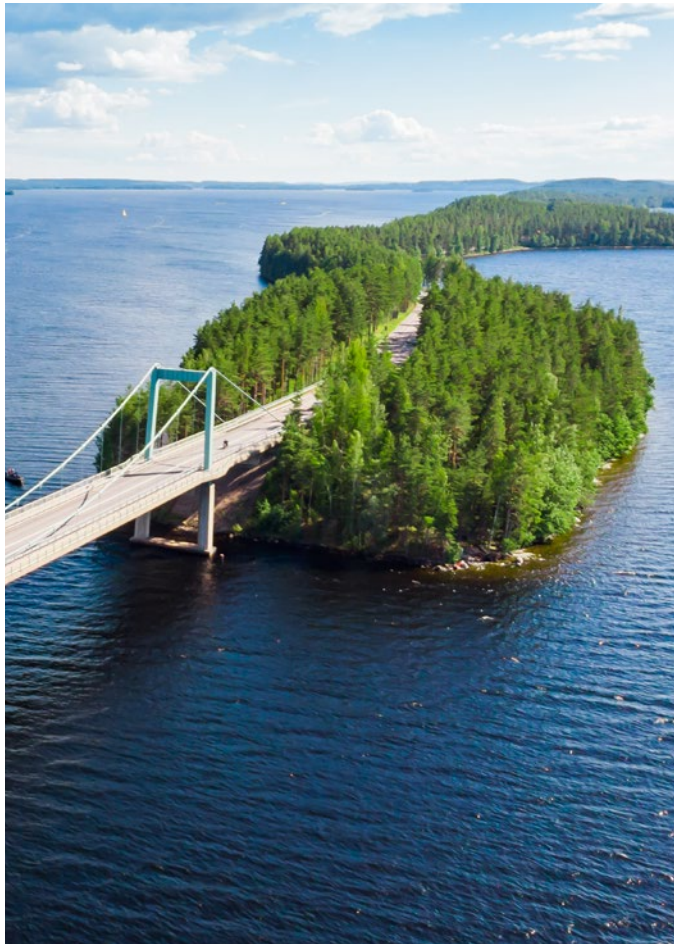
Biogas is sustainable

A 100% renewable fuel makes it possible for users to cut greenhouse gas emissions generated over the fuel life cycle by an average of 70-90% when compared with a fossil-based fuel as defined in the EU Renewable Energy Directive (RED2 2018/28/EC). If **manure** is used as a feedstock, there is potential to reduce emissions even beyond 100%. All biogas delivered by us fulfills the **sustainability criteria** laid down by the EU RED2. Biogas has also been awarded the Nordic Swan ecolabel. The label covers most of **Finnish biogas production used as a transport fuel**.

Waste is a valuable resource

We source wastewater sludge, industrial and agricultural side streams, manure and biowaste for use as feedstocks in biogas production in Finland and Sweden. In 2021, we processed a total of 880,000 tonnes of biodegradable feedstocks, and 4,000,000 tonnes of wastewater in Sweden and Finland. Our network of fairly large biogas plants improves economy of scale and efficiency, and allows biomass processing to be optimized between plants depending on, for example, logistics, capacity, market conditions and different feedstock fractions.

We provide waste processing and circular economy services in Finland. Our waste processing service enables the re-use of biodegradable waste material as energy, thereby reducing the energy lost in processes such as waste combustion or composting. Nutrient residues such as nitrogen and phosphorus arising as a by-product in biogas production are returned either as recycled nutrients to industry or as recycled fertilizers to agriculture.



We are exploring new feedstock possibilities to ensure biogas availability and growth. We are preparing for the increased use of animal manure in our forthcoming large-scale biogas production. The Götene biogas plant in Sweden will be largely based on manure and will be an excellent example of strengthening the regional circular economy with farmers by returning biofertilizer to their fields. Opposite to the Swedish model, the profitability of large-scale manure-based biogas plants is currently poor in Finland due to the absence of production support.

In Finland, we opened a new biowaste transfer station in the Helsinki region to enable a cost-efficient recycling chain and logistics for biowaste.

In Sweden, several of our biogas plants aim at utilizing a wider feedstock base in biogas production. Jordberga and Katrineholm biogas plants have ongoing permit processes aiming at diversifying the feedstock and expanding biogas production. Jorberga plant continued investment in raw material handling to enable utilization of more diverse fractions of by-products efficiently.

CASES

Sewage from cargo ships turns into biogas

Together with The Baltic Sea Action Group, Kymen Vesi, transportation company Autoyhtymä Vuorinen and several shipping companies, such as Meriaura, Maersk, RABN, and Utkilen, Gasum helps the Baltic Sea by producing biogas from sewage discharged by ships at the port of HaminaKotka. Sewage from cargo ships may be legally discharged into the Baltic Sea, although it accelerates eutrophication. Every time wastewater is discharged at the port the nutrient load on the sea decreases. The Ship/t Waste Action project aims at a cleaner Baltic Sea – one ship, one port, and one country at a time.

Biowaste transports to biogas plant fueled by biogas

In 2021, the cities of Hanko, Hyvinkää, Lohja, Loviisa, Porvoo, and Raasepori started using biogas vehicles to transport sewage sludge from a wastewater plant and biowaste collected by waste management company Rosk'n Roll Oy Ab to the Gasum biogas plant network. The switch enables CO_2 emission reduction of up to 7,000 tonnes annually. It equals the annual emissions of more than 3,000 passenger cars. The cities' cooperation with Gasum is part of their work for being a forerunner in climate action. Creating more environmentally friendly permanent operating models is at the core of their strategy.

Fertilizer products and nutrients are produced alongside biogas

The organic side stream of biogas production contains nutrients which can be re-utilized as recycled nutrient products. These products replace fossil and mining-based inorganic nutrients in agriculture and industry. At the same time, the valuable organic matter is circulated back to the soil.

We produce recycled fertilizers and nutrients created as by-products of biogas production for agricultural and industrial needs. In 2021, our biogas plants produced about 950,000 tonnes of nutrient products. The safe and sustainable use of nutrient-rich by-products is important to us.

High hygiene quality

All biodegradable fractions delivered to biogas plants in Finland, and fractions containing animal by-products in Sweden go through a rigorous treatment process where they are turned into organic fertilizer products. Any pathogens and pests are destroyed by heating the feedstock mass to a temperature above 70°C.

Gasum's fertilizers are produced in compliance with fertilizer product legislation, and the operations are supervised by the Finnish and Swedish authorities. The amount of heavy metals and pathogens in fertilizer products is controlled through systematic sampling. In Finland, our production complies with the Decree on Fertilizer Products and operations are overseen by the Finnish Food Authority.

In Sweden, all Gasum's fertilizers are certified through SPCR 120 and most of the volume is also certified for organic use. The quality standard includes tests and analyses throughout the process from raw material to the final product, a certified biofertilizer.

Recycled nutrients reduce emissions and support biodiversity

The use of recycled nutrients and fertilizers reduces the use of fossil- or mineral-based nutrients such as the use of scarce phosphorus resources. Using recycled nutrients and fertilizers also cuts emissions originating in the manufacture of nutrients from fossil origin.

CASE

Recycled fertilizer for crop growth and soil improvement

Gasum's newly opened biogas plant in Lohja produces recycled fertilizer that is authorized also for organic use. Max Schulman was one of the first farmers to test this in practice. The soil on his fields of winter wheat is clayey and needs organic material for arability. In addition to nutrients, Gasum's recycled fertilizer contains plenty of organic material. Since Schulman works as Secretary of Cereals at the Central Union of Agricultural Producers and Forest Owners (MTK), he was already familiar with the circular economy in agriculture. By testing it himself, he wishes to bring it closer to farmers on practical level.

CASE

Fertilizers produced in Lohja offer their users huge emissions reduction potential

The climate impact of recycled fertilizer products made at Lohja biogas plant was studied in a master's thesis in 2021. The life cycle assessment (LCA) showed that emissions generated in the production of recycled fertilizers are more than 90% lower than those of mineral fertilizers containing a similar amount of nutrients. Besides low emissions, the recycling of organic matter back to farming land also restores and promotes sustainable use of farmland. Using organic fertilizers and soil improvements combat farmland erosion and holds up biodiversity loss.

The use of the digestion residue from biogas production as a soil-enhancing product also improves soil health. Digestion residue-based soil-enhancing products contain carbon compounds that make soils more fertile for food production. This can buffer the effect of climate change in agricultural soils and lower the related risks. Unlike, for example, burning biomass as an energy source and releasing the carbon it contains into the atmosphere, carbon containing soil-enhancing products help to bind carbon into the soil and support soil biodiversity. Approximately half of the carbon contained in biogas production feedstocks ends up back in the soil, which is important as it enhances soil fertility and reflects in the ability of the soil to produce crops.

Developing ecosystems and partnerships in nutrient recycling

We aim at further expanding opportunities for the use of nutrient-rich digestate. Collaboration with selected partners ensures more sustainable use of nutrients and new technological innovations in the development of digestate solutions. Partnering ranges from developing a local logistical contractor network to cooperation projects with global companies. As the recycled nutrient market is still developing, it is important to find new technologies and ways to increase the market value of recycled nutrients and fertilizers.

In 2021, many of our development activities were focused on the fiber fraction of biofertilizers from farm-based production plants. Together with a partner, we implemented fiber separation in Jordberga, Sweden, which enabled increasing biofertilizer value and decreasing volumes. We also continued to produce a liquid fertilizer for potted greenhouse grown herbs and this is used at a commercial scale in several greenhouses in Sweden.

Carbon containing soil-enhancing recycled fertilizer products help to bind carbon into the soil and support soil biodiversity.

The circular economy and recycled nutrients are at the core of our R&D

Our research and development activities are focused on the development of our biogas business. During 2021, several large R&D projects were initiated with a focus on hydrogen and carbon value chains in future energy systems, as well as nutrient recycling.

The need for carbon neutral energy solutions is predicted to grow strongly in the coming years. A focus area of our R&D work included hydrogen and carbon value chains in future energy systems. Methanation technologies offer an alternative to biological biogas process in renewable methane production. We are involved in developing synthetic methane gas (SNG) concepts, for example in the "Biological methanation of syngas from gasification of lignocellulose" project financed by the Swedish Energy Agency. In gasification, product gas containing hydrogen is made from lignocellulosic biomass, for example. Biological or synthetic methanation can be used to upgrade the gas into renewable methane.

We partnered also in "Hydrogen and carbon value chains in green electrification" (HYGCEL), which is another large research project launched at the end of 2021. The project, with 17 company partners and three universities as participants, takes a holistic view of future energy systems. Nutrient recovery is an important area of research.

During 2021, new projects were launched focusing on increased biogas production. Extraction of plant proteins and their combined utilization with waste and residue feedstocks in biogas production is being studied in projects led by the Swedish University of Agricultural Sciences in Alnarp. A new project coordinated by RISE studies the utilization of hydrothermic liquefication in a combined energy system.

In Finland, we are developing advanced nutrient and resource recovery from municipal wastewater sludge in a two-year "Järkki" project, aiming at centralized treatment facilities. Funded by the Ministry of the Environment, the "Circular economy of industrial water" (CEIWA) project focuses on new water treatment and nutrient recovery technologies, as well as challenges such as microplastics. The project brings together a large consortium of companies, research institutes and universities.

An essential element of Gasum's R&D work is partnerships with research institutions and enterprises. Both the HYGCEL and CEIWA projects were developed within the open innovation cluster Clic innovation, where Gasum actively participates under energy and circular economy theme groups. Gasum is also a member of the Biogas Research Center at Linköping University in Sweden, where we continue work in projects in five research areas.

Other examples of research and development projects and initiatives we were involved in during 2021:

- Biofibers from biogas production as littering material in dairy production, led by RISE
- New approved hygienization methods for biogas plants in Sweden, led by RISE
- TYPKI – aims to prevent nutrient emissions into environment and to simultaneously produce new circular economy products
- Biosfääri and Orvo projects coordinated by the Natural Resources Institute Finland (Luke), aiming at improving resource recovery from manure and by-product biomasses and to measure soil carbon sequestration when organic fertilizers are used
- HABA – decentralized biomethane production in Central Finland includes biological insitu methanation of CO_2 and H_2
- Carbon capture and utilization, led by Linköping University Carbon capture

Environmental management

We aim at operational excellence, and invest in energy efficiency, maintenance, and process and emission control development to improve our environmental performance.

WHAT WE AIMED FOR	WHAT WE ACHIEVED IN 2021
Minimizing the environmental impact of our operations. Zero environmental breaches and increased number of energy and environment related observations.	**Environmental target of zero new breaches achieved.** New investments were made to mitigate non-conformities identified in 2020. **Investments** in energy efficiency and process efficiency. We continued the development of the efficiency of odor management at our Finnish biogas plants. **Proactive environmental work.** More than 200 energy and environment related observations were made to improve our daily operations and prevent harm. **Building operational excellence.** Gasum's all biogas plants in Finland are now certified in accordance with ISO 9001, ISO 14001, ISO 45001, and ISO 50001 requirements.

Respect the environment

In accordance with our Code of Conduct, we commit to the prevention of environmental degradation.

In our daily work, we make systematic efforts to minimize the most significant environmental impacts of our operations: air emissions, **energy consumption**, odor nuisances, and environmental impacts caused during project construction.

We employ environmentally sound and energy-efficient technologies and ensure efficient maintenance. We continuously improve our operations and comply with environmental and energy system requirements as well as a biogas sustainability scheme. We increase our understanding of the life-cycle impact of our products and use this information to improve our performance.

Environmental compliance

All sites systematically follow up on any deviations, proactively report observations, conduct safety walks, and compile risk assessments. We use reporting tools in the management and reporting of environment-related actions. In 2021, the number of energy and environment related observations totaled 219 (222 in 2021). Making energy and environmental observations helps us to prevent environmental damage and accidents, improve energy efficiency, and to continuously improve our daily operations.

No major environmental incidents occurred in our operations, nor were there environmental fines imposed on us during 2021. One administrative compulsion was set to Gasum due to earlier odor gas emissions from our Turku biogas plant. New environmental non-conformances were not identified. A total of 89 notices from the public were received during the year, mainly related to odor nuisance from our biogas plants, and some to noise from our operations.

In 2021, the nitrogen load of purified process water at Vehmaa biogas plant slightly exceeded the environmental permit limit. To obtain more efficient nutrient removal, a modification was installed to the reverse osmosis (RO) system which is used to treat process water before releasing it into a ditch. The new treatment system will be tested during 2022.

During 2021, actions were taken to mitigate non-conformances identified during the previous year, 2020. We invested in odor treatment systems at the Turku and Riihimäki biogas plants which resulted in performance in accordance with environmental permit limits in both plants. In addition, Gasum together with the City of Turku, accomplished a plan to lead run-off water from an old landfill site of the City of Turku to a waste water treatment plant, which will prevent the contamination of the storm water of Gasum's biogas plant.

Water management

We aim to utilize recycled water in the biogas production process as much as possible. We see the internal recycling of reject water as an economical and environmentally sound solution for operating biogas plants. Internal recycling improves the plants' heat balance and reduces the amount of wastewater.

Water consumption is also reduced by utilizing site run-off waters in the biogas process, and by optimizing the production processes. The plants are equipped with efficient technologies for water purification and recovery of nutrients and organic carbon. Increased recovery of nutrients helps to lower the environmental load of effluent before discharging it into a wastewater treatment plant. Some of the nutrient-rich excess process water is utilized in the forest industry as a nitrogen source for microbes at wastewater treatment plants.

In our LNG supply chain, sea water is used as ballast water in the vessels. After use, the ballast water is released back into the sea unpolluted. Most of our freshwater consumption is as process water in biogas plants and as tap water in offices.

Water withdrawal

m^3	2021	2020	2019
Municipal water	189,000	183,000	180,000
Groundwater	48,000	51,000	30,000
Seawater	140,000	174,000	157,000
Rainwater	8,000	9,000	53,000

Odor gas management

Many of our biogas plants are located in centralized waste treatment centers, where many companies operate and where Gasum is one contributor to odor nuisance. In Finland, a total of 78 notices (5 in Sweden) were received from the public related to odor. Feedback is taken seriously. During the year, we worked to improve the odor management and to reduce the harm caused in the vicinity of the plants. We cooperate with the local environmental authorities and report on our actions to them.

In 2021, we continued to invest in reducing odor nuisances from our biogas plants. In Turku, we improved odor gas treatment by investing in new activated carbon filter units both in odor treatment equipment of the plant and by performing a total repair of odor scrubbers and biofilter. A cooling unit was installed to lower the digestate temperature and odor level in the compost hall. The waste receiving halls were fitted with new automated doors to minimize odor emissions from the building, and several improvements to collect odor gases to treatment were made. In addition, weekly odor observation performed by a consultant was continued in the vicinity of the Turku plant.

In the Riihimäki biogas plant, good results were delivered by new investments in the hygienization process of odor gas treatment in the boiler unit and modification of odor scrubber unit to optimize performance.

Waste

tons	2021	2020	2019
Non-hazardous waste, total	**11,780**	**10,590**	**9,910**
Reuse, recycling and recovery	1,780	3,380	3,910
Incineration	9,510	7,010	5,990
Landfill	420	200	3
Other	70	1	30
Hazardous waste, total	**110**	**20**	**90**
Reuse, recycling and recovery	40	20	20
Incineration	50	1	60
Other	20	2	10

Waste management

Most of the waste fractions generated in Gasum's operations are recovered or reused. Sand and packaging materials removed from the raw material stream received for biogas production account for our most significant proportion of our solid waste.

In our daily work, we make systematic efforts to minimize the most significant environmental impacts of our operations.

Social

People

Our goal is that all Gasum Group employees can do their work well and be inspired in a safe and energizing work environment.

We respect human rights and promote the well-being, work ability and competence of our personnel

WHAT WE AIMED FOR	WHAT WE ACHIEVED IN 2021
Promoting wellbeing and a healthy working environment: absence rate < 1.5%	**Employee absence rate 1.6%**
Developing an agile culture and employee experience: Continuous assessment of the employee experience through the pulse survey, min. employee participation rate of 75%	**The employee pulse survey** continued to be active and had a 72% participation rate. The survey helps us to assess and develop employee experience and gives every employee the possibility to give feedback regularly and develop our culture. **The Leading for impact journey** was initiated with surveys to all Gasum Group employees on 'Leadership styles' and 'Organizational Climate' to strengthen our leadership culture and help our line managers to become better leaders.
Growing Gasum's professional talent: Development discussions are held and agreed development plans implemented, 100% of employees participate	**94% of employees participated in development discussions** **Development of HR processes** was continued to ensure high-quality competence. New recruitment tools (personality test and ability test) and metrics to measure our processes were implemented. **Gasum Academy training sessions** were organized for the personnel as part of developing our feedback culture and creating common tools to strengthen wellbeing and an agile way of working.

Agile culture and inspirational leadership

We aim to strengthen the culture that engages, energizes and focuses on building and sharing a common understanding and purpose.

Agile leadership and ways of working are fundamental building blocks in the development of our culture at Gasum. It means continuous learning and a growth mindset. A strong customer focus is our guiding principle also in internal collaboration.

The Covid-19 pandemic continued throughout 2021. An internal survey was conducted to map learnings from the new way of working during the pandemic. Most employees adapted to changes quickly and working digitally has taken a huge step forward. In August, we launched a new guideline for multilocational work based on the learnings and feedback collected from employees.

Leading for impact journey

We at Gasum want to find new ways to measure and show the leadership impact on the business. Our aim is to strengthen our leadership culture and help our line managers to become better leaders. Leadership styles and workplace climate are important levers in team and line manager performance. We launched Leadership Styles and Organizational Climate surveys in November 2021. In January 2022, a series of identical workshops and 1:1 coaching sessions were organized for line managers. Targeted development actions were created based on the results and specific insights.

Employee pulse survey

A monthly employee pulse survey, introduced in September 2020, continued to be active. The survey gives all employees the possibility to give feed-back regularly and to take part in developing Gasum's culture together. The survey currently covers the following themes: clarity, wellbeing, feedback, collaboration, information, empowerment, and motivation.

Results from 2021 show that employees find their work meaningful and feel empowered by the freedom to choose how to best perform their jobs. On the other hand, there is room for improvement in receiving feedback related to work and having all the information for employees to perform to the best of their ability in their jobs. The survey response rate was 72% in 2021.

CASE

Pulse survey is part of everyday life at Gasum

Employee experience is an important element in Gasum's strategy. It is supported by the Pulse survey that measures employee experience and works as a tool for improving it. Most of the work based on Pulse survey is done in teams. However, it can also be used for developing activities of the entire organisation. The survey is also utilised in planning internal trainings and choosing their topics. The Pulse survey has become integrated into everyday life at Gasum but the work isn't over. Efforts will be made to continuously develop the survey to better respond to the need of Gasum's employees.

Wellbeing at work

The focus areas of wellbeing work at Gasum include developing inspirational and active leadership and an open feedback culture, **increasing safety at work**, maintaining work ability and reducing disability pensions.

Well-functioning community

Our wellbeing goal is that all Gasum Group employees can do their work well in a safe and energizing work environment. Work contributes to the health of employees throughout their careers. We constantly analyse and develop our toolbox and procedures to promote wellbeing. Wellbeing entails a personal experience of feeling positive about work, having a possibility to influence own work, and having a meaningful job which matches skills, and interactive and respectful collaboration in a healthy, encouraging work environment. In a well-functioning organization information is shared, the goals are clear, and we listen and appreciate everyone. Every Gasum employee is also responsible for their personal wellbeing.

Collaboration model

We implement a healthy workplace model introduced by our occupational healthcare partner. We collaborate internally between Gasum's management, HR-team, and line managers, and have developed cooperation models with external partners like occupational healthcare and insurance companies to anticipate and respond to potential work-related challenges together. During the long-lasting pandemic, line managers have focused on communication, performance, and wellbeing.

CASE

Employee of the year

Selecting the Gasum Employee of the Year has a long history in our company: more than 30 excellent employees, always chosen by their colleagues, have already received this award. The aim of the Gasum Employee of the Year award is to highlight successes and exemplary attitude as well as to thank and provide recognition for outstanding work and for great colleagues. In 2021, the award went to Jarkko Avikainen, who is working as a Team Manager, Physical Desk in Portfolio Management and Trading (PMT) and based in Jyväskylä, Finland.

Growing talent

We focus on building the right competences and mindset in response to external customer needs

At Gasum, we believe in our people - everyone is seen as a talent. The goal is to ensure that everyone's efforts and development journey are directed towards achieving our strategic targets and that every employee has a clear sense of purpose and understanding of what is expected of them. Gasum offers challenging tasks and opportunities to grow, and employees are encouraged to take ownership of personal development. Gasum's strategy provides the framework through which this talent grows, innovates, and creates a future with a defined purpose.

Gasum Academy

The Gasum Academy is an umbrella concept for all people development activities at Gasum. The focus is on training through e-learning, which can be easily accessed by all employees and brings flexibility and standardizes training by providing the same quality of training to everyone. E-learning is a useful way of delivering courses and helps the business units and support functions to disseminate information widely and efficiently. The trainings also support Gasum's strategy, values, leadership principles, feedback and learning methods.

During 2021, new online trainings were launched in Gasum Academy, including topics as such resilience, continuous learning, a growth mindset, developing a feedback culture and how to manage your energy. Altogether, the Gasum Academy platform offers over 80 different e-learning training packages to Gasum employees and contractors. The number of training hours in 2021 totaled about 9 hours per employee.

Ongoing dialogue

Systematic development discussions are held between line managers and employees at least once or twice a year. Our aim is that development discussions are held, and individual development plans are implemented for all our employees. In 2021, 94% of employees participated in development discussions.

Development discussions give an opportunity to create a shared view of key issues and focus areas for the future, as well as setting goals and following up on personal development and Gasum's Leadership Principles. One-to-one discussions and team meetings support the dialogue. In 2021, we launched a development discussion e-learning training module, which is mandatory for line managers to support them to conduct successful development discussions.

Recruitments and onboarding

An important part of having the right competences for future needs is a good recruitment process and smooth onboarding. Onboarding practices provide a tool for successful talent management and help us to ensure that everyone understands how their tasks are connected to the Gasum strategy and story. To succeed even better and develop our recruitment and onboarding processes, we started to measure new hires' experience in the beginning of 2021. Furthermore, HR has an onboarding discussion with every new hire. To improve recruitment quality, we launched internal personality and ability tests. Certificates have been granted to all HR team members.

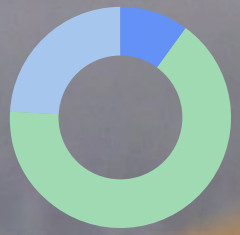
Employee turnover

At the end of 2021, Gasum Group had a total of 356 employees (2020: 384). Gasum's exit rate or employee turnover in 2021 was 12.1% (2020: 7.0%) and the entry rate was 10.4% (2020: 9.6%). The turnover figures reflect the development of Gasum's operations and competence. The exit and entry rates are calculated by comparing the number of permanent employees leaving (42) or joining (36) the organization during the year with the number of permanent employees at year-end (346).

Success of HR processes scored by Gasum's new hires

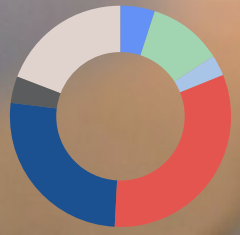
Recruitment 4.5 / 5.0
Onboarding 4.1 / 5.0

PERSONNEL BY AGE
Dec 31, 2021



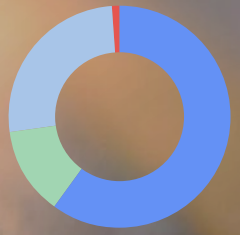
- < 30 years **10%**
- 30–50 years **66%**
- 50+ years **24%**

EMPLOYEES BY FUNCTIONS
Dec 31, 2021



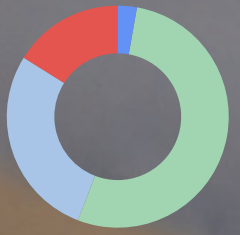
- Industry **5%**
- Traffic **11%**
- Maritime **3%**
- Biogas **32%**
- Portfolio management and trading **26%**
- Commercial product management **4%**
- Support Functions **19%**

TOTAL WORKFORCE BY COUNTRY
Dec 31, 2021



- Finland **60%**
- Norway **13%**
- Sweden **26%**
- Germany **1%**

PERSONNEL BREAKDOWN BY PERSONNEL GROUP
Dec 31, 2021



- Executive **3%**
- Managerial & expert **53%**
- White-collar **28%**
- Blue-collar **16%**

72%
MEN

28%
WOMEN

97%
FULL-TIME

3%
PART-TIME

97%
PERMANENT

3%
TEMPORARY

77%
PEOPLE WORKING IN BUSINESS FUNCTIONS

23%
SUPPORT FUNCTIONS
(incl. Commercial product management)

Respect human rights

Gasum is committed to respecting human rights in accordance with internationally recognized human rights standards and to complying with fair employment practices and labor standards. Our policy on human rights is embedded in Gasum Code of Conduct.

We strive to avoid involvement in any human rights abuses. We support the principles enshrined in the Universal Declaration of Human Rights, the United Nations Guiding Principles on Business and Human Rights (UNGP), the Organisation for Economic Co-operation and Development (OECD) Guidelines for Multinational Enterprises, and the International Labour Organization (ILO) Core Conventions on Labour Standards.

Equality at Gasum

Gasum's Equality plan defines actions to be taken to promote equality and assesses the realization of equality at Gasum. Gasum's Human Resources plan, procedures and leadership models are based on gender and other equality. Our Human Resources principles set standards for good human resources management, harmonized managerial work and the fair treatment of employees at Gasum.

We are committed to complying with all laws concerning privacy, freedom of association, collective bargaining, working time, wages and salaries. We value diversity and emphasize fair treatment and equal opportunity in all our personnel processes, such as the recruitment and development of employees and their working conditions as well as employee remuneration and promotion, regardless of gender, age, race, ethnicity, religion, political opinion, language, sexual orientation, family ties, disability or other similar aspects relating to individuals. Discrimination or unfair treatment is not tolerated.

Working culture

A key feature of Gasum's working culture is that everyone can work safely and undisturbed. All working conditions should allow for safe working practices and support the occupational health and wellbeing of employees and contractors. No-one should experience bullying or inappropriate behavior. Untoward events must be addressed and resolved immediately. Our ethical guidelines set the baseline for how to:

- Prevent, uncover, and stop inappropriate behavior and bullying
- Improve the way conflicts and incidents of inappropriate behavior and bullying are dealt with
- Lower the threshold for reporting inappropriate behavior and bullying

The purpose of our six Leadership Principles is to enable good leadership and collaboration, healthy working environments, a functional work community and the fair treatment of our employees.

Business partners

We expect our business partners to commit to the same principles and to apply fundamental human rights equally to all employees, whether temporarily or permanently hired or contracted. The requirements are set out in our Code of Conduct for Business Partners.

We strive to avoid any risk of becoming linked through our business relationships to any form of modern slavery, including forced labor or human trafficking. We do not, under any circumstances, tolerate the use of forced, compulsory or child labor.

We perform risk assessments to develop our work in upholding human rights. Continuous collaboration with our different stakeholders and business partners is a crucial part of this effort. We seek to be a responsible actor in the societies where we operate and take actions to ensure that human rights are respected throughout our operations.

Management of human rights and personnel training

Compliance work, including human rights, is overseen by the Gasum Management Team and the Board of Directors, or the Board Committee. The implementation of the responsible business practices as defined in the Gasum Code of Conduct is supported and overseen by our Ethics and Compliance (E&C) work. Business management is responsible and accountable for compliance in day-to-day operations. The Gasum Group Compliance Officer ensures that adequate procedures have been designed, provides implementation support, and monitors the implementation. The HR function is responsible for monitoring and responding to any attempt to apply a sanction or to disadvantage or discriminate against any person who raises a concern.

E-learning training on Gasum's Code of Conduct covers human rights related issues. The training is continuously available and mandatory for all employees annually.

Reporting channel

Reporting channels are offered to employees, as well as business partners, to report any concerns, incidents of non-compliance or suspected misconducts relating to human rights violations. A whistleblowing channel is accessible on Gasum's external webpage and available in all company languages (English, Finnish, Swedish and Norwegian). In 2021, there were no grievances related to human rights filed through Gasum's reporting channels.

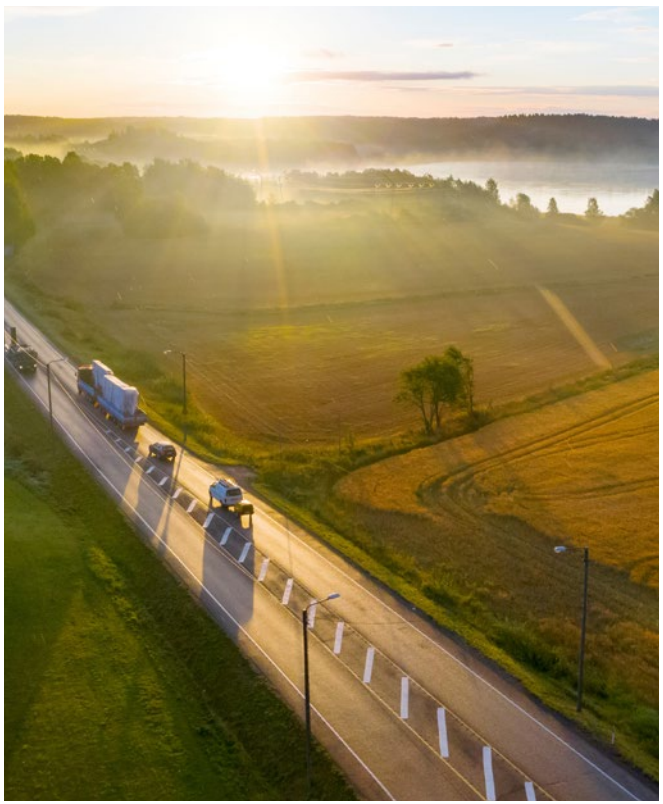
Safety and security

We believe that "zero harm to people, the environment and assets in Gasum Group" is achievable, and that all employees are committed to reaching this target. We enable sustainable growth and a safety culture with our business partners. We promote safe and secure working environments for our employees and contractors.

We have a strong safety culture and aim for zero harm to our employees and contractors.

WHAT WE AIMED FOR	WHAT WE ACHIEVED IN 2021
Zero harm to people	Our safety targets zero lost time injury (LTI) and zero medical treatment injury (MTI) were not achieved. There were 5 LTIs and 2 MTIs recorded for Gasum employees and contractors. The lost time injury frequency (LTIF) rate was reduced by 3.7%. An active safety culture program. Monthly safety topics covered operational discipline, lifesaving rules and "I am safety" amongst others. Safety & security e-learnings were established. Increased reporting of observations and incidents, including identifying corrective and preventive safety measures. Managing well during the pandemic. No serious incidents nor interruption in production or supply related to the pandemic situation.

Safety first culture



We strive to be recognized as an industry leader in safety. Our target is zero injuries. A safe and secure working environment continues to have a strong focus at management level in the organization and is crucial to achieve our goals.

Preventing harm pro-actively

Our safety target of zero lost time injuries (LTI) and medical treatment injuries (MTI) was not achieved in 2021. However, lost time injury frequency (LTIF) was reduced by 3.7%.

Every one of us is responsible for following safety and security instructions, making observations, and eliminating hazards, and for taking part in safety and security training. We acknowledge our contractors are a significant part of our operational work force, and have included them in our safety statistics, lost time injury frequency (LTIF) and total recordable injury frequency (TRIF), for 2021.

Occupational health and safety issues are managed and monitored as regards the number of accidents, LTIF, TRIF, risk assessments and safety and security observations. When risks are identified, we set deadlines and responsibilities for corrective actions and monitor these actions. We develop safety together with our partners to make our work safer.

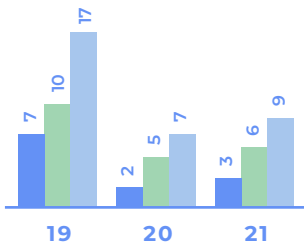
A proactive safety culture was demonstrated by a high level of incident and observation reporting, together with identified corrective and preventive actions in response to incidents, observations, and safety walks in 2021. All major incidents and accidents were investigated, and relevant safety alerts or lessons learned were established from these. In addition, other major incidents and near misses were subject to safety alerts.

Safety performance is one of the focus areas of the short-term incentive program in our personnel remuneration system. Remuneration is a tool promoting the achievement of targets and long-term growth in the value of the company.

I am safety program

We have continued and extended our safety culture program to raise awareness and strengthen our commitment. The safety culture program was extended from previous years by establishing and publishing monthly safety topics throughout 2021. Monthly safety topics enable us to keep our safety culture visible, continuously improve our safety performance and maintain a strong safety culture.

OCCUPATIONAL ACCIDENTS
(LTI, RWI, MTI)



LTI = Lost time injury
MTI = medical treatment injury
RWI = Restricted work injury

Safety and security training

Our e-learning trainings are targeted at both internal and external personnel. In 2021, we established a total of 20 e-learning trainings, which include a general safety training module for contractors in all local languages, safety trainings for visitors at biogas plants, safety trainings for truck drivers at biogas plants and an update of the introduction to the Integrated management system in all local languages.

The mandatory safety training module ensures that only qualified persons are allowed to access our sites as part of our security requirements.

Our health and safety principles

We comply with the following health and safety principles in our operations:

- By complying with safety and security guidelines and safe working methods, each employee is responsible for safety and wellbeing.
- We maintain and develop a management system with integrated safety and security guidelines.
- We are committed to safety and security guidelines and regulations.
- We identify the risks and hazards relating to our activities, make improvements and take corrective actions to remove or prevent hazards and reduce risks, and take them into consideration in planning and work performance.
- We provide personnel training and encourage compliance with safe working methods.
- We expect our partners to have a corresponding safety and security level.

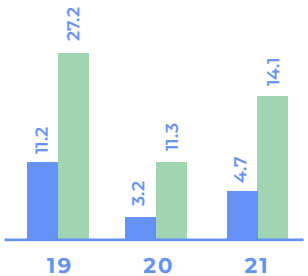
Organization and responsibilities

Safety and security issues are covered monthly by the Gasum Management Team as well as by the Board of Directors, and regularly communicated though internal communication channels.

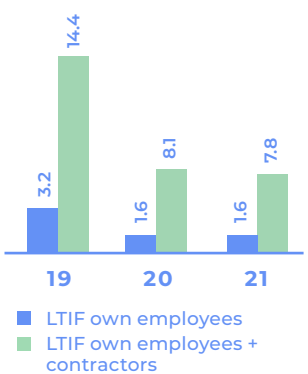
The business functions report on their respective safety and environmental performance monthly. Gasum has a Working Environment Committee in each operating country. The duties of the committees include consideration of occupational health and safety and healthcare action plans, reporting and follow-up on healthcare, risks, incidents, injuries, and environmental issues.

We have a common safety representative organization with one main safety representative in each operating country. The safety representatives cooperate across business units and countries. They safeguard the interests of employees in matters relating to the working environment and ensure that all employees can perform their work in a safe and secure manner. Reporting observations and incidents, including identifying corrective and preventive safety measures, was at a high level, thereby strengthening our proactive safety culture.

TOTAL RECORDABLE INJURY RATE
(TRIF)



LOST TIME INJURY FREQUENCY
(LTIF)



Safety figures

	2021	2020	2019
Medical treatment injuries (MTI)			
Gasum	1	1	5
Contractors	1	1	3
Restricted work injury (RWI)			
Gasum	1	0	0
Contractors	1	0	0
Lost time injuries (LTI)			
Gasum	1	1	2
Contractors	4	4	7
Occupational accidents MTI+RWI+LTI			
Gasum	3	2	7
Gasum + contractors	9	7	17
Lost working days due to occupational accidents	35	18	133
Absentee rate %	1.6	1.1	1.5
Absentee working days due to accident or disease	1,850	1,070	1,359
Injury rate (Lost day IR)	0.03	0.02	0.15
Occupational disease rate	0	0	0
Work-related fatalities	0	0	0

Lost working days due to occupational accidents = Number of total days lost due to occupational accident

Absentee rate % = (Number of actual absence days / Total days scheduled to be worked) x 100

Absentee days due to accident or disease = Number of total lost days due to occupational accident or disease in the reporting period

Injury rate (Lost day IR) = (Total lost working days due to injury / Total days scheduled to be worked) x 100

Occupational disease rate = Number of occupational disease / Total hours worked in the reporting period

Lost time injury frequency (LTIF) = (Number of occupational injuries / Total hours worked) x 1,000,000. Includes only LTIs.

Total recordable injury rate (TRIF) = (Number of injuries / Total hours worked) x 1,000,000. Includes MTIs, LTIs and RWIs. Includes zero-day accidents and accidents that resulted in at least one day off work.

Safe operations, products and logistics

Safe operations

Process safety involves ensuring our plants, facilities and gas filling stations are well designed, safely operated, secure, and properly maintained.

Process safety starts with the design phase of building facilities and extends throughout their lifecycle, ensuring they are operated safely, well maintained and inspected regularly to identify and deal with any potential process safety hazards.

Keeping our employees and contractors safe and secure is our top priority, and they are required to follow Gasum's Life-saving Rules. Our safety and security training programs help to create a safety-first working culture that increases risk awareness and prevents major incidents. In 2021, we aligned the main operational risk assessment procedures at group level, ensuring common practices and knowledge. Common and available procedures and processes are an imperative factor in safeguarding our personnel.

We have all our chemical safety data sheets (SDS) available in the Ecobio Manager software system, which covers all Gasum's terminals and plants in Finland, Sweden and Norway. The system improves chemical safety within Gasum by ensuring that the latest safety data sheets are in use and that the sites have the right chemicals lists. In 2021, we added additional tools to the system, tools for risk assessment and an exposure register.

Safe products

We maintain information to support our collaborative work to make our products safer. This information includes safety data sheets, which clearly set out the hazards associated with specific products and any relevant local regulatory requirements. Safety data sheets are available at our website. Safety data sheets maintain information to support our collaborative work to make our products safer. During 2021, we experienced zero customer injuries in connection with our products.

Safe logistics

Safety is a key concern in our road and maritime activities. We transport, deliver, process, and store gas, biowaste and recycled nutrients.

All transportations, whether on land or at sea, are dealt with by our logistics service providers. Whether delivering fuel to customers, equipment for projects or traveling to meetings, we work hard to keep all our drivers and travelers safe.

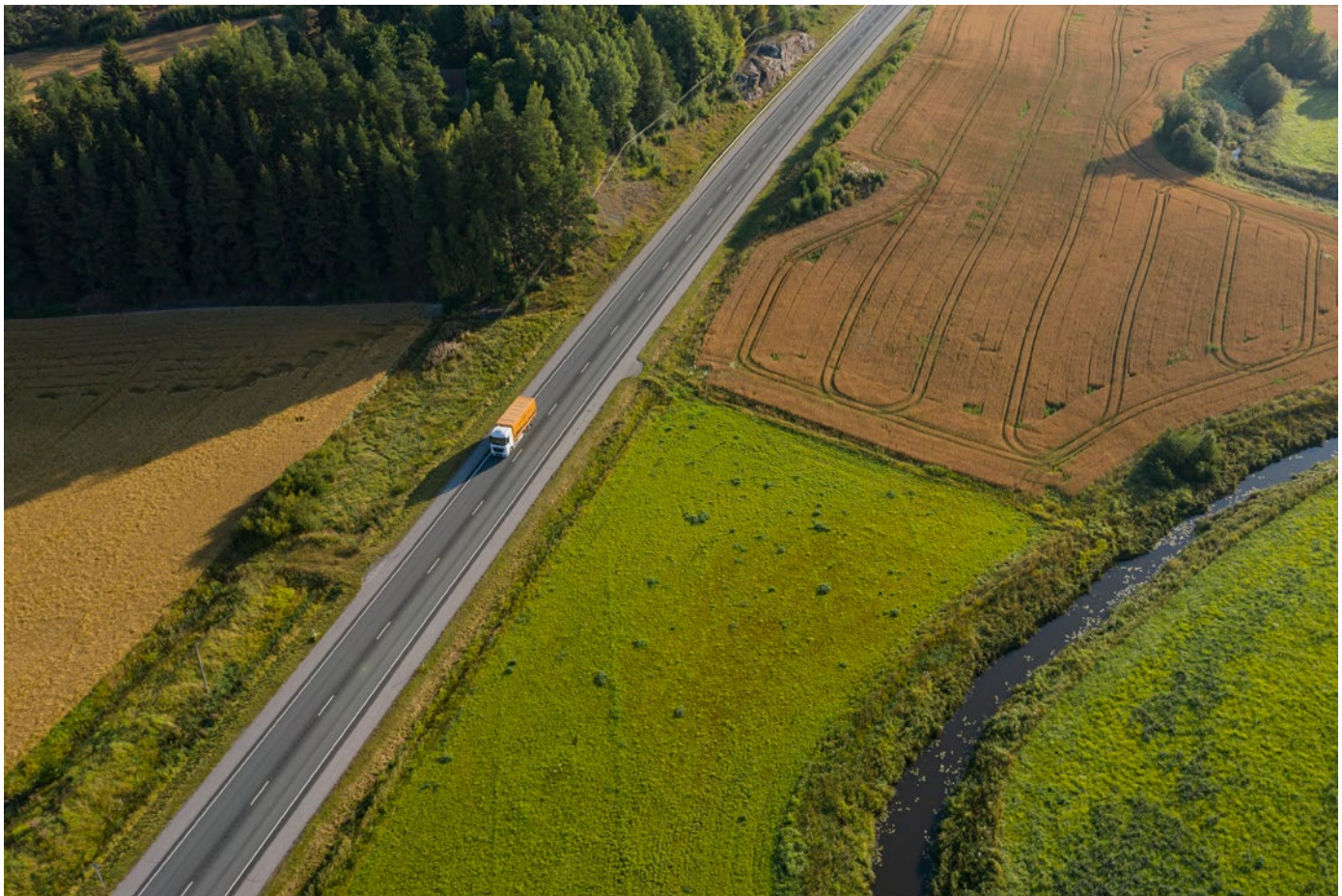
Our road safety approach focuses on driver skills and behavior, the condition of the transport fleet, road, and local environment. Our employees, drivers and suppliers are required to comply with Gasum's safety rules. All safety incidents are reported, and all major incidents are investigated.

We manage logistics safety through careful selection and evaluation of our logistics service providers.

CASE

Sharing lessons learned from incidents

A lesson can be learned from almost anything that occurs to us in our lives. Workplace incidents are no different. In such cases, it is important to ensure that relevant stakeholders learn from the incident and take the necessary safety precautions when conducting similar work activities. To strengthen our message, we started to issue safety alerts and lessons learned to relevant recipients, including customers and suppliers. Safety alerts are distributed after an accident, serious incident or near miss has taken place to enable us to work together towards zero accidents.



Transports of LNG and LBG by road or sea fall under ADR and IMO regulation, but we also provide drivers with additional training, both theoretically and in practice involving exercises including extinguishing LNG fires in pits. In addition, we require all drivers to conduct and pass Gasum-specific drivers e-learning training. Due to Covid-19 restrictions in 2021, these practical exercises were postponed. Our logistics operations emphasize environmental, health and safety matters with our partners.

Preparedness for exceptional situations

We continuously monitor operational preparedness for emergency situations. Our Business Continuity Plan (BCP) at group level ensures a common Business Continuity strategy. In addition, we have in place Emergency Preparedness Plans for the business units and functions, including IT. Emergency preparedness drills are conducted internally and externally in collaboration with public emergency services and customers.

We lived with the Covid-19 pandemic the whole year and managed the situation well. From the start of the pandemic in 2020, an internal corona task force has coordinated the work to prevent coronavirus spreading in Gasum Group. The task force has followed guidelines set out in our business continuity plan. In 2021, there were no serious incidents related to the pandemic situation and no interruptions in production or supply. All employees were invited to a survey to give feedback on our handling of the pandemic. The survey came back with excellent scores and feedback, telling us that the business continuity plan and checklist related to a pandemic had worked as intended.

Information security

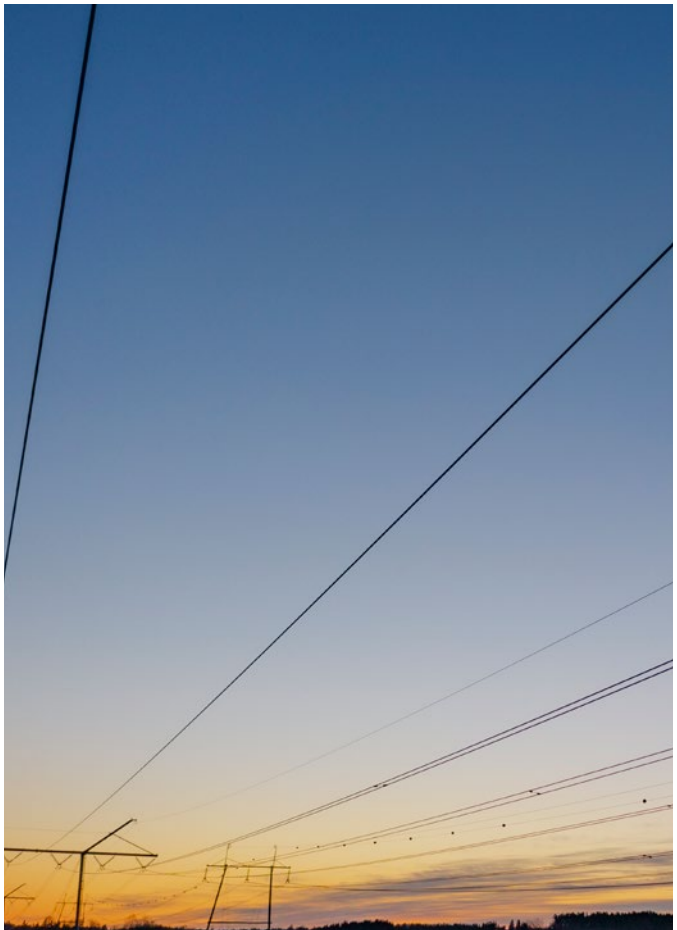
We are committed to promoting the culture of security by establishing and maintaining effective information security measures to preserve the confidentiality, integrity, and availability of all the information Gasum gathers, receives, or generates.

To achieve this, the company is implementing an Information Security Management System (ISMS) based on ISO/IEC 27001:2013 requirements. Gasum has established the information security policies, the appointment of information security roles and responsibilities, and allocating appropriate resources for maintenance of the Gasum ISMS. The ISMS is subject to continuous, systematic review and improvement. The key objectives of the Gasum ISMS are the following:

- Information is made available to all authorized parties with minimum disruption to the business processes
- Risks related to confidentiality, integrity and availability of Gasum's information are mitigated to an acceptable level
- Information security is integrated into all business processes at Gasum
- Regulatory, legislative, legal and other applicable requirements related to information security are met
- All Gasum employees perceive information security as a crucial part of their daily operations
- Appropriate business continuity arrangements are in place to counteract interruptions to business activities considering information security
- Appropriate information security awareness and training is provided to staff and relevant third parties' employees
- Breaches of information security, actual or suspected, are reported, and investigated through appropriate processes

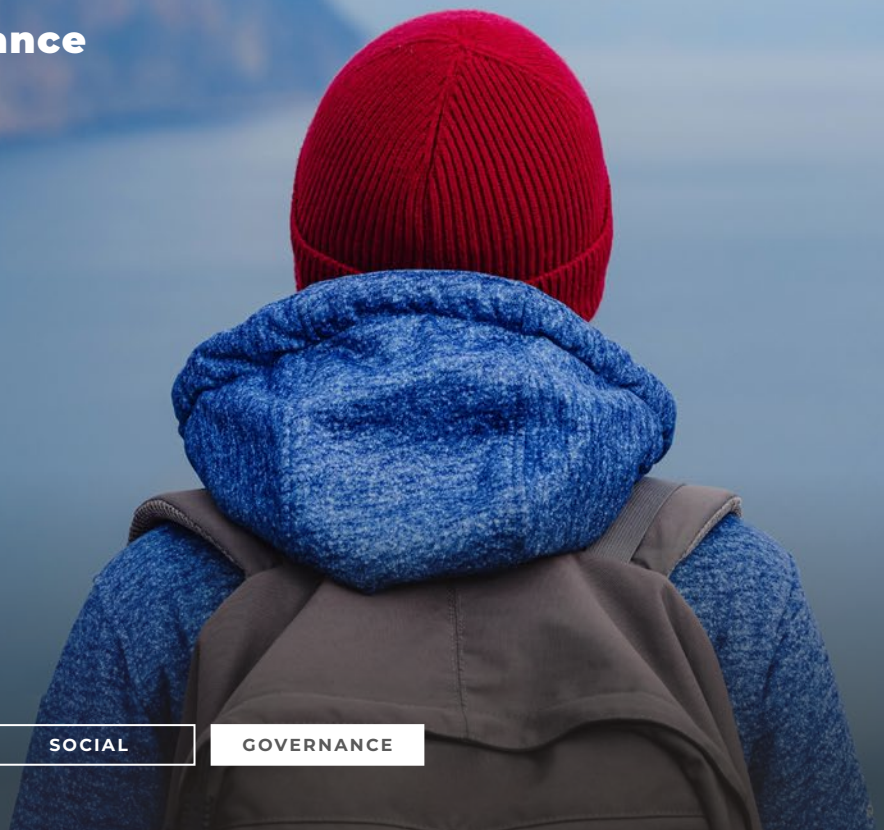
Appropriate access control is maintained, and information is protected against unauthorized access. ISMS requirements describing information security areas and the implementation of information security controls are defined in Gasum ISMS standards and other relevant ISMS documentation.

We are committed to preserve the confidentiality, integrity, and availability of all the information Gasum gathers, receives, or generates.



Governance

RESPONSIBLE BUSINESS



Governance – responsible business

The Gasum Code of Conduct applies to everyone working at or on behalf of Gasum.

Our aim is to ensure compliance and accountability in our own operations and in business partnerships.

Business ethics and compliance

Gasum Code of Conduct defines our approach to ethical business practises and sets out the ways of working with our customers and stakeholders, and together as a company. The Code of Conduct applies to everyone working at or on behalf of Gasum: employees, consultants, resellers and representatives, and our affiliates. Our Code of Conduct for Business Partners defines how we expect our business partners to operate.

In line with the Code of Conduct, we avoid bribery and corruption, conflict of interest and unfair competition. We do not seek to obtain favorable decisions on public policies from authorities through inappropriate or illegal means. We recognize that even customary gifts, entertainment, and donations may be inappropriate in connection with ongoing business negotiations. We comply with international laws and regulations, and respect trade obligations, human and labor rights, and the environment. We protect confidential and personal information.

Code of Conduct e-learning training is obligatory for all employees on an annual basis and is part of our onboarding program for new employees. The training summarizes how we work with

our customers, stakeholders and together as a company, and encourages employees to raise concerns and report suspected violations or non-compliance with the Code of Conduct principles or other company rules, guidelines, and policies. 59% of active employees had completed the training during 2021.

Compliance

The implementation of responsible business practices as defined in the Gasum Code of Conduct is supported and overseen by our Ethics and Compliance (E&C) work. Compliance with laws and regulations is an operational responsibility and business management are responsible and accountable for compliance within day-to-day operations. The Gasum Group Compliance Officer ensures that adequate procedures have been designed, provides implementation support, and monitors the implementation. The work is overseen by the Gasum Management Team and the Board of Directors, or the Board Committee.

During 2021, fewer than 5 incidents of suspected non-compliance with the Code of Conduct principles or other company guidelines were brought to the Group Compliance Officer's knowledge. Of these cases, 2 were reported via the whistleblowing reporting channel. All the reported cases were investigated, and actions taken accordingly.

Gasum conducts a set of internal controls and assessments to monitor activities and compliance, to mitigate risks, to promote operational efficiency and to ensure that statutory and other binding requirements are fulfilled.

Raising concerns

A healthy speak-up culture of openness, integrity and accountability is essential to prevent, detect and react to suspected misconducts or breaches of our Code of Conduct, Corporate Governance, or related Management System. Gasum encourages and expects all employees to report concerns, incidents of non-compliance or suspected misconduct using the appropriate reporting channels.

A whistleblowing reporting channel is available in all company languages (English, Finnish, Swedish, and Norwegian) on Gasum's intranet and website for our personnel and for business partners. All alleged incidents of misconduct communicated through the reporting channel are reviewed in accordance with the related response and review processes. Only the Group Compliance Officer or a person specifically appointed by them has access to the report. The HR function is responsible for monitoring and reacting to any attempt to apply a sanction or to disadvantage or discriminate against any person who raises a concern. Failure to comply with our Code of Conduct may lead to disciplinary actions up to and including termination of employment or the contractual relationship.

Corporate Governance and remuneration

Gasum Group's Corporate Governance sets out the legal framework and decision-making powers of the corporate bodies and determines the operational instructions for Gasum's day-to-day operations.

Gasum Ltd's corporate governance is based on the Articles of Association, the Limited Liability Companies Act, the rules issued by the Ownership Steering Department of the Prime Minister's Office and other legislation and regulations on the governance of limited liability companies. Gasum is fully owned by the State of Finland. Our shares are held at 73.5% by the state-owned Gasonia Oy and 26.5% directly by the State of Finland.

The highest decision-making power is exercised by the shareholders at the general meeting of shareholders. The Annual General Meeting elects the Chairman and the members of the Board of Directors. **Gasum Ltd's Board of Directors** has established two committees to assist the Board in its work: an Audit and Risk Committee and an HR Committee. The Board of Directors nominates the Group's CEO who, with the Gasum Management Team, manages the company's operations. The HR Committee confirms the nomination of the members of the **Gasum Management Team** on the CEO's proposal. The Gasum Management team consists of 10 members in addition to the CEO.

The general meeting adopts the financial statements and considers our corporate responsibility report and remuneration report.

Further details about our governance bodies and structures of the Board of Directors of Gasum Ltd and the Gasum Management Team are described in **Governance and Remuneration report 2021**.

Remuneration is connected with the business performance and safety

The remuneration of personnel within the Gasum Group is based on the Group's remuneration principles and the remuneration principles laid out by the Ownership Steering Department of the Prime Minister's Office. The company aims for a target-oriented company culture, where the entire personnel understand the company's strategy and objectives, the ways in which individuals can affect results, and the connection between business performance and remuneration.

At Gasum, remuneration is based on total remuneration which may, in addition to basic salary, include short- and long-term incentive programs linked to company-wide, unit-specific, and personal targets. In Gasum's short-term incentive program, the focus is on the Group's financial results, safety and security, and strategy implementation. In the long-term incentive programs, the earnings criteria focus on the company's value increases in accordance with the strategy and on creating profitable growth in new businesses. The remuneration system also includes other benefits and bonuses.

The HR Committee assists the Board of Directors with its duties, including preparing proposals on matters concerning the personnel and their remuneration and approving (within the scope of authority given by the Board) the nomination and remuneration of top management members other than the CEO. The HR Committee had nine meetings in 2021.

The remuneration principles and the remuneration model are described in **Governance and Remuneration report 2021**.

Collaborative and personnel models

Successful management of business is built on trust and collaboration between management and employees. Open dialogue and free flow of information are important at Gasum. Our collaborative models between personnel and management are defined according to local practices and procedures in each country.

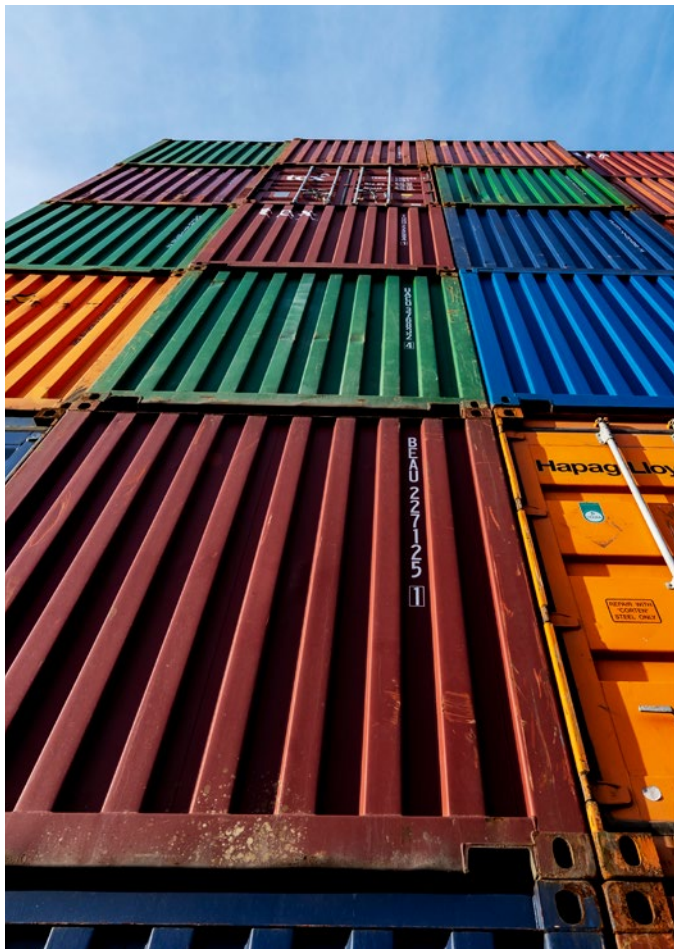
Risk management

The risk management governance and process are described in the **Governance and Remuneration report**. The strategic, political, operational, market and financial risks that Gasum's business operations are exposed to, are reported as part of the **Gasum Financial Review**.

Business continuity and emergency preparedness

We have a proactive business continuity plan to avoid and mitigate risks associated with disruption in operations. The plan outlines different scenario descriptions of how the business will continue operating to maintain financial and sustainable viability during an unplanned situation. The business continuity plan provides lines of duty for the Gasum Crisis Management Team to ensure collaboration across the organization and helps to ensure that we continue our deliveries to customers and business partners, and that we assist personnel to react in any crisis.

Our emergency preparedness plan strengthens us in preparing to meet hazard and accident situations. Business specific plans and guidelines help our personnel to manage resources and responsibilities during emergencies. Emergency preparedness comprises all safety systems, equipment, organization, personnel, and competences that are needed to manage hazard and accident situations. All emergency preparedness planning is based on risk and emergency preparedness analyses, company, and regulatory requirements.



An online training module is available on business continuity and emergency preparedness in Gasum to ensure a common understanding on how to act and collaborate within the organization and with our business partners in response to a crisis. The training is mandatory for all employees every other year. Our business continuity and emergency and preparedness plans help us to maintain the financial and sustainable viability of our business in an unplanned situation.

Our emergency preparedness plan strengthens us in preparing to meet hazard and accident situations.

Main sustainability risks

The main sustainability risk factors that can affect our business are set out below.

Sustainability risk factor	Gasum approach
Health, safety, and security We transport, deliver, process and store, for example, gas, biowaste and recycled nutrients. We identify occupational health and safety risks as a substantial part of our total risk environment. These risks include accidents, product safety, leaks, and chemical hazards amongst others. Security risks include deliberate harmful activities related to our assets and information security. Materialization of any safety or security risk may cause harm to employees or contractors, damage assets or production and damage reputation.	The mitigation of these risks is the top priority in all our operations and a prerequisite for us to continue to operate safely, deliver safe products to customers and manage any hazard risks. As regards health and safety risks, Gasum has a clear zero-accident policy. We have implemented comprehensive safety and security rules, procedures, and training, and continue to systematically align work procedures to improve our safety culture. Many of the health and safety risks are mitigated through process development in the business units and training activities that also cover our contractors. Our logistics providers are responsible for all the company's transports. We maintain logistics safety by continuous assessment and monitoring. Employee, driver, and subcontractor safety are an important factor in mitigating operational risks. We strive to work proactively with regards to managing crises, business disruptions and cyber security incidents with established plans on business continuity and emergency preparedness.
Working environment and employee-related matters Employee wellbeing, competence and leadership are all necessary for Gasum's success. Providing a healthy and safe working environment and ensuring wellbeing play a key role in avoiding risks such as accidents, work-related illness, and stress. The ability to recruit and retain competent personnel and develop leadership culture are prerequisites for avoiding shortages of competent and motivated personnel.	Skilled and motivated personnel is a key element of Gasum's success. Our tools for successful talent management include solid onboarding practices, training, career development opportunities and remuneration policy. We continuously develop and assess our leadership culture. We promote a healthy and safe working environment, where preventive action plays a key role. Safety representatives, the Working Environment Committee and company health service support this work. We measure employee experience continuously and focus on increasing smoothness of work, maintaining work ability and reducing disability retirement due to disability. During the COVID-19 pandemic, Gasum has formed a working group to monitor regulation and guidance from the authorities and the effects on Gasum employees.

Sustainability risk factor	Gasum approach
Ethics and compliance The compliance risks related to our business operations include the potential risk of illegal activities such as fraud, misconduct, or criminal offence. Non-compliance may result in significant legal, financial, and reputational consequences for the company.	We do not tolerate any form of illegal activities such as corruption and bribery. We strive to act in full compliance with legislative and regulatory provisions as well as our commitments both within Gasum and in relation to customers, public authorities, and other stakeholders. We utilize a Responsible Business framework to manage our ethics and compliance risks. The framework is founded upon leadership and tone from the top and is based on established standards as to what constitutes the cornerstones of an effective Ethics & Compliance program. Our legal framework and decision-making powers are set forth by the Corporate Governance. Gasum Code of Conduct and Code of Conduct for Business Partners set out for our ethical principles. A whistleblowing reporting channel is available for raising concerns. We train and supervise our personnel and carry out internal control activities on our operations to ensure compliance.
Climate change Climate change is a global challenge which impacts the environment and people through natural disasters and the loss of ecosystems and livelihoods. The global aim is to curb the average temperature rise at the level that limits the threat. Businesses are influenced by global, EU-level, and national energy and climate policies and regulatory changes. Operations are exposed to the physical risks including extreme and chronic changes in weather patterns that could also impact Gasum's assets and value chains, as well as energy demand in the market. On the other hand, transition to low-carbon economy brings opportunities for renewable and circular economy related products and business.	Gasum is a significant low-carbon energy supplier. We believe that market demand for solutions that reduce emissions and help adaption to climate change will increase. Our main tools for climate change mitigation include enabling greenhouse gas emission reductions for our customers through renewable and low-carbon gas products. We are a major actor in the wind power segment and strive to increase procurement of renewable wind power in the Nordics. Our circular economy products are mainly based on recycled feedstocks, and we work to develop the recycled nutrient market. Relatively modern production assets, continuous work to improve energy efficiency and use of renewable electricity in all operations provide a good basis for emission control in Gasum's operations. To manage the political and regulatory risks related to gas as a low-carbon energy source, Gasum actively monitors changes in EU and national legislation, energy support and in particular, taxation. In addition, Gasum seeks to continuously draw attention to the company's position as regards the impacts of proposed amendments to legislation or taxation.

Sustainability risk factor	Gasum approach
Environmental impact from emissions to air and water, biodiversity Gasum is subject to a large variety of laws, regulations and requirements set by authorities, stakeholders, and society, that aim at reducing environmental impact. We aim at zero environmental breaches. A leak or a spill due to malfunction or human error may lead to damage to reputation, sanctions, clean-up costs and/or irreversible or permanent impact to the environment.	Our main tools for environmental management are processes that ensure continuous compliance with environmental law and regulations, such as our Integrated Management System that is compliant with international ISO standards (ISO 9001, ISO 14001, ISO 50001, ISO 45001) and the biogas sustainability scheme. We employ environmentally sound and energy-efficient technologies and ensure efficient maintenance. We increase our understanding of the life cycle impact of our products and use this information to improve our performance. Adequate understanding of the environmental aspects of our business is key to managing emissions and incidents, and reducing the risk of environmental permit violations. Our biodegradable feedstocks are based on waste and residues, which reduces the risk to biodiversity.
Supply chain We do business with a variety of suppliers, partners, and contractors. Cost-effective and responsible supply chains are crucial to Gasum. Non-compliance in the supply chain may lead to legal processes, a risk of losing business and damage our reputation.	Good governance and responsible and risk-based sourcing practises mitigate risks. Our Code of Conduct for Business Partners defines how we expect our business partners to operate. We evaluate our suppliers and conduct supplier audits based on risk approach.

Stakeholders

We collaborate with a range of international organizations and industry associations in the fields of maritime fuels, bioenergy, climate, circular economy and energy research.

Active dialogue with our stakeholders is an important part of our daily work. Understanding the views and expectations of stakeholders improves the identification of opportunities and challenges in our operating environment.

Stakeholder collaboration within our organization is primarily defined by the theme and form of collaboration as well as the stakeholder group. Stakeholder collaboration is a central element in Gasum's functions responsible for sales, marketing, communications, public affairs, sustainability as well as many of our experts. The business functions engage with customers and business partners on a daily basis.

Our stakeholders include entities that have an impact on our business, or are affected by our activities, products, and services. All stakeholder groups have an important role in the development of our operations.

We have a strong customer focus, and our most important objective is to generate added value for our customers. The development of our personnel wellbeing and competences is crucial for the implementation of our strategy. For shareholders, we aim at generating profits.

We expect responsible business practices from our suppliers and subcontractors, conduct supplier evaluations, and give safety training to our contractors and logistics service providers.

Public authorities and policymakers at various levels, from local and national to EU institutions, are also relevant to our business. We communicate openly to the media and non-governmental organizations, our aim being to convey correct information about the sector.

Our operations in various locations around Finland, Sweden and Norway create jobs and value for municipal economies. We engage with local communities in contexts such as investment projects.

Stakeholder feedback

To obtain information and to improve, we conduct surveys that measure the success of our stakeholder collaboration and identify the important expectations that the various stakeholder groups have on us. We regularly survey topics such as **customer satisfaction** and **employee experience**. We also survey what our stakeholders consider to be the most important sustainability aspects of our operations.

Stakeholder surveys

Survey	Target groups	Countries	Frequency
Pulse survey	Personnel	Finland, Sweden, Norway, Germany	Monthly
Customer NPS-survey	B2B - Customers	Finland, Sweden, Norway	Continuous
Customer pulse survey	Customers	Finland, Sweden, Norway	Continuous
Stakeholder survey for materiality of sustainability themes	Customers Personnel Suppliers Shareholders Partners Media Public authorities Policy makers	Finland, Sweden, Norway	Previous survey published in 2019. Need for renewal reviewed annually.

Collaboration and partnerships

We collaborate with a range of international organizations and industry associations. Through this, we are involved in developing the energy and gas sector's industry practices as well as influencing development in fields including maritime fuels, bioenergy, climate change mitigation, circular economy, waste management and energy research. This work helps us to deepen our understanding of global topics and their connections to our business.

We participate in programs, projects, networks, and commitments promoting sustainability such as

- UN Global Compact
- Baltic Sea Action Group (BSAG)
- Carbon Neutral Municipalities project (HINKU)
- Climate Partners network of the City of Helsinki and business life
- Climate Leadership Coalition (CLC)
- Finnish Business and Society (FiBS) corporate responsibility network
- Helsinki Metropolitan Smart & Clean Foundation
- Society's Commitment to Sustainable Development (Finland)
- 2030 secretariat (Sweden).

An essential element of our **R&D work** is collaboration and partnerships with research institutions and enterprises in areas such as hydrogen and carbon value chains in future energy systems, as well as nutrient recycling. Gasum is a member of the Biogas

Research Center at Linköping University and a shareholder in innovation cluster CLIC Innovation Ltd.

Public affairs work

We engage in active dialogue with national legislators, authorities and other decision-makers in Finland, Sweden and Norway, and with relevant EU bodies.

In our public affairs work, we emphasize promoting the use of versatile and low-emission gas and ensuring the competitiveness of circular economy solutions and low-carbon energy. In 2021, the total value of this advocacy cooperation in Brussels was around €35,000. The amount is based on figures reported to the EU Transparency Register. We do not provide support to political parties or contribute to election campaigns of individual candidates.

Stakeholder communication

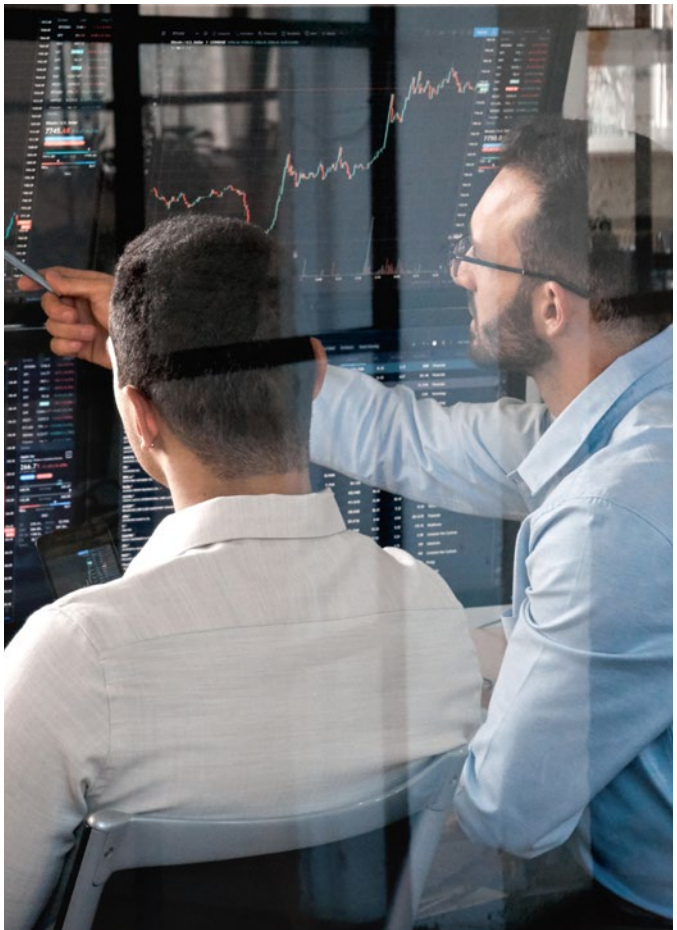
We communicate about our operations, goals, strategies, and financial position to our stakeholders. We seek to increase the attractiveness of and, awareness about, the gas sector and the energy company Gasum as a reliable and modern and forerunner employer.

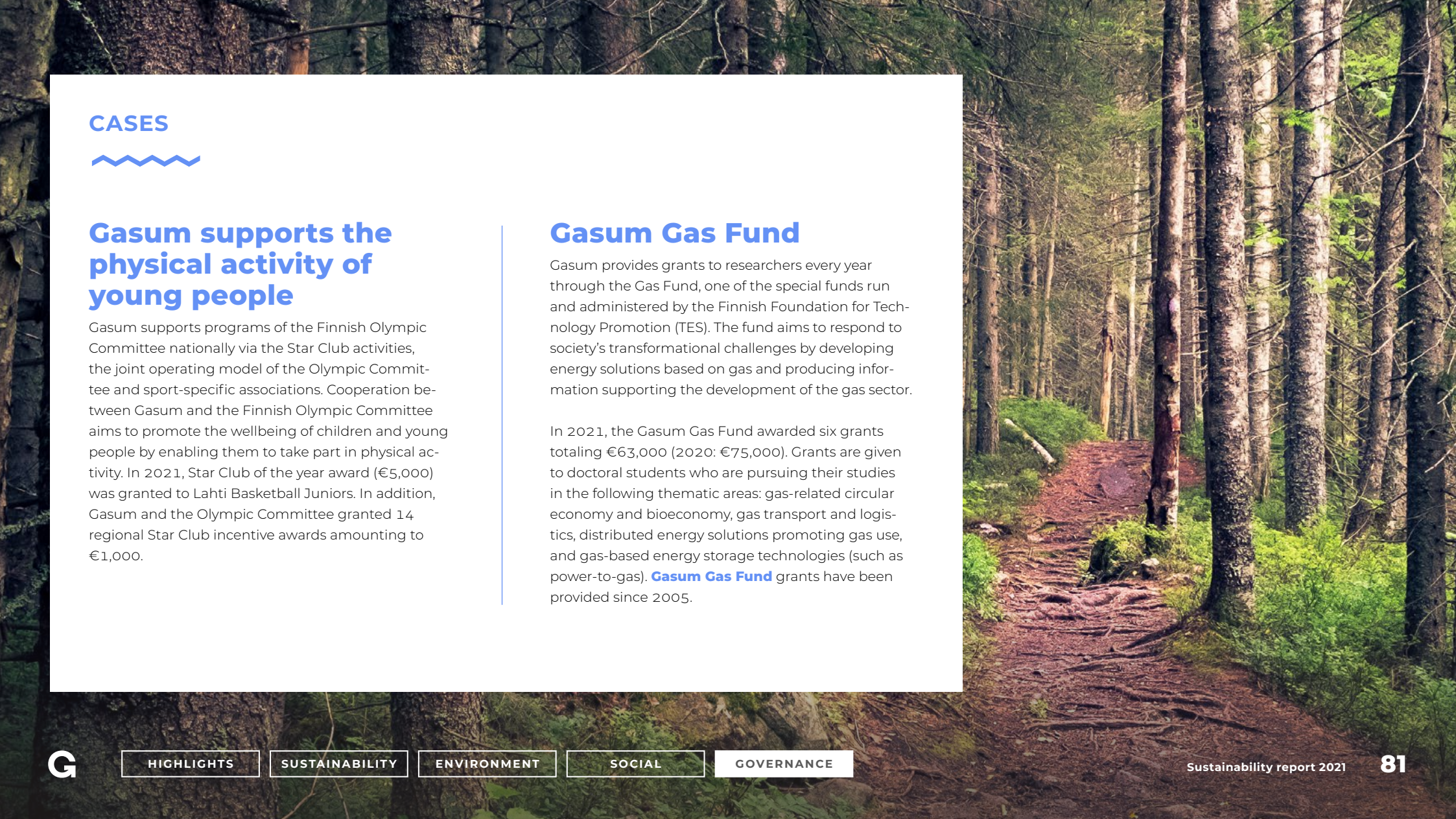
The key principles of our communications are reliability, openness, and consistency. We communicate both positive and negative information consistently and comprehensively. The use of diverse communication channels ensures access for Gasum's stakeholder groups to enough information about issues that are current and interesting to them.

Donations and funding

We are involved in creating capacities and experiences. Through our sponsorship and cooperation projects, we want to promote physical activity among children and young people as well as Finnish and international capacities in the fields of sports and culture alike.

Gasum supports UNICEF, which works across the globe to save children's lives and defend their rights. In 2021, Gasum's Christmas gift funds were donated to UNICEF and its work in emergencies and humanitarian context across the globe. Gasum participates in the Savonlinna Opera Festival's Young Opera Stars cooperation program. The program supports aspects including the internationalization of young opera stars' talent and competences.





CASES

Gasum supports the physical activity of young people

Gasum supports programs of the Finnish Olympic Committee nationally via the Star Club activities, the joint operating model of the Olympic Committee and sport-specific associations. Cooperation between Gasum and the Finnish Olympic Committee aims to promote the wellbeing of children and young people by enabling them to take part in physical activity. In 2021, Star Club of the year award (€5,000) was granted to Lahti Basketball Juniors. In addition, Gasum and the Olympic Committee granted 14 regional Star Club incentive awards amounting to €1,000.

Gasum Gas Fund

Gasum provides grants to researchers every year through the Gas Fund, one of the special funds run and administered by the Finnish Foundation for Technology Promotion (TES). The fund aims to respond to society's transformational challenges by developing energy solutions based on gas and producing information supporting the development of the gas sector.

In 2021, the Gasum Gas Fund awarded six grants totaling €63,000 (2020: €75,000). Grants are given to doctoral students who are pursuing their studies in the following thematic areas: gas-related circular economy and bioeconomy, gas transport and logistics, distributed energy solutions promoting gas use, and gas-based energy storage technologies (such as power-to-gas). **Gasum Gas Fund** grants have been provided since 2005.

Customers

We have a strong customer focus and want to be a reliable partner to our customers. Sustainability and carbon neutrality targets, high quality products and services, and supply security are key topics of common interest.

Our business supports our customers in their sustainability efforts. We help our customers in maritime and road transport, and industry to reduce their carbon footprint as well as that of their customers.

Our product portfolio includes biogas and liquefied biogas (LBG), natural gas and liquefied natural gas (LNG), and power. In addition, we offer our customers energy market portfolio management and expert services, including market analyses and the selection of risk management models, guarantees of origin for electricity, voluntary emission offsetting and expert services in emission trading. We also provide our customers with biowaste management services and offer recycled nutrient and fertilizer products and organic matter for the soil.

CASE

Mobile app serves gas drivers

In 2021, we launched a new Gasum Driver app, a mobile application that serves both private and professional drivers. The Driver App has been developed based on customer feedback. The app makes it easy to find the nearest light and heavy-duty traffic gas filling stations in both Sweden and Finland. In addition, the app provides information on prices, outages, and filling instructions, and the user can easily contact Gasum's customer service.

Customer feedback

Customer surveys help to find ways to improve the customer experience and quality of our services. In 2021, we launched continuous customer NPS and sales pulse surveys. Both customer satisfaction and sales performance are measured continuously through a digital platform and results are always available in real time. Customer satisfaction survey measures the performance through various metrics, providing also a real-time NPS score. Sales Pulse measurement is a situation-based measurement that is carried out after customer meetings. Results from both surveys are presented and analyzed every month.

In addition, we monitor customer satisfaction daily through customer feedback, obtained through account managers who keep in touch with our customers around the year. Consumer customer feedback is received primarily through our customer service, but also through websites and social media. Feedback is important in finding concrete and practical ways to improve the customer experience and quality of our service.

Customer relationship management (CRM) is part of the daily routines and processes employed to document customer interaction and feedback received to ensure professional and complete follow up.

Developing services for customers

In 2021, we launched a new digital traffic customer portal to provide business customers with flexible customer relationship management. The customers benefit from the portal's features such as billing history, monitoring of refueling transactions, GasCard management and gas prices.

In 2021, Gasum and DKV, as well as Gasum and Eurowag, agreed on cooperation that extends the network of our LNG and CNG filling stations for DKV Card holders and Eurowag Card holders to Finland and Sweden. Integration of the Nordic gas filling station network with the Central European markets enables cross-border corridors for gas haulage and low emission logistics for international players in the Nordics.

We have a strong customer focus and want to be a reliable partner to our customers.

Suppliers

We source natural gas, liquefied natural gas (LNG), renewable power (from hydro, wind, solar and bioenergy sources) as well as biogas. We also source biodegradable feedstocks for use in biogas production.

Sourcing principles

We purchase goods and services from many suppliers. By selecting reliable suppliers, we secure our operations, effective supply chains, and ability to constantly deliver quality products to our customers.

Our procurement guidelines determine the procurement processes and principles that must be followed in sourcing. We comply with the principles of openness, transparency and non-discrimination, and we expect our business partners to comply with the same principles and rules that govern our operations. Our business partners are expected to excel in quality, health, and safety, and to minimize environmental impacts within their value chains. Reliable and good quality deliveries, financial stability as well as social and environmental responsibility are considered in selecting suppliers.

Supplier qualification and assessments

We carry out continuous supplier assessments based on a systematic risk approach. Our critical partners are evaluated regularly with a set of Key Performance Indicators (KPI) regarding their performance in occupational health and safety, quality, energy efficiency and environmental aspects. We prefer suppliers who comply or are certified with related management systems. We prequalify potential new suppliers and control evidence of compliance with ethical behavior. By conducting supplier evaluations, we ensure cooperation with suppliers who are following our adopted principles.

In 2021, we conducted 5 supplier audits. Suppliers were selected for audits based on supplier evaluations and needs from our business units with a focus on operational excellence. Audit results showed mainly good management practices. A small number of non-conformities did not result in termination of agreements.

Our **Code of Conduct for Business Partners** clarifies our requirements for practices such as respecting international trade obligations, environment and human rights, anti-corruption and managing confidential information. We are determined to ensure our critical suppliers are approved according to our requirements. Contractors working at our sites must comply with our safety rules.

Raising concerns

We encourage and expect our business partners to raise and address concerns on suspected breaches of the Code of Conduct with a Gasum contact person, Gasum's Compliance Officer or via the whistleblowing channel available on the Gasum website where the submitter may remain anonymous.

Tax footprint

Gasum complies with country-specific legislation and regulations in tax payment, collection, remitting and reporting.

Gasum as a taxpayer

Gasum complies with country-specific legislation and regulations in tax payment, collection, remitting and reporting. Taxation is always a consequence of business activity and taxes are paid in compliance with legal provisions in the country where the activity is located. Gasum's tax strategy aims to ensure the realization of investments, flexibility of operations and capability to pay dividends to shareholders.

Gasum makes efforts to manage and reduce any taxation-related uncertainties, and the aim is to manage tax issues in a manner enabling timely response to future challenges. Taxation-related matters are evaluated continuously whenever changes take place in external regulation and operations expand to new areas.

The company participates continuously in the development of tax legislation and policies and wants to be involved in the development of a fair, clear and consistent tax system. As part of tax issues management, in spring 2018 Gasum entered into an enhanced customer relationship with the Large Taxpayers' Office in Finland. The enhanced customer relationship between Gasum and the tax authorities is an ongoing operating model. The collaboration supports Gasum's tax strategy and intent to be a responsible taxpayer and promote smooth and interactive collaboration with the authorities. In its tax reporting, the company also complies with the guidelines concerning state-owned companies issued by the Ownership Steering Department in the Prime Minister's Office.

Tax environment 2021

In late June 2021, a legislative proposal was approved concerning the expansion of the scope of application of the Finnish national transport fuel distribution obligation to also include biogas and other renewable liquid and gaseous fuels of non-biological origin. The amendment entered into force on January 1, 2022. However, including biogas in the distribution obligation meant that the transport use of biogas had to be included within the scope of excise taxation. In transport use, the energy content tax levied on biogas is €10.33/MWh. Use of biogas in heating and work machinery will remain tax free.

In Sweden, the national tax system incentivizes a transition from oil and coal to gas. Natural gas is subject to full carbon dioxide tax but exempt from the transport sector energy tax, which provides an incentive for switching from diesel-fueled to gas-fueled vehicles. Biogas is exempt from both the carbon dioxide and the energy tax in all sectors, and in 2021 the European Commission approved the prolongation of tax exemption for biogas until 2030.

Also applying to natural gas, the CO_2-based tax increases continued in Norway in 2021, too, and had direct impacts on industry as well as the maritime and road transport sectors. Biogas is a tax-free fuel in Norway and the Norwegian Government is currently planning a variety of measures to promote the production and consumption of biogas.

Tax footprint

The tax footprint illustrates the taxes and tax-like payments, by country, received by society from the company's operations. In its tax reporting, the company seeks transparency as well as a good understanding of and good reporting on its tax footprint. In its communication, Gasum wishes to report transparently, consistently and reliably on taxes as well. All companies are included in the figures reported for the periods during which they have been part of the Gasum Group. Tax information on Gasum AB German Branch are included in the Swedish figures. Collected and paid tax data is presented in the table on the next page.

The periods are not comparable with each other:

- In November 2021, Gasum sold the Risavika LNG liquefaction plant to North Sea Midstream Partners (NSMP).
- In April 2020, Gasum acquired AGA's Clean Energy and Nauticor Marine Bunkering businesses from Linde AG, and in October 2021 Gasum acquired all the shares of Skövde Biogas AB.
- In February 2020, Gasum Ltd sold its subsidiary Gasum Tekniikka Oy to the industrial maintenance partner Viafin Service Oyj.

€ thousand			Finland			Norway			Sweden			Other countries			Total
Taxes paid	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**	**2021**	**2020**	**2019**
Corporation taxes	57	1,662	27,356	-266	770	161	3,270	739	0	0	0	0	3,061	3,171	27,517
Asset-related taxes*	64	89	185	32	48	52	120	91	66	0	0	0	215	228	303
Employer contributions	3,780	3,292	4,722	1,375	-119	203	3,849	2,672	2,055	25	-47	0	9,029	5,798	6,980
Total taxes paid	**3,901**	**5,043**	**32,263**	**1,141**	**700**	**416**	**7,238**	**3,502**	**2,121**	**25**	**-47**	**0**	**12,305**	**9,198**	**34,800**
Taxes collected															
Value-added tax, sales	228,854	121,621	234,811	38,049	13,256	19,202	79,339	34,204	22,842	0	14	0	346,242	169,095	276,855
Value-added tax, purchases	80,018	66,014	67,218	21,544	16,246	25,980	23,218	12,713	35,664	0	385	0	124,780	95,359	128,862
Value-added tax, net	148,835	55,607	167,594	16,505	-2,990	-6,778	56,121	21,491	-12,822	0	-371	0	221,462	73,737	147,993
PAYE deductions from salaries	5,587	5,713	7,152	2,289	1,834	1,724	0	0	0	0	0	0	7,876	7,547	8,875
Employees' social security contributions	265	1,523	653	1,005	0	0	2,550	2,092	0	0	62	0	3,820	3,677	653
Energy tax, sales**	3,599	1,695	63,052	18,320	12,780	6,390	688	742	742	0	0	0	22,607	15,216	70,184
Energy tax, purchases**	3,206	5,358	65,793	8,644	-4,065	15,421	0	0	0	0	0	0	11,850	1,293	81,214
Energy taxes, net	393	-3,664	-2,742	9,676	16,845	-9,031	688	742	742	0	0	0	10,757	13,923	-11,031
Taxes at source	37	0	0	0	0	0	0	0	0	0	0	0	37	0	0
Total taxes collected	**155,117**	**59,179**	**172,656**	**29,474**	**15,688**	**-14,086**	**59,359**	**24,325**	**-12,080**	**0**	**-309**	**0**	**243,950**	**98,884**	**146,491**
Total taxes paid and collected	**159,018**	**64,222**	**204,920**	**30,615**	**16,389**	**-13,670**	**66,597**	**27,828**	**-9,958**	**25**	**-356**	**0**	**256,255**	**108,082**	**181,291**
Revenue by country	1,022,172	459,245	945,185	175,902	64,896	76,032	353,826	139,127	106,383	19,131	710	0	1,571,031	663,977	1,127,599
Profit before tax	-267,712	16,696	89,713	-13,864	-10,069	25,433	18,887	-17,014	8,539	1,092	-1,358	0	-228,754	-11,744	123,685
Personnel on average	219	216	244	65	66	53	99	99	76	3	3	0	386	384	373

* Real estate tax and asset transfer tax
** Includes energy tax, strategic stockpile fee and carbon dioxide tax

The Group companies at December 31, 2021 by country are as follows: Finland: Gasum Ltd, Gasum LNG Oy, Gasum Portfolio Services Oy; Norway: Gasum AS, Gasum Clean Gas Solutions AS; Sweden: Gasum AB, Gasum Västerås AB, Skövde Biogas AB, Gasum Clean Gas Solutions Holding AB, Gasum Clean Gas Solutions AB; Germany: Gasum AB German Branch and Estonia: Gasum Oü

The energy company Gasum is a Nordic gas sector and energy market expert.

Gasum offers cleaner energy and energy market expert services for industry and for combined heat and power production as well as cleaner fuel solutions for road and maritime transport. The company helps its customers to reduce their own carbon footprint as well as that of their customers. Together with its partners, Gasum promotes development towards a carbon-neutral future on land and at sea.

Read more about responsibility

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GRI content index and UN Global Compact

GRI Standards disclosure		Location	Reporting	Global Compact Principles
GRI 102: General disclosure (2016)				
Organizational profile				
102-1	Name of the organization	page 74	Gasum Ltd	
102-2	Activities, brands, products, and services	**Financial report 2021**		
102-3	Location of headquarters	GRI index	Espoo, Finland	
102-4	Location of operations	GRI index	Operations in 4 countries: Finland, Sweden, Norway and Germany.	
102-5	Ownership and legal form	page 74		
102-6	Markets served	page 4		
102-7	Scale of the organization	**Financial report 2021**		
102-8	Information on employees and other workers	page 60		6
102-9	Supply chain	page 84, partially		8
102-10	Significant changes to the organization and its supply chain	**Financial report 2021**		
102-11	Precautionary Principle or approach	pages 51, 75	In line with the precautionary principle, Gasum acts with care and diligence to prevent environmental degradation and takes into account the probability or the risk of degradation, accident risk and opportunities to prevent accidents and mitigate their impacts.	7
102-12	External initiatives	pages 51, 79		
102-13	Membership of associations	page 79		

GRI Standards	disclosure	Location	Reporting	Global Compact Principles
Strategy				
102-14	Statement from senior decision-maker	page 5		Commitment to Global Compact
102-15	Key impacts, risks, and opportunities	pages 75-76 **Financial report 2021**		7
Ethics and integrity				
102-16	Values, principles, standards, and norms of behavior	pages 8, 10, 72-73		6, 8, 10
102-17	Mechanisms for advice and concerns about ethics	pages 72-73		1, 6, 8, 10
Governance structure				
102-18	Governance structure	**Governance and Remuneration 2021**		
102-19	Delegating authority	page 15		
102-20	Executive-level responsibility for economic, environmental, and social topics	page 15		
102-21	Consulting stakeholders on economic, environmental, and social topics	**Governance and Remuneration 2021**		
102-22	Composition of the highest governance body and its committees	**Governance and Remuneration 2021**		
102-23	Chair of the highest governance body	**Governance and Remuneration 2021**		
102-24	Nominating and selecting the highest governance body	**Governance and Remuneration 2021**		
102-25	Conflicts of interest	**Governance and Remuneration 2021**		
102-26	Role of highest governance body in setting purpose, values, and strategy	page 15		
102-27	Collective knowledge of highest governance body	page 15		
102-30	Effectiveness of risk management processes	**Governance and Remuneration 2021**		

GRI Standards	disclosure	Location	Reporting	Global Compact Principles
102-31	Review of economic, environmental, and social topics	page 15		
102-32	Highest governance body's role in sustainability reporting	page 15		
102-34	Nature and total number of critical concerns	page 73		
102-35	Remuneration policies	**Governance and Remuneration 2021**		
102-36	Process for determining remuneration	**Governance and Remuneration 2021**		
Stakeholder engagement				
102-40	List of stakeholder groups	page 78		
102-41	Collective bargaining agreements	GRI index	Gasum Code of Conduct includes a commitment to respect employees' right to organize freely and bargain collectively.	3
102-42	Identifying and selecting stakeholders	page 78		
102-43	Approach to stakeholder engagement	page 78		
102-44	Key topics and concerns raised	pages 15, 78-80		
Reporting practice				
102-45	Entities included in the consolidated financial statements	**Financial report 2021**		
102-46	Defining report content and topic Boundaries	page 15		
102-47	List of material topics	page 15		
102-48	Restatements of information	page 17		
102-49	Changes in reporting	page 17		
102-50	Reporting period	page 17		
102-51	Date of most recent report	page 17		
102-52	Reporting cycle	page 17		

GRI Standards disclosure		Location	Reporting	Global Compact Principles
102-53	Contact point for questions regarding the report	page 85		
102-54	Claims of reporting in accordance with the GRI Standards	page 17		
102-55	GRI content index			
GRI 103: Management approach (2016)				
103-1	Explanation of the material topic and its Boundary	page 15		
ECONOMIC STANDARDS				
GRI 201: Economic performance (2016)				
201-1	Direct economic value generated and distributed	**Financial report 2021**		
201-2	Financial implications and other risks and opportunities due to climate change	page 76		
201-4	Financial assistance received from government	page 22		
GRI 203: Indirect economic impacts (2016)				
203-1	Infrastructure investments and services supported	page 22		
GRI 205: Anti-corruption (2016)				
205-1	Operations assessed for risks related to corruption	GRI index	Before entering into a business relationship, we perform risk-based due diligence and screen our business partners to ensure that we know who we are doing business with. We focus in particular on managing risks related to trade compliance, bribery and corruption, human rights, money laundering, fraud and possible financial issues.	
205-2	Communication and training about anti-corruption policies and procedures	page 73		10
GRI 207: Tax (2019)				
207-1	Approach to tax	**Financial report 2021**		
207-2	Tax governance, control, and risk management	**Financial report 2021**		
207-3	Stakeholder engagement and management of concerns related to tax	**Financial report 2021**		
207-4	Country-by-country reporting	**Financial report 2021**		

GRI Standards disclosure		Location	Reporting	Global Compact Principles
ENVIRONMENTAL STANDARDS				
GRI 301: Materials (2016)				
301-1	Materials used by weight or volume	page 47		
301-2	Recycled input materials used	page 47		8, 9
GRI 302: Energy (2016)				
302-1	Energy consumption within the organization	page 41		7, 8
302-3	Energy intensity	page 41		8
302-4	Reduction of energy consumption	page 40		8, 9
GRI 304: Biodiversity (2016)				
304-2	Significant impacts of activities, products, and services on biodiversity	page 49		8, 9
GRI 305: Emissions (2016)				
305-1	Direct (Scope 1) GHG emissions	pages 39-40		7, 8
305-2	Energy indirect (Scope 2) GHG emissions	pages 39-40		7, 8
305-3	Other indirect (Scope 3) GHG emissions	pages 39-40		7, 8
305-4	GHG emissions intensity	pages 40		8
305-5	Reduction of GHG emissions	pages 39-41		8, 9
305-7	Nitrogen oxides (NOX), sulfur oxides (SOX), and other significant air emissions	pages 40		7, 8
GRI 307: Environmental compliance (2016)				
307-1	Non-compliance with environmental laws and regulations	page 53		5
SOCIAL STANDARDS				
GRI 401: Employment (2016)				
401-1	New employee hires and employee turnover	page 59		6

GRI Standards	disclosure	Location	Reporting	Global Compact Principles
GRI 403: Occupational health and safety (2018)				
403-1	Occupational health and safety management system	page 65		1
403-2	Hazard identification, risk assessment, and incident investigation	pages 68-69		1
403-3	Occupational health services	page 58		1
403-4	Worker participation, consultation, and communication on occupational health and safety	page 66		1
403-5	Worker training on occupational health and safety	ppage 66		1
403-6	Promotion of worker health	pages 58, 65		1
403-7	Prevention and mitigation of occupational health and safety impacts directly linked by business relationships	page 66		1
403-9	Work-related injuries	page 67		1
403-10	Work-related ill health	page 67		1
GRI 404: Training and education (2016)				
404-1	Average hours of training per year per employee	page 59		6
404-2	Programs for upgrading employee skills and transition assistance programs	page 59		
404-3	Percentage of employees receiving regular performance and career development reviews	page 59		
GRI 405: Diversity and equal opportunity (2016)				
405-1	Diversity of governance bodies and employees	**Governance and Remuneration 2021**		1, 6
GRI 406: Non-discrimination (2016)				
406-1	Incidents of discrimination and corrective actions taken	page 73		
GRI 408: Child labor (2016)				

GRI Standards	disclosure	Location	Reporting	Global Compact Principles
408-1	Operations and suppliers at significant risk for incidents of child labor	GRI Index	We strive to avoid any risk of becoming linked, through our business relationships, to any form of modern slavery, including forced labor or human trafficking. We do not, under any conditions, tolerate the use of forced, compulsory or child labor	5
GRI 409: Forced or compulsory labor (2016)				
409-1	Operations and suppliers at significant risk for incidents of forced or compulsory labor	GRI Index	We strive to avoid any risk of becoming linked, through our business relationships, to any form of modern slavery, including forced labor or human trafficking. We do not, under any conditions, tolerate the use of forced, compulsory or child labor	4
GRI 412: Human rights assessment (2016)				
412-1	Operations that have been subject to human rights reviews or impact assessments	page 62		1, 2
412-2	Employee training on human rights policies or procedures	page 72		1
GRI 413: Local communities (2016)				
413-1	Operations with local community engagement, impact assessments, and development programs	page 53		
GRI 415: Public policy (2016)				
415-1	Political contributions	page 80		
GRI 416: Customer health and safety (2016)				
416-1	Assessment of the health and safety impacts of product and service categories	page 68		
416-2	Incidents of non-compliance concerning the health and safety impacts of products and services	page 68		
GRI 419: Socioeconomic compliance (2016)				
419-1	Non-compliance with laws and regulations in the social and economic area	GRI Index	No reported incidents in 2021	1, 2

Gasum

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