



**GASUM CORPORATE
RESPONSIBILITY
2014**





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GASUM CORPORATE RESPONSIBILITY 2014

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Gasum Corporation
P.O. Box 21
Miestentie 1
02151 Espoo
Finland

Editor-in-Chief

Anna Ailio
anna.ailio@gasum.fi

Editing and layout

Miltton Oy

Translation

Käännös-Aazet Oy

Photos

Christian Marquardt
Tomi Parkkonen
Petteri Vilkki
Gasum Corporation

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A special year for gas

The year 2014 marked the 40th anniversary of Finland gaining access to a new source of energy – natural gas. Originally an industrial fuel, today natural gas is also used to heat homes and as a land and marine transport fuel. In its liquefied form (LNG), natural gas can also be delivered outside the pipeline network, and therefore LNG is expected to open up new opportunities for the development of the Finnish gas market.

In addition to marking 40 years of gas in Finland, 2014 was also the 20th anniversary year of Gasum. Originally established as the natural gas unit of Neste, today Gasum is 75% owned by the Finnish State, and 100% Finnish biogas flows in the Finnish gas pipeline network in addition to natural gas.

ABOUT GASUM'S REPORTING

This report covers Gasum's corporate responsibility performance and is also available online in Finnish. For other important events in Gasum's year 2014, please see the Annual Report. The Annual Report and Financial Statements are available in Finnish and English on the Gasum website and in print. Gasum adopted reporting in compliance with the International Financial Reporting Standards (IFRS) and the Global Reporting Initiative (GRI) G4 guidelines in 2014. Gasum has reported in accordance with the Global Reporting Initiative (GRI) guidelines since 2010.



READ MORE AT WWW.GASUM.COM

Gasum – Cleanly with natural energy gases

Gasum provides customers with intelligent and competitive gas solutions. At the same time we are also developing an intelligent gas system by generating new business as well as increasing our capacity and the efficiency of our operations. We also promote sustainable development and are building a new Gasum.

Intelligent and competitive gas solutions

Changes in our operating environment as well as the Skangass acquisition have made and will continue to make Gasum an even more prominent player in the Nordic gas sector. We will carry on our work toward change with our new strategy, which allows us to provide our customers with intelligent and competitive gas solutions.

Gasum's strategy was renewed at the beginning of 2015. Strategy work took place in 2014 with our personnel and executives.

The purpose of our new strategy and business model is to stimulate growth in our business areas and strengthen our ability to deliver solid financial performance and value growth as well as profitability.

Mission and vision clarified

Our mission is *Cleaner energy through efficient gas solutions* and our vision *The Nordic gas ecosystem as a promoter of sustainable development*.

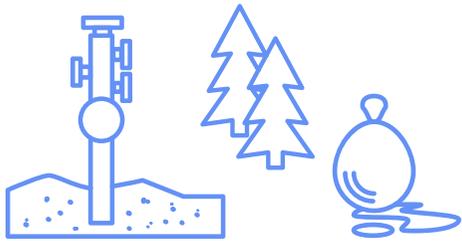
The Nordic gas ecosystem consists of gas-related activities in Norway, Sweden and Finland. Active players in the ecosystem provide products and services to their customers who are also part of the ecosystem. Gasum is at the core of the ecosystem and with other players – by doing things together – more can be accomplished than any individual player could do alone. The ecosystem evolves over time and generates new opportunities for the players involved.

Gasum's intent is to be an exemplary player from the economic, social as well



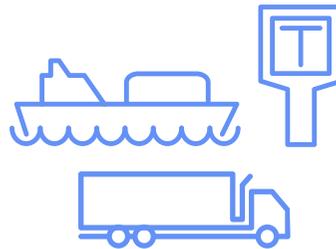


NATURAL GAS VALUE CHAIN



PRODUCTION, SOURCING AND SALES

Diversification and active development of gas infrastructure and competitive supply of gas.



TRANSMISSION AND DISTRIBUTION

Transmission and distribution of gas with excellent supply security and safety levels and taking the customer into consideration. Emission-reducing solutions.



USAGE

Diverse use of natural gas and biogas in energy production, industries, households and land as well as maritime transport.

as environmental perspective alike. In our company everyone is treated fairly.

Every Gasum employee also acts responsibly in their work toward customers, co-workers and other stakeholders. Corporate responsibility and sustainable development are closely linked with Gasum's business. In our organization corporate responsibility matters come under communications and marketing. Our new organization entered into force on January 1, 2015. To read more, see our Annual Report.

In cooperation with customers and stakeholders, Gasum aims to create partnerships that enable the efficient development of new natural energy gas solutions for a sustainable tomorrow. Our corporate responsibility is guided by our Code of Conduct, which also covers our environmental, safety and security, and ethical principles.

Our values determined together with personnel

To create a strong value foundation for strategy implementation, we also revised our values to reflect our current operating environment and corporate responsibility themes. Our new values were formulated on the basis of a survey among our entire personnel and summed up in a single value proposition:

Purposefully and responsibly moving toward new opportunities.

Responsibility encompasses corporate responsibility as well as responsibility on the part of each individual employee.



HIGHLIGHTS IN 2014

Gasum contributes towards a better and cleaner environment by providing customers with intelligent and competitive gas solutions.

More LNG to Finland

Gasum acquired a majority stake in the Skangass LNG business in May 2014. In the autumn the Gasum subsidiary Skangass made two important investment decisions to develop the LNG infrastructure. Skangass began the construction of an LNG terminal and natural gas logistics chain in Pori, Finland. In addition, an investment decision was made by Manga Terminal Ltd for an LNG terminal in Tornio, with Outokumpu, SSAB, EPV Energy and Skangass the partners developing the project. Read more on page 17.

Gasum innovation competition opened again

The Gasum innovation competition was opened again in autumn 2014, with this year's challenge being to develop new environmentally friendly solutions for the transport use of natural energy gases. The aim of the competition was to find and promote new natural energy gas solutions that will help reduce emissions and increase the share of Finnish and renewable energy in road transport. Read more on page 16.



33.9
GWh

AMOUNT OF BIOGAS
INJECTED INTO THE
NETWORK IN FINLAND
(2013: 31.7 GWh)



3.9
TWh

LNG SALES IN THE
NORDIC COUNTRIES
(2013: 2.6)



29.3
TWh

NATURAL GAS SALES
IN FINLAND
(2013: 33.2 TWh)

Gas cookers fuelled on biogas for a month

Helsinki homes using gas cookers were provided with biogas instead of natural gas for a month. The resulting cut in carbon dioxide emissions exceeded 140,000 kg for the month. This inspired several housing companies in the Helsinki region to switch from natural gas to clean, 100% Finnish and 100% renewable local biogas.

Gasum biogas recognized as a vehicle fuel

Gasum's biogas for use as a road transport fuel concept was nominated for the Energy Initiative of the Year award in an annual competition organized by the Tekniikka & Talous magazine.

Biogas production and upgrading facility opened as a Gasum and LABIO joint project

A major step forward was taken in the Finnish bioenergy sector as an integrated biogas production and upgrading facility was opened as a joint project of LABIO and Gasum in Kujala, Lahti. The facility is a prime example of the promotion of circular economy as it will produce 50 GWh of upgraded biogas from 44,000 tonnes of waste per year. The facility is the largest producer of upgraded biogas in Finland in terms of production capacity. Renewable and 100% Finnish, biogas offers a flexible and efficient way of reducing emissions from energy consumption.

The facility enables further efficiency in energy recovery from waste. Suitable raw materials include biowaste from homes, industry and retail outlets. Sludge from wastewater purification plants can also be processed at the facility.

READ MORE ABOUT 2014 EVENTS IN GASUM'S YEAR 2014 PUBLICATION – WWW.GASUM.COM

Responsibly throughout the organization

It is important for Gasum to identify our impact on the society and the environment. We seek to develop our business in a sustainable manner. We monitor progress made in our corporate responsibility work and communicate with our stakeholders about our responsibility themes.

CORPORATE RESPONSIBILITY GOALS

ADDED VALUE FOR STAKEHOLDERS

Gasum seeks to generate added value for stakeholders by offering and developing diverse and competitive solutions for the utilization of natural energy gases. Partnerships with our customers and stakeholders enable the efficient development of new, sustainable natural energy gas solutions. Added value for customers is also created by solid supply security, which was identified as one of Gasum's most important themes in the materiality analysis. We strive to ensure there will not be any unforeseen delivery disruptions in gas supply.

SAFE USE OF GAS AND EMPLOYEE WELLBEING

The wellbeing and equal treatment of our employees are key factors in our efforts to reach our corporate social responsibility objectives. Accident prevention is part of wellbeing, and our target is zero accidents at work. We now have an even stronger focus on safety observations and corrective

measures to prevent accidents. Other tools include risk assessments and regular safety reviews. The safe use of natural energy gases also plays an important role. Our aim is to eliminate accidents in the gas transmission, distribution, production and filling-up systems and related tasks.

ENVIRONMENTAL IMPACT MONITORING AND REDUCTION

It is important for Gasum to be fully informed of the environmental impacts of the natural energy gas production and consumption chains. We seek to address and reduce any environmental impacts caused by our company.

CONTINUOUS DEVELOPMENT OF OUR BUSINESS

Together with our customers and stakeholders, we create partnerships for the efficient development of new natural energy gas solutions for a sustainable tomorrow. The active implementation of research and development projects and the efficient development of innovation are among our priority areas.



OLGA VÄISÄNEN

Director, Communications,
Marketing and Corporate Responsibility

Gasum's reporting to stakeholders takes place in accordance with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines. We see corporate responsibility and sustainable development as a comprehensive approach that is also closely linked with our business strategy. We are determined to continuously develop our responsibility in response to our changing operating environment.

Our Corporate Responsibility Report contains the information and indicators that we have identified through our materiality analysis as material from the perspective of our stakeholders, business, operating environment and megatrends. See page 11 to read more on how we determined our material indicators. Also take a look at our Annual Report and Financial Statements for 2014 online at www.gasum.com.



Corporate responsibility management

At Gasum, responsibility is based on our company values and common approaches, which have been compiled into our Code of Conduct document in 2014. In addition to these, our operations are guided by internal guidelines and principles.

The Director for Communications, Marketing and Corporate Responsibility is in charge of the management of our responsibility work, while the realization of responsibility in Gasum's operations is supervised by the Executive Management Group (EMG). The EMG formulates the strategic policies concerning responsibility and monitors their implementation in their respective business areas and support functions. Responsibility issues are considered by the Gasum Board of Directors and EMG as well as the Management Groups of the safety organization, business areas and production facilities.

Management and areas of responsibility

Corporate responsibility management is scheduled in accordance with Gasum's annual calendar under matters related to corporate responsibility, corporate safety and security, risk management, and integrated management system. Human resources issues are incorporated into the EMG's work.

In our new organisation in force since February 2015, the Director for Communi-

cations, Marketing and Corporate Responsibility is responsible for corporate responsibility issues. She reports regularly to the EMG about responsibility. In 2014 Vice President for Strategy and Corporate Responsibility Sari Siitonen was in charge of responsibility issues. The HSEQ Manager is responsible for safety and environmental indicators, which include reporting on environmental emissions and energy consumption. Safety indicators, such as the number of accidents, are monitored and reported on as part of the corporate safety and security entity.

The Controller produces the financial indicators for the corporate responsibility report, such as income, taxes, operating expenses, staff costs, donations, profit from previous years, and dividends to shareholders and the State.

The HR Manager is responsible for the monitoring and correctness of indicators relating to social responsibility. This monitoring covers pension cover, total workforce by employment type, employment contract and gender as well as employee turnover.

The Operation Manager of the gas network is responsible for supply security indicators, including reporting on gas supply disruptions.

Principles and policies

The principles and policies guiding Gasum's operations were updated into a single document in 2014. Entitled the Code of Conduct, the document applies to every Gasum Group employee. The update process took place in a working group comprising experts, managers and directors from the various areas of corporate responsibility. The work involved consultation of the Guidance on Social Responsibility, the GRI G4 Guidelines, the Global Compact initiative and the Government resolution on ownership policy. In addition, Gasum's own strategy, systems and commitments were taken into consideration in the update. The principles were updated into a single entity, and more specific documents were turned into operational guidelines. The Code of Conduct was adopted by the EMG on November 10, 2014 and can be



found in full on the Gasum website under Responsibility.

We comply with the following corporate responsibility principles in our activities:

OUR ETHICAL CODE

Our ethical principles support our business activity and success, forming a shared foundation for our values and operations. We are committed to full compliance with legislation and regulations both within Gasum and in relation to customers, public authorities and other stakeholders. Our value proposition is “Purposefully and responsibly moving toward new opportunities.”

WE WILL CONTINUOUSLY IMPROVE OUR ACTIVITIES

We aim to continuously improve our activities. Operational quality and compliance with environmental and safety perspectives are monitored regularly on the basis of audits conducted by an external partner as well as an internal audit team.

Our safety and security objective is that no damage or accidents take place in our activities or in the end use of natural energy gases.

OUR COMMITTED PERSONNEL

The purpose of our human resources principles is to enable good human resources management, harmonized managerial work and the fair treatment of employees.

Gasum’s human resource policy, internal and external policies and approaches as well as leadership and operating models are based on gender equality and the abso-

lute prohibition of discrimination on the basis of age, health or other grounds specified in the Employment Contracts Act.

WE OPERATE RELIABLY AND TAKE RISKS INTO CONSIDERATION

Our financial activities aim at the sustained generation of permanent economic value for owners.

Gasum subjects its procurements to competitive tendering in accordance with applicable procurement regulations. In public procurements we comply with the Government decision-in-principle on the promotion of environmental and energy solutions (cleantech solutions) in public procurement.

Gasum’s comprehensive risk management covers the management of strategic, financial and operational as well as accident and damage risk management.

WE COMMUNICATE ACTIVELY TO OUR STAKEHOLDERS

The goal of Gasum’s communications is to support the implementation of the company’s strategy and objectives. The objective of our communications is to communicate in a speedy, open, efficient, active and interactive manner.

The aim of our sponsorship and support activities is to support Gasum’s strategic objectives, care of our corporate image, marketing and responsible business.



GASUM'S MAIN CORPORATE RESPONSIBILITY OBJECTIVES AND ACHIEVEMENTS

Objectives	Measures	Achievements 2014
SAFETY		
Using natural energy gases is safe; accidents in the gas transmission, distribution, production and filling-up systems and related tasks are eliminated.	<ul style="list-style-type: none"> • Safety observations and corrective measures • Zero Accident Forum • Applying ISO: 9001, ISO:14001, OHSAS:18001 	Gasum has organized major collaboration exercises to prepare for exceptional situations since 2008. The target set was reached: there were no accidents.
There are zero accidents at work.	<ul style="list-style-type: none"> • Safety targets were included in every employee's performance targets. • Special effort was made in safety management, and an HSEQ Manager was appointed for the Group. • Zero Accident Forum 	<ul style="list-style-type: none"> • 11 accidents at work • Absentee rate 2.91%
No unforeseen delivery disruptions in gas supply	<ul style="list-style-type: none"> • Careful planning of network servicing and maintenance 	The supply security of gas was particularly good. The amount of energy not delivered was 0.00 GWh (2013: 0.88 GWh).
An annual total of 650 safety and environmental observations made by employees.	<ul style="list-style-type: none"> • Active safety and environmental campaigning during the year • Providing supervisors and other managerial staff with encouragement and training 	592 observations realised. We did not reach our target. A total of 141 corrective or preventive measures were implemented.
ENVIRONMENT		
Reducing methane emissions from the gas network by 30% from the 2010 level by 2020.	<ul style="list-style-type: none"> • Flaring in use at the Porvoo LNG facility • The refurbishment of the Helsinki city gas network continued systematically • Methane emissions minimized in pipeline connection work 	<ul style="list-style-type: none"> • Gasum's methane emissions in 2014 totaled 979 tonnes (2013: 1,248). • Emissions from the Helsinki gas network improved by 26% on the year before • No more methane emissions generated at the Porvoo LNG facility thanks to the flaring of methane
We are fully informed of the environmental impacts of natural energy gas production and consumption chains and seek to contribute towards reductions in the impacts of our own activities.	<ul style="list-style-type: none"> • Creating the LNG lifecycle model in the MMEA project with the Finnish Environment Institute. The model can be used to evaluate emissions over the lifecycle of LNG. 	<ul style="list-style-type: none"> • The LNG lifecycle model was built systematically, and the work will be completed in 2015. There is also a corresponding tool for biogas and, in the future, also for pipeline natural gas imported from Russia.
BUSINESS AND RESPONSIBILITY		
Together with our customers and stakeholders, we create partnerships for the efficient development of new natural energy gas solutions for a sustainable tomorrow.	<ul style="list-style-type: none"> • Taking sustainable development into consideration in the Gasum strategy • Promoting cooperation projects and efficient stakeholder cooperation • Promoting R&D and innovation • The Gasum innovation competition 2014–2015 • CLEEN Ltd cooperation • Gasum Gas Fund • Cooperation with the innovation group of students from Haaga-Helia University of Applied Sciences 	<ul style="list-style-type: none"> • The Lahti biogas production and upgrading facility, annual biogas production increased by 50 GWh • Commissioning of the Lysekil LNG terminal, storage capacity 30,000 m³ • Construction of the Pori LNG terminal and the launch of the Skangass Tornio Manga LNG cooperation project • Grants from the Gas Fund given out at €95,500 (2013: 46,500)
RESPONSIBILITY MANAGEMENT		
We are fully informed of the impacts of our activities, monitor measures taken and report on them annually in our Corporate Responsibility Report.	<ul style="list-style-type: none"> • Gasum's Code of Conduct drawn up • Master's thesis on corporate responsibility supply chains and report development • Material indicators determined through materiality analysis • External assurance of report indicators • Responsibility issues transferred under Communications and Marketing 	<ul style="list-style-type: none"> • Gasum applies the Core option of the GRI G4 Guidelines in this report. • The four most important indicators underwent independent external assurance • Gasum subsidiary Skangass included in reporting on a few indicators in the report for 2015

Comprehensive energy and climate solutions

The promotion of Finnish competitiveness and wellbeing requires reasonably priced energy that helps minimize the burden on the environment. In the changing operating environment it is important to be able to offer comprehensive energy solutions. Low-emission natural energy gases play an important role in this.

In recent years the price competitiveness of gas in energy production has been poor against other fuels such as coal. This is due to several factors including taxation, emissions allowance price level and also the low price of electricity.

Amendments to Finnish heat production taxation reduced the competitiveness of natural gas against other fuels in 2010. The tax increases took place in three stages in 2011, 2013 and 2015. The Government promised in conjunction with the tax increase to monitor the development of the competitive setting of natural gas and the impacts of the tax reform. Over this period, however, gas consumption has decreased by 7.9 TWh while the consumption of solid fuels has increased by 6 TWh.

In summer 2013 the Finnish Government established a Parliamentary Committee on Energy and Climate Issues to consider ways of moving towards a carbon-neutral future. The outcome of the work carried out under

the leadership of Minister of Economic Affairs Jan Vapaavuori – Finland's Energy and Climate Roadmap 2050 – was published on October 16, 2014. According to the Roadmap, gas plays an important role on the journey toward a carbon-neutral society. Natural gas is a fuel with diverse uses and considerably lower emissions compared with coal and oil.

Gasum seeks to restore the price competitiveness of natural gas for gas consumption to increase and for gas to regain its position among the most popular fuels for combined heat and power (CHP) production. Gasum seeks to ensure the competitive pricing of gas against other fuels in Finland.

Examination of megatrends and the diverse opportunities provided by gas play a decisive role in efforts to make an impact in the energy debate. Changes in our operating environment can be best illustrated by the following megatrends:



RESOURCE WISDOM

The need for food, energy and natural resources is increasing in the world due to continuous population growth and rise in living standards. The threat of climate change calls for increased efficiency in resource use as well as carbon neutrality. The aim is to achieve considerable cuts in the use of fossil fuels by 2050. Resource wisdom is represented by energy efficiency, efficient use of raw materials, circular economy, utilization of local resources, and a change in consumption habits towards a resource saving direction.



CONSUMER POWER

Consumers have access to new methods enabling their freedom of choice. People have a stronger view of their decision-making power and the uniqueness

of their lives than ever before. As consumers, individuals and communities want to and can decide on their type of energy production and control their energy consumption. This strengthens the trend towards an increase in the energy technologies available and the diversification of energy production.



DIGITAL REVOLUTION

Automatization, global industrial products, ICT and mobile technology as the latest arrival have brought the mankind together in a unique manner into one system. Digitalization has taken the number of available choices to a new level. The industrial network enables communication between devices and systems (big data). The energy sector is being transformed by digital services.



Material aspects identified and classified under four themes

We have redefined Gasum’s key responsibility themes from the viewpoint of the economic, social and environmental impacts of our business.

In 2014 a materiality analysis was performed to identify the key responsibility aspects of Gasum’s activities. We were assisted by PricewaterhouseCoopers Oy in the process to determine the material aspects that are significant for our economic, social or environmental impacts or for our various stakeholders. The materiality analysis was conducted in compliance with the principles of the GRI G4 guidelines through identification, prioritization and validation of material aspects.

Responsibility aspects identified

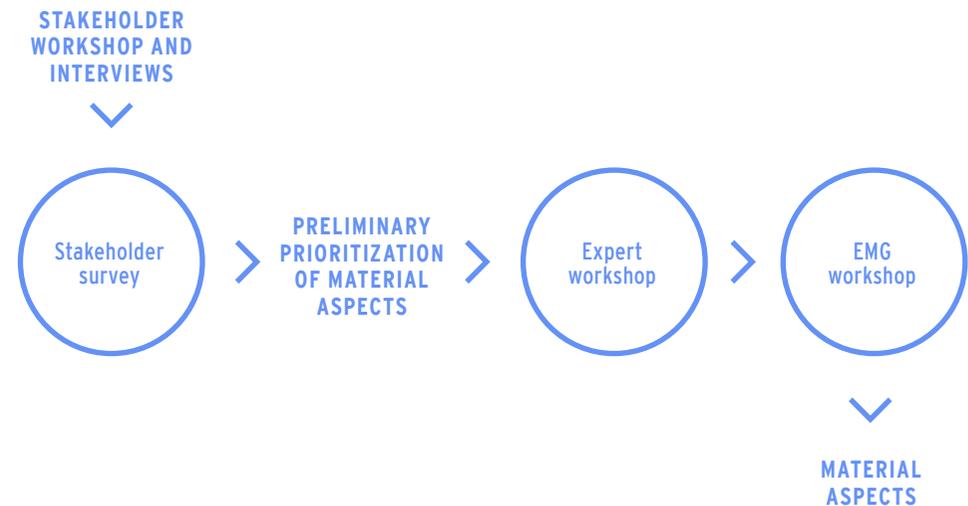
Material aspects were identified on the basis of background material, G4 aspects, other responsibility publications of our sector as well as stakeholder inclusion and interviews, while external as well as internal stakeholders were represented diversely in the stakeholder workshop. In addition to these, our stakeholder survey was taken by 221 respondents including representatives

of residential and enterprise customers, personnel, authorities and Gasum’s suppliers. These three stages provided a comprehensive picture of stakeholder expectations regarding our responsibility work.

In the next stage, stakeholders’ ideas were processed further and aspects were prioritized in an expert workshop. A broad group of Gasum personnel from various departments participated in the workshop.

The final stage was an Executive Management Group workshop where the aspects brought up were examined from the perspective of Gasum’s strategy and risk assessment and where the prioritized aspects were validated. This resulted in the selection of four themes covering 13 material aspects.

STAGES IN OUR MATERIALITY ANALYSIS





Focal areas of Gasum's corporate responsibility



Innovations and the future

Expansion and active development of the gas market

Diversification of gas infrastructure and expansion of gas use

New business models and partnerships

Emission-reducing solutions



In active cooperation with society

Openness, transparency and active dialog

Investments and tax footprint

Responsible employer



Supply security and safety

Safe use of gas

Supply security of gas and preparedness to respond to exceptional situations

Corporate safety and security of personnel and partners



Value chain

Industrial competitiveness

Supply chain efficiency and environmental impacts

Supplier responsibility

Corporate responsibility themes

The themes selected respond to the requirements set by megatrends, support our business strategy and promote sustainable development.



Innovations and the future

Gasum's biogas supply increased considerably when the biogas production and upgrading facility built in cooperation between Gasum and LABIO Oy became operational in Lahti, Finland, in autumn 2014. Gasum also acquired a majority stake in the Skangass LNG business in spring 2014, and in the autumn the liquefied natural gas (LNG) terminal of the Skangass subsidiary Skangass Terminal AB in Lysekil, Sweden, was phased in. Skangass Ltd also made an investment decision on the Pori LNG terminal in Finland, which is due for commissioning in autumn 2016. Gasum also launched its second open innovation competition in October.

[READ MORE ON PAGES 16-17](#)



In active cooperation in society

We engage in an open dialog with political decision-makers, public authorities and

non-governmental organizations. In regional advocacy work efforts are made to collect information about local needs and wishes around Gasum's operating area. Gasum was active in the Pori area in 2014 in the context of the Gasum subsidiary Skangass launching the construction of the LNG terminal in Pori.

The development of the production and usage infrastructure of biogas and liquefied natural gas (LNG) as well as the use of natural gas and biogas as transport fuels are important new opportunities to reduce emissions and diversify the natural gas market.

[READ MORE ON PAGES 18-25](#)



Supply security and safety

Gasum's supply security remained at a good level in 2014. There were no disruptions in the supply of natural gas from Russia to Finland or within the Finnish transmission network.

Our occupational safety objective is zero accidents at work. We employ several tools to reach the objective, including risk assessments, safety information and campaigns,

safety incident notifications and related investigations. Gasum has been a member of the Zero Accident Forum since 2003.

We also encourage our partners and subcontractors to take safety issues into consideration. Our activities are guided by an occupational health and safety management system, which is subjected to regular internal and external audits.

[READ MORE ON PAGES 27-30](#)



Value chain

Gasum's environmental objective is to reduce methane emissions by 30% from the 2010 level by 2020. We have already achieved a significant cut in actual methane emissions. The Helsinki city gas network is overhauled systematically on an annual basis, and methane emissions from pipeline connection points during maintenance work are minimized through careful planning and practical measures.

A model for the calculation of emissions over the lifecycle of natural gas based on the lifecycle assessment method was produced for Gasum in 2014. A corresponding model for biogas had already previously been pro-

duced for us, enabling the examination of emissions of bio-based gas.

In 2014 an emissions calculator was produced by Gasum experts, enabling a more detailed analysis of emissions during the use of gas and other fuels in various processes, such as road and maritime transport and power plants. Data from the emissions calculator can also be combined with the lifecycle models described above. Initial data for the calculator was collected from many sources, literature and Gasum files. The coherent data provided by the calculator can be utilized in the calculation of emissions generated by processes and in establishing the emission reductions achieved through fuel switching.

In autumn 2014 the Energy Authority accepted the operator's sustainability scheme of Gasum for the next five-year period. The sustainability scheme is based on the Renewable Energy Sources (RES) Directive and the Act on the sustainability of biofuels and bioliquids and for Gasum applies to the transport use of biogas. In the sustainability scheme, compliance with criteria for origin is verified and the emission reduction for biogas compared with fossil fuels is calculated.

[READ MORE ON PAGES 31-35](#)



Aspect indicators

In 2014 we determined our material corporate responsibility themes as well as the related aspects and indicators in line with the Core level of the GRI G4 Sustainability Reporting Guidelines. Material aspects were evaluated on the basis of how each aspect affects our ability to generate value through our business and of our own views and the views of our stakeholders concerning materiality. We selected a total of 20 indicators for our material aspects.

The table on page 15 summarizes our material sustainable development themes, aspects and reporting boundaries as well as related indicators.

MATERIAL THEMES, ASPECTS AND SELECTED INDICATORS FOR GASUM'S CORPORATE RESPONSIBILITY

INNOVATIONS AND THE FUTURE	IN ACTIVE COOPERATION IN SOCIETY	SUPPLY SECURITY AND SAFETY	VALUE CHAIN
Expansion and active development of the gas market OG3 Total amount of renewable energy generated by source	Openness, transparency and active dialog S08 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations S06 Total value of political contributions by country and recipient/beneficiary PR5 Results of surveys measuring customer satisfaction	Safe use of gas No indicator – reported in another manner on pp. 27–30	Industrial competitiveness No indicator – reported in another manner on pp. 31–32
Diversification of gas infrastructure and expansion of gas use EC7 Development and impact of infrastructure investments and services supported	Investments and tax footprint EC1 Direct economic value generated and distributed EC4 Financial assistance received from government	Supply security of gas and preparedness for response in exceptional situations No indicator – reported in another manner on p. 30	Efficiency and environmental impacts of the supply chain EN3 Energy consumption within the organization EN8 Total water withdrawal by source EN21 NO _x , SO _x and other significant air emissions EN23 Total weight of waste by type and disposal method S08 Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations EN34 Number of grievances about environmental impacts
New business models and partnerships No indicator – reported in another manner on pp. 16–17	Responsible employer LA1 Total number and rates of new employee hires and employee turnover by age group, gender and region LA9 Average hours of training per year per employee LA12 Composition of governance bodies and breakdown of employees per employee category	Corporate safety and security of personnel and partners LA5 Percentage of total workforce represented in formal joint management-worker health and safety committees that help monitor and advise on occupational health and safety programs LA6 Type of injury and rates of injury LA16 Number of grievances about labor practices	Supplier responsibility No indicator – reported in another manner on pp. 31–32
Emission-reducing solutions EN15 Direct greenhouse gas (GHG) emissions			



MATERIAL ASPECTS IDENTIFIED	GROUNDS FOR ASPECT SELECTION, FOCUS AREAS	ASPECT BOUNDARY WITHIN THE ORGANIZATION	ASPECT BOUNDARY OUTSIDE THE ORGANIZATION	REPORTED INDICATORS
Economic responsibility				
Economic Performance	Competitiveness, supply security, profitability, investments and economic impacts	Gasum Group, excl. Gasum Eesti transaction September 2014. Exceptionally includes figures for Skangass.		G4-EC1, G4-EC4
Indirect Economic Impacts	Competitiveness, supply security, diversification of gas infrastructure and expansion of gas use	Gasum Group, excl. Gasum Eesti transaction September 2014. Exceptionally includes figures for Skangass		G4-EC7
Environmental responsibility				
Energy	Emission-reducing solutions	Gasum Group, excl. Skangass. Excl. rental properties		G4-EN3
	Emission-reducing solutions	Gasum Group, excl. Skangass. Volume of biogas injected into the Gasum network		G4-OG3
Water	Efficiency and environmental impacts of the supply chain, emission-reducing solutions	Gasum Group, excl. Skangass		G4-EN8
Emissions	Efficiency and environmental impacts of the supply chain, emission-reducing solutions	Gasum Group, excl. Skangass. Excl. rental properties	Environment impacts of the production and transmission chain of natural gas imported from Russia 2012, Neste Jacobs research report	G4-EN15, G4-EN21
Effluents and waste	Efficiency and environmental impacts of the supply chain	Gasum Group, excl. Skangass		G4-EN23
Compliance	Efficiency and environmental impacts of the supply chain Compliance with legislation in all of our activities			G4-EN29
Environmental Grievance Mechanisms	Efficiency and environmental impacts of the supply chain Grievance mechanism channel for our stakeholders to report any irregularities			G4-EN34
Social responsibility				
Employment	Responsible employer: respected employer that attracts employees and achieves their commitment	Gasum Group personnel in Finland, excl. Skangass, excl. contractors or service providers		G4-LA1
Occupational Health and Safety	Corporate safety and security of personnel and partners Workplace providing personnel with safety and wellbeing	Gasum Group personnel in Finland, excl. Skangass, excl. contractors or service providers		G4-LA5
	Corporate safety and security of personnel and partners Workplace providing personnel with safety and wellbeing	Gasum Group personnel in Finland, excl. Skangass,		G4-LA6
Training and Education	Interesting career and development opportunities for continuous competence development Competencies required for strategy implementation	Gasum Group personnel in Finland, excl. Skangass, excl. contractors or service providers		G4-LA9
Diversity and Equal Opportunity	Responsible employer: diversity and equality	Gasum Group personnel in Finland, excl. Skangass, excl. contractors or service providers		G4-LA12
Labor Practice Grievance Mechanisms	Responsible employer, safety and security of personnel and partners Channel for reporting any irregularities			G4-LA16
Societal and product responsibility				
Public Policy	Openness, transparency and active dialog in society	Gasum Group, excl. Skangass		G4-S06
Compliance	Openness, transparency and active dialog Compliance with legislation in all of our activities	Gasum Group, excl. Skangass		G4-S08
Product and Service Labeling	Openness, transparency and active dialog Customer satisfaction is the prerequisite for our business	Gasum Group's customers, corporate customers, excl. Skangass		G4-PR5

Aiming at carbon dioxide emission cuts

The long-term goal of Gasum's innovation, research and development is to promote the transition to a carbon-neutral society. In the future we will be involved in solutions that play a role as providers of climate-friendly technologies. These include the switch to low-carbon fuels, production of bio- and waste-based fuels, provision of energy-efficient solutions to customers and diversification and expansion of gas infrastructure.

Gasum is a Finnish expert in natural energy gases (natural gas and biogas), and our research, development and innovation (RDI) aims at a sustainable tomorrow. In the future we want to be involved in solutions that play a role in action against climate change. We develop the Finnish and Nordic gas system and promote sustainable development. We are constantly looking for new types of business models and partnerships.

Active innovation

Gasum maintains active internal and external innovation processes. In 2014 ideas were developed in regular in-house innovation workshops, in addition to which more than 30 in-house innovation initiatives were collected and processed. The core Gasum's in-house innovation process features an ideas blog that aims to collect the ideas and innovations generated in our organisation and make them visible. The purpose of the blog is not only to collect ideas but also thoughts,

problems, questions as well as examples of ideas and innovations presented elsewhere.

Innovation with stakeholders

The second Gasum innovation competition for stakeholders was launched in autumn 2014. The aim is to find new natural energy gas solutions, such as technical solutions, service concepts or marketing tools for the reduction of emissions and to increase the share of renewable energy in road transport. The project ideas must be implementable within the next couple of years.

Entries could be submitted until the end of 2014, and 130 ideas for the increased transport uses of natural energy gases were received by the deadline.

The members of the jury were Chairman of Gasum Supervisory Board Juha Rantanen, Professor Petri Parvinen (Helsinki University and Aalto University Department of Industrial Engineering and Management), Professor Kalevi Ekman (Aalto University Department

of Engineering Design and Production), Mighty Eagle Peter Vesterbacka (Rovio Entertainment), and Board Member Jaakko Lehtonen (Dodo). Gasum was represented by CEO Johanna Lamminen, Vice President for Strategy and Corporate Relations Sari Siitonen and Business Development Manager for Biogas and Transport Solutions Jussi Vainikka.

The competition will continue in spring 2015 with two workshops where the shortlisted ideas will be taken further under the leadership of the jury. The winner will be announced in June 2015, with an innovation prize up to €100,000 available to the winning team.

Joint workshop innovation between Gasum's safety experts and a group of students from Haaga-Helia University of Applied Sciences was launched in November 2014. The innovation project is geared to the future: How could we prevent damage caused to the natural gas network by external factors such as excavation work in advance? The project will run throughout spring 2015.

Gasum's key research and development themes:

RENEWABLE GAS

- Key areas in this theme include biogas produced using anaerobic digestion, its raw materials and pre-treatments, wood-based biogas produced using gasification (bio-SNG) and the hydrogen gas economy.

ENERGY SYSTEMS AND NEW OPPORTUNITIES OF GAS

- Key areas in this theme are the flexibility required by the use of renewable energies, such as storage issues and changes in energy systems, such as the transformation caused by new technologies.

USES AND ENERGY-EFFICIENCY OF GAS

- Key areas in this theme include the energy-efficiency issues and environmental impacts of the gas supply chain, and energy efficiency in the end use of energy.

Steps toward carbon-neutral society

We took major steps toward a carbon-neutral society by developing our LNG and biogas business. Interest in cost-efficient gas solutions is increased by deeper environmental awareness among consumers as well as stricter emission targets.

Gasum acquired a majority stake in the LNG business of the Norwegian Skangass in May 2014. Skangass will continue to strengthen the position and infrastructure of LNG and the utilization of new gas solutions more extensively in Finland, Sweden and Norway. The pan-Nordic market created facilitates the development of sourcing and distribution services, improves the efficiency of the logistics chain and increases the total storage capacity available for LNG.

Two investment decisions were made by Skangass during the year to develop the LNG infrastructure. Skangass is building an LNG terminal and a natural gas logistics chain in Pori, Finland. The construction of an LNG terminal in Tornio, Finland, was also begun by Manga Terminal Ltd, with Outokumpu, SSAB, EPV Energy and Skangass the partners developing the project. In addition to these, in Sweden, the Lysekil LNG terminal of Skangass Terminal AB became operational in the autumn.

Gasum's biogas production capacity increased considerably in 2014 when a new biogas production and upgrading facility with an annual capacity for producing 50 GWh of biogas was opened as a joint operation between Gasum and LABIO Oy in Kujala, Lahti, Finland. Biogas is also injected into the Finnish network from Mäkikylä, Kouvola, and the Suomenoja wastewater treatment plant in Espoo.

Biogas is available from all of Gasum's 18 gas filling stations in Finland. The development of the filling station network is one of Gasum's key objectives. In 2014 a Gasum filling station was opened in Lielähti, Tampere. A roadmap is being designed for 35 new filling stations in key traffic locations around Finland. Biogas and, in the future, liquefied natural gas (LNG) infrastructure solutions will help increase the filling station network outside the gas pipeline network. This development is also supported by the goal of making biogas more common as a fuel for public transport in urban areas.

The year also saw the launch of the sales of biogas for other natural energy gas uses, including a variety of industrial applications, restaurants, property heating and residential use.

Gasum is also actively developing a variety heating solutions, such as hybrid solutions combining renewable energies with gas. In practice these may include solar panels, collectors or heat pumps acting as the primary source of energy, with gas providing the system with the additional energy needed for periods of low supply of renewable energy. Hybrid solutions are scalable, so they are also suitable for industrial energy production needs.

The development of the biogas market will open up opportunities for the introduction of new production methods. As well as from biodegradable waste, biogas can be produced from material such as grass growing on fallow land or wood obtained from forest industry by-products.

Taking a pioneer role in circular economy with biogas

Biogas production is a key element in the circular economy and enables resource-wise circular economy. In line with the Gasum strategy, we are developing an intelligent gas ecosystem. Biogas is part of the circular economy and facilitates integration into a broader system. The full circle is possible by turning biowaste into energy. The Finnish biogas production potential corresponds to around half of the current use of gas. Biogas production will create new jobs in Finland and opportunities for the development of Finnish environmental technologies and expertise. Biogas provides energy for agriculture, industry and consumers.

Important role played by research networks

Gasum is an active player in national research networks. Our research and development is closely connected with CLEEN Ltd (Cluster for Energy and Environment) and FIBIC Ltd (Finnish Bioeconomy Cluster) research programs, with Gasum participating in several different programs. In the Measurement, Monitoring and Environmental Assessment (MMEA) program Gasum has developed lifecycle calculation for LNG value chains and in the Sustainable Bioenergy Solutions for Tomorrow (BEST) research program we have collaborated to identify opportunities and new solutions for the bioenergy economy. The Efficient Energy Use (EFEU) program explores energy-efficient energy systems of the future.

Gasum is also involved in other re-

search consortiums. Launched in 2014, the Neo-Carbon Energy project looks into the opportunities to achieve an emission-free energy system without nuclear power and carbon dioxide capture. One of the key themes is research into power-to-gas (P2G) technologies generating information about the production of methane with solar power.

Gasum Gas Fund

We support national research, development and innovation every year through the Gasum Gas Fund. The Gas Fund is one of the special funds administered by the Finnish Foundation for Technology Promotion (TES). In 2014 ten grants were given out from the fund, totaling €95,500 (2013: €46,500).

International networks

Gasum participates in international research with several organizations. In 2014 Gasum was a member of organizations including the European Gas Research Group (GERG) and European Pipeline Research Group (EPRG). We have also participated in the activities of the International Gas Union (IGU).

Cooperating with universities - training future gas experts

Gasum is developing Finnish and in part also international gas expertise by participating in university education. Every other year we have organized the Natural Gas Engineering course in collaboration with Aalto University. We also commission theses related to the gas sector, with students working on their Master's theses being a regular sight among our staff.



We communicate actively to our stakeholders

Gasum has a broad sphere of influence among the various stakeholders. We seek to maintain continuous stakeholder cooperation and ensure that gas is an attractive form of energy and the opportunities it provides are known. We communicate openly, transparently and through active dialog.

THE MOST IMPORTANT STAKEHOLDERS IDENTIFIED BY GASUM ARE:

- customers
- personnel
- shareholders
- national- and local-level decision-makers
- European Union institutions
- Finnish and foreign member organizations
- landowners
- research and development partners
- subcontractors and consultants
- the media

All of these stakeholders play a major role in the development of our operations and operational capacities. In addition to these, information about the company is also requested by several educational institutions and students, with whom we cooperate in various ways.

The strategic goal of Gasum's communications is to support the implementation of the company's strategy and objectives. It is also important to increase the attractiveness of Gasum and the gas sector as well as awareness of them. We communicate speedily, openly, effectively, actively and interactively. Our use of diverse communication channels ensures our various stakeholders' access to a broad coverage of information about all issues that are current and interesting to them. In addition to effective communications, we seek to ensure continuous stakeholder cooperation by organizing meetings, seminars, visits, press conferences and neighborhood events as well as by participating in trade fairs. We also speak actively about gas sector opportunities at seminars and events.

We study stakeholder opinions about our operations using customer and employee surveys and commission other surveys whenever necessary.

Customer satisfaction surveys are an important part of our service development

Our customer satisfaction survey aims to support the development of Gasum's customer experience and service quality. In 2014 the survey was conducted among Energy Trade, Energy Services and transport customers. Depending on the business area, customer satisfaction was studied using phone interviews and online questionnaires. Our Net Promoter Score (NPS) is quite high, which means our current customers are prepared to recommend Gasum as a cooperation partner. The highest satisfaction was reported by respondents on supply security, keeping of promises, personnel's professional skills and service-mindedness. Our customers follow the gas sector actively, and Gasum's activities and communications are followed through a variety of channels.

Responses provided in our customer satisfaction survey reflected the poor price competitiveness of natural gas against other fuels and a wait-and-see attitude as regards the price development of natural gas, biogas production and sales as well as the opportunities provided by liquefied natural gas (LNG). Gasum was hoped to increase its visibility in societal debate and advocacy. The studies were conducted in 2014 by MainIdea.



Our use of diverse communication channels ensures our stakeholders' open and speedy access to information about current topics.

Active year of media hits in 2014

Gasum complies with the principles of openness, transparency and non-discrimination in its operations. In 2014 we renewed our communications practices, and this was reflected in our media hit rate. Our media hit total for the year increased to 1,500 (2013: 805).

We also integrated our communications, marketing and corporate responsibility units into a single function, with the synergy benefits generated increasing the team's efficiency. In addition to active communications, we publish a variety of customer letters and brochures supporting our business messages as well as material on a range of topics in social media and on our website.

Debate about society's sustainable gas ecosystem of the future

Gasum wants to ensure a competitive product for the gas market and diversify the market. Gasum's societal advocacy themes are:

1. Incentives for using gas and other low-emission fuels must be created through taxation.
2. The development of LNG and biogas infrastructure and market must be supported in a sustained manner to enable the diversification of the energy system and improvement of supply security.
3. The compatibility of local and national energy and climate objectives must be ensured through improved national coordination.
4. The potential of gas must be employed fully in transport. National distribution infrastructure promoting the use of gas

as a road transport fuel must be created. Vehicle taxation must be supportive to low-emission fuels.

Gas and gas infrastructure play a key role in national sustainable energy and transport policies today and tomorrow.

The need to renew Finnish energy taxation is a priority theme. The energy market has undergone a major change since the energy tax reform that took place in 2011, with the competitiveness of natural gas in particular against coal having been reduced considerably. The most concrete evidence of this can be seen in the Finnish success story – combined heat and power (CHP) production – where a significant share of natural gas usage has been replaced by coal. This has an adverse effect on national emission levels because CO₂ emissions per unit of energy with natural gas are around 40% lower than with coal. The use of coal instead of natural gas is proof of a clear need for an energy tax reform. The next Government should create incentives through taxation for the use of gas and other low-emission fuels as cost-effectively and energy-efficiently as possible. To promote the realization of this objective, Gasum launched a study with Gaia Consulting aiming to determine a tax model that would provide improved steering towards the use of low-emission fuels, such as natural gas, in energy-efficient CHP production.

The new Government must also continue the long-term development of the biogas market. Finland's biogas production potential is considerable as more than half of the

current use of natural gas could be replaced by renewable Finnish biogas. It is important to remember that the existing transport infrastructure and usage sites of natural gas can also be utilized when using biogas. With biogas, emissions in the non-emissions trading sector can be reduced efficiently. For example, in the transport sector biogas is the most efficient vehicle biofuel and the least expensive way to cut traffic carbon dioxide emissions (by up to 97%) and reduce harmful fine particulate emissions in urban environments in particular.

The third theme emphasized by us is the need to increase coordination at the national level so that local and national energy and climate measures support each other as well as possible. Achieving the emission reduction targets calls for work at the regional, national as well as international level. It is highly positive that Finnish municipalities and cities have actively joined the efforts towards emission cuts with a great deal of initiative. This action should be supported in the future as well.

At the same time, however, the impacts of regional decisions should be taken into consideration in the examination of cost-effectiveness at the national level. Natural gas and biogas will continue to be good choices in areas covered by the gas network. LNG is a cost-effective option for industry and transport in areas outside the gas network. There is no point in every municipality employing exactly the same methods to achieve the climate targets. Instead, the bigger national picture as well as the strengths of each region and existing infrastructure and resources



We seek to ensure the desirability of gas as an energy form and awareness of the opportunities provided by it.

should be taken into account in planning. The Ministry of Employment and the Economy should be provided with a stronger coordinator role to harmonize regional and national objectives. This would be in the interests of the entire Finnish society.

The potential of gas must also be employed fully in road and maritime transport. Natural gas, biogas and LNG play a key role in the EU Directive on the deployment of alternative fuels infrastructure completed last year. Finland is currently developing the transport fuel distribution system in accordance with the directive. By taking efficient national action to support the demand for vehicles running on low-emission fuels as well as infrastructure build-up, Finland's next Government will be able to achieve considerable cuts in transport carbon dioxide emissions as well as fine particulate and other local emissions that are a particular problem in urban areas. Other key events in our advocacy have included participation in the preparation of the new Natural Gas Market Act and regulatory framework. This advocacy will be continued actively in 2015 as well.



Gasum takes part in societal projects

Gasum has made a commitment to programs promoting sustainable development and energy efficiency as well as projects supporting environmental protection. We joined the Climate Leadership Council (CLC) in autumn 2014. Members of the CLC share a will to take action to curb climate change and set an example for other enterprises to do the same. This consortium of leading Finnish companies was founded by the Finnish Innovation Fund Sitra, the building systems company Caverion, the energy companies Fortum and St1, the elevator and escalator company KONE, and the technology company Outotec. Gasum joined the CLC with the chemicals company Kemira and the communications and IT company Nokia.

Gasum was also one of the organizers of the Arkadia 2015 coaching program for future influencers and young Parliamentary election candidates across the party political landscape.

Thanks to Gasum biogas being 100% Finnish, we joined the Blue and White Footprint campaign for Finnish work implemented by the Association for Finnish Work, K-Group retailers (K-citymarkets, K-supermarkets, K-markets and K-extras as well as Rautia and K-rauta building and home improvement stores), Finnish food manufacturers, non-food industry as well as building and renovation companies. The campaign reminds consumers about the importance of their consumption choices for the Finnish economy. Launched at the

beginning of 2014, the campaign will run until the end of 2015.

Gasum is also a signatory to the Finnish industrial energy efficiency agreement and a member of the Zero Accident Forum, which comes under the national industrial accident programme, and the Chemical Industry of Finland's Responsible Care Initiative.

Gasum has made a commitment to improve the state of the Baltic Sea through the Baltic Sea Action Group (BSAG). Gasum's commitment is to create opportunities for the use of a clean fuel – liquefied natural gas (LNG) – as a shipping fuel. In addition, Gasum is a member of the Climate Partners network of the City of Helsinki and local businesses. The Climate Partners make a commitment to reduce their greenhouse gas emissions by increasing their operational efficiency and offering better products and services to curb climate change. Gasum made a commitment to use biogas as the fuel for its service vehicles and company cars used by Gasum personnel, promote opportunities to utilise biogas and LNG in the Helsinki region in cooperation with its partners as well as to maintain and develop the gas distribution network within the City of Helsinki.

Gasum biogas sold for use as a vehicle fuel has been awarded the Made in Finland Key Flag Symbol of the Association for Finnish Work as well as the Nordic Eco-label. The criteria and requirements set for the labels as regards the product's environmental friendliness in comparison with other corresponding products are reviewed every year.

Active involvement in Finnish and international organizations

Gasum is a member of the Finnish Gas Association and the Bioenergy Association of Finland. As an employer Gasum is also a member of the Chemical Industry Federation of Finland. Gasum is a cooperation member of Finnish Energy Industries (ET). We are represented in the Energy Forum of Finland and the Energy Committee of the Confederation of Finnish Industries (EK).

Gasum also participates in the activities of international organizations in the energy and gas sector, including Eurogas, International Gas Union, European Network of Transmission System Operators for Gas (ENTSO-G), Gas Infrastructure Europe (GIE), International Gas Union (IGU), European Federation of Energy Traders (EFET), European Gas Research Group (GERG) and European Pipeline Research Group (EPRG).

Sponsorship and donations

Our sponsorship activity mainly supports our regional visibility and cooperation with local actors. The aim for Gasum is to be regarded as a company that demonstrates local responsibility and is a good partner. Support funding was granted to several different recipients. These included junior activities of sports clubs in areas where Gasum has operations, and individual events. Students of universities and vocational education and training institutions received Gasum support through advertising on student attire and support to student guild activities. In 2014 the recipi-

ent of our biggest individual donation was the biogas project supported by UFF and the Finnish Ministry for Foreign Affairs in India, which received a Christmas donation from Gasum in 2014.



CASE: UFF BIOGAS PLANT PROJECT IN INDIA

Gasum supports the construction of five biogas plants in poor rural areas of Dausa, India. The units are built in cooperation with UFF and its local partner, Humana India. The families provided with a biogas plant are farmers, and each unit is designed to serve a household with 8-12 members. To be eligible, the families must have four heads of cattle to produce enough dung for use as raw material in biogas production.

This is the second three-year biogas project in Dausa supported by UFF in collaboration with the Ministry for Foreign Affairs. Implemented in 2010-2012, the previous project provided this poor rural area with 200 biogas units. The excellent outcome inspired a continuation to this project that is important for the natural environment as well as for human wellbeing. The continuation project launched in 2014 will ensure the flawless operation of the units set up previously and build 405 more dung-fuelled units.

Biogas project with a direct impact on people's wellbeing

The project not only aims for improved access to income for rural families but also for women's empowerment and health promotion through biogas.

The concrete advantages of the biogas plant project can be seen immediately: using biogas instead of wood as a household fuel reduces indoor air pollution, which has a direct impact on family health. Smoke caused by wood-burning no longer causes eye diseases, and breathing is easier for women and girls doing a lot of domes-

tic work indoors. The female members of the family no longer need to spend hours on gathering wood. Instead, they can focus on looking after their family. Biogas also enables light generation inside the home, so children and young people are also able to study in the evenings.

Biogas plants produce slurry as a by-product, which is used as a fertilizer to improve the soil and reduce the need for watering, energy and chemical fertilizers. This results in savings for the farmer families as fertilizers are expensive in India and slurry improves agricultural productivity.

The families' lives can be followed through monthly newsletters published on the Gasum website.

CASE: LOCAL FOOD CLEANLY WITH BIOGAS

The Food Cooperative operating in the Helsinki Metropolitan Area delivers organic vegetables to its members using a van fuelled cleanly with biogas. The Herttoniemi Food Cooperative won the national award for the most innovative rural enterprise in 2014. The cooperative's idea has also inspired many people. The fourth crop season is now underway, and the members comprise 180 households. The products are delivered by Kuljetus Santamaa, which has converted its Ford Transit van to use biogas. When a diesel-fuelled vehicle is retrofitted to run also on biogas, carbon dioxide emissions are cut by 70% to 126 grams per kilometer, while with diesel fuel alone the emissions would be 419 grams.

The conversion was carried out by Terra Gas. Fuel choices help reduce carbon dioxide emis-

sions from transport, which with biogas are 65% lower than when running a vehicle on diesel only.

Both old and new petrol- and diesel-fuelled cars can be converted to biogas. Biogas vehicles do not differ from conventional cars in terms of their operating characteristics.

Biogas is the best fuel for the climate, because it helps achieve the biggest cuts in carbon dioxide and air pollution emissions.



Economic value generated and distributed and impacts on society

Direct economic value generated and distributed

Gasum analyzes the economic impact of its operations by country of operations. Contrary to previous financial years, Gasum's operating countries now also include Sweden and Norway in addition to Finland. At Gasum economic responsibility means ensuring profitability and competitiveness. By implementing economic responsibility we are able to generate economic value for shareholders in our countries of operation and be a reliable employer, investee and partner. Gasum provides quarterly financial reports and acts in compliance with laws and regulations. Gasum reports in compliance with the International Financial Reporting Standards (IFRS).

Economic value for stakeholders

Gasum is a major economic player in Finland, Sweden and Norway. We monitor the impacts and wellbeing generated by our activities continuously. The most significant direct cash flows in our operations arise

from sales revenue, purchases of goods and services from suppliers, payments to providers of capital and shareholders, growth and maintenance investments, salaries, and taxes paid.

Our operations also have indirect economic impacts. The State of Finland holds 75% of Gasum's shares, and our contributions to society include paying taxes and dividends. These help safeguard the basic functions of the Finnish society and create further wellbeing. Investments as well as purchases of goods and services provide employment locally as well as outside our operating areas. Salaries and taxes paid have a positive impact on local communities.

The table on the next page presents on an accrual basis Gasum's cash flows to various stakeholders: personnel, providers of capital, shareholders and the public sector. The figures are given by country. Gasum acquired the Skangass group operating in Sweden and Norway in May 2014, whereby operations in those countries were yet to begin during the reference year.

Personnel

Gasum's activities focus on Finland, Sweden and Norway. Gasum has an average of 319 employees. Employee competencies and performance are developed through training and job rotation. Salaries and benefits affect private consumption, and taxes paid by personnel also contribute towards the generation of wellbeing in society.

Shareholders and providers of capital

The State of Finland holds 75% and OAO Gazprom 25% of Gasum's shares. On November 3, 2014 the State of Finland acquired the 31% shareholding of Fortum Heat and Gas Oy and the 20% shareholding of E.ON Ruhrgas International GmbH in Gasum, raising State ownership in Gasum to 75%. Cash flows to shareholders are presented in the following table on a cash basis, i.e. the figures relate to dividends paid for 2012 and 2013.

G4-EC1: DIRECT ECONOMIC VALUE GENERATED AND DISTRIBUTED

€ THOUSAND	FINLAND		NORWAY		SWEDEN		TOTAL	
ECONOMIC IMPACT GENERATED	2014	2013	2014	2013	2014	2013	2014	2013
Revenue	972,867	1,149,702	104,809	-	1,366	-	1,079,042	1,149,702
ECONOMIC VALUE DISTRIBUTED								
Personnel								
Salaries and benefits	20,048	16,679	2,050	-	821	-	22,919	16,679
Social security costs	4,951	3,097	306	-	143	-	5,399	3,097
Total	24,999	19,776	2,355	0	964	0	28,318	19,776
Suppliers								
Purchases	862,716	1,062,944	119,332	-	2,623	-	984,671	1,062,944
Providers of capital	4,138	4,677	3,063	-	1,654	-	8,856	4,677
Shareholders**								
Finnish State	4,299	9,604	0	-	0	-	4,299	9,604
Other shareholders	13,615	30,411	0	-	0	-	13,615	30,411
Total	17,914	40,015	0	-	0	-	17,914	40,015
Society								
Taxes paid*	75,551	64,295	1,488	-	0	-	77,038	64,295
Donations	20	16	0	0	0	0	20	16

* Includes corporation taxes, excise duties, taxes at source and asset-related taxes.

** The figures are on a cash basis.

G4-EC4: FINANCIAL SUPPORT RECEIVED

In 2014 Gasum received €100 million (2013: €84 million) in financial support from Tekes.

G4-EC7: DEVELOPMENT AND IMPACT OF INFRASTRUCTURE INVESTMENTS AND SERVICES SUPPORTED**Public sector**

Gasum supports development in society by paying taxes and employer contributions. Taxes paid by Gasum totaled €77 million in 2014. We also support research in the gas sector through the Gasum Gas Fund, focusing on the following research and development areas in particular: renewable gas, energy systems and new opportunities of gas, uses of gas and energy efficiency. In 2014 the Gas Fund gave out ten grants, totaling €95,500 (2013: €46,500).

Investments

Total investments in 2014 amounted to €35,869 million (2013: 21,400), in Norway €5,614 million

and in Sweden €10,017 million, bringing the total in 2014 to €51,500 million (2013: 21,400).

The figures include investments in tangible and intangible assets.

The majority of the investments focused on the LNG terminal construction in Pori, Finland, and Lysekil, Sweden. All of the Gasum Group's investments were related to solutions supporting the gas sector and projects increasing the use of gas (natural gas or LNG). The investments generate jobs during construction as well as operation. The investments have a direct and, through subcontractors, indirect employment-generating impact.

On September 18, 2014 the Finnish Ministry of Employment and the Economy granted €23 million in investment aid to the construction of the Pori LNG terminal. The support was granted to Skangass Ltd, and the terminal will be completed in autumn 2016.



The tax footprint illustrates the taxes and tax-like payments received by society from our operations.

Gasum's tax footprint

Gasum complies with the legislation in force concerning the payment, collection and remitting of and reporting on taxes. In our communications we wish to report transparently and reliably on taxes as well (see the table below for quantitative tax data).

The tax footprint illustrates the taxes and tax-like payments received by society from our operations. Taxation-related responsibility is derived from Gasum's management principles.

We seek to increase transparency in our tax reporting and facilitate a good understanding of our tax footprint. We make sure all tax-related information required is reported on time and correctly to the tax authorities, shareholders and other parties. We participate continuously in the development of tax legislation and policies and want to be involved in the development of a fair, clear and consistent tax system. In February 2015 we published our tax model relating to the fuel tax reform to achieve emission reductions more cost-effectively.

Gasum as a taxpayer and our tax strategy

Gasum's operations in the various countries and companies are managed on the basis of commercial principles with a view to business efficiency and profitability. Gasum's tax strategy is to support business solutions and ensure their realization, also from the taxation perspective. We seek to manage and reduce any uncertainties relating to taxation.

Our aim is to manage tax issues in a manner enabling us to respond in time to future challenges and avoid any surprises. Taxation-related uncertainties are assessed on an annual basis. The Group's tax matters are managed and organized by the chief financial officer.

Share of company acquisitions or disposals

Gasum acquired the Skangass group operating in Sweden and Norway in May 2014. Gasum Eesti was sold in September 2014. The company's figures are not included in either year's figures; the impact on the figures is not material.

QUANTITATIVE TAX DATA								
€ thousand	Finland		Norway		Sweden		Total	
	2014	2013	2014	2013	2014	2013	2014	2013
Key figures on tax payment								
Revenue by country	972,867	1,149,702	104,809	-	1,366	-	1,079,042	1,149,702
Personnel on average	281	273	31	-	7	-	319	273
Taxes on an accrual basis***								
Corporation taxes	8,850	5,872	0	-	0	-	8,850	5,872
Value-added tax, net	225,743	267,310	12,782	-	42,299	-	255,259	267,310
Excise duties**	65,672	57,122	1,488	-	0	-	67,160	57,122
Taxes at source	555	1,218	0	-	0	-	555	1,218
Asset-related taxes*	473	83	0	-	0	-	473	83
PAYE deductions from salaries	5,869	5,892	684	-	34	-	6,588	5,892
Social security costs	4,951	3,097	306	-	143	-	5,399	3,097

*Real estate tax and asset transfer tax

**Includes energy tax on purchases, strategic stockpile fee and carbon dioxide tax

***The country-specific figures are in compliance with GRI G4 reporting requirements for the Oil and Gas sector



Responsible and attractive employer

Gasum wishes to be a respected and attractive employer. We are going through major changes as a workplace environment as well as in terms of our business areas. Our operations must be even more efficient and our employees' competencies must be enhanced continuously due to the changes taking place in our operating environment. We are investing in our employees' wellbeing and encourage personal competence development.

The purpose of human resources management is to make sure the company has competent, responsible and motivated employees.

We have approximately 300 employees. We also provided 35 summer jobs of various durations in tasks including maintenance, operation and office work. We also had an exceptionally large number of fixed-term employees during the year.

At year-end our personnel numbered 269. Of these, 83 were female and 186 male. The number of employees working under a permanent contract was 235, with 229 of these working full time and 6 part time. A total of 66 female and 169 male employees had a permanent contract, while 168 male and 61 female employees worked full time. A total of 4 new male and 5 female employees started with Gasum during the year under review, all of them aged 30–50. In all 7 employees retired, with all of them over the age of 50. The number of those who resigned during the year was 3, with 2 of them aged 30–50 and 1 over the age of 50.

Entire staff in Finland covered by collective agreements

Everyone, excluding the CEO, with a contractual employment relationship with the Gasum Group in Finland is covered by a collective agreement. Managerial and expert staff come under the wages protocol signed between the Chemical Industry Federation of Finland and the Federation of Professional and Managerial Staff (YTN), other white-collar staff under the collective agreement between the Chemical Industry Federation of Finland and the Trade Union Pro and blue-collar staff under the agreement between the Chemical Industry Federation of Finland and Industrial Union TEAM.

Competence development

We focus on personnel development and learning in a sustained and target-oriented manner. Due to the changes taking place in our operating environment, our organization must operate even more efficiently and the diverse competence of our personnel must be ensured – including over the long term. Competence needs are mapped out

and objectives for the year determined in development discussions.

A training event bringing our entire personnel together is organized on an annual basis. In 2014 almost 200 Gasum employees got together under the theme of “Together with great energy”. Our employees spend an average of three days a year in training. Most of this is internal training and on-the-job learning.

Rewards in accordance with achievements

We have created an incentive and reward scheme for our employees to encourage everyone at Gasum to be proactive and contribute to the development of our operations toward the achievement of our common strategic objectives. In addition to the strategic objectives shared by all, the reward system also features personal and group-specific targets.

Other incentives include merit awards and the Gasum Employee of the Year competition.

Composition of governance bodies

Employee-related issues are presented to the Gasum Group's Executive Management Group by the Vice President for Regulation,

Legal Affairs and HR or, where necessary, by the HR Manager. There is no specifically appointed employee representative in the Gasum Board of Directors.

Regular meetings between senior management and personnel groups are held around four times a year. These meetings are attended by shop stewards of every employee category, the CEO of Gasum Corporation and the Managing Directors of Gasum Tekniikka Oy, Gasum Energiapalvelut Oy and Gasum Paikallisjakelu Oy, the Vice President for HR, and the HR Manager.

Health and safety at work supervised by committees

All our employee categories are represented in the official employee-employer committees of the Gasum Group supervising health and safety at work. Each employee category is represented in the Health and Safety Committee. The Committee has six members, each of whom has a personal deputy. The employer is represented by two members, and the health and safety officers serve as committee secretaries.

G4-10: TOTAL NUMBER OF EMPLOYEES BY EMPLOYMENT TYPE AND EMPLOYMENT CONTRACT REPORTED BY REGION AND GENDER

Dec 31, 2014	Female	Male	Total
Number of employees	83	186	269
Permanent full-time	61	168	229
Permanent part-time	5	1	6

Employee categories Dec 31, 2014	Executives	Managerial and expert	Office workers	Workers	Total
Gasum Corporation, parent company	10	86	30	0	126
Gasum Energiapalvelut Oy	0	12	13	0	25
Gasum Paikallisjakelu Oy	0	2	5	0	7
Gasum Tekniikka Oy	0	17	27	67	111
Total	10	117	75	67	269

G4-LA1: EMPLOYEE TURNOVER

2014	Female	Male	Total
New employees hired ¹⁾	5	4	9
Retired employees ²⁾	2	5	7
Resigned employees ³⁾	0	3	3

1) All those hired in 2014 by Gasum are aged 30-50

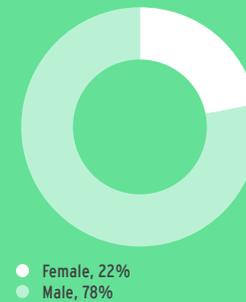
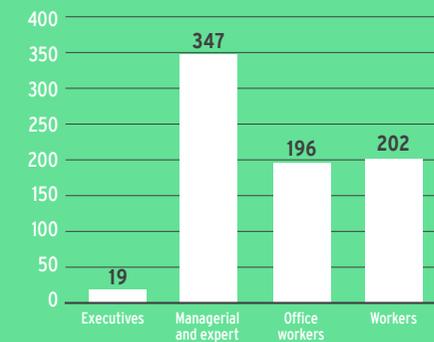
2) All those who retired in 2014 are in the 50+ age group

3) Of those who resigned in 2014, 2 are in the 30-50 and 1 is in the 50+ age group

G4-LA9: AVERAGE HOURS OF TRAINING PER YEAR PER EMPLOYEE BY GENDER, AND BY EMPLOYEE CATEGORY

Training days 2014	Executives	Managerial and expert	Office workers	Workers	Total
Females	5	88	62	15	169
Males	14	259	135	187	595
Total	19	347	196	202	764

Participation in trainings	Executives	Managerial and expert	Office workers	Workers	Total
Total	7	108	68	88	271

Training days by gender 2014

Training days by employee category 2014

G4-LA12: COMPOSITION OF GASUM'S GOVERNANCE BODIES

Dec 31, 2014	Female	Male	Total
Executive Management Group ¹⁾	3	5	8
Board of Directors ²⁾	2	3	5

1) With 6 aged 30-50 and 2 aged 50+

2) With 3 aged 30-50 and 2 aged 50+

Aiming at zero accidents

At Gasum occupational safety is a top priority in our day-to-day work. We believe that our safety-first approach creates a strong and responsible foundation for our business.

Safety is an important requirement for our entire personnel, our partners and those who live close to the gas network and our production facilities. We are continuously improving our occupational safety and also paying attention to our safety culture. We also seek to ensure safety in the use of natural energy gases to eliminate any safety incidents in the transmission, distribution, production and filling-up systems and related tasks. We also require safety work from our cooperation partners and subcontractors and set this as a condition in our cooperation agreements. In 2014 we updated our instructions and guidelines on personal protective equipment, which also apply to our subcontractors and partners.

Gasum's occupational safety target is zero accidents at work, zero pipeline damage cases, zero environmental accidents and zero traffic accidents. Together with our safety and security, HR and communications units, our business areas cooperate closely to achieve the targets. Safety monitoring takes place non-stop, and development measures are targeted in accordance with the results achieved. Gasum is a mem-

ber of the Zero Accident Forum of the Finnish Institute of Occupational Health.

The commitment of Gasum management and employees to safety issues can be seen in the following:

- compliance with safety instructions and safe working methods;
- maintenance and development of a safety management system;
- identification of and consideration for work-related risks;
- personnel training and encouragement towards safe working methods;
- provision of occupational health and safety training for all employees as appropriate for their job description.

Accidents at work analyzed and prevented

Every Gasum employee is provided with occupational safety training as appropriate for their job description. This also applies to summer trainees in short-term employment with us. More than 90% of our employees have completed the training to obtain an Occupational Safety Card or Office Work Safety Card.

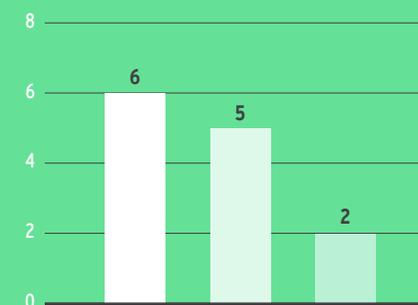
Number of accidents at work that resulted in at least one day off work



Sick leave rate due to ill health and accidents (% of working hours)



Number of accidents by type 2014



- Zero-day accidents 6 (2013: 4)
- Accidents that resulted in at least one day off work 5 (2013: 2)
- Accidents during work-related journeys 2 (2013: 2)



Gasum's safety target of zero accidents was not reached in 2014. There were 11 accidents at work during the year (2013: 6 accidents), with 5 of these resulting in at least one day off work. All incidents and accidents were investigated. We managed to speed up the identification of safety-related hazards and the implementation of corrective measures from the rate seen a year earlier. The sick leave rate remained low at 2.91% (2013: 2.46%).

”
In 2015 our focus will be on the development of a culture of safety.

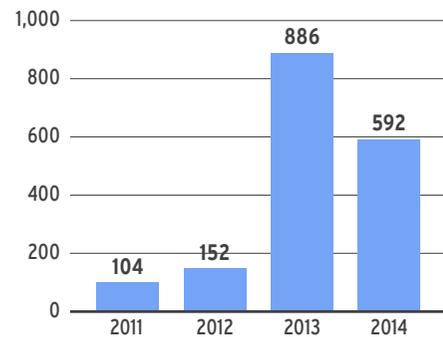
Safety targets included in every employee's performance targets

Preventive occupational safety work is important at Gasum, and therefore we have included safety targets in every employee's performance targets. To promote a culture of safety, all Gasum employees use the Safety TAVA system for accident and risk management for action to prevent any occupational safety challenges, incidents and risks. All staff members can enter any safety and environmental observations made by them into the system. Careful analyses are conducted to prevent any corresponding events in the future and to develop our operations accordingly. In 2014 a total of 592 (2013: 886) safety and environmental observations were reported to the system.

Open safety reporting

We report openly to our entire personnel on occupational health and safety issues through our regular safety bulletins. Our senior management receive safety briefings twice a year. Our safety management visit our various offices and facilities on a regular basis. Corporate safety and security issues are also addressed at the meetings of our business areas at regular intervals. Our entire personnel can read about the occupational safety and environmental observations reported to our TAVA system that is accessible by everyone within Gasum. Every employee can view the observations reported and find out what has been done in response to them.

Number of safety and environmental observations



G4-LA6: OCCUPATIONAL HEALTH AND SAFETY AT GASUM

2014	Female	Male	Total among employees
Absentee days in the reporting period	587	1,381	1,968
Absentee rate	3.2	2.8	2.9
Occupational disease rate	0	0	0
Occupational accidents during the reporting period	2	9	11
Injury rate	16.1	27.5	24.3
Days lost due to occupational accidents during the reporting period	2	256	258
Lost day rate	0.00002*	0.00078	0.00057
Work-related fatalities	0	0	0

*One minor injury

Formulas for G4-LA6:

Absentee rate= $\frac{\text{Number of days lost in the reporting period}}{\text{Theoretical working days in the reporting period} \times 100}$

Occupational disease rate= $\frac{\text{Number of occupational diseases}}{\text{Total hours worked in the reporting period}}$

Injury rate= $\frac{\text{Number of occupational injuries in the reporting period}}{\text{Total hours worked in the reporting period} \times 1,000,000}$

Lost day rate= $\frac{\text{Number of lost days (due to occupational injury) in the reporting period}}{\text{Total number of hours scheduled to be worked in the reporting period}}$



OCCUPATIONAL HEALTH AND SAFETY OBJECTIVES AND SAFETY THEMES

OBJECTIVE	ACHIEVEMENT OF OBJECTIVES
Zero accidents	The objective was not reached. Gasum employees had 11 accidents at work, with 5 of these resulting in time off work. There were also 2 accidents during work-related journeys.
No serious accidents	The objective was not reached. There were 2 serious accidents during the year (sick leave 30+ days).
All safety incidents identified	A total of 15 safety incidents were identified during the year, which is 5 less than in 2013. Not all safety incidents were identified, and the number of accidents increased.
A total of 650 safety observations reported	Gasum employees reported 592 observations during the year. Although this is below the objective set, the quality level was correspondingly higher than in the year before.
Measures taken in response to safety observations	A total of 141 corrective or preventive measures were taken on the basis of safety observations.
Traffic safety	The objective was reached. The traffic accidents were minor and there were no personal injuries. There were 26 traffic incidents, which is less than in previous years.
SAFETY THEMES	PROGRESS MADE IN THEME IMPLEMENTATION
Coping	Employee coping was monitored in close cooperation with the occupational health care provider. An information session and training themed on coping were organized. The rate of occupational health care appointments relating to coping or mental wellbeing was reduced by 20% from the year before.
New safety training operating model	Progress was made in e-learning plans, but the broader-scale launch was postponed until the following year.
Traffic	Gasum employees' traffic safety and traffic behavior were promoted through several campaign and training events. Serious traffic accidents were avoided and there were no personal injuries.
Fire safety	Fire safety was one of the most visible themes of the year. Fire safety training and an evacuation drill took place at all offices and facilities owned by Gasum. A collaboration exercise to prepare for a major accident took place in Kouvolaa on October 10.
Risk assessment	The risk assessments concerning tasks, machinery and work conditions progressed as planned at facilities including Espoo and Helsinki. The dynamic assessment tool was introduced.
Summer employee safety	Special attention was paid to the safety of summer employees at the beginning of the summer season. Despite the training provided, one summer employee suffered a minor injury.
Chemical safety	A chemical safety inspection round was conducted at Gasum Tekniikka facilities. Attention was paid to chemicals storage, disposal and safety data sheets.
External safety and security	To improve external safety and security, a study for improved premises security was launched.



Annual collaboration exercises with stakeholders

Collaboration exercises relate to our corporate safety and security, business security, and the security of natural gas supply.

At Gasum this is connected closely with one of our material responsibility themes: supply security and safety and preparedness for response in exceptional situations. To ensure the supply security of gas, Gasum must have the competencies and preparedness required for response to exceptional situations. In addition to our own employees, we also provide training for contractors and worksite personnel. We have organized annual collaboration exercises with the authorities to prepare for major accidents since 2009. Through this regular exercise regime we test and develop our preparedness for a variety of exceptional situations.

Exercise aims and focuses

The purpose of the exercises is to practice collaboration and situation leadership between the parties involved. In addition to this, the rescue department and other participating authorities receive a revision of the world of natural gas and the special features of the sector. These aim to provide stakeholders with more in-depth know-

ledge about the gas sector and improve preparedness for various disturbance and crisis situations and related response. Individual operators such as Gasum have limited resources for action in case of a disturbance, but collaboration helps achieve major societal advantages. Correct response can reduce the consequences of a disturbance and speed up the restoration of operations to a normal level.

The recurring themes in our exercises are collaboration, leadership and communication in accident situations, and restoration of operations to normal situation. The special focus selected for the 2014 exercise was internal and external communications.

Exercise themes vary from year to year

The exercise involved a fictional serious gas leak situation where a pipeline rupture caused a leak and at the same time a traffic accident close to a railway line and shopping center. Fictional personal injuries were also caused by the accident. The accident site was close to the crossing of a busy

road and a railway line near several shopping facilities and business premises. The realistic accident setup played a major role in making the exercise a success.

There were 50 participants to the exercise, representing in addition to Gasum management also the Kymenlaakso Rescue Department, Southeast Finland Police Department, Regional State Administrative Agency for Southern Finland, customer enterprises and a communications agency.

Successful collaboration exercise

The collaboration exercise was an excellent proof of how well cooperation between Gasum's central control room and the Rescue Department works and how important it is to continue these exercises to maintain skills. In the future the management of response to disturbances will be even better thanks to regular exercises. The success of our collaboration exercise is due to successful stakeholder cooperation where exercises can improve the response and activities of all those participating.



Collaboration exercises with stakeholders improve our preparedness for response in exceptional situations.

Value chain and the environment

We offer our customers intelligent and competitive gas solutions for industry, transport and homes. Our value chain involves improved industrial competitiveness, supplier responsibility and the efficiency and environmental impacts of the supply chain.

Industrial competitiveness

Wellbeing in the local environment and society is important in our provision of cleaner energy through efficient gas solutions. Gasum is an active contributor to industrial competitiveness by developing the Nordic gas market and infrastructure. An example of this is the construction of the LNG terminal in Pori, Finland, by the Gasum subsidiary Skangass. The LNG terminal will be taken into use in 2016. Gasum also built Finland's largest biogas production and upgrading facility in Lahti in 2014.

Supplier responsibility

We expect our suppliers to comply whenever possible with the same principles and rules that we follow in our operations at Gasum. Our suppliers must be accepted in terms of finances and quality and take quality, environmental as well as safety and security issues into consideration in their activities.

In 2014 Gasum launched supplier assessment – with responsibility as one of the themes – to improve cooperation with

suppliers. The assessments began with our most significant suppliers. The aim is for our suppliers to respond to a supplier survey, which is one of the criteria for our approved supplier selection. The survey helps Gasum prepare for audit visits among significant suppliers.

Efficiency and environmental impacts of the supply chain

In 2014 a calculation model based on the lifecycle assessment method was produced for Gasum for the assessment of the total environmental impact of LNG production and use. The project took place as part of the CLEEN Ltd Measurement, Monitoring and Environmental Efficiency Assessment (MMEA) program. The model was created in cooperation with experts from the Finnish Environment Institute.

Different natural gas sources as well as transport alternatives and routes can be taken into account in the calculations, enabling comparisons between supply chains. The model also includes the environmental impacts of natural gas imported to Finland

from Russia through pipeline supply, with factors such as climate change and particle generation taken into account. A lifecycle calculation model for biogas was already formulated for Gasum in 2013 for the examination of the environmental impacts of bio-based gas.

In 2014 an emissions calculator was produced by Gasum experts, enabling a more detailed analysis of emissions during the use of gas and other fuels in various processes, such as road and maritime transport and power plants. Data from the emissions calculator can also be combined with the above lifecycle models. The coherent data provided by the calculator can be utilized in the calculation of emissions generated by processes and in establishing the emission reductions achieved through fuel switching.

In autumn 2014 the Energy Authority accepted the operator's sustainability scheme of Gasum for the next five-year period. The sustainability scheme is based on the European Union's Renewable Energy Sources (RES) Directive and the Act on the sustainability of biofuels and bioliquids and for

Gasum applies to the transport use of biogas. In the sustainability scheme, compliance with criteria for origin is verified and the emission reduction for biogas compared with fossil fuels is calculated.

Supply chain in corporate responsibility reporting

Recent developments in society have resulted in increased expectations on corporate responsibility. Consumer interest, general concern, legislation, industrial pressure, competition, concern about reputation and media interest have increased companies' appreciation of corporate responsibility. In 2013 the G4 Sustainability Reporting Guidelines were released by the Global Reporting Initiative (GRI). Reporting on the impacts of not only the organization's own activities but also of those of the supply chain is encouraged in the G4 Guidelines.

A Master's thesis was written on the topic to develop Gasum's corporate responsibility reporting. The thesis was themed on system boundary definition concerning the supply chain in corporate responsi-

lity reporting on natural and biogas business operations. The author examined the role of the supply chain in reporting in compliance with the G4 Guidelines. The aim was to identify which actors of the pipeline gas, LNG and biogas supply chain should be taken into account in social and environmental impact reporting. In corporate responsibility reporting, supply chain system boundary definition plays a major role. This affects what kinds of impacts can be identified in product supply chains.

In the supply chain of pipeline gas, the production, transmission and use of natural gas were identified as the stages of material significance to environmental impact assessments. For LNG, the material stages comprise natural gas production, transmission in the pipeline, liquefaction, storage, transmission to end users, and use.

Two supply chains were set up for biogas: in one waste and wastewater and in the other energy crops were used as raw materials. In the supply chain utilizing waste and wastewater, significant stages for environmental impact assessments were the transport of raw materials to the biogas production facility, the production and upgrading of biogas, transmission and use. The material stages also included the transport and use of the sludge created as a by-product. When energy crops are used, the supply chain is otherwise the same as that with waste, but the cultivation of energy crops and the production of related inputs must also be taken into account in assessments.

GASUM'S OWN SUPPLY CHAIN

G4-EN3: ENERGY CONSUMPTION WITHIN THE ORGANIZATION

Gasum is a signatory to the Finnish Energy Efficiency Agreement for Industries and has determined the energy saving objectives for its activities. In 2014 Gasum's energy consumption totaled 697 TJ (2013: 705). The figure covers fuel as well as electricity consumption, but fuel consumption accounts for the largest part. Heat and electricity sold has also been taken into account in the total energy consumption figure. Gasum's reporting on electricity consumption for 2014 does not cover the Skangass facility in Porvoo, Finland.

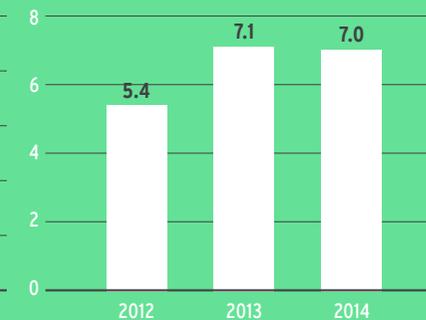
The monitoring of energy consumption was improved in 2014 by focusing the electricity supply on one supplier providing online monitoring of consumption. The new energy-efficient heating boilers of our pressure reduction stations and the unit run choices made at compressor stations all affect our fuel consumption. Gasum has also supplied a district heating solution utilizing geothermal energy in the heating of homes in Kirkkonummi, Finland. Gasum's Warma Geo district heat production system is based on advanced geothermal heat pump technology and natural energy gases.

ENERGY CONSUMPTION	2014
Fossil fuel consumption	189 GWh
Renewable fuel consumption (biogas)	2 GWh
Electricity consumption	7 GWh
District heat consumption	0 GWh
Cooling	0 GWh
Steam consumption	non-material
Heat sold	4 GWh
Electricity sold	0.4 GWh
Total energy consumption	194 GWh

Fuel consumption (GWh)



Electricity consumption (GWh)



G4-EN15: DIRECT GREENHOUSE GAS (GHG) EMISSIONS

We seek to reduce the environmental impacts of the production and usage chains of natural energy gases through our own activities. Gasum's environmental objective is to reduce methane emissions by 30% from the 2010 level by 2020. We have already achieved a significant cut in actual methane emissions. The Helsinki city gas network is overhauled systematically on an annual basis, and methane emissions from pipeline connection points during maintenance work are minimized through careful planning and practical measures.

Direct greenhouse gas emissions in 2014 amounted to 59,378 tonnes of CO₂e (2013: 64,369). Methane emissions in 2014 totaled 979 tonnes

(2013: 1,248) and were included in Gasum's direct greenhouse emissions. Gasum's direct greenhouse gas emissions consisted of methane and carbon dioxide and arose from the use of transmission system equipment and the heating of offices and other facilities. The transmission of natural gas along pipelines requires compressor stations where gas pressure is raised at intervals of about 100 km along the network. The compressors are powered by gas turbines fuelled by natural gas. Gasum's compressor stations are located in Imatra, Kouvola and Mäntsälä, and the Imatra and Kouvola stations fall within the sphere of emissions trading. Carbon dioxide emissions are also generated in the heat business at heating plants where natural gas is used as a fuel for energy production.

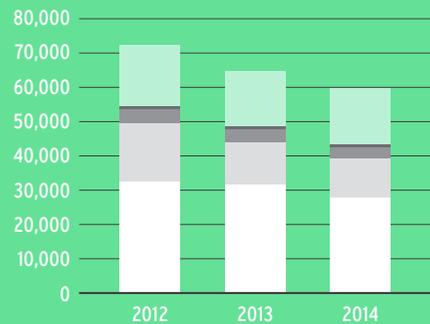
Based on the latest data from the Fifth Assessment Report of the Intergovernmental Panel on Climate Change (IPCC), Gasum used 28 as the global-warming potential (GWP) for methane. The GWP used previously for methane was 25. Gasum wishes to follow the precautionary principle in calculations, so the factor was raised from the preceding years on the basis of the latest research data.

G4-OG3 TOTAL AMOUNT OF RENEWABLE ENERGY GENERATED BY SOURCE

A total of 34 GWh of renewable biogas was injected into the Gasum natural gas transmission network in 2014.

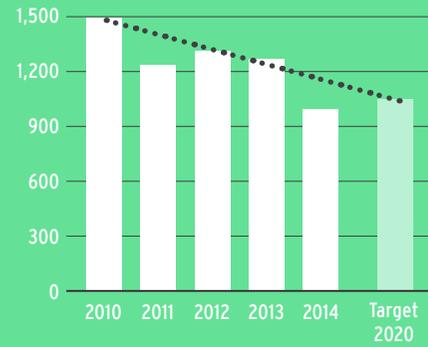
Biogas is fed into the Gasum network from Espoo, Kouvola and Lahti, Finland.

Direct greenhouse gas emissions (tonnes CO₂ e)



- Heating plants
- Properties
- Pressure reduction stations
- Compressor stations
- Total methane emissions

Methane emissions (t)



..... Target 2020 -30%

G4-EN21: OTHER SIGNIFICANT AIR EMISSIONS

The combustion of natural gas creates carbon dioxide, water vapor and nitrogen oxides but no particulate or sulfur dioxide emissions at all. Gasum's nitrogen oxide emissions are mainly generated at compressor stations, pressure reduction stations and heating plants. The total for nitrogen oxides (NO_x) in 2014 was 37 tonnes. The average specific emission of NO_x from compressor stations was 94 mg/MJ, showing an increase on the year before (2013: 72 mg/MJ). This was caused by natural gas pressure increases at lower-capacity gas turbines that do not feature Low-NO_x technology. The use of lower-capacity turbines was due to the lower levels of natural gas consumption seen throughout Finland.

Nitrogen oxides (t)



G4-EN23, G4-EN8: WASTE AND WATER

Gasum's biggest waste components are cesspool sludge, oil waste collected from natural gas pipelines, and oily water. These fractions are taken to disposal facilities and cannot be recycled. The waste sorting procedure varies by office or facility. At Gasum we sort waste such as energy and biowaste, metals, cardboard, paper and hazardous waste. Waste is taken by our waste management partners to recycling or responsible disposal.

Gasum's water withdrawal comprises water intended for human consumption as well as process and cooling water. Gasum's sanitary wastewater is led either directly or via cesspools to municipal wastewater treatment plants. Process water used in the biogas and heat business is disposed of in municipal or Gasum's cooperation partners' wastewater treatment processes.

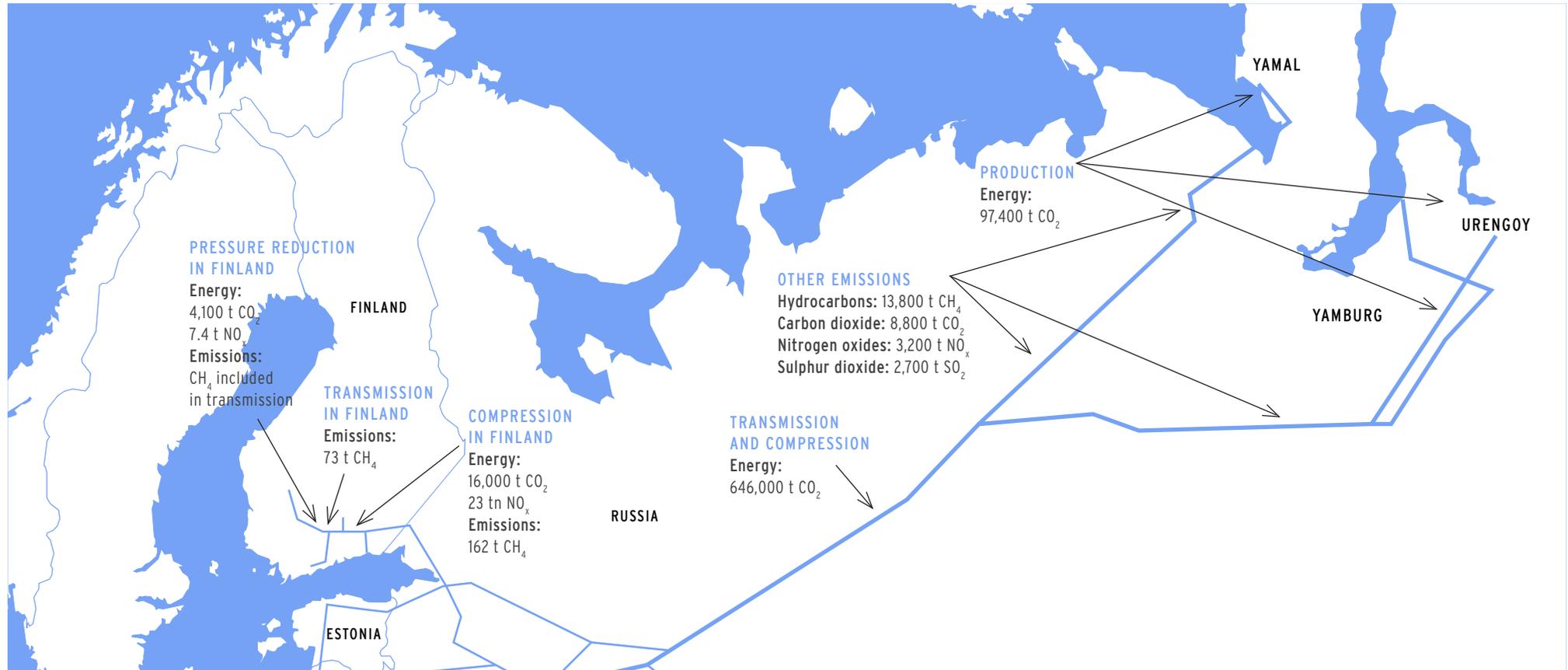
WASTE AND WATER	2013	2014
Waste (t)	146	141
of which non-hazardous waste	113	100
hazardous waste	30	41
Water consumption (m ³)	25,800	28,400
Process and cooling water	21,900	24,100
Water intended for human consumption	3,900	4,300

G4-EN34: FEEDBACK

Gasum received feedback on environmental issues on three occasions in 2014. These pertained to waste management at filling stations, the biogas TV campaign, and the location of the LNG terminal. All providers of feedback received a speedy response, and no concrete measures resulted in any of the cases.

Around 10 in-house environmental observations were reported to the Safety TAVA system in 2014. The largest numbers of observations were entered concerning waste sorting, which was improved during the year through ways including the publication of news items and concrete measures.

ENVIRONMENTAL IMPACTS OF THE PRODUCTION AND TRANSMISSION CHAIN OF NATURAL GAS IMPORTED TO FINLAND FROM RUSSIA



Natural gas supply chain

Gasum aims to be fully informed of the environmental impacts of the natural energy gas production and consumption chains and to seek to contribute towards reductions in negative impacts through our own activities. We commissioned a report on the environmental impacts of the production and consumption chains of natural gas im-

ported to Finland from Russia at the turn of 2013 and 2014. The study focuses on the assessment of greenhouse gas emissions based on data from 2012. The report will be updated where necessary and in conjunction with any material changes.

Russian functions account for 13.6% of the emissions. Most of the emissions taking place in Russia are caused by gas transmis-

sion as carbon dioxide is released from the combustion of natural gas used at compressor stations. Methane emissions from Russian functions account for approximately 0.5% of the share of high-pressure transmission, which is clearly below the 3.5% level that is regarded as the limit for natural gas remaining more favorable from the climate impact perspective than coal.

Finnish transmission emissions represent 0.3% of the total. The relative share of methane in emissions from Finnish transmission is around one quarter of the total emissions and less than 0.01% of the total gas flow.

Emissions during use account for around 86% of the total emissions of the chain. In this only carbon dioxide emissions from combustion are taken into account.



We put a great focus on risk management

The goal of Gasum's risk-taking is to maximize the utilization of the opportunities provided by the energy market within the limits set by our long-term goals, strategy and Articles of Association. Due to the nature of our operations, our risk-taking must be considered and controlled. This way we can maintain the high safety level achieved by us.

Comprehensive risk management is a way of thinking and doing things

When making work-related decisions, each Gasum employee implements risk management on a daily basis when identifying and assessing risks that have been determined by Gasum as uncertainties relating to our objectives. This uncertainty involved in our operating environment and decision-making involves opportunities as well as threats.

To remain successful in the challenging field of energy in the future and to reach our objectives as a company and as individuals, at Gasum we develop risk management in a comprehensive manner. This means that our methods, approaches and culture relating to risk management are continuously harmonized through small steps taken in each element throughout our organizational levels.

Gasum's risk management policy contains a description of the risk management objectives and principles adopted by the Supervisory Board. The Executive Management Group goes through risk assessments on a monthly basis.

The risk management policy application instructions determine the principles for the application of Gasum's risk management policy. Gasum's risk management framework – our risk management processes, guidelines, responsibilities and application – are determined in the instructions. Their application enables maximum uniformity in our identification, assessment and planning of measures related to the way we address risks.

Risk assessment

1. determining the manner and impacts of risk materialization;
2. selecting a realistic maximum impact scenario;
3. assessing the impact in euros, e.g. loss of profit or compensation for damage to be paid;
4. assessing the probability of this scenario;
5. assessing whether the values obtained in this manner represent the risk as a whole well enough – if not, the risk is divided into two.

Risk assessment takes place over a perspective of five years. The assessments cover maximum loss, expectations and probabilities. For each risk, the potential reputation risk is also assessed.

Business risks

Gasum's business risks include those related to the energy market and fuel price development as well as those related to access to natural gas, the functioning of the transmission system, business regulation, safety and security, and environmental impacts. The most considerable risks from the profit perspective are to do with fuel price development and business regulation.

Financial risks relating to Gasum Corporation's business include market risk (including interest rate risk) and credit risk. The Group's risk management is carried out by the Group's financial unit together with business planning and business activities.

The price payable under Gasum Corporation's natural gas supply contract is

linked to price indexes. These include the price of heavy fuel oil (HFO1S), the Finnish energy market index (E40) published by Statistics Finland, and the price of coal. The indexes are calculated every month, with six-month averages applied to them. The indexes applied in procurement are also applied to the sales prices of natural gas, which creates a natural hedge for the prices.

Gasum's business is capital intensive, and the Group faces a regular need for financing. Efforts are made to minimize credit-related interest rate risk by using derivatives for hedging.

Gasum Corporation's energy trade customers all have a high credit rating. The number of the Group's energy service customers is quite large, comprising more than 30,000 customers, which reduces the credit risk.

There are also considerable risks involved in the new business activities created by Gasum. The energy sector is characterized by large initial investments, the



profitability of which is difficult to predict specifically before the operations are launched and have become established.

Gasum is prepared for natural gas supply disruptions with reserve fuel arrangements. The functioning of the transmission system is monitored and improved through network renewal and new construction in accordance with a long-term plan. Gasum has been developing fuel, particularly oil-related, price risk management for several years. Efforts are made to manage risks relating to the development of new business activities through measures including the utilization of international references as background data and minimizing any risks relating to financing.

Natural gas network operations and energy trade are both supervised by the Energy Authority. Changes in Finnish or European regulation may result in adverse effects on Gasum's financial position or opportunities to pursue objectives set for the development of the natural gas market.



RISKS AND THEIR MANAGEMENT IN THE FIELDS OF ECONOMIC, SOCIAL AND ENVIRONMENTAL RESPONSIBILITY

RISK DESCRIPTION	CONSEQUENCE	GASUM'S RISK MANAGEMENT
Economic responsibility		
Changes in taxation or support mechanisms place gas in a less favorable position against other types of energy, including as a result of changes in legislation	Competitiveness of natural gas is reduced	Active interest representation
Lag between expectations and implementation	The company cannot meet the expectations of the market	Market monitoring and efficient project implementation
The company's value does not grow as planned	The company cannot implement its growth strategy	Active monitoring and management of strategy implementation, thorough assessment of project viability, prioritization of things done
The political acceptability of gas is reduced	Taxation becomes less favorable to gas and/or customers replace their gas consumption with other solutions	Active gas image building, building the biogas and LNG market, LNG terminal promotion
Credibility of strategy implementation	Customers do not believe in the improvement of the competitiveness of gas and, instead, make decisions based on other solutions	Active communications and image building, communicating about competitiveness and its development to customers
Failure to develop new technologies as planned	New business opportunities are not identified or cannot be developed fast enough A competing technology is developed to a better degree and becomes so inexpensive that the company is unable to respond to the requirements of the market	Continuous monitoring of technological development and competitors, and strong in-house product development
Integration into the European network	Customers do not believe in the improvement of the competitiveness of gas and, instead, make decisions based on other solutions	Active communications and image building, communicating about competitiveness and its development to customers
Social responsibility		
The company fails to renew itself	The company is unable to offer up-to-date products and services	Innovation and creation of new concepts and strong partnerships
Gasum fails to participate actively in public decision-making	The benefits of gas are not defended or included in the debate by anyone	Active interest representation and image building
Personnel competencies are not developed	Failure to achieve business success, and reduced profitability experienced	Mapping of competencies required, personnel training and competence development
Information security, and integrity and confidential processing of information	Information integrity problems, negative impact on the company's reputation	Project IT competence, information security and information management guidelines
Failure to recruit or retain competent employees	Failure to achieve success and development in business activities, loss of competence outside the company	Strengthening of Gasum's corporate image and recruitment competence, employee incentive systems, and development of wellbeing at work
Reduced cooperation with customers	Customers do not take all of the benefits and opportunities provided by gas into consideration in their decision-making	More active customer interface management and communications
Production and operational safety, including occupational safety, damage targeted at employees or property	Employee accident, property damage or negative impact on the company's reputation	Safety management system, safety observations and preventive safety work, and safety guidelines
Information security (management system), system malfunction	System disruption or error. Financial impact or negative impact on the company's reputation	IT staff competence and access to resources, technical preparedness
Environmental responsibility		
Acceptability of natural gas is reduced	Competitiveness of natural gas affected	Bringing biogas and liquefied natural gas (LNG) more strongly alongside basic natural gas
Sustainability of natural energy gases	An issue related to sustainability is raised in public debate and reduces the reputation of natural energy gases and the company	Linking the importance of sustainability even more closely with the company's goals and emphasizing sustainability in the induction of new employees
The fossil origin of gas is emphasized	Efforts are made to replace gas-fuelled power plants with other solutions, resulting in reduced use of natural energy gases	Drawing attention to the good qualities of gas in communications, and bringing non-fossil biogas more strongly alongside natural gas



Reporting principles

Sustainable development and its promotion is part of our strategy. We report annually in Finnish and English on sustainable development and our material topics in accordance with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Guidelines.

The Gasum Corporate Responsibility Report was drawn up in accordance with the G4 Core option and, as appropriate, also with the Oil and Gas Sector Supplement. Gasum's Annual Report and Financial Statements for 2014 were published online on March 31, 2015.

We prepare and disclose our financial statements in compliance with the International Financial Reporting Standards (IFRS) and our governance-related reporting in compliance with Finnish legislation. Our economic performance indicators are based on audited data. Personnel figures and injury frequency rates relating to safety are in accordance with the G4 Guidelines. Our environmental reporting is in accordance with the G4 Guidelines, while costs are reported in compliance with the Finnish Accounting Board's general guidelines for recording, accounting and disclosing of environmental issues as part of the financial statements. Gasum's reporting takes place under Finnish law.

Report coverage

The reporting period of the Corporate Responsibility Report is the same as that of the Annual Report, i.e. the financial year from

January 1 to December 31, 2014.

Safety and environmental reporting for 2014 covers the activities of the Gasum Group, excluding Skangass. The Skangass acquisition took place in May 2014, and the functions relating to the company are yet to be harmonized. The boundaries used in this report are listed by indicator on page 15.

Significant changes in the scope and boundary applied in the report

The scope for 2014 does not include the Skangass Ltd Porvoo LNG facility in Finland. Skangass is part of the Gasum Group but, due to its operations outside Finland, Skangass is not included in the Scope for 2014.

Gasum's activities expanded further in 2014, and the new activities are included in report. These include the new filling station in Lielähti, Tampere, and the biogas upgrading facility in Kujala, Lahti.

There may be minor changes in indicator data because the previous figures were reported in accordance with G3.1, while the G4 Guidelines were adopted in 2014. For example, changes have taken place in the calculation of the G4-EN3 energy indicator.

There is a slight difference in quantities

of waste in comparison with the year earlier due to the development of environmental data system reports.

Gasum's facilities in rented properties have been left out of indicators G4-EN3 and G4-EN15 because these are not owned or controlled by Gasum.

Contractors are not included in the LA6 indicator. The formulas used for the indicators are reported in conjunction with each indicator.

Reporting systems

Gasum collects environmental and safety data from the CRM system, CSM environmental database, Generis database and

TAVA accident and incident reporting system. Personnel figures are from Gasum's personnel data and payroll systems and documents.

External assurance

The four report indicators identified as material (G4-EN3, G4-EN15, G4-EC1, G4-LA6) have undergone independent external assurance by PricewaterhouseCoopers Oy, and the congruence between responsibility information presented in the Finnish and English versions has been checked.

The contents of the report are not updated after the assurance. Instead, any changes in content will be reported in following year.

UNITS USED IN THE REPORT

ABBREVIATION	TERM	DEFINITION
1 terawatt hour (TWh)	1,000 gigawatt hours (GWh) = 1,000,000 megawatt hours (MWh) = 1,000,000,000 kilowatt hours (KWh)	A unit of energy
1 gigawatt hour (GWh)	3.6 terajoules (TJ)	A unit of energy
1 cubic meter (m ³)	1,000 liters (l)	A unit of volume
1 tonne (t)	1,000 kilograms (kg)	A unit of mass



Independent Assurance Report

To the Management of Gasum Corporation

We have been engaged by the Management of Gasum Corporation (hereinafter also the Company) to perform a limited assurance engagement on selected performance indicators in the areas of economic, social and environmental responsibility for the reporting period 1 January to 31 December 2014, disclosed in Gasum Corporation's Sustainability Report 2014 (hereinafter Sustainability information) and described below.

Sustainability information

The Sustainability information consists of the following performance indicators:

- G4-EC1 Direct economic value generated and distributed. Also the Company's tax footprint has been reported in association with the performance indicator.
- G4-EN3 Energy consumption within the organization
- G4-EN15 Direct greenhouse gas (GHG) emissions (Scope 1)
- G4-LA6 Type of injury and rates of injury, occupational diseases, lost days, and absenteeism, and total number of work-related fatalities, by region and by gender

Management's responsibility

The Management of Gasum Corporation is responsible for preparing the Sustainability

information in accordance with the Reporting criteria as set out in the Company's reporting instructions and the G4 Sustainability Reporting Guidelines and the Oil and Gas Sector Disclosures of the Global Reporting Initiative.

Practitioner's responsibility

Our responsibility is to express a conclusion on the Sustainability information based on our work performed. Our assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except to Gasum Corporation for our work, for this report, or for the conclusions that we have reached.

We have not been engaged to provide assurance on the Sustainability information with respect to prior reporting periods.

We conducted our work in accordance with the International Standard on Assurance Engagements (ISAE) 3000 "Assurance Engagements Other than Audits or Reviews of Historical Financial Information". This Standard requires that we comply with ethical requirements and plan and perform the assurance engagement to obtain limited assurance whether any matters come to our attention that cause us to believe that the Sustainability information has not been prepared, in all

material respects, in accordance with the Reporting criteria.

In a limited assurance engagement the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other disclosures in the Sustainability information. The procedures selected depend on the practitioner's judgement, including an assessment of the risks of material misstatement of the Sustainability information. Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of the Company
- Visiting the Company's Head Office as well as one site in Finland
- Interviewing employees responsible for collecting and reporting the information presented in the Sustainability Information at the Group level and at the site where our visit took place
- Assessing how Group employees apply the reporting instructions and procedures of the Company
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis

- Testing the consolidation of information and performing recalculations on a sample basis

Conclusion

Based on our work described in this report, nothing has come to our attention that causes us to believe that Gasum Corporation's Sustainability information has not been prepared, in all material respects, in accordance with the Reporting criteria. When reading our assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

Helsinki, 24 April 2015

PricewaterhouseCoopers Oy

Sirpa Juutinen Partner Sustainability & Climate Change	Maj-Lis Steiner Director, Authorised Public Accountant Assurance Services
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GRI CONTENT INDEX

GRI contents can be found in Gasum's Year 2014, Financial Statements 2014, Gasum's Code of Conduct and this Gasum Corporate Responsibility 2014 report, www.gasum.com.

GRI contents

Core	Contents	Pages	Assurance	More information
STRATEGY AND ANALYSIS				
G4-1	Statement from the CEO	Gasum's year 2014: CEO's review 6–7, Highlights 9–11, Strategy 12–13		
ORGANIZATION PROFILE				
G4-3	Name of the organization	Financial Statements 2014: General information 15		
G4-4	Primary brands, products and services	Financial Statements 2014: General information 15		
G4-5	Location of headquarters	Financial Statements 2014: General information 15		
G4-6	Number of countries where the organization operates, and names of countries where either the organization has significant operations or that are specifically relevant to the sustainability topics covered in the report	Gasum's Year 2014: Offices 43		See Aspect boundaries 15
G4-7	Nature of ownership and legal form	Financial Statements 2014: General information 15		
G4-8	Markets served	Financial Statements 2014: General information 15		
G4-9	Scale of the reporting organization	Gasum's Year 2014: 4–5, 7–9		
G4-10	Number of employees by employment contract, employment type, region and gender	Gasum's Year 2014: 34–35, CRR: Responsible employer 25–26		
G4-11	Percentage of total employees covered by collective bargaining agreements	CRR: Responsible employer 25–26		
G4-12	Description of the organization's supply chain	CRR: Value chain and the environment 31–35		
G4-13	Significant changes during the reporting period regarding the organization's size, structure, ownership, or its supply chain	Gasum's Year 2014: 5, CRR: Reporting principles 39		
G4-14	Addressing the precautionary approach or principle	Financial Statements 2014: 8–9, 26–28, CRR: Direct greenhouse gas emissions 33		
G4-15	Externally developed sustainability charters, principles or other initiatives	CRR: In active cooperation in society 20		
G4-16	Memberships of associations and advocacy organizations	CRR: In active cooperation in society 20		



<i>Core</i>	<i>Contents</i>	<i>Pages</i>	<i>Assurance</i>	<i>More information</i>
IDENTIFIED MATERIAL ASPECTS AND BOUNDARIES				
G4-17	Organization's boundaries	CRR: Aspect boundaries 15		
G4-18	Process for defining the report content	CRR: Management and objectives 7–9, Operating environment 10, Definition of materiality and indicators 15		
G4-19	Material aspects identified	CRR: Focal areas 12–13, Definition of materiality and indicators 14		
G4-20	Aspect boundary within the organization	CRR: Aspect boundaries 15		
G4-21	Aspect boundary outside the organization	CRR: Aspect boundaries 15		
G4-22	Explanation of the effect of any re-statements of information	CRR: Reporting principles 39, Aspect boundaries 15		Gasum acquired a majority stake in the LNG business of the Norwegian Skangass in May 2014. Because the transaction was not concluded until mid-2015 and company integration took place throughout the autumn, this report does not cover any Skangass figures for 2014. This is the first Gasum report in accordance with the Global Reporting Initiative (GRI) G4 Sustainability Reporting Principles. Gasum's previous reporting since 2010 was in accordance with the GRI 3.1 Guidelines.
G4-23	Significant changes from previous reporting periods in the scope and aspect boundaries	CRR: Reporting principles 39, Aspect boundaries 15		
STAKEHOLDER ENGAGEMENT				
G4-24	List of stakeholder groups engaged by the organization	CRR: In active cooperation in society 18		
G4-25	Basis for identification and selection of stakeholders	CRR: Material aspects identified and classified under four themes 11–12		
G4-26	Approach to stakeholder engagement	CRR: In active cooperation in society 18–20		
G4-27	Responding to key topics and concerns resulting from stakeholder engagements	CRR: Operating environment 10, In active cooperation in society 18–19, Gasum's Year 2014: CEO's review 6–7		
REPORT PROFILE				
G4-28	Reporting period			January 1 – December 31, 2014
G4-29	Date of previous report			April 9, 2014
G4-30	Reporting cycle			Annual
G4-31	Contact point for questions regarding the report or its contents			viestinta@gasum.fi, www.gasum.fi/palaute
G4-32	GRI Content Index	CRR: GRI Content Index 41–45, External Assurance Report 40		
G4-33	Policy and current practice with regard to seeking external assurance for the report			Four important material indicators have been assured for Gasum by PwC: EN15, EC1, LA6 and EN3, as well as the tax footprint. CRR: Assurance Report 42. In addition, the Board of Directors' report and Financial Statements for 2014 have been audited.



<i>Core</i>	<i>Contents</i>	<i>Pages</i>	<i>Assurance</i>	<i>More information</i>
GOVERNANCE				
G4-34	Governance structure of the organization, including committees of the highest governance body	Financial Statements 2014: Governance 8, 4–6, CRR: Responsible employer 25		
ETHICS AND INTEGRITY				
G4-56	Organization's values, principles, standards and norms of behavior such as codes of conduct and codes of ethics	Gasum's Year 2014: Strategy 12–13, Gasum's Code of conduct		
GENERAL DISCLOSURES OF MANAGEMENT APPROACH (DMA)				
ECONOMIC				
ECONOMIC PERFORMANCE				
G4-EC1	Direct economic value generated and distributed	CRR: Direct economic value created and distributed and impact on society 22–24	Assurance	Does not include figures for Gasum Eesti because the company was sold in 2014. Gasum's tax footprint is included. G4-EC1 is reported in Gasum's own manner which is not fully in accordance with the reporting requirements of G4-EC1.
G4-EC4	Financial assistance received from government	CRR: Direct economic value created and distributed and impact on society 23		Figures for Gasum Eesti not included as the company was sold in 2014.
INDIRECT ECONOMIC IMPACTS				
G4-EC7	Development and impact of infrastructure investments and services supported	CRR: Economic impacts 23		Figures for Gasum Eesti not included as the company was sold in 2014.
ENVIRONMENTAL				
ENERGY				
G4-EN3	Energy consumption within the organization	CRR: Value chain and the environment 32	Assurance	
WATER				
G4-EN8	Total water withdrawal by source	CRR: Value chain and the environment 34		
EMISSIONS				
G4-EN15	Direct greenhouse gas emissions (Scope 1)	CRR: Value chain and the environment 33	Assurance	Gasum Group included, Skangass and rental properties not included
G4-EN21	NO _x , SO _x and other significant air emissions	CRR: Value chain and the environment 34		
EFFLUENTS AND WASTE				
G4-EN23	Total weight of waste by type and disposal method	CRR: Value chain and the environment 34		
COMPLIANCE				
G4-EN29	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with environmental laws and regulations	No cases in 2014		



<i>Core</i>	<i>Contents</i>	<i>Pages</i>	<i>Assurance</i>	<i>More information</i>
ENVIRONMENTAL GRIEVANCE MECHANISMS				
G4-EN34	Number of grievances about environmental impacts filed, addressed and resolved through formal grievance mechanisms	CRR: Value chain and the environment 34		
SOCIAL				
LABOR PRACTICES AND DECENT WORK				
EMPLOYMENT				
G4-LA1	Total number and rates of new employee hires and employee turnover by age group, gender and region	CRR: Responsible employer 26		
OCCUPATIONAL HEALTH AND SAFETY				
G4-LA5	Workforce represented in formal joint management worker health and safety committees that help monitor and advise on occupational health and safety programs	CRR: Responsible employer 25–26		
G4-LA6	Type and rates of injury, occupational diseases, lost days and absenteeism and total number of work-related fatalities, by region and by gender	CRR: Supply security and safety 28	Assurance	Gasum mainly reports performance in 2014 for this indicator because the reporting principles for 2014 differ from those for previous years. Data collected in previous years in accordance with GRI 3.1 does not fully cover the GRI G4 requirements. Contractors' data is not included.
TRAINING AND EDUCATION				
G4-LA9	Average hours of training per year per employee by gender and by employee category	CRR: Responsible employer 26		Reported training days, one day is 7.5 hours.
DIVERSITY AND EQUAL OPPORTUNITY				
G4-LA12	Composition of governance bodies and breakdown of employees per employee category according to gender, age group, minority group membership, and other indicators of diversity	CRR: Responsible employer 26		
LABOR PRACTICES AND GRIEVANCE MECHANISMS				
G4-LA16	Number of grievances about labor practices filed, addressed and resolved through formal grievance mechanisms	No cases in 2014		Gasum did not have any grievances about labor practices filed, addressed, or resolved through formal grievance mechanisms.
SOCIETY				
PUBLIC POLICY				
G4-SO6	Total value of political contributions by country and recipient			Gasum does not provide support to political parties or contribute to election campaigns of individual candidates. In 2014 Gasum carried out advocacy work in Finland and Brussels in cooperation with the communications agencies Kreab and Millton. The total value of this advocacy cooperation was €175,000. The amount is based on figures reported to the EU Transparency Register.



<i>Core</i>	<i>Contents</i>	<i>Pages</i>	<i>Assurance</i>	<i>More information</i>
COMPLIANCE				
G4-SO8	Monetary value of significant fines and total number of non-monetary sanctions for non-compliance with laws and regulations	No cases in 2014.		
PRODUCT				
PRODUCT AND SERVICE LABELING				
G4-PR5	Results of surveys measuring customer satisfaction	CRR: In active cooperation in society 18		
OIL & GAS SECTOR DISCLOSURES INDICATORS				
ENERGY				
G4-OG3	Total amount of renewable energy generated by source	CRR: Value chain and the environment 33		

Natural energy gases

‘Natural energy gas’ is a generic term for natural gas and biogas. Natural gas and upgraded biogas both consist of the same substance – methane.



Natural gas

Consisting of almost pure methane, natural gas is sourced from natural gas and oil deposits as well as shale rock. Its net calorific value (NCV) is 10 kWh/m³, which corresponds to the NCV of one liter of light fuel oil. At the moment the natural gas consumed in Finland is imported along a pipeline from Western-Siberian gas fields in Russia to a reception station in Imatra, eastern Finland. After measurements and quality control, natural gas is transmitted from the reception station to customers via the transmission and distribution network owned by Gasum.

Natural gas has a multitude of uses. Finnish industrial facilities utilize natural gas as a fuel as well as a raw material, and gas provides a high rate of efficiency in combined heat and power (CHP) production. Natural gas can also be used instead of electricity in many industrial processes. Residential customers use natural gas for heating and cooking. Upgraded natural gas is also an excellent shipping and road transport fuel.

Natural gas is the least expensive vehicle fuel (comparative price for equivalent liter of petrol on 2 Feb, 2015: €0.851/l).



Biogas

Gasum biogas is a 100% Finnish renewable energy source. It has been upgraded to a composition corresponding to natural gas, so it can be used for all the same purposes as natural gas. Its net calorific value (NCV) is around 10 kWh/m³. The existing gas pipeline network is used to transmit Gasum biogas from production facilities to customers. Biogas is injected into the Gasum network from biogas facilities located in Kouvolaa, Espoo and Lahti.

A variety of renewable raw materials, such as municipal and industrial waste, can be used to produce biogas. Biogas can be used for all the same purposes as natural gas. Biogas can also be liquefied. This is when it is referred to as liquid biogas (LBG).

Biogas is least expensive renewable vehicle fuel in the market (comparative price per equivalent liter of petrol on 2 Feb, 2015: €0.928/l).



LNG

Liquefied natural gas (LNG) is natural gas converted to liquid form by cooling it to -162 °C. As a fuel, the properties of LNG are equal to those of natural gas. In the liquid state, it only takes up 1/600th of the volume of gas in the gaseous state. This is why LNG can be stored, transported and used as a fuel smoothly and cost-effectively. Using LNG helps cut carbon dioxide emissions by around 25% compared with heavy fuel oil.

LNG is an environmentally friendly energy source that meets the maritime transport emission limits that entered into force in January 2015. LNG is odorless, tasteless and non-toxic, and it does not contain sulfur, fine particulate matter or heavy metals.

CONTACT INFORMATION

Gasum Corporation

Head office

P.O BOX 21 (Miestentie 1)

FI-02151 Espoo

Finland

Tel. 020 44 71

firstname.lastname@gasum.fi

www.gasum.fi

Olga Väisänen

Director, communications, marketing

and corporate responsibility

tel. 020 44 78628

Anna Ailio

Communications manager

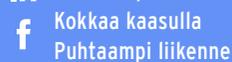
Tel. 020 44 78623



GasumOy



Gasum Oy



Kokkaa kaasulla

Puhtaampi liikenne



Gasum1

Gasum

Gasum is a Finnish expert in natural energy gases. Gasum imports natural gas to Finland and upgrades biogas. The company transmits and supplies them for energy production, industry, homes and land and maritime transport.

Gasum develops the Finnish and Nordic energy infrastructure by investing in the LNG market, biogas business and transport services.

Gasum is the leading supplier of biogas in Finland. Gasum feeds biogas into the gas network from Espoo, Kouvola, and Lahti.

In May 2014 Gasum acquired the majority of the LNG distribution business of the Norwegian company Skangass. Skangass continues to strengthen the position of LNG and the broader utilization of new solutions in Finland, Sweden and Norway.

Gasum Group Company has more than 300 employees. The company's revenue for 2014 totaled €1.1 billion.

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