GASUM
FINANCIAL REVIEW

2019

CONTENTS

Gasum

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* Comprise the consolidated financial statements and the parent company financial statements.

Information about Annual Reporting for 2019
Gasum's Annual Reporting for 2019 comprise Gasum Financial Review, Governance and Remuneration Report and Corporate Responsibility Report, which is available on the Gasum webpage, Publications and Key figures.

"Last year was a year of huge leaps of change for Gasum, too. We are involved in the transformation of the entire society towards a carbon-neutral future by enabling emission reductions for our customers in road and maritime transport and industry by offering cleaner energy and diverse services."

FROM GAS COMPANY TO ENERGY COMPANY – CLEANER ENERGY IN EVERY WAY

Gasum's operating environment faced many changes in 2019. Following a long period of preparations, the opening up of the Finnish gas market was finalized during the year and wholesale trade in gas and the gas transmission network were unbundled from each other on January 1, 2020.

The year 2019 saw both a parliamentary election in Finland and European elections throughout the European Union, with the run-ups to the elections featuring heated debate on climate change and energy sector themes. The importance of biogas and the circular economy as part of solutions to the acute challenges relating to climate was emphasized after the elections, and the role played by gas is now increasing in Finland as well as other countries such as Sweden, particularly in those sectors where emission rates are the highest, namely road and maritime transport and industry.

Last year was a year of huge leaps of change for Gasum, too. For several years, we have been building Gasum into an energy company making it possible for our customers to access cleaner energy on land and at sea. In 2019, this journey became in many ways more a reality in our everyday lives – our strategy of focusing on the development of the Nordic gas market and energy infrastructure is being implemented at a great pace.

Our determined work to achieve change also meant that we reached our financial targets set for 2019. The Group's revenue totaled €1,128 million, down 4.2% year on year. The decline in revenue was caused primarily by the development in the sales price of gas. Our operating profit was €141.4 million, up 13.9% year on year.

Concluded in 2018, our acquisition of the energy industry expert company Enegia positioned us strongly among energy market service providers in 2019. We also announced our acquisition of AGA's Clean Energy business and Nauticor's Marine Bunkering business from Linde AG last year. Once completed, the transaction will create a platform for an even broader offering of low-emission energy solutions in response to growing demand among industrial, maritime and road transport customers. In early 2019, we sold our subsidiary Gasum Tekniikka Oy to the industrial maintenance partner Viafin Service Oyj, which has continued the active development of gas-sector maintenance services.

For us all this has meant not only having assumed a bigger role in the energy sector as a whole but also being involved in the transformation of the entire society towards a carbon-neutral future. Our role as an enabler of emission cuts has been recognized especially in heavy-duty transport, maritime transport and industry – exactly where emissions are the highest. This strengthens our role as a bridge to a carbon-neutral future. A big thank you goes to all of our customers. We want to serve our customers even better as a comprehensive energy company. On a daily basis, we get to enable decisions made by them on more sustainable solutions. A significant part of living up to this role is our continuous development of circular economy solutions and innovations: every single day, 2,000,000 kg of waste is recycled via us and provided a new life as biogas. Big thanks are due for this and all of our other cooperation to our partners, such as Kesko and IKEA, together with whom we can do good for society and also provide consumers with access to more sustainable solutions.

None of the work to achieve change carried out in recent years or the huge steps forward taken by us in 2019 would not have been possible without our motivated and professional people at Gasum, who have been ready to embrace change and have been making change a reality every day in their own work. Many new faces have joined us, and we have all learned a lot from each other over the year. I would like to thank our personnel: change is brought about together, and I am very happy about us having already progressed far thanks to the contributions of all of you. Our journey to become a full-fledged energy company still continues.

Johanna Lamminen
Chief Executive Officer

FINANCIAL STATEMENTS AND BOARD OF DIRECTORS' REPORT 2019

BOARD OF DIRECTORS' REPORT

GASUM GROUP'S BUSINESS DEVELOPMENT IN 2019

During the year 2019, Gasum advanced its strategy in the Nordic countries by developing the gas market and enabling a broader offering of low-emission energy solutions in response to growing demand among industrial as well as road and maritime transport customers.

The Finnish pipeline gas market was successfully opened up to competition, and the ownership unbundling of Gasum's transmission business in Finland took effect at the beginning of 2020 in accordance with the Natural Gas Market Act. The new transmission network company Gasgrid Finland Oy began operations on January 1, 2020. Gasum acted as the Transmission System Operator (TSO) with system responsibility until the end of 2019.

In November 2019, Gasum and Linde AG signed an agreement under which Gasum will acquire AGA's Clean Energy business and Nauticor's Marine Bunkering business. In the transaction, an LNG liquefaction plant, two LNG terminals and a total of 48 gas filling stations in Sweden and Norway will be transferred to Gasum's ownership. The transaction is subject to approval by the competition authorities and is anticipated to be completed during 2020.

During 2019, Gasum increased its biogas production capacity through several investments. Once completed, Gasum's Lohja and Nymolla biogas plant projects in Finland and Sweden as well as several cooperation projects will strengthen growth in biogas volumes. The expansion of the Turku biogas plant in Finland was completed in 2019 and the commercial production of liquefied biogas will start in early 2020.

The sales of natural gas and liquefied natural gas (LNG) in 2019 totaled 30 TWh (2018: 31 TWh), biogas sales amounted to 428 GWh (477 GWh) and road fuel gas sales to 138 GWh (86 GWh). Gas consumption decreased overall compared with the corresponding period a year earlier due to the cold start of the reference year. The decline in biogas sales volumes was affected especially by the biogas distribution sales agreements having been sold to Suomen Kaasuenergia Oy in June of the reference period. The strong increase in road fuel gas sales volumes was due to increased demand in various segments for cleaner transport solutions and to the expansion of the gas filling station network.

The Gasum Group's revenue including continuing and discontinued operations for the period under review totaled €1,127.6 million, down 4.2% from the corresponding period a year earlier (2018: €1,177.4 million). The decline in revenue was caused primarily by the development in the sales price of natural gas. The continuing operations' revenue for the period under review totaled €925.8 million (2018: €967.9 million).

The Group's operating profit including continuing and discontinued operations was €141.4 million (€124.2 million). The operating profit margin at 12.5% was up year on year (10.5%). The continuing operations' operating profit was €50.9 million (2018: €23.0 million).

The Group's balance sheet total at December 31, 2019 came to €1,648.3 million (December 31, 2018: €1,526.6 million). Factors behind the increase included the investments in biogas production plants, the gas filling station network and the construction of the interconnector pipeline between Finland and Estonia.

The Group's interest-bearing debt at the reporting date totaled €625.0 million (December 31, 2018: €580.6 million), including borrowings from financial institutions as well as lease liabilities. The Group's financial position remained strong in the reporting period, with the equity ratio being 44.7% (December 31, 2018: 43.7%).

Gasum renewed all of its external borrowings with financial institutions during the financial year. In that context, the company also renewed its financing strategy to promote the transition to a low-carbon society in line with the company's values. Altogether 39% of the company's total borrowing consists of a green loan which can be used to show the positive climate and environmental impacts of the company's business. The loan agreement was concluded with SEB, Nordea and OP Corporate Bank, and Gasum's Green Funding Framework was evaluated by CICERO Shades of Green.

KEY FINANCIAL INDICATORS*

€ thousand	2019	2018	Change
Revenue	1,127,599	1,177,448	-4.2%
Operating profit	141,393	124,169	13.9%
Operating profit (%)	12.5%	10.5%	
Equity ratio (%)	44.7%	43.7%	
Return on equity (%)	13.6%	13.3%	
Return on investment (%)	9.7%	9.2%	
Balance sheet total	1,648,330	1,526,550	8.0%
Net interest-bearing debt	614,954	562,715	9.3%
Gearing ratio (%)	83.4%	84.7%	
Gearing ratio (%) excluding the impact of IFRS 16 Leases	76.0%	84.7%	
Net debt/EBITDA	3.0	2.9	
Personnel at the end of period	373	434	-14.1%

* Include continuing and discontinued operations.

The Group has applied the IFRS 16 Leases standard since January 1, 2019. The current year's key financial indicators include the effects of IFRS 16. Comparative information excluding the impacts of the IFRS 16 standard.

OPERATING ENVIRONMENT

Energy market and industry

European natural gas prices have been exceptionally low since summer 2019 because of increased supply and low demand due to mild weather. The price level is expected to remain low until the end of 2020, which will affect the Finnish and Baltic gas markets. We can also expect to see increasing price fluctuations, with gas price hedging becoming an even more important part of the operations of companies. Transnational emission reduction targets and rising emission allowance prices will also steer towards reduced energy use of coal in Europe, and this is projected to lead into significant growth in the demand for natural gas in the years ahead. Finland set an example by banning coal-fired power by 2030, and this may increase Finnish use of natural gas during the transition period.

Industrial use of gas is forecasted to grow in the coming years as it can help achieve significant emission cuts cost-effectively compared with petroleum-based fuels. In addition, the increasing importance of corporate responsibility and concrete carbon neutrality objectives strongly support the role of biogas in the transition of companies towards a carbon-neutral future.

Circular economy

The circular economy will be integrated during the current decade into the everyday activities of companies and consumers, and the role of biogas as one of the most efficient ways to promote the circular economy will be strengthened. Promoting the circular economy is also a prominent component of the agenda of the new European Commission that took office last year, and concrete measures are in the pipeline already for this year. Adopted last year, the EU's new Waste Framework Directive and its recycling targets provide concrete support to increases in biogas production. In addition, several national policy measures in the Nordic countries support the development of the biogas sector and create clear incentives for the channeling of waste and side streams to biogas production and for rapid increases in the transport use of biogas.

Transport

Gas will play an even more important role in road and maritime transport and, in road transport in particular, the role of renewable biogas will be emphasized considerably in the years ahead.

International regulation steers maritime transport towards the use of cleaner fuels. The role of liquefied natural gas (LNG) as a fuel of the future will be strengthened as it meets all of the stricter international and EU emission targets set for maritime transport. In addition, switching to LNG enables the future use of renewable gases.

In road transport, the transition to more extensive use of natural gas and biogas is advancing at a rapid rate. Emission reduction targets set for heavy-duty transport at the EU and national levels steered actors towards gas-fueled operations. In addition, national support measures targeted at gas-fueled transport actively promoted the development of gas-fueled vehicle fleets and distribution infrastructure in the Nordics. The number of gas vehicle registrations increased considerably last year, and the total number of gas-fueled vehicles on Finland's roads now exceeds 10,000 and in Sweden 50,000. Around 150 tractor units powered by liquefied gas started operating on Finnish and Swedish roads during 2019.

GASUM'S STRATEGY IS TO EXPAND THE GAS MARKET

During the year under review, Gasum advanced its strategy in the Nordic countries by developing the gas market and enabling an even broader offering of low-emission energy solutions in response to growing demand among industrial as well as road and maritime transport customers.

In 2019 Gasum entered into two transactions: In January, Gasum Tekniikka Oy was sold to Viafin Service Oyj and in November a deal was signed on the acquisition of AGA's Clean Energy business and Nauticor's Marine Bunkering business from Linde AG. The transaction with Linde is subject to approval by the competition authorities and is anticipated to be completed during 2020. Both transactions were part of Gasum's strategy of focusing on the development of the Nordic gas market and energy infrastructure.

Gasum is developing the LNG infrastructure and availability of LNG particularly for maritime transport, heavy-duty road transport and industry. LNG infrastructure also enables a future switch to liquefied biogas (LBG) use without any additional investments required from customers. Gasum also entered into partnership agreements on the supply of LNG to industry players such as the cleantech company Forchem Oy and Eastman Chemical Company. The LNG will be delivered from the Manga LNG terminal in Tornio, Finland, which started commercial operations in June 2019. Metsä Tissue also began using LNG in the production processes of its Mänttä tissue paper mill.

Increasing the biogas market and biogas production capacity and promoting cleaner transport in particular are key elements of the Gasum strategy. Once completed, Gasum's Lohja and Nymolla biogas plant projects in Finland and Sweden as well as several cooperation projects will strengthen growth in biogas volumes. The expansion of the Turku biogas plant in Finland was completed in 2019, and the commercial production of liquefied biogas will start in early 2020.

Gasum is committed to the development of the low-emission road fuel gas market in the Nordic countries. The company is developing the filling station network and sells compressed and liquefied natural gas and biogas for road transport in the Nordic countries. The company is constructing a gas filling station network to respond particularly to the rapidly growing demand in heavy-duty transport in Finland, Sweden and Norway by the early 2020s. In 2019, the company expanded the gas filling station network by a total of 13 new stations in Sweden and Finland.

As part of its energy market services, Gasum offers energy wholesale users and producers comprehensive services ranging from the strategic planning of long-term sourcing and production, and risk management to 24/7 balance management. The company entered into a three-year contract with the Finnish electricity transmission system operator Fingrid, under which Gasum is responsible for portfolio management and trading services relating to Fingrid's loss power. The volume of losses in Finland's power transmission grid is around 1.2 TWh a year, which equals to 1.5% of Finland's entire electricity consumption.

Gasum renewed the Group's loans and concluded a green loan agreement with financial institutions. In its Corporate Responsibility Program, Gasum is committed to action against climate change and to promoting the transition to a low-carbon society. The company provides its customers with cleaner energy solutions and helps its customers cut their own as well as their customers' carbon footprint.

Safety and security are at the core of Gasum's responsibility, and the company's injury rate has developed in a positive direction and is at its lowest in 10 years.

CAPITAL EXPENDITURE AND ACQUISITIONS

The Gasum Group's capital expenditure including continuing and discontinued operations on intangible and tangible assets in 2019 totaled €124.4 million (2018: €48.0 million), and most of this was spent on biogas plant expansion investments, the construction of new filling stations as well as the interconnector pipeline constructed between Finland and Estonia.

Gasum received a total of €56.3 million in investment support during the financial year (2018: €20.6 million), targeted at currently ongoing investments as well as ones being launched in Finland and Sweden.

Gasum Ltd sold its subsidiary Gasum Tekniikka Oy to the industrial maintenance partner Viafin Service Oyj. The transaction was signed on January 17 and closed in February 2019.

On June 17, 2019 Gasum Ltd and Kouvolan Vesi Oy completed a transaction under which Gasum acquired the Mäkikylä biogas plant business in Kouvola, including the Mäkikylä wastewater treatment plant and the biogas plant building and process equipment.

In August 2019, Gasum and UAB GET BALTIC signed an agreement under which Gasum sold the Suomen kaasupörssipalvelut gas exchange services business to UAB GET Baltic. The Gasum-owned Gas Exchange Ltd ceased operations on January 1, 2020 and at the same time UAB GET Baltic began operations in Finland.

On November 13, 2019 Gasum and Linde AG signed an agreement under which Gasum will acquire AGA's Clean Energy business and Nauticor's Marine Bunkering business. In the transaction, an LNG production plant, two LNG terminals, two LNG bunkering vessels and a total of 48 gas filling stations in Sweden and Norway will be transferred to Gasum's ownership. The transaction is subject to approval by the competition authorities and is anticipated to be completed during 2020.

QUALITY, THE ENVIRONMENT, SAFETY AND SECURITY AND RESPONSIBILITY

The Gasum Group's integrated management system (IMS) covers occupational health, safety and security, sustainability, environmental, energy and quality management. In Q4 of 2019, the quality, environmental, energy, and safety and security management systems of the IMS were audited externally. The main focus in IMS development in 2019 was on harmonizing processes and approaches. Gap analyses took place at Gasum's biogas plants in Finland concerning quality, energy, environmental, occupational health, and safety and security management systems.

In 2019, the injury rate was reduced by 50% compared with the year before. There were 2 accidents at work resulting in at least one day off work. The reduction in the injury rate from 2016 to 2019 is 71% and the rate is currently at its lowest in 10 years. Online training in safety and security was developed in Q4 of 2019. The introduction of the Lifesaving safety and security rules in the operating countries will further support the development of safety and security culture among employees and partners.

The supply certainty of natural gas, LNG and biogas was at a good level throughout the year, and there were no delivery disturbances in gas supply.

Gasum renewed its commitment to the Finnish Society's Commitment to Sustainable Development in 2019 and pledged to take action enabling further reductions in transport emissions. Gasum has also made a commitment to continue actions under the voluntary the Energy Efficiency Agreement for Industries for the 2017–2025 period in Finland.

RESEARCH AND PRODUCT DEVELOPMENT

During 2019, the focus in Gasum's research and product development was on the development of the Biogas business, particularly in Finland and Sweden. Research and product development costs related to the development of the Biogas business totaled €1.6 million (2018: €2.1 million).

The circular economy and recycled nutrients are at the core of Gasum's research and product development. The company has continued product development relating to new digestate processing solutions and potential uses of nutrient residues in collaboration with its partners. The aim is to process nutrient residues from biogas production to meet the needs of industrial processes, for example.

Gasum supports research and development in the gas sector through the Gasum Gas Fund. In 2019, 8 research grants, amounting to a total of €62,200 (2018: €40,800), were given out from the Gasum Gas Fund administered by the Finnish Foundation for Technology Promotion.

PERSONNEL

At December 31, 2019 the Gasum Group had a total of 373 employees (December 31, 2018: 434). Of these, 76 worked in Sweden and 53 in Norway. The remaining 244 employees were based in Finland.

The decrease in the total number of Group employees is due to Gasum selling the shares of Gasum Tekniikka Oy to Viafin Service Oyj in early 2019 and the personnel of the company sold having been transferred in the transaction. The number of employees increased due to the reform of the Group's organization structure and the human resources required by new business functions.

The company is investing continuously in personnel competence and leadership development. Gasum conducted a 360-degree feedback process for all supervisors during autumn 2019. At the same time, the company continued the systematic anchoring of the Gasum leadership principles into the company's practices and everyday work. The leadership principles are a tool for every employee and help improve corporate culture and leadership.

OWNERSHIP STRUCTURE AND GOVERNANCE

Gasum is fully (100%) owned by the State of Finland. Of the shares, 73.5% are held by the state-owned Gasonia Oy and 26.5% directly by the State of Finland. There were no changes in shareholding during the period under review.

Gasum Ltd's Annual General Meeting (AGM) was held in Helsinki on March 18, 2019. The AGM confirmed the number of members of Gasum's Board of Directors as being seven. The current members Juha Rantanen, Stein Dale, Elina Engman, Päivi Pesola, Elisabet Salander Björklund and Jarmo Väisänen were re-elected. Torbjörn Holmström was elected as a new member of the Board. Juha Rantanen was re-elected as the chairman of the Board of Directors. The Board's work is supported by the Audit and Risk Committee and the HR Committee.

RISK FACTORS AFFECTING FINANCIAL PERFORMANCE

Gasum operates in the energy sector and its financial performance entails financial, economic, operational, strategic and political risks.

The price of natural gas and associated products as well as demand for natural gas and liquefied natural gas (LNG) are the most important factors affecting the company's financial performance. In the long term, the economic environment and prices of alternative fuels affect demand for and, consequently, prices of natural gas, biogas and LNG. In the short term, gas prices are affected above all by the weather, prices of alternative fuels and the associated seasonal fluctuations. Besides economic factors, the demand for gas is also affected by energy policies as well as environmental factors.

Energy policy aims as well as customers' need to switch to cleaner fuels are steadily increasing interest in natural gas and boosting its demand as an industrial, maritime transport and road transport fuel. Compared to other similar fuels, the lower carbon dioxide emissions from natural gas as well as the availability of gas-related technologies are contributing to the growing demand for gas solutions.

Gasum aims to expand the Nordic gas market, which will bring strategic risks relating to the operating environment, technology and customers. The political risk mainly relates to changes in EU and national legislation, energy support and, in particular, taxation. The company prepares for these risks relating to its operating environment by actively monitoring related developments. In addition, Gasum seeks to continuously draw attention to the company's viewpoints as regards the impacts of proposed amendments to legislation or taxation.

Gasum is exposed to operational risks which relate to the fact that the company uses transmission pipelines, trucks and ships to distribute gas. As the company's logistics operations take place both on land and at sea, the company is exposed to the operational risk of disruption to customers' energy supply. The company also prepares for potential disruptions in the supply of gas by having reserve fuel arrangements in place. Gasum monitors its operations, production and logistics on a daily basis. Employee health and safety at work are important factors mitigating operational risks. Oversight of compliance with environmental permits is also a continuous process in the company.

The Group and its operations are exposed to operational as well as financial and economic risks. Gasum's business includes risks relating to the market price development of oil and gas products. Financial risks include interest rate risk, price risk, foreign currency risk, credit risk and liquidity risk. The Group's commodity risks (including price risk) are managed by the Portfolio Management & Trading business unit. The Group's interest rate, foreign currency, credit and liquidity risks are managed by the Group Treasury.

Gasum's general risk management development is described in the Gasum Group's Enterprise Risk Management Policy, which has been adopted by the Gasum Board of Directors. The priority of the Enterprise Risk Management Policy is to help Gasum's businesses, management and employees to better safeguard the company's operations and support the implementation of the company's growth strategy. The main principle of the company's risk management policy is to take responsibility for risks and respond to risks where they arise. Each business unit and Group function is responsible for identifying, assessing and managing its own risks.

The Audit and Risk Committee is responsible for oversight of the company's risk management system. The Risk Controller coordinates the risk management process and reports to the CFO. The Risk Controller is also responsible for monitoring all Group risks and for the instructions and tools to ensure an effective risk management process in the company's business activities.

EVENTS AFTER THE REPORTING PERIOD

The ownership unbundling of Gasum's transmission business in Finland took effect at the beginning of 2020 in accordance with the Natural Gas Market Act. The new transmission network company Gasgrid Finland Oy began operations on January 1, 2020. Gasum acted as the Transmission System Operator (TSO) with system responsibility until the end of 2019.

The transmission business comprised the parent company Gasum Ltd's transmission business, Baltic Connector Ltd, Suomen Kaasunsiirtopalvelut Oy and Gas Exchange Ltd. The demerged entity relating to the transmission business is disclosed as discontinued operations in the financial statements at December 31, 2019. Unless otherwise stated, all of the figures relating to the income statement presented in this report, including corresponding periods in 2018, only cover continuing operations. The balance sheet is reported in accordance with the IFRS 5 standard, and the figures for the reference periods prior to the partial demerger also include the assets and liabilities transferred in the demerger and, consequently, the balance sheet for the reference periods does not reflect the financial position of the continuing operations.

FUTURE OUTLOOK

The role of gas as an energy source will increase further as action is taken against climate change and the Nordic countries are moving towards carbon-neutral energy production. Both the industrial as well as transport use of gas is projected to grow strongly in the years ahead. Gasum has prepared for the growth in demand by investing purposefully in the development of the Nordic gas infrastructure for several years already.

The expanding gas infrastructure creates a good foundation for the increased production and use of biogas, too. So far, only a fraction of the biogas production potential is in use.

Gasum's investments in the Nordic gas ecosystem and in new business functions facilitate growth in the future. The capacity to operate more broadly in the energy market strengthens Gasum's position comprehensively as an energy company of the future.

BOARD OF DIRECTORS' PROPOSAL FOR DISTRIBUTION OF PROFITS

At December 31, 2019 the parent company had distributable funds of €430,881,095.33, which includes the profit for the period, €94,648,496.21. The Board of Directors proposes to the general meeting of shareholders that a dividend of €0.3774 per share, i.e. a total of €20,002,200.38, be paid for the period now ended and that the remainder be retained.

GASUM GROUP

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GASUM'S FINANCIAL DEVELOPMENT IN 2019

€ thousand	1.1.–31.12.2019	1.1.–31.12.2018
Revenue	**1,127,599**	**1,177,448**
Other operating income	64,440	12,931
Materials and services	-874,855	-909,114
Personnel expenses	-38,151	-40,117
Depreciations and amortization	-64,129	-69,819
Other operating expenses	-74,715	-47,303
Share of result from investments accounted for using the equity method	1,203	143
Operating profit	**141,393**	**124,169**
Finance items – net	-17,708	-23,614
Profit before taxes	**123,685**	**100,554**
Taxes	-28,520	-17,305
Profit for the period	**95,165**	**83,250**
Profit for the period attributable to:		
Owners of the parent	95,163	87,605
Non-controlling interest	1	-4,355

Continuing and discontinued operations are disclosed as a single entity before the demerger of the transmission business. Disclosed as discontinued operations in 'Consolidated financial statements', the transmission business comprises the parent company Gasum Ltd's transmission business, Baltic Connector Ltd, Suomen Kaasunsiirtopalvelut Oy and Gas Exchange Ltd.

CONSOLIDATED FINANCIAL STATEMENTS

CONSOLIDATED STATEMENT OF INCOME

€ thousand

	Note	1.1.–31.12.2019	1.1.–31.12.2018
CONTINUING OPERATIONS			
Revenue	2.1	**925,823**	**967,860**
Other operating income	2.2	62,919	12,393
Materials and services	2.3	-805,176	-845,660
Personnel expenses	2.4	-34,137	-34,278
Depreciations and amortization	2.5	-46,101	-49,903
Other operating expenses	2.6	-53,638	-27,534
Share of result from investments accounted for using the equity method		1,203	143
Operating profit		**50,893**	**23,021**
Finance income		13,257	4,078
Finance expenses		-29,027	-27,735
Finance items – net	2.8	-15,770	-23,657
Profit before taxes		**35,123**	**-635**
Current income tax expense (income)	2.9	-5,673	-7,537
Change in deferred taxes	3.9	-4,196	10,813
Profit for the period from continuing operations		**25,254**	**2,641**
Profit from discontinued operations		69,911	80,609
Profit for the period		**95,165**	**83,250**
Profit for the period attributable to:			
Owners of the parent		95,163	87,605
Non-controlling interest		1	-4,355

CONSOLIDATED STATEMENT OF COMPREHENSIVE INCOME

€ thousand

	Note	1.1.–31.12.2019	1.1.–31.12.2018
Profit for the period		**95,165**	**83,250**
Other items in comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurements of post-employment benefits	3.11	938	352
Taxes related to items that will not be reclassified		-188	-70
Total		750	282
Items that may be reclassified subsequently to profit or loss			
Translation differences		616	-1,042
Cash flow hedges	4.5	11,014	-2,684
Taxes related to items that may be reclassified		-2,207	537
Total		9,422	-3,189
Total comprehensive income for the period		**105,338**	**80,343**
Total comprehensive income for the period attributable to:			
Owners of the parent		105,336	84,698
Non-controlling interest		1	-4,355
Total comprehensive income for the period attributable to owners:			
Profit for the period from continuing operations		35,425	4,089
Profit for the period from discontinued operations		69,911	80,609

CONSOLIDATED BALANCE SHEET

€ thousand

	Note	31.12.2019	31.12.2018
ASSETS			
Non-current assets			
Intangible assets	3.1	208,510	226,271
Tangible assets	3.2	696,994	1,013,036
Equity-accounted investments	3.3	11,652	10,530
Other investments at fair value through the statement of income		56	56
Derivative financial instruments	4.3	5,556	1,123
Other non-current assets		1,542	307
Total non-current assets		**924,309**	**1,251,322**
Current assets			
Inventories	3.5	39,203	24,186
Derivative financial instruments	4.3	34,351	6,403
Trade and other receivables	3.4	153,133	223,152
Current tax assets		826	289
Assets held for sale and discontinued operations	3.7, 5.2	494,656	3,348
Cash and cash equivalents	3.8	1,852	17,850
Total current assets		**724,021**	**275,228**
Total assets		**1,648,330**	**1,526,550**

CONSOLIDATED BALANCE SHEET

€ thousand

	Note	31.12.2019	31.12.2018
EQUITY AND LIABILITIES			
Share capital	4.4	178,279	178,279
Paid-up unrestricted equity reserve		26,280	26,280
Fair value reserve	4.5	6,660	-2,147
Retained earnings		435,302	379,659
Profit for the period		95,163	87,605
Translation differences		-4,784	-5,400
Total equity attributable to owners of the parent		**736,900**	**664,275**
Non-controlling interest		19	206
Total equity		**736,919**	**664,481**
Liabilities			
Non-current liabilities			
Loans	4.6	229,411	415,111
Other non-current liabilities	4.7	186,005	143,493
Derivative financial instruments	4.3	2,298	5,487
Deferred tax liabilities	3.9	30,685	63,936
Provisions	3.10	10,463	10,049
Post-employment benefits	3.11	3,917	6,742
Total non-current liabilities		**462,778**	**644,817**
Current liabilities			
Loans		0	19,808
Derivative financial instruments	4.3	13,610	9,677
Trade and other payables	3.6	162,094	175,514
Current income tax liabilities		322	12,253
Liabilities associated with assets held for sale and discontinued operations	3.7, 5.2	272,607	0
Total current liabilities		**448,633**	**217,252**
Total liabilities		**911,412**	**862,069**
Total equity and liabilities		**1,648,330**	**1,526,550**

CONSOLIDATED STATEMENT OF CHANGES IN EQUITY

€ thousand	Share capital	Paid-up unrestricted equity reserve	Fair value reserve	Retained earnings	Translation differences	Total	Non-controlling interest	Total equity
	Attributable to owners of the parent							
Equity at January 1, 2019	**178,279**	**26,280**	**-2,147**	**467,263**	**-5,400**	**664,275**	**206**	**664,481**
Profit for the period				95,163		95,163	1	95,165
Other comprehensive income								
Remeasurements of post-employment benefits				802		802		802
Translation differences					616	616		616
Cash flow hedges			8,807			8,807		8,807
Total comprehensive income for the period			**8,807**	**95,965**	**616**	**105,387**	**1**	**105,389**
Transactions with the owners								
Profit distribution				-32,902		-32,902		-32,902
Other changes				140		140	-189	-49
Equity at December 31, 2019	**178,279**	**26,280**	**6,660**	**530,465**	**-4,784**	**736,900**	**19**	**736,919**

€ thousand	Share capital	Paid-up unrestricted equity reserve	Fair value reserve	Retained earnings	Translation differences	Total	Non-controlling interest	Total equity
	Attributable to owners of the parent							
Equity at January 1, 2018	**178,279**	**0**	**0**	**378,927**	**-4,358**	**552,848**	**38,023**	**590,871**
Profit for the period				87,605		87,605	-4,355	83,250
Other comprehensive income								
Remeasurements of post-employment benefits				308		308		308
Translation differences					-1,042	-1,042		-1,042
Cash flow hedges			-2,147			-2,147		-2,147
Total comprehensive income for the period			**-2,147**	**87,913**	**-1,042**	**84,724**	**-4,355**	**80,369**
Transactions with the owners								
Profit distribution				-32,902		-32,902		-32,902
Other changes*		26,280		33,326		59,606	-33,462	26,143
Equity at December 31, 2018	**178,279**	**26,280**	**-2,147**	**467,263**	**-5,400**	**664,275**	**206**	**664,481**

* The change in the reserve for invested unrestricted equity is related to the transfer of the shares of Baltic Connector Ltd from the State of Finland to the Gasum Group. Other changes between equity attributable to owners of the parent and non-controlling interest mainly consist of the increase in the shareholding in Gasum AS (previously named Skangas AS) to 100% from the previous 70% holding. The Group had already previously controlled the company. Further information is provided in 5.1 Business acquisitions and disposals.

CONSOLIDATED STATEMENT OF CASH FLOWS

€ thousand

	Note	1.1.–31.12.2019	1.1.–31.12.2018
Cash flows from operating activities			
Profit before income tax		123,685	100,554
Adjustments			
Depreciation and amortization	2.5	64,129	69,819
Finance items – net	2.8	17,708	23,614
Unrealized gains/losses on financial instruments		-21,777	-2,378
Other non-cash items		-829	2,087
Change in working capital		-10,177	33,979
Cash inflow from operating activities before financial items and taxes		172,739	227,675
Interest paid, leasing interest and other financial items		-19,250	-17,113
Received financial income		919	876
Income taxes paid		-44,926	-36,788
Cash flow from financial items and taxes		-63,256	-53,026
Net cash flows from operating activities		**109,483**	**174,649**
Cash flows from investing activities			
Investments in tangible assets		-124,138	-46,090
Investments in intangible assets		-218	-1,898
Investment grants received		56,341	20,605
Proceeds from sale of property, plant and equipment		112	392
Business acquisitions and disposals		-553	-3,568
Net cash flows from investing activities		**-68,456**	**-30,559**
Cash flows from financing activities			
Proceeds from non-current borrowings		408,000	0
Repayments of non-current borrowings*		-403,239	-38,735
Proceeds from current borrowings		20,000	0
Repayments of current borrowings		-31,978	-53,158
Payment of lease liabilities		-8,701	-4,107
Dividends paid		-32,902	-32,902
Net cash flows from financing activities		**-48,821**	**-128,903**
Net decrease/increase in cash and cash equivalents		**-7,793**	**15,188**
Cash and cash equivalents at the beginning of the period (Dec 31)		17,850	2,662
Cash and cash equivalents at the end of the period	3.8	10,057	17,850

* Includes the exercise of the 30.0% call option for Gasum AS in 2018.
The cash flow statement for the reporting period and the reference period contains both continuing and discontinued operations.
Cash flows relating to discontinued operations are presented in Note 5.2 Discontinued operations.
Net debt reconciliation is presented under 4.1 Capital management.

NOTES TO THE CONSOLIDATED FINANCIAL STATEMENTS

1 General accounting policies

1.1 General information

Gasum Ltd is a Finnish limited liability company and the parent company of the Gasum Group ('Gasum', the 'Group' or the 'Company', unless otherwise stated) domiciled in Espoo, Finland, and with its registered address in Revontulenpuisto 2 C, P.O.Box 21, FI-02100 Espoo, Finland.

The energy company Gasum is a Nordic gas sector and energy market expert. Together with its partners, Gasum is building a bridge towards a carbon-neutral society on land and at sea. Gasum promotes the circular economy by processing waste and producing biogas and recycled nutrients in Finland and Sweden. The company offers energy for heat and power production, industry as well as road and maritime transport. Gasum is the leading supplier of biogas in the Nordic countries. The company has a gas filling station network that also serves heavy-duty vehicles. Gasum is also the leading liquefied natural gas (LNG) player in the Nordic market. The company continues to strengthen the position and infrastructure of LNG and supplies LNG to maritime transport, industry and heavy-duty vehicles in Finland, Sweden and Norway. Gasum also offers the most comprehensive expert services and solutions in the energy market.

Gasum Ltd is 100% owned by the State of Finland directly and through the state-owned Gasonia Oy. Copies of the consolidated financial statements are available at Gasum's head office in Revontulenpuisto 2 C, 02100 Espoo, Finland, and on the company website at www.gasum.com in Finnish and English. The consolidated financial statements of the Gasum Group are the highest level to which Gasum Ltd and its subsidiaries are consolidated.

The Board of Directors of Gasum Ltd approved these financial statements for issue at its meeting on February 11, 2020.

1.2. Basis of preparation

Gasum Ltd's consolidated financial statements have been prepared in accordance with the International Financial Reporting Standards (IFRS) as adopted by the European Union and in compliance with the standards and interpretations applicable as at December 31, 2019. Accounting standards have not been applied in the consolidated financial statements before their effective date. The notes to the consolidated financial statements are also in accordance with the requirements of the Finnish accounting and corporate legislation supplementing the IFRS.

The consolidated financial statements have been prepared primarily under the historical cost convention unless otherwise indicated. Financial assets and liabilities recognized at fair value through profit or loss have been measured at fair value. The consolidated financial statements are presented in thousands of euros unless otherwise stated.

The gas transmission business is unbundled from the Gasum Group into a separate company on January 1, 2020. The demerged entity relating to the transmission business is disclosed as discontinued operations in the financial statements at December 31, 2019. Unless otherwise stated, all of the figures relating to the income statement presented in this report, including corresponding periods in 2018, only cover continuing operations. The balance sheet is reported in accordance with the IFRS 5 standard, and the figures for the reference periods prior to the partial demerger also include the assets and liabilities transferred in the demerger and, consequently, the balance sheet for the reference periods does not reflect the financial position of the continuing operations.

1.3. Consolidation principles

The consolidated financial statements are for the parent company and all of its subsidiaries. Subsidiaries are all such entities over which the parent company has direct or indirect control. Gasum controls an entity when it is exposed to, or has rights to, variable returns from its involvement with the entity and has the ability to affect those returns through its power over the entity. Subsidiaries are fully consolidated from the date on which control is transferred to the Group and deconsolidated from the date that control ceases.

Subsidiaries are consolidated using the acquisition method of accounting. The consideration transferred for the acquisition of a subsidiary comprises the fair values of the assets transferred, the liabilities incurred to the former owners of the acquiree and the equity interests issued by the Group. Identifiable assets acquired and liabilities and contingent liabilities assumed in a business combination are measured at their fair values at the acquisition date. Any retained interest in any difference between the consideration and the acquired assets is goodwill. Acquisition-related costs are expensed as incurred.

Intercompany transactions, balances and unrealized gains on transactions between Group companies are eliminated. Unrealized losses are also eliminated. Transactions with non-controlling interests that do not result in loss of control are accounted for as equity transactions, that is, as transactions with the owners in their capacity as owners. The difference between fair value of any consideration paid and the relevant share acquired of the carrying value of net assets of the subsidiary is recorded in equity. The share of non-controlling interests within the equity of subsidiaries is presented separately from the equity attributable to the shareholders of the parent. The share attributable to non-controlling interests is determined at the date of acquisition as the proportionate share of the non-controlling interests in the net value of the assets acquired. Following the acquisition, the share of the non-controlling interests is the share determined in the acquisition plus the share of changes in equity attributable to those interests.

An associated company is an entity where the Group has a holding of 20–50% or over which it has significant influence. Joint venture is an arrangement where two or more parties have contractually agreed joint control of the arrangement. Joint control exists only when decisions about the relevant activities require the unanimous consent of the parties sharing control.

Associated companies and joint ventures have been consolidated using the equity method. Under the equity method, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. When the Group's share of losses in a joint venture or associated company equals or exceeds its interest in the joint venture or associate, the Group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the entity.

Unrealized gains on transactions between the Group and its associated companies and joint ventures are eliminated to the extent of the Group's interest. Unrealized losses are also eliminated unless the transaction provides evidence of an impairment of the asset transferred. Accounting policies of joint ventures and associated companies have been changed where necessary to ensure consistency with the policies adopted by the Group.

During the 2018 financial year, a company was consolidated into Gasum as an investment for no cash consideration. The company was consolidated into the Group using the predecessor value method in accordance with the IFRS, according to which balance sheet values at carrying values in accordance with IFRS are consolidated into the Group. Going forward, the company will apply the predecessor value method to corresponding common control transactions.

FOREIGN CURRENCY ITEMS

Items included in the financial statements of each of the Group's entities are measured using the currency of the primary economic environment in which the entity operates (the functional currency). The determination of the functional currency requires some management judgment, but often the currency of the economic environment is clearly identifiable. The consolidated financial statements are presented in euros, which is the parent company's functional and presentation currency.

Foreign currency transactions are translated into the functional currency using the exchange rates prevailing at the dates of the transactions. Monetary items denominated in foreign currencies are translated into the functional currency using the exchange rates prevailing at reporting dates. Non-monetary items are translated at the dates of the transactions. Foreign exchange gains and losses resulting from the settlement of transactions in foreign currencies and translation of monetary items are recognized in the income statement. Foreign exchange gains and losses arising from transactions in the ordinary course of business are included in respective items above operating profit. Translation differences related to financial items are recognized in finance income and costs.

The income statements of foreign subsidiaries have been translated into euros at average exchange rates for the reporting period and their balance sheets at the exchange rate prevailing at the reporting date. The resulting translation difference as well as other translation differences arising from the translation of a subsidiary's equity are recognized in other comprehensive income. Translation differences are presented as a separate item under equity.

The Group also has companies operating in Norway and Sweden, with the euro determined as their functional currency.

1.4. New and revised standards

The consolidated financial statements have been prepared in compliance with the same accounting policies as in 2018, except for the following new standards, interpretations and amendments to existing standards that the Group has applied since January 1, 2019.

IFRS 16

IFRS 16 Leases. The new standard replaces the IAS 17 Leases standard. The standard contains new rules regarding the classification of leases. IFRS 16 requires lessees to recognize most leases on their balance sheets as lease liabilities and related right-of-use assets. The standard makes two practical exemptions available concerning recognition on the balance sheet of leases for which the lease term ends within 12 months or less and leases for which the underlying asset is of low value.

Gasum has adopted IFRS 16 Leases as of January 1, 2019, applying the simplified approach according to which comparative information has not been restated. Gasum has decided to apply the above exceptions to short-term leases for which the lease term is 12 months or less and to assets of low value. The Group has both fixed-term leases and leases with an indefinite lease term. The lease term of fixed-term leases is determined by taking into account the non-cancellable period of lease as well as the periods covered by an option to extend or terminate the lease during which it is reasonably certain that the option is exercised. Most of the Group's leases are indefinite-term leases where the lease term is determined on the basis of operational factors. The leases include leases of land, facilities, vehicles and other leased machinery and equipment. At the time of transition to the IFRS 16 standard, the recognition of land leases on the balance sheet resulted in the biggest effect.

The adoption of the IFRS 16 standard has affected the Group's figures. The most significant leases were classified by the Group as finance leases already under IAS 17. In conjunction with the adoption of IFRS 16, €56.8 million in lease liabilities were recognized on the basis of leases that had previously been classified as operational leases. These liabilities were determined using the present value of the remaining lease payments, calculated using the lessee's incremental borrowing rate at January 1, 2019 as the discount rate. The corresponding right-of-use assets were recognized at the amount of lease liability. Property, plant and equipment increased by €56.8 million. The adoption has affected items in the statement of income. Depreciation of right-of-use assets is included in depreciations and interest expenses on lease liabilities in financial items. The cash flow statement was affected only by the change of reporting method between cash flows from operating activities and from financing activities. Previous lease costs are not presented in cash flows from operating activities but as depreciations of lease liabilities in cash flows from financing activities.

The following new interpretations and amendments to existing standards have become mandatory during reporting periods commencing January 1, 2019 or thereafter: interpretation of IFRIC 23 Uncertainty over Income Tax Treatments, amendments to IFRS 9 Prepayment Features with Negative Compensation, amendments to IAS 28 Long-term Interests in Associates and Joint Ventures, annual improvements to IFRS standards 2015–2017, amendments to IAS 19 Plan Amendment, Curtailment or Settlement. These interpretations and amendments mandatory from January 1, 2019 did not have significant effects on Gasum's financial statements.

FORTHCOMING IFRS STANDARDS, INTERPRETATIONS AND AMENDMENTS

The company estimates that the IFRS standards, interpretations and amendments taking effect later than in the reporting period which started on January 1, 2019 will not have significant effects on Gasum's financial statements.

1.5. Critical accounting estimates and judgmental items

The preparation of financial statements in conformity with IFRS requires the use of certain critical accounting estimates as well as management judgement in the process of applying the accounting policies when preparing financial statements. The estimates and judgements are continually evaluated and are based on historical experience and other factors, including expectations of future events that are believed to be reasonable under the circumstances.

The Group makes estimates and assumptions concerning the future. The resulting accounting estimates will, by definition, seldom equal the related actual results. The most critical estimates and assumptions and judgmental items are discussed in more detail in the following.

PENSION BENEFITS

The present value of the pension obligations depends on a number of factors that are determined on an actuarial basis using a number of assumptions. The discount rate is one of the significant assumptions in determining the net cost (or net income) arising from pensions. Any changes in these assumptions will impact the carrying amount of pension obligations.

GOODWILL AND IMPAIRMENT TESTING

At December 31, 2019 Gasum had goodwill of €117.7 million (2018: €117.4 million) recorded on its balance sheet. Goodwill is tested annually or whenever there are indications of impairment. The assumptions used in impairment testing require the exercise of management judgement. The most significant discretionary assumptions are related to the terminal year growth rate and the discount rate used. Further information on the sensitivity of the recoverable amount to changes in assumptions is provided under Note 3.1.

Significant assets in property, plant and equipment and in intangible assets with indefinite lives (including goodwill) are tested for impairment whenever there are indications of impairment and at least once a year. Tangible and intangible assets with finite useful lives are tested for impairment only when indications exist that their carrying value may be impaired.

The nature of the estimates depends on which business the tested assets belong to. The most critical judgements regarding sales activities relate to future cash flows and the discount rate.

TAXES

The Group companies are liable to income tax in Finland, Sweden and Norway. The utilization of tax losses calls for judgement on the part of management and impacts on the extent to which deferred income tax assets are recognized for these. The Group's balance sheet at December 31, 2019 includes a deferred income tax asset of €15.1 million recognized for adopted losses (2018: €16.4 million). Further information regarding taxes is presented under Note 2.9 Income tax expenses and Note 3.9 Deferred taxes.

The Group has a receivable of €6.8 million on the balance sheet relating to energy consumption tax of an LNG liquefaction plant located in Norway. Gasum has a difference in opinion relating to tax classification with local authorities. Legal proceedings have been initiated concerning the difference in opinion. For more information, refer to 5.6 Legal proceedings and claims. Further information is also provided in Note 3.4 Trade and other current receivables.

2 Notes to the income statement

2.1. Revenue

Accounting policies

Revenue recognition

Sales revenue is recognized in accordance with IFRS 15 Revenue from Contracts with Customers. Revenue from contracts with customers adjusted for discounts and indirect taxes is recognized as revenue. The company uses the five-step recognition model in accordance with the IFRS 15 standard when determining the recognition of sales revenue. Performance obligations are identified specifically for each contract and sales revenue is recognized when control of a good or service transfers to a customer. Accordingly, revenue is as a general rule recognized at the time of delivery in accordance with the terms and conditions of delivery. The recognition of the various performance obligations is described in greater detail below. Discounts are included in sales prices and any variable consideration is recognized in accordance with the time of recognition. In the context of gas sales, variable considerations are typically linked to various indices, whereby the variable consideration is determined on the basis of the indices applicable at any given time and is therefore known at the time of revenue recognition.

The company does not have any significant financing components or rights to return in its contracts with customers. The company does not have any non-standard payment terms.

Natural gas sales

Natural gas is transmitted via the transmission network and invoiced to customers monthly according to actual consumption. Revenue is recognized on the basis of quantities supplied as indicated by measuring equipment and the tariffs in effect at the time (Natural Gas Pricing System).

Sales revenue is recognized monthly on the basis actual invoiced unit quantities. Uncertainty relating to variable considerations is resolved each month. Monthly revenue is recognized based on the price index and the volume, or quantity of services or units supplied.

Liquefied natural gas (LNG) sales

Liquefied natural gas (LNG) is invoiced to customers according to deliveries and revenue is recognized on the basis of the time of delivery. The time of delivery varies customer-specifically according to the terms and conditions of their respective contracts. In addition to gas, LNG sales may also contain other performance obligations, including terminal and delivery services. Revenue from terminal services is recognized over time and revenue from delivery services once the service has been performed.

Gasum has control of the LNG until the time of delivery. LNG sales revenue is recognized when control is transferred to the customer. LNG sales agreement types include several fixed and variable considerations and pricing models. At the time of invoicing, however, pricing is fixed as any uncertainty relating to considerations is resolved every month on the basis of, for example, updated indices.

Sales revenue from contracts with a Take-or-Pay clause is not recognized before the customer exercises its remaining rights as regards any undelivered quantities. However, sales revenue is recognized when the likelihood of the customer exercising its remaining rights becomes very remote.

Biogas sales

Biogas is transmitted both from plants directly to customers and via the transmission network and invoiced to customers monthly according to actual consumption. Revenue from biogas sales is recognized on the basis of quantities delivered as reported by the metering systems. The transaction price is fixed at the time of monthly invoicing, whereas variable considerations are determined on the basis of indices. Biogas can also be delivered as certificates, which is when invoicing is based on numbers of certificates.

Waste processing

The price of the waste processing service includes variable considerations, such as the proportion of dry solids in waste, and annual incentives. At the time of monthly invoicing, however, the price is fixed. The effects of annual incentives on sales revenue are confirmed during the year. The effect of incentives is not projected in the recognition of sales revenue as the impacts are immaterial.

In the waste processing service, the customer at the same time receives and consumes the benefits of the service provided by Gasum. Revenue from the waste processing service is recognized over a period of time and, because the timing difference is not significant, sales revenue is recognized at the time of receiving waste.

Energy market services

Energy market services cover power market portfolio management and brokering services, market analyses, balance services in the wholesale physical power market, control room services for electricity balance risk management, demand-side management services for electricity consumption optimization, energy market software solutions, Guarantees of Origin services for electricity, and expert services for emissions trading.

Customers can choose which of the above services they buy, whereby they are treated as separate performance obligations. Because Gasum has control of the performance obligations until their transfer, it acts as a principal in accordance with IFRS 15 and applies the no-netting principle to the revenue recognition of performance obligations.

Participation and connection fees

Gasum's customers pay participation and connection fees when connecting to the transmission network. Participation fees are recognized to revenue over the expected life of the customer contract based on Gasum's accumulated experience. Connection fees are recognized to revenue when there is reasonable certainty that the related economic benefits will flow to Gasum.

Trade receivables relating to sales revenue are presented in Note 3.4 Trade and other receivables. Contract liabilities are presented in Note 3.6 Trade and other current payables.

€ thousand

Revenue by business unit	2019	2018
Natural gas and LNG	760,206	871,068
Portfolio Management and Trading	112,873	44,992
Biogas	42,751	43,197
Traffic	9,458	4,792
Other	534	3,810
Total	**925,823**	**967,860**

€ thousand

Revenue by region	2019	2018
Finland	739,567	722,480
Other countries	186,256	245,379
Total	**925,823**	**967,860**

2.2. Other operating income

Accounting policies

Insurance recovery

Insurance recovery is recognized when there is a reasonable assurance that the compensation will be received. Insurance recovery is recognized in the income statement under other operating income in the same reporting period as the corresponding costs incur.

Government grants

Government grants are recognized at their fair value where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions. Government grants related to costs are recognized under other operating income in the income statement over the period necessary to match them with the costs that they are intended to compensate. Government grants relating to the acquisition of tangible assets are deducted from the cost of the asset and recognized in the income statement by deducting the depreciation for the respective asset. Investment subsidy (yet to be received) related to unfinished investments is recognized where there is a reasonable assurance that the subsidy will be received and corresponding costs have incurred. Support is recognized as current or non-current receivables and as reduction of unfinished investments.

€ thousand

Other operating income	2019	2018
Gain on sale of tangible assets	201	415
Gains from derivative financial instruments	53,805	4,861
Other income	8,912	7,117
Total	**62,919**	**12,393**

Other income includes production subsidies received by Swedish biogas plants and insurance recovery.

2.3. Materials and services

€ thousand

Materials and services	2019	2018
Total materials and supplies	-789,256	-831,575
External services	-15,920	-14,085
Total	**-805,176**	**-845,660**

2.4. Personnel

€ thousand

Personnel expenses	2019	2018
Salaries and remunerations	-27,440	-26,902
Pension expenses – defined contribution plans	-3,722	-4,342
Pension expenses – defined benefit plans	-192	-381
Statutory employer's contributions	-2,783	-2,652
Total	**-34,137**	**-34,278**

€ thousand

CEO's and Members of the Board of Directors' salaries and remunerations	2019	2018
CEO's	561	582
Members of the Board of Directors and Supervisory Board	225	220
Total	**786**	**802**

PERSONNEL ON AVERAGE

Personnel on average	2019	2018
White collar	285	308
Blue collar	63	115
Personnel on average	**348**	**423**

TOTAL PERSONNEL AT THE END OF PERIOD

Total personnel at the end of period	2019	2018
White collar	281	299
Blue collar	63	109
Total personnel at the end of period	**344**	**408**

2.5. Depreciation and amortization

Accounting policies

Depreciation and amortization

Items are depreciated straight-line over their estimated useful lives. Land and water areas are not depreciated. Gasum has adopted IFRS 16 Leases as of January 1, 2019, applying the simplified approach according to which comparative information has not been restated. Depreciations of right-of-use assets are included in depreciation of fixed assets in the statement of income. Right-of-use assets associated with land areas recognized on the balance sheet in accordance with IFRS 16 standard are depreciated straight-line on the basis of the lease terms determined. Leases are presented in Note 3.2 Tangible assets.

The estimated useful lives are:

- Software 3–5 years
- Customer relationships 10–25 years
- Pipelines related to gas distribution 40–65 years
- Terminal-related pipelines 25 years
- Terminal-related buildings and structures 40–52 years
- Terminal-related tanks 40 years
- Other buildings and structures 30–40 years
- Filling stations 15–25 years
- Production plant machinery and equipment 25 years
- Other machinery and equipment 3–25 years

€ thousand

Depreciation and amortization	2019	2018
Depreciation of land	-2,427	0
Depreciation of buildings and structures	-13,553	-8,717
Depreciation of machinery and equipment	-21,867	-21,543
Depreciations of other tangible assets	-980	-3,156
Depreciation of tangible assets	-38,828	-33,417
Amortization of intangible assets	-6,213	-6,001
Impairment*	-1,061	-10,485
Total	**-46,101**	**-49,903**

* Impairment in the 2018 financial year consisted mainly of the write-off of the LNG liquefaction plant located in Porvoo, Finland.

2.6. Other operating expense

€ thousand

Other operating expenses	2019	2018
Rents	-1,048	-5,713
Maintenance costs	-9,208	-5,701
External services	-16,702	-13,175
Loss from derivative financial instruments	-22,521	-2,944
Other	-4,159	0
Total	**-53,638**	**-27,534**

The item 'Other' contains other normal operating expenses.

2.7. Audit fees

€ thousand

Audit fees	2019	2018
Statutory fees	-337	-264
Audit opinions	-76	-20
Tax services	-272	-104
Other services and fees	-237	-18
Total	**-922**	**-406**

2.8. Finance income and expenses

€ thousand

Finance income	2019	2018
Foreign exchange gains	11,547	3,157
Realized and unrealized results from interest rate derivatives	1,266	210
Other finance income	444	711
Total	**13,257**	**4,078**

€ thousand

Finance costs	2019	2018
Interest expenses on finance loans	-2,188	-2,619
Foreign exchange losses	-9,153	-6,810
Finance lease interests	-11,585	-10,507
Realized and unrealized results from interest rate derivatives	-4,342	-2,630
Other finance costs	-1,759	-5,169
Total	**-29,027**	**-27,735**
Net finance income and costs	**-15,770**	**-23,657**

2.9. Income tax expenses

Accounting policies

Current and deferred income tax

The tax expense for the period comprises current and deferred tax. Tax is recognized in the income statement, except to the extent that it relates to items recognized in other comprehensive income or directly in equity. In this case, the tax is also recognized in other comprehensive income or directly in equity, respectively. The current income tax charge is calculated on the basis of the tax laws enacted at the balance sheet date.

Deferred income tax is recognized on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts. Temporary differences arise from issues including depreciation differences, provisions, defined benefit pension plans and confirmed losses.

€ thousand

Income tax expenses	2019	2018
Current tax	-5,706	-7,426
Taxes for previous periods	33	-111
Change in deferred taxes	-4,196	10,813
Total	**-9,869**	**3,276**

Income taxes recognized in the consolidated income statements differ from the income taxes calculated using the Finnish corporation tax rate as follows:

€ thousand

Income tax expenses	2019	2018
Profit before income tax	35,123	-635
Mathematical tax based on Finland's corporate tax rate	-7,025	127
Effect of different tax rates applied to foreign subsidiaries	-601	-225
Tax exempt income	505	20
Non-deductible expenses	-423	-236
Unrecognized deferred taxes	235	4,882
Unrecognized deferred tax receivables on losses	-1,275	-1,680
Taxes for previous periods	33	-111
Effect of tax rate change (Norway)	0	1,038
Permanent differences	667	202
Differences in tax rate due to functional currency	251	-156
Other items	-2,238	-584
Total	**-9,869**	**3,276**

The impacts of other taxes relating to components of other comprehensive income are as follows:

€ thousand

	2019			2018		
Tax effects relating to component of other comprehensive income	Before tax amount	Tax expense/ benefit	After tax amount	Before tax amount	Tax expense/ benefit	After tax amount
Remeasurements of post-employment benefits	938	-188	750	352	-70	282
Cash flow hedges	11,014	-2,207	8,807	-2,684	537	-2,147
Other comprehensive income	**11,952**	**-2,395**	**9,557**	**-2,332**	**466**	**-1,865**

3 Capital employed

3.1. Intangible assets

Accounting policies

Intangible rights consist primarily of patents and licenses as well as value allocated to customer accounts from business combinations. Other long-term expenditures include compensatory allowances to landowners for the expropriation of long-term usufructs for the accommodation of natural gas pipelines as well as for other restrictions of land usage arising from natural gas pipelines.

Intangible assets are recognized at cost if the cost of the item can be measured reliably and it is likely that future economic benefits associated with the item will flow to the Group. Assets are amortized over their estimated useful lives. The assets' residual values, useful lives and amortization method are reviewed at a minimum at the end of each reporting period and adjusted, if appropriate, to reflect changes in the expected economic benefits. Compensatory allowances to landowners are accounted for as intangible assets with an indefinite useful life. They are not subject to amortization and are tested annually for impairment.

The estimated useful lives are:
- Software 3–5 years
- Customer relationships 10–25 years

Impairment

Intangible assets with finite useful lives are tested for impairment only when indications exist that their carrying value may be impaired. Recoverable amount is additionally assessed annually for the following asset classes regardless of whether indications of impairment exist: goodwill, intangible assets with indefinite useful lives, and intangible assets in progress. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. An impairment loss is recognized for the amount by which the asset's carrying value exceeds its recoverable amount. Impairment loss recognized for other assets is reversed in case there is a material change in the estimates used for assessing the recoverable amount.

RECONCILIATION OF INTANGIBLE ASSETS

€ thousand

2019	Goodwill	Intangible rights	Other long-term expenditure	Total
Cost at January 1	117,405	113,765	35,740	266,910
Additions	0	91	127	218
Disposals	0	0	-6,937	-6,937
Reclassifications	0	-37	2,921	2,884
Adjustments	0	-14	10	-4
Historical cost of discontinued operations	0	-90	-25,815	-25,905
Changes in exchange rates	307	-34	0	273
Cost at December 31	**117,712**	**113,680**	**6,047**	**237,439**
Accumulated amortization at January 1	0	20,937	19,702	40,639
Depreciation of continuing operations	0	5,275	938	6,213
Depreciation of discontinued operations	0	0	479	479
Accumulated depreciation of discontinued operations	0	-37	-12,031	-12,068
Amortization for the period	0	3	601	605
Disposals	0	0	-6,937	-6,937
Reclassifications	0	-7	0	-7
Changes in exchange rates	0	3	0	3
Accumulated amortization at December 31	**0**	**26,175**	**2,752**	**28,928**
Net book value at January 1, 2019	117,405	92,828	16,038	226,271
Net book value at December 31, 2019	117,712	87,505	3,295	208,510

€ thousand

2018	Goodwill	Intangible rights	Other long-term expenditure	Total
Cost at January 1	115,119	103,789	32,901	251,809
Additions	0	6	1,881	1,887
Disposals	0	-10	-1,669	-1,679
Businesses acquired	2,479	10,019	1,116	13,614
Reclassifications	0	51	1,511	1,562
Changes in exchange rates	-193	-90	0	-283
Cost at December 31	**117,405**	**113,765**	**35,740**	**266,910**
Accumulated amortization at January 1	0	16,148	18,871	35,019
Amortization of continuing operations	0	4,738	1,262	6,001
Amortization of discontinued operations	0	30	986	1,016
Amortization for the period	0	0	281	281
Disposals	0	-10	-1,669	-1,678
Reclassifications	0	30	-30	0
Accumulated amortization at December 31	**0**	**20,937**	**19,702**	**40,639**
Net book value at January 1, 2018	115,119	87,641	14,029	216,790
Net book value at December 31, 2018	117,405	92,828	16,038	226,271

GOODWILL

Accounting policies

The acquisition method of accounting is used to account for business combinations. Goodwill is recognized at the excess of cost over the Group's share of the acquisition-date fair value of the net identifiable assets of the acquired subsidiary. Goodwill is measured at original cost less impairment. Goodwill is tested annually and whenever there are indications of impairment. Towards this end, goodwill is allocated to cash-generating units (CGU). Any negative goodwill is recognized immediately. Any impairment of goodwill recognized is not reversed.

ALLOCATION OF GOODWILL

In the Gasum Group, goodwill relating to acquisitions of business units is allocated to cash-generating units (CGU) which are expected to benefit from the business combination generating the goodwill. Gasum's CGUs are the LNG business, which is part of the Natural Gas and LNG business unit, and the Energy Market Services business, which is part of the Portfolio Management and Trading business unit. Goodwill is subjected to testing at these levels in internal management reporting.

€ thousand

Goodwill	2019	2018
CGU: LNG business	115,233	114,926
CGU: Energy Market Services business	2,479	2,479
Total	**117,712**	**117,405**

RECONCILIATION OF GOODWILL

€ thousand

Reconciliation on Goodwill	2019	2018
Net book value at January 1	117,405	115,119
Additions	-	2,479
Translation differences	307	-193
Net book value at December 31	**117,712**	**117,405**

IMPAIRMENT TESTING

Goodwill is subjected to impairment testing whenever there are indications of impairment and always at least once a year. If any such indications exist, the recoverable amount of the respective asset is assessed. An impairment loss is recognized immediately in profit or loss for the amount by which the asset's carrying value exceeds its recoverable amount. The useful life of the asset is reviewed in connection with recognition of impairment losses. Prior impairments of assets other than goodwill are reversed in case there has been a change in the estimates used for assessing the recoverable amount.

Recoverable amounts are based on management estimates of future cash flows at the cash generating unit (CGU) level and forecast cash flows prepared concerning them. In impairment testing, the recoverable amount is based on value-in-use calculations (expected future net cash flows derived from the asset or CGU in question discounted to net present value). The forecast period is five years and the terminal value has been determined on the basis of the final year. Cash flows beyond the forecast period are extrapolated using a long-term estimated growth rates in the range of 1–2%, which are judged suitable to the Group's growing energy-sector business in the Nordic countries. The forecast business volumes are based on the current structure including investments that have already been started.

Future cash flows have been discounted by using Weighted Average Cost of Capital (WACC), a reflection of the market view of the time value of money and the risks associated with the sector. The pre-tax discount rate is applied. The parameters used to determine the discount rate (risk-free interest rate, risk factor, risk premium and capital structure) are based on observed factors of energy-sector businesses engaging in equivalent or rival business operations and on the market conditions prevailing at the end of 2019. The pre-tax discount rate used in the calculations for the LNG business is 6.66% (2018: 7.01%) and for the Energy Market Services business 7.12%.

Any impairment is recognized as an expense in the income statement. Goodwill impairment losses are not reversed. There were no impairments of goodwill during the 2019 and 2018 reporting periods.

SENSITIVITY ANALYSES

Sensitivity analyses for key assumptions – discount rate, EBITDA development and residual value growth factor – were performed in connection with impairment testing. The key variables in the calculations are a change of two percentage points in the discount rate, poorer than estimated development of EBITDA, and decline of two percentage points in growth in the period beyond the forecast period. On the basis of the sensitivity analyses, the probability of impairment losses on goodwill is very low. Examined individually, foreseeable changes in no key variable would lead into a situation where the recoverable amount would be below the carrying value and result in the recognition of an impairment loss.

3.2. Tangible assets

Accounting policies

Tangible assets

Tangible assets mainly consist of LNG distribution terminals and liquefaction plant, biogas production plants, pipelines relating to gas distribution and other machinery and equipment. Property, plant and equipment (PPE) items are recognized at historical cost less depreciation and impairment charges.

The cost includes expenditure that is directly attributable to the acquisition, construction and production of the item of PPE and capitalized borrowing costs arising from these. In addition, the cost includes any estimated costs arising from obligations to dismantle, remove and restore the items of PPE. The cost for self-constructed assets include material costs, directly attributable employee benefit costs and other directly attributed costs arising from development to completion for the intended use. In case an item of PPE consists of multiple assets with different useful lives, each asset is accounted and measured as separate item of PPE. Any replacement costs are capitalized and remaining value in the balance sheet at the date of replacement is derecognized.

Costs incurred subsequently to add to, replace part of or service an item of PPE are included in the item's carrying amount only when it is probable that future economic benefits associated with the item will flow to the Group and the cost of the item can be measured reliably. Costs of servicing, i.e. repair and maintenance costs, are recognized in profit or loss as incurred. Grants received are recognized as reductions of the cost where there is a reasonable assurance that the grant will be received and the Group will comply with all attached conditions.

Items are depreciated straight-line over their estimated useful lives. Land and water areas are not depreciated. The estimated useful lives are:

- Pipelines related to gas distribution 40–65 years*
- Terminal-related pipelines 25 years
- Terminal-related buildings and structures 40–52 years
- Terminal-related tanks 40 years
- Other buildings and structures 30–40 years
- Filling stations 15–25 years
- Production plant machinery and equipment 25 years
- Other machinery and equipment 3–25 years

* Not applicable to cushion gas accounted for as an item of PPE which is depreciated only when the expected residual value is lower than the acquisition cost or carrying value at reporting date. Cushion gas means the smallest volume of gas required for flawless gas transmission delivery.

The assets' residual values, useful lives and amortization method are reviewed at a minimum at the end of each reporting period and adjusted, if appropriate, to reflect changes in the expected economic benefits. Recognition of depreciations is commenced when the asset is ready for its intended use.

Impairment

Tangible assets with finite useful lives are tested for impairment only when indications exist that their carrying value may be impaired. Recoverable amount is additionally assessed annually for the following asset classes regardless of whether indications of impairment exist: tangible assets with indefinite useful lives, and intangible assets in progress. The recoverable amount is the higher of an asset's fair value less costs of disposal and value in use. An impairment loss is recognized for the amount by which the asset's carrying value exceeds its recoverable amount. Impairment loss recognized for other assets is reversed in case there is a material change in the estimates used for assessing the recoverable amount.

RECONCILIATION OF TANGIBLE ASSETS

€ thousand

2019	Land and water	Buildings	Machinery and equipment	Other tangible assets	Construction in progress	Total
Cost at January 1	3,837	958,055	490,726	44,667	68,019	1,565,304
Additions	55,508	10,567	6,881	740	67,640	141,336
Disposals	-3,176	-5,434	-2,806	-5	0	-11,421
Reclassifications	0	59,053	-30,998	48	-31,024	-2,921
Adjustments	0	-10,135	19,628	200	-101	9,592
Historical cost of discontinued operations	-3,170	-640,903	-107,464	-9,515	-33,540	-794,592
Changes in exchange rates	268	542	211	61	-91	991
Cost at December 31	**53,267**	**371,746**	**376,177**	**36,196**	**70,903**	**908,289**
Accumulated depreciation at January 1	0	382,180	153,174	9,414	7,500	552,267
Depreciation of continuing operations	2,427	12,733	21,867	978	0	38,005
Depreciation of discontinued operations	64	14,597	2,630	258	0	17,549
Impairment	0	236	0	0	220	456
Accumulated depreciation of discontinued operations	0	-309,040	-89,134	-4,162	0	-402,336
Disposals	0	-2,992	-1,810	0	0	-4,802
Reclassifications	0	12,864	-12,857	0	0	7
Adjustments	0	4,866	5,227	356	0	10,449
Changes in exchange rates	-28	-114	-153	-4	0	-299
Accumulated depreciation at December 31	**2,463**	**115,329**	**78,944**	**6,840**	**7,720**	**211,295**
Net book value at January 1, 2019	3,837	575,875	337,552	35,254	60,519	1,013,036
Net book value at December 31, 2019	50,805	256,417	297,233	29,356	63,183	696,994

Tangible assets include right-of-use assets in accordance with IFRS 16 Leases. The effects of the adoption of IFRS 16 on PPE are presented in greater detail in the following paragraph, Leases where the Group is the lessee.

€ thousand

2018	Land and water	Buildings	Machinery and equipment	Other tangible assets	Construction in progress	Total
Cost at January 1	5,285	950,709	440,251	42,444	20,356	1,459,046
Additions*	233	1,201	70,625	942	43,796	116,797
Disposals	-79	-7,805	-11,104	-513	-1,105	-20,606
Businesses acquired	0	0	0	0	19,454	19,454
Reclassifications	0	16,820	-6,729	1,871	-13,525	-1,562
Adjustments	-1,561	-1,787	0	0	-949	-4,297
Changes in exchange rates	-41	-1,083	-2,317	-77	-10	-3,528
Cost at December 31	**3,837**	**958,055**	**490,726**	**44,667**	**68,019**	**1,565,304**
Accumulated depreciation at January 1	0	360,053	135,322	6,577	7,311	509,263
Depreciation of continuing operations	0	8,717	21,543	3,156	0	33,417
Depreciation of discontin-ued operations	0	14,587	2,817	232	0	17,637
Impairment	0	6,768	4,510	0	189	11,467
Disposals	0	-7,699	-11,016	-513	0	-19,228
Reclassifications	0	-163	163	0	0	0
Changes in exchange rates		-84	-166	-38	0	-288
Accumulated depreciation at December 31	**0**	**382,180**	**153,174**	**9,414**	**7,500**	**552,268**
Net book value at January 1, 2018	5,285	590,656	304,929	35,868	13,045	949,783
Net book value at December 31, 2018	3,837	575,875	337,552	35,254	60,519	1,013,036

* The largest individual addition to PPE is Coral EnergICE, a vessel leased under a finance lease. The cash flow effect of the arrangement is presented in the cash flow statement under Interest paid, leasing interest and other financial items and under Payment of lease liabilities.

Accounting policies

Leases where the Group is the lessee

On January 1, 2019 the Group adopted the IFRS 16 Leases standard applying the simplified approach according to which comparative information has not been restated. In accordance with the standard, the Group recognizes, for almost all contracts classified as leases, on the balance sheet the receivable based on the right-of-use asset and the corresponding lease liability by measuring future lease payments at the present value. Lease liabilities have been discounted using the Group's incremental borrowing rate. Contracts providing the Group with the right to control the use of an identified leased asset for a specific period of time in exchange for consideration are classified as leases; service agreements are not classified as leases. Lease payments receivable are depreciated on a straight-line basis for the remaining lease term, which transfers part of the lease costs recognized as other operating expenses under depreciation and amortization and the part of the payments that reflects interests under finance costs. The Group has both fixed-term and indefinite-term leases. Management judgement is exercised when determining the actual term of a contract, taking into account any contractual penalties, lease incentives and renewal options.

The Group applies the exemptions allowed by the standard concerning short-term leases with a lease term of 12 months of less and leases for which the underlying asset is of low value, such as IT hardware, which is recognized to profit or loss under other operating expenses. The most significant leases were classified by the Group as finance leases already under IAS 17. In conjunction with the adoption of IFRS 16, €56.8 million in lease liabilities were recognized on the basis of leases that had previously been classified as operational leases in accordance with IAS 17 Leases. These liabilities were determined using the present value of the remaining lease payments, calculated using the lessee's incremental borrowing rate at January 1, 2019 as the discount rate. The corresponding right-of-use assets were recognized at the amount of lease liability. Property, plant and equipment increased by €56.8 million due to the adoption of the standard.

The leases recognized on the balance sheet comprise carriers and trailers used for LNG transport, land areas, facilities, vehicle leasing agreements and other leased machinery and equipment. At the time of transition to the IFRS 16 standard, the recognition of land leases on the balance sheet resulted in the biggest effect. The Group's LNG transport carriers are classified as finance leases when the term of the lease covers the majority of the vessel's useful life. Carriers classified as finance leases are typically leased for a period of 20–25 years. Lease terms of other right-of-use assets are typically as follows: office equipment 3–5 years, facilities 3–5 years, vehicles 3–15 years, land areas 10–20 years. Leases where a substantial portion of the risks and rewards of ownership is retained by the lessor are accounted for as other leases and charged to profit or loss on a straight-line basis over the period of the lease.

IMPACTS OF THE ADOPTION OF IFRS 16 ON LEASE LIABILITIES

€ thousand	2019
Finance leasing debt at December 31, 2018	145,646
Operating lease obligations at December 31, 2018	47,689
Finance leasing debt addition	9,222
Relief options	-112
Short-term lease contracts	-81
Low-value assets	-12
Service contracts	-19
Leasing liability at January 1, 2019	**202,445**
Leasing liability long-term	192,971
Leasing liability short-term	9,474

LEASE LIABILITIES

€ thousand	2019	2018
Leasing liability long-term	186,005	141,219
Leasing liability short-term	8,216	4,427
Total	**194,222**	**145,646**

IMPACTS OF THE ADOPTION OF IFRS 16 ON RIGHT-OF-USE ASSETS

€ thousand	Land and water	Buildings	Machinery and equipment	Other tangible assets	Total
Right-of-use asset at January 1, 2019	48,863	5,184	2,035	717	56,799
Additions	6,214	814	911	13	7,952
Disposals	-3,176	-2,322	-919	-5	-6,422
Depreciations	-2,491	-1,090	-708	-36	-4,326
Changes in exchange rates	321	-4	65	0	383
Discontinued operations	-938	0	-62	-674	-1,674
Net book value at December 31, 2019	**48,793**	**2,582**	**1,321**	**15**	**52,712**

3.3. Share of investments consolidated using the equity method

Accounting policies

Joint ventures and associated companies

Associated companies and joint ventures have been consolidated using the equity method. Under the equity method, interests in joint ventures are initially recognized at cost and adjusted thereafter to recognize the Group's share of the post-acquisition profits or losses and movements in other comprehensive income. Accounting policies of joint ventures and associated companies have been changed where necessary to ensure consistency with the policies adopted by the Group. When the Group's share of losses in a joint venture or associated company equals or exceeds its interest in the joint venture or associate, the Group does not recognize further losses, unless it has incurred legal or constructive obligations or made payments on behalf of the entity.

Joint ventures and associated companies 31.12.2019	Country of corporation	% of ownership interest	Measurement method	
Manga LNG Oy	Finland	25.0	Equity method	Joint venture
Hirtshals LNG A/S	Denmark	50.0	Equity method	Joint venture
Vadsbo Biogas AB	Sweden	50.0	Equity method	Joint venture

€ thousand

Interests in joint ventures	2019	2018
Net book value at January 1	10,530	10,510
Share of the period's profit	1,203	143
Increases	0	0
Decreases	-83	-136
Change in exchange rates	2	14
Net book value at December 31	**11,652**	**10,530**

SUMMARIZED FINANCIAL INFORMATION FOR JOINT VENTURES

€ thousand	Non-current		Current		Revenue	Profit/Loss	Ownership interest
Summarized financial information for joint ventures	Assets	Liabilities	Assets	Liabilities			
2019							
Manga LNG Oy*	87,633	57,276	27,039	24,472	47,036	0	25%
Hirtshals LNG A/S	2,143	0	3	7	0	111	50%
Vadsbo Biogas AB	3,106	1,672	1,028	787	1,496	585	50%
Total	**92,882**	**58,948**	**28,070**	**25,267**	**48,532**	**696**	

€ thousand	Non-current		Current		Revenue	Profit/Loss	Ownership interest
Summarized financial information for joint ventures	Assets	Liabilities	Assets	Liabilities			
2018							
Manga LNG Oy*	87,953	72,700	27,460	13,645	17,163	172	25%
Hirtshals LNG A/S	2,279	0	66	4	0	132	50%
Green LNG A/S**	-	-	-	-	-	-	33%
Vadsbo Biogas AB	3,164	1,703	1,047	802	1,182	2	50%
Total	**93,396**	**74,403**	**28,573**	**14,451**	**18,345**	**306**	

* Manga LNG Oy forms a Group together with its subsidiary. The figures presented are Group figures.

** As of the date of the consolidated financial statements of Gasum Ltd at December 31, 2018, the financial information of GreenLNG A/S was not yet available. This had no material effect on the consolidated financial statements of Gasum Ltd at December 31, 2018.

3.4. Trade and other receivables

Accounting policies

Trade and other receivables

Trade receivables are amounts due from customers for goods sold or services performed in the ordinary course of business. Trade receivables are recognized at invoiced amounts and impairment is recognized if there is objective evidence that an impairment loss has incurred.

The fair values of trade and other receivables equal their carrying amount. The maximum exposure to credit risk is the carrying value of each receivable. Credit losses incurred from trade receivables have been immaterial at Gasum, whereby no expected credit losses have been recognised for trade receivables.

€ thousand

Trade and other receivables	2019	2018
Trade receivables	135,978	173,784
Accrued income	10,011	7,214
Received investment subsidies	0	30,748
Other receivables	7,144	11,405
Total	**153,133**	**223,152**

Other receivables include a receivable of €6.8 million relating to energy consumption tax payments of an LNG production plant located in Norway. The company's industrial classification is determined by Statistics Norway, and the amount of tax is determined by the tax administration on the basis of this classification. The classification of the production plant has been changed retroactively since 2014, also resulting in an increase in the tax determined for the production plant. The matter is still under consideration, and the company is of the view that the new classification is not appropriate and results in the payment of taxes that are too high in its reference group. Therefore, a receivable based on the tax difference between the reclassification and the classification that in the company's view is the correct one has been recognized in the financial statements.

The ageing analysis of trade receivables after impairment is as follows:

€ thousand

Ageing analysis of trade receivables	2019	2018
Not due	133,602	159,562
Overdue by		
Less than 3 months	2,340	14,178
Over 3 months	36	44
Total	**135,978**	**173,784**

3.5. Inventories

Accounting policies

Inventories

Inventories are stated at the lower of cost and net realizable value. Net realizable value is the estimated selling price in the ordinary course of business, less applicable variable selling expenses. Cost is determined using the first-in first-out (FIFO) method and comprises all costs incurred in bringing the inventories to their present location and condition.

€ thousand

Inventories	2019	2018
Product inventories	17,542	18,997
Other inventories	6,700	1,580
Prepayments	14,961	3,610
Total	**39,203**	**24,186**

Gasum has concluded a long-term gas supply contract under which, in addition to the contracted volumes of natural gas supply, the minimum annual volume of natural gas supplied is agreed. In case Gasum does not use the minimum annual volume of gas, Gasum will pay a prepayment for the difference, which gives Gasum the right to receive the unused amount of the agreed annual supply volume in later years. Reported under inventories are prepayments of €15 million (2018: €3.6 million) as required under the contract.

3.6. Trade and other current payables

€ thousand

Current liabilities to others	2019	2018
Accounts payable	75,851	69,598
Contract liabilities	0	5,022
Participation fee accruals	217	1,151
Other liabilities	35,289	50,460
Accruals and deferred income	38,037	44,856
Bank overdraft facility	4,484	0
Lease liabilities – current portion	8,216	4,427
Total	**162,094**	**175,514**

The revenue recognition liability for participation fees is related to fees that customers pay when connecting to the network and which are recognized over the average life of the customer contract.

Other liabilities consist mainly of a value-added tax liability (€25 million). Accruals and deferred income include investment support received in advance relating to the Biogas business unit's investing activities in Sweden. Contract liabilities include advance payments related to transfers of goods taking place in the future.

3.7. Assets held for sale

Accounting policies

The Group has classified assets as held for sale if their carrying amount will be recovered principally through a sale transaction rather than through continuing use. Assets held for sale are measured at the lower of their carrying amount and fair value less costs to sell. There are no liabilities related to the assets classified as held for sale.

€ thousand

Assets held for sale	2019	2018
Assets held for sale	3,113	3,348
Total	**3,113**	**3,348**

During the 2018 financial year, the company closed down the LNG liquefaction plant located in Porvoo, Finland. A write-off of €11.1 million was recognized for the plant and in that context the remaining assets relating to the plant and land area were classified as held for sale.

3.8. Cash and cash equivalents

Accounting policies

Cash and cash equivalents

The Group's cash and cash equivalents includes cash on hand and in bank accounts. Bank overdraft limits used are presented under other current payables on the balance sheet.

€ thousand

Cash and cash equivalents	2019	2018
Cash and cash equivalents	1,852	17,850
Total	**1,852**	**17,850**

3.9. Deferred taxes

Accounting policies

Deferred tax

Deferred income tax is recognized on temporary differences arising between the tax bases of assets and liabilities and their carrying amounts. Deferred tax liabilities are not, however, recognized if they arise from the initial recognition of goodwill or undistributed earnings of subsidiaries where the difference will not materialize in the foreseeable future.

The most significant temporary differences in the Group arise from the depreciation of property, plant and equipment, from the fair valuation of derivative financial instruments, from defined benefit pension plans and from unused tax losses.

Deferred taxes are calculated on the basis of the tax laws enacted or substantively enacted at the balance sheet dates. Deferred income tax assets are recognized only to the extent that it is probable that future taxable profit will be available against which the temporary differences can be utilized. A deferred income tax asset is not recognized if it arises from the initial recognition of an asset or liability in a transaction other than a business combination that at the time of the transaction affects neither accounting nor taxable income. The Group assesses the recognition criteria of deferred income tax assets respectively at the end of each reporting period.

Deferred income tax assets and liabilities are offset in the Group if and only when there is a legally enforceable right to offset current tax assets against current tax liabilities and when the deferred income tax asset and liabilities relate to income taxes levied by the same taxation authority on either the same taxable entity or different taxable entities where there is an intention to set off deferred income tax assets and liabilities or realize the tax receivable and pay the tax liability simultaneously on such future period during which a significant amount of deferred income tax liabilities are expected to be paid or a significant amount of deferred income tax assets are expected to be deducted.

€ thousand

Deferred income tax	2019	2018
Deferred tax assets:		
Financial instruments	3,459	2,957
Pensions and employee benefits	886	1,348
Adopted losses	15,075	16,411
Provisions	1,595	1,507
Fixed assets	85	1,289
Finance lease	3,883	3,131
Other temporary differences	204	142
Total	**25,188**	**26,786**
At January 1	26,786	19,154
Business acquisitions and disposals	-242	0
Recognized in income statement	-758	8,811
Recognized in other comprehensive income	-599	-1,174
Translation differences	0	-5
Book value at December 31	**25,188**	**26,786**
Netted from deferred tax liability	25,188	26,786
Total, net	**0**	**0**
Deferred tax liabilities:		
Tangible assets	64,926	70,174
Intangible assets	17,726	19,295
Financial instruments	8,448	791
Other temporary differences	1,762	463
Effect of discontinued operations	-36,989	0
Total	**55,873**	**90,722**
At January 1	90,722	96,076
Business acquisitions and disposals	0	1,873
Effect of discontinued operations	-36,989	0
Recognized in income statement	245	-5,283
Recognized in other comprehensive income	1,809	-1,633
Translation differences	86	-310
Book value at December 31	**55,873**	**90,722**
Netted from deferred tax assets	25,188	26,786
Total, net	**30,685**	**63,936**
Deferred tax assets and liabilities, net	**-30,685**	**-63,936**

Deferred tax assets are recognized for tax loss carryforwards to the extent that the realization of the related tax benefit through future taxable profits is probable.

A large share of the Group's tax liabilities is related to fixed assets. There is a time difference between taxation and accounting in the depreciation of fixed assets, resulting in deferred tax liability.

At December 31, 2019 the Group had a total of €21 million of such temporary differences for which no deferred tax asset had been recognized. These temporary differences have an indefinite expiry period.

3.10. Provisions

Accounting policies

Provisions

Provisions for environmental restoration, asset retirement obligations, restructuring costs and legal claims are recognized when the Group has a present legal or constructive obligation as a result of past events; it is probable that an outflow of resources embodying economic benefit will be required to settle the obligation; and a reliable estimate of the obligation can be made. The amount of provision is the current value of those costs that the settlement of the obligation is expected to require.

€ thousand

Provisions	2019	2018
Provisions at beginning of period	**10,049**	**9,959**
Provisions for the period	286	0
Unwinding of discount	91	141
Translation differences	38	-51
Provisions at end of period	**10,463**	**10,049**
Of which current provisions	286	0
Of which non-current provisions	10,177	10,049

The provisions are primarily to do with contractual terminal and plant dismantling obligations.

3.11. Post-employment benefits

Accounting policies

Post-employment benefits

The Group operates various post-employment benefit schemes, including both defined benefit and defined contribution schemes. Pension arrangements are managed through external pension and life insurance companies.

Defined contribution schemes mean pension plans under which fixed contributions are paid to a separate pension insurance company and the Group does not have any legal or constructive obligations to make further contributions on later dates. The contributions are recognized as employee benefit expenses when they are due. Prepaid contributions are recognized as an asset to the extent that a cash refund or a reduction in the future payments is available. Statutory pension costs are expensed in the year they are incurred. Pension schemes other than defined contribution plans are defined benefit plans.

Defined benefit plans typically define an amount of pension benefit that an employee will receive on retirement, usually dependent on one or more factors such as age, years of service and compensation. The liability recognized on the balance sheet in respect of defined benefit pension plans is the present value of the defined benefit obligation at the end of the reporting period less the fair value of plan assets. The defined benefit obligation is calculated annually by independent actuaries using the projected unit credit method. The present value of the defined benefit obligation is determined by discounting the estimated future cash outflows using interest rates of high-quality corporate bonds that are denominated in the currency in which the benefits will be paid, and that have terms to maturity approximating to the terms of the related pension obligation.

Actuarial gains and losses arising from experience adjustment and changes in actuarial assumptions are charged or credited to equity in other comprehensive income in the period in which they arise. Past service costs are recognized immediately in statement of income.

Finnish statutory earnings-related pension cover is arranged through a pension insurance company and accounted for as a defined contribution plan in the consolidated financial statements. The supplementary pension scheme provided by Gasum is accounted for as a defined benefit plan.

€ thousand

Post-employment benefits	2019	2018
Balance sheet obligations for:		
Post-employment benefits	3,917	6,742
Liability in the balance sheet	**3,917**	**6,742**

€ thousand

Income statement charge included in operating profit for*	2019	2018
Defined pension benefits	192	381
Total	**192**	**381**

* The income statement charge included within operating profit includes current service cost, net interest income and expense, past service costs and gains and losses on settlement and curtailment.

DEFINED BENEFIT PLANS

Gasum operates a supplementary pension scheme which is classified as a defined benefit pension plan and is arranged with Mandatum Life Insurance Company. In the arrangement the targeted level of pension benefit is set in percent terms whereby the benefit payable is not linked to the contribution payments Gasum makes into the scheme. The scheme was closed in 1994.

€ thousand

Defined benefit pension plans	2019	2018
Present value of funded obligations	20,987	25,368
Fair value of plan assets	-17,070	-18,626
Deficit of funded plans	3,917	6,742
Liability in the balance sheet	**3,917**	**6,742**

The movement in the defined benefit obligation over the year is as follows:

€ thousand	Present value of defined benefit obligation	Fair value of plan assets	Net defined benefit obligation
1.1.2019	**25,368**	**18,626**	**6,742**
Current service cost	170		170
Interest expense or income (-)	347	260	87
Discontinued operations	-79	14	-93
	25,806	18,900	6,906
Remeasurements:			
Gain (-) /loss from change in demographic assumptions			
Gain (-) /loss from change in financial assumptions	1,287		1,287
Experience gains (-) /losses	24		24
Return on plan assets, excluding amounts included in interest expense or income		2,313	-2,313
Business disposal	-3,754	-2,683	-1,071
Discontinued operations	-1,494	-1,072	-422
Contributions:			
Employers		494	-494
Plan participants			
Payments from plans:			
Benefit payments	-882	-882	0
At December 31, 2019	**20,987**	**17,070**	**3,917**

The discount rate used to calculate the situation at December 31, 2019 was 0.6%, while for the year before it had been 1.6%. The change of discount rate created a gain of €1.3 million for the defined benefit pension liability.

€ thousand	Present value of defined benefit obligation	Fair value of plan assets	Net defined benefit obligation
1.1.2018	**26,271**	**18,902**	**7,369**
Current service cost	284		284
Interest expense or income (-)	365	268	97
Discontinued operations	76	12	64
	26,996	19,182	7,814
Remeasurements:			
Gain (-) /loss from change in demographic assumptions			0
Gain (-) /loss from change in financial assumptions	-361		-361
Experience gains (-) /losses	-345		-345
Return on plan assets, excluding amounts included in interest expense or income		-321	321
Contributions:			
Employers		687	-687
Plan participants			
Payments from plans:			
Benefit payments	-922	-922	0
At December 31, 2018	**25,368**	**18,626**	**6,742**

The significant actuarial assumptions were as follows:	2019	2018
Discount rate	0.6%	1.6%
Inflation	1.1%	1.7%
Pension growth rate	1.4%	2.0%
Wage coefficient	2.3%	2.9%

Assumptions regarding future mortality are set based on actuarial advice in accordance with mortality models for the insured under the Employees Pensions Act (K2008) as well as experience. These assumptions translate into an average life expectancy in years for a person retiring at the age of 65. Life expectancy is defined as the life span prediction of a person of a particular age and its calculation is based on the Gompertz mortality model:

Life expectancy at age 65	Male	Female
Aged 45 at balance sheet date	22.0	27.0
Aged 65 at balance sheet date	21.4	25.4

The tables below present the sensitivity analyses concerning 0.5% changes in the key assumptions, the discount rate and the wage coefficient. The sensitivity analyses are based on a change in an assumption while holding all other assumptions constant.

	Financial period ending 31.12.2019				
€ thousand	Present value of defined benefit obligation	Fair value of plan assets	Net defined benefit obligation	Current service cost	Net interest
Discount rate 0.60%	20,987	17,070	3,917	52	22
Discount rate +0.50%	19,611	16,079	3,533	48	37
Discount rate -0.50%	22,519	18,166	4,353	57	4
Impact in percentage terms					
Discount rate 0.60%	0.0%	0.0%	0.0%	0.0%	0.0%
Discount rate +0.50%	-6.6%	-5.8%	-9.8%	-8.1%	64.4%
Discount rate -0.50%	7.3%	6.4%	11.1%	9.2%	-81.4%

	Financial period ending 31.12.2019				
€ thousand	Present value of defined benefit obligation	Fair value of plan assets	Net defined benefit obligation	Current service cost	Net interest
Salary growth rate 2.3%	20,987	17,070	3,917	52	22
Salary growth rate +0.50%	21,047	17,070	3,977	54	23
Salary growth rate -0.50%	20,928	17,070	3,858	51	22
Impact in percentage terms					
Salary growth rate 2.3%	0.0%	0.0%	0.0%	0.0%	0.0%
Salary growth rate +0.50%	0.3%	0.0%	1.5%	3.0%	1.6%
Salary growth rate -0.50%	-0.3%	0.0%	-1.5%	-2.9%	-1.6%

The sensitivity analysis tables include discontinued operations.

Through its defined benefit pension plans the Group is exposed to a number of risks, the most significant of which are detailed below:

CHANGES IN BOND YIELDS

A decrease in corporate bond yields will increase the plan liabilities. If the bond yields used as bases for discount rates change, the Group may need to change the discount rates respectively. This will have an impact on the net defined benefit obligation as well as the amount of remeasurements recognized in other comprehensive income.

INFLATION RISK

Some of the Group's defined benefit obligations are linked to inflation, and higher inflation will lead to higher defined benefit obligations. If the development of employer productivity lags behind inflation, the acceleration of inflation may increase the deficit of defined benefit plans.

The expected maturity breakdown of undiscounted pension benefits is as follows:

December 31, 2019	Less than a year	Between 1–5 years	Between 5–10 years	Over 10 years	Total
Pension benefits*	893	3,998	4,657	14,967	24,515
Total	**893**	**3,998**	**4,657**	**14,967**	**24,515**

* The maturity table includes discontinued operations.

4 Capital structure

4.1. Capital management

The Group aims to support profitable growth with an efficient capital structure the management of which is based on assessments of the Group's material risks. Changes in capital structure result from investments in business operations and dividend payments to the owner.

The following table presents Gasum's net debt and gearing, which the company monitors as part of its capital management. The Group's gearing is restricted by a covenant of a borrowing facility concerning the Group's gearing ratio. In other respects, there is no specific target level determined for the Group's capital structure. Instead, the aim is to ensure a high credit rating and, consequently, capacity to support the business growth objectives and generate shareholder value.

€ thousand

Capital management	2019	2018
Interest-bearing liabilities	428,117	580,565
Cash and cash equivalents	-1,852	-17,850
Net debt	**426,265**	**562,715**
Total equity*	517,982	664,481
Total capital	944,247	1,227,196
Gearing ratio (%)	**82%**	**85%**

*Equity from continued operations.

€ thousand

Interest-bearing liabilities	2019	2018
Loans from financial institutions	229,411	434,919
Lease liabilities	194,222	145,646
Bank overdraft facility	4,484	0
Interest-bearing liabilities	**428,117**	**580,565**

NET DEBT RECONCILIATION

The below sets out an analysis of net debt and the movements in net debt for the current period.

€ thousand

Net debt	2019	2018
Cash and cash equivalents	-1,852	-17,850
Current interest-bearing liabilities	12,700	24,234
Non-current interest-bearing liabilities	415,416	556,331
Net debt	**426,265**	**562,715**

€ thousand	Other assets	Liabilities from financing activities				
	Cash and cash equivalents	Leases due within one year	Leases due after one year	Borrowings due within one year	Borrowings due after one year	Total
Net debt as at 31 December 2017	**-2,662**	**2,415**	**80,034**	**52,885**	**453,200**	**585,872**
Cash flows	-15,188	2,012	-6,119	-53,158	-38,735	-111,189
Acquisitions			67,304		25,000	92,304
Foreign exchange adjustments				-88	-681	-769
Other non-cash movements*				20,168	-23,673	-3,504
Net debt as at 31 December 2018	**-17,850**	**4,427**	**141,219**	**19,808**	**415,111**	**562,715**
Cash flows	7,793	-1,152	-7,550	-11,978	4,761	-8,126
Foreign exchange adjustments			-292	2,171	271	2,151
Net debt transferred in the demerger	12,686	-101	-1,583	-40,000	-161,009	-190,007
Other non-cash movements	-4,482	5,042	54,210	34,484	-29,723	59,531
Net debt as at 31 December 2019	**-1,852**	**8,216**	**186,005**	**4,484**	**229,411**	**426,265**

* Mainly includes transfers between non-current and current borrowings in 2018 and 2019 as well as increases and decreases in lease liabilities not involving cash flows.

4.2. Finance risk management

The purpose of the Gasum Group Commodity Risk and Treasury Policy is to identify and analyze the Group's risks and establish the appropriate risk level and controls. Both risk policies are regularly assessed to ensure that they support the Group's various business functions in the pursuit of their objectives and respond to any changes in market conditions or Group functions.

The Group and its operations are exposed to operational as well as financial and economic risks. Operational risks relating to Gasum's business include risks relating to the market price development of oil and gas products. In addition, business functions acquired involve risks relating to their business development. Financial risks include interest rate risk, price risk, foreign currency risk, credit risk and liquidity risk. The Group's commodity risks (including price risk) are managed by the Portfolio Management & Trading business unit. The Group's interest rate, foreign currency, credit and liquidity risks are managed by the Group Treasury. The Group Risk Management unit is responsible for the monitoring of the Group's risk entity.

COMMODITY DERIVATIVES AND RISKS

Commodity derivatives are used to hedge the Group's outstanding commodity position relating to business activities as well as price risk relating to power sourcing. For gas, the outstanding commodity position for the following 12 months at the reporting date was €99.4 million (2018: €246.2 million) and for electricity €1.5 million (2018: €6.5 million). The nominal values of the commodity derivatives totaled €306.8 million at the year-end (2018: €90.7 million). The fair values of commodity derivatives are based on quotes at the reporting date.

The Group's commodity risks are managed with a commodity risk management policy that sets the limits for commodity risks. The policy steers the closing of outstanding sell and buy positions and the risk mandate of Trading. In Portfolio Management, outstanding positions might arise from imbalance in sales and procurement volumes, price index or grounds for pricing. Portfolio Management manages outstanding positions using a hedging strategy where the target hedging rate is 75–125%. A further target is to cost-effectively hedge the Group's outstanding commodity risk position and, consequently, ensure competitive pricing.

As a general rule, the pricing of the Group's gas supply contracts reflects developments in the international market prices of gas. In the Natural Gas unit, the supply price of gas is linked to indices based on energy and cost development. In the 2019 reporting period, the indices applied to natural gas sales prices were the same as those applied to gas procurement, whereby there was no outstanding commodity risk.

In the LNG business, the sourcing of gas is mainly linked to gas indices, with the same index linkages mostly also used in the sales agreements of the LNG business. The Group has hedged the commodity risk arising from price index difference between purchase and sales contracts with commodity derivatives. Portfolio Management & Trading uses forwards, futures and options in the OTC and stock markets in commodity hedging.

The gas businesses consume significant amounts of electricity in their processes, resulting in price risk when there are changes in the price of electricity. Electricity price risk hedging has therefore taken place in the Group with derivatives.

The Group has applied hedge accounting to commodity derivatives since the previous financial year to hedging against the commodity risk arising from purchase and sales agreements of the LNG business and to hedging in the Group's electricity procurement. Hedge effectiveness is examined at the inception of the hedge relationship and continuously during the hedge relationship. Ineffectiveness is as a general rule not expected to arise because the instruments match the purchase and sales agreements both in terms of their market risk component as well as their maturities. The nominal value of commodity derivatives included in hedge accounting was €87.9 million at the date of the financial statements (2018: €80.2 million). The nominal value of commodity derivatives not included in hedge accounting was €218.8 million at the date of the financial statements (2018: €10.5 million).

Significant changes in market conditions and resulting impacts on hedge relationships included in hedge accounting are evaluated continuously as regards forecast future transactions so that the economic relationship between the hedging instrument and the hedged item remains effective and the full implementation of the Group's financing strategy is enabled. Due to changes in market conditions that took place during the 2019 financial year, one hedge-accounted hedge relationship relating to gas sourcing was terminated, with the market value removed from the hedge reserve amounting to -€1.6 million.

SENSITIVITY ANALYSES FOR COMMODITY RISK

Sensitivity analyses for significant commodity risks are presented in the following table. In the calculation of commodity price risk, the position includes outstanding derivatives with external counterparties. The impact in euros of the increase or decrease in the price of each commodity on the Group's income statement and hedge reserve after tax is presented in the table below. The figures are based on the assumption that there has been a 10% increase/decrease in commodity price while all other variables have been held constant. The figures do not present the real impact on the Group's income statement because they do not include the mirror fair value change of the hedged item.

Sensitivity to commodity risk, € million	31.12.2019	31.12.2018
Impact of 10% increase in gas and propane prices on profit	-2.8 mill.	1.0 mill.
Impact of 10% increase in gas and propane prices on hedge reserve	-0.5 mill.	-1.7 mill.
Impact of 10% decrease in gas and propane prices on profit	2.8 mill.	-1.0 mill.
Impact of 10% decrease in gas and propane prices on hedge reserve	0.5 mill.	1.7 mill.
Impact of 10% increase in oil prices on profit	0 mill.	
Impact of 10% decrease in oil prices on profit	0 mill.	
Impact of 10% increase in power prices on profit	0.3 mill.	0 mill.
Impact of 10% increase in power prices on hedge reserve	0.6 mill.	0 mill.
Impact of 10% decrease in power prices on profit	-0.3 mill.	0 mill.
Impact of 10% decrease in power prices on hedge reserve	-0.6 mill.	0 mill.

INTEREST RATE DERIVATIVES AND RISKS

The Group's business is capital intensive. The current long- and short-term portfolio consists of bank financing. All loans are euro denominated. Primary methods employed to finance seasonal fluctuations in working capital are internal financing, working capital management, commercial papers and overdraft facilities. Of the Group's interest-bearing debt to financial institutions, 100% is based on variable interest rates, resulting in interest-rate price risk for the Group (2018: 100%). Gasum strives to reduce the fluctuation of interest expenses in the statement of income by using derivative financial instruments to hedge some of its interest payments within the limits set by the Treasury Policy. Interest rate caps and floors and interest rate swaps have been used as hedging instruments for the variable interest rates paid by the Group on borrowings. The Group did not apply hedge accounting to interest rate derivatives in 2019 and therefore the euro area reference rate reform is not expected to affect the interest rate derivatives portfolio. Strategies for interest-rate risk management are continuously developed in order to find an optimal ratio between risks and hedging expenses. The funding has been raised only for the parent entity.

Interest rate derivatives are used to hedge against the interest rate risk of the Group's borrowings based on variable interest rates. As at December 31, 2019 the nominal values of the outstanding interest rate derivatives were €199.2 million (2018: €408.7 million). Gains and losses on interest rate swaps are recognized in the consolidated income statement as financial items. The fair value of interest rate swaps is calculated as the present value of the estimated future cash flows based on market-priced yield curves. The Group's interest rate risk is managed with the Treasury Policy, which sets the minimum and maximum limits in terms of amount and time for interest rate hedges in proportion to loans. According to the Treasury Policy, the average duration of the fixed-income portfolio must always be 6–24 months and the average maturity of the debt portfolio more than 2 years.

At December 31, 2019 the Group's interest-bearing liabilities totaled €428.1 million (2018: €580.6 million). Interest-bearing liabilities include loans from financial institutions and lease liabilities. The average duration of Gasum's debt portfolio at the end of 2019 was 2.5 years (2018: 1.7 years). The average duration of Gasum's interest-rate hedge portfolio was 13.7 months (2018: 17.4 months).

The interest rate risk of the Group's borrowings based on variable interest rates is as follows:

€ thousand

31.12.2019	Loans from financial institutions	Floating rate debt	Derivative contract
Nominal value	229,411	229,411	199,235

€ thousand

31.12.2018	Loans from financial institutions	Floating rate debt	Derivative contract
Nominal value	434,919	434,919	408,717

SENSITIVITY ANALYSES FOR INTEREST RATE RISK

Interest rate sensitivity is analyzed by presuming an increase of 1 percentage point in market rates and examining its impact on Group performance. The impact on performance arises from the interest rate risk and changes in the fair value of interest rate derivatives at present. All loans from financial institutions and interest rate derivatives at period-end are included in the calculation. The impact of taxes is excluded from the sensitivity analysis.

Sensitivity to interest rate risk, € million	31.12.2019	31.12.2018
Impact on profit/loss of increase of 1 percentage point in market interest rates	-2.2 mill.	2.5 mill.
Of which the impact of interest expenses of borrowings	-4.5 mill.	-4.8 mill.
Of which changes in market value of interest rate derivatives	2.3 mill.	7.3 mill.
Impact on profit/loss of decrease of 1 percentage point in market interest rates	-2.1 mill.	-5.9 mill.
Of which the impact of interest expenses of borrowings	0.2 mill.	1.8 mill.
Of which changes in market value of interest rate derivatives	-2.3 mill.	-7.7 mill.

CURRENCY DERIVATIVES AND FOREIGN CURRENCY RISKS

The Group's foreign currency risk is managed with the Treasury Policy. Transaction risks are hedged at the local level in the reporting currency of each company to avoid translation differences in the income statement. The transaction position is divided into balance sheet and cash flow positions. The Treasury Policy sets the boundaries for the foreign currency risks of the cash flow position in terms of time and amount. The cash flow position consists of already agreed or forecast items and cash flows denominated in a foreign currency over the following 24 months. As a general rule, balance sheet foreign currency risk is hedged fully and the outstanding transaction position mandate is €10 million. Translation risk hedging does not take place as a general rule.

The Group's operating cash flows are primarily denominated in euro. In addition, in the Group's Norwegian and Swedish subsidiaries the functional currency of which is euro, expenses are incurred in local currencies that are not netted against corresponding currency-denominated revenues. These expenses expose the Group to foreign currency risk, which is primarily hedged with either forwards or options. Gasum did not apply hedge accounting to cash flow or balance sheet risk currency derivatives in 2019, whereby changes in the market value of derivative financial instruments are recognized directly in the income statement. At December 31, 2019 the nominal values of the outstanding currency derivatives totaled €155.3 million (2018: €150.5 million). The fair value of currency derivatives is calculated on the basis of observable forward prices and volatilities of currencies.

The euro has been determined as the functional currency of some of the Group's subsidiaries operating outside the euro area. The euro-denominated transactions of these companies do not give rise to foreign currency risk for the Group. Subsidiaries for which a local currency (SEK) has been determined as the functional currency give rise to foreign currency risk if the currency of a transaction is other than the functional currency. Foreign currency risks of subsidiaries with a local currency are hedged in accordance with the Treasury Policy.

The Group's foreign currency risk is presented below by currency pair. Foreign currency risk includes financial assets and liabilities in the currency pair in question, cash, internal borrowings, and trade receivables and payables in the balance sheet.

Currency risk against EUR, € thousand	NOK	SEK	GBP	USD	DKK	Total
31.12.2019	15,538	3,204	145	-2,379	-203	16,305
31.12.2018	253,992	90,786	-231	-908	-159	343,480

SENSITIVITY ANALYSES FOR FOREIGN CURRENCY RISK

Sensitivity to foreign currency risk has been calculated in Group profit or loss using a 10% change in rate. The most significant foreign currency risks in Gasum's business and financing relate to NOK and SEK. The impact of taxes is excluded from the sensitivity analysis.

Sensitivity to currency risk, € million	31.12.2019	31.12.2018
Appreciation of NOK by 10%	1.7 mill.	19.2 mill.
Depreciation of NOK by 10%	-1.4 mill.	-15.7 mill.
Appreciation of SEK by 10%	1.5 mill.	2.5 mill.
Depreciation of SEK by 10%	-2.9 mill.	-2.0 mill.
Appreciation of USD by 10%	-0.3 mill.	-0.1 mill.
Depreciation of USD by 10%	0.2 mill.	0.1 mill.

CREDIT RISK

The Gasum Group's credit risk management process and division of responsibilities are determined in the Gasum credit risk policy, according to which the examination and control of credit risks is centralized under the Group Risk Management unit. According to the credit risk policy, the credit rating of all new counterparties is checked prior to commencing business with them and monitored regularly. Credit loss risk has been analyzed in accordance with IFRS 9. Credit losses incurred from trade receivables have been immaterial and no expected credit losses have been recognized for trade receivables.

As a rule, the Group's customers have a high credit rating. With the number of gas-fueled vehicles increasing, the significance of credit risk related to transport customers increases, although in monetary terms the credit risk pertaining to transport customers was immaterial in 2019. The Portfolio Management & Trading and the Group Treasury units aim to spread the counterparty risk in derivatives trading by concluding contracts with counterparties with a sufficiently high credit rating.

LIQUIDITY RISK

Liquidity risk refers to the risk relating to the Group's ability to meet its monetary obligations. Liquidity risk management seeks to ensure access to financing and low financing costs. The Group manages the liquidity risk by maintaining a sufficient liquidity reserve. At the date of the financial statements on December 31, 2019 the company had a sufficient liquidity reserve to cover its liquidity needs, with the committed overdraft limit remaining undrawn amounting to a total of €220 million (2018: €120 million).

The Group's borrowings are subject to a financial covenant of a borrowing facility concerning the gearing ratio, which is reported to providers of finance on a quarterly basis. No breaches of the Group's covenant occurred during the reporting period.

The following table presents the Group's non-derivative financial liabilities and derivative financial liabilities divided into relevant maturity groupings at the balance sheet date. The amounts disclosed in the table are the contractual undiscounted cash flows. The maturity of derivative financial assets is also disclosed.

Maturity of non-derivative and derivative financial liabilities:

€ thousand 31.12.2019	Less than 1 year	1–2 years	2–5 years	More than 5 years	Total
Loans from financial institutions	0	0	229,411	0	229,411
Trade payables	74,466	0	0	0	74,466
Derivative financial instruments (no hedge accounting)	102,352	5,168	705	0	108,225
Derivative financial instruments (included in hedge accounting)	6,535	0	60	0	6,594
Lease liabilities*	7,775	7,619	21,385	157,442	194,222
Used bank overdraft limits	613	0	0	0	613
Interest payments	1,686	1,667	1,667	0	5,020
Total	**193,427**	**14,454**	**253,228**	**157,442**	**618,551**

€ thousand 31.12.2018	Less than 1 year	1–2 years	2–5 years	More than 5 years	Total
Loans from financial institutions	19,808	204,936	178,188	31,987	434,919
Trade payables	69,598	0	0	0	69,598
Derivative financial instruments (no hedge accounting)	2,517	1,706	2,774	0	6,997
Derivative financial instruments (included in hedge accounting)	7,160	1,007	0	0	8,167
Lease liabilities*	4,427	4,097	13,852	123,271	145,646
Interest payments	3,564	2,762	786	100	7,212
Total	**107,074**	**214,508**	**195,601**	**155,357**	**672,539**

* Includes interest effect

Maturity of derivative financial assets:

€ thousand 31.12.2019	Less than 1 year	1–2 years	2–5 years	More than 5 years	Total
Derivative financial instruments (no hedge accounting)	115,402	7,453	103	1	122,958
Derivative financial instruments (included in hedge accounting)	14,209	267	49	1	14,526
Total	**129,611**	**7,720**	**152**	**3**	**137,485**

€ thousand 31.12.2018	Less than 1 year	1–2 years	2–5 years	More than 5 years	Total
Derivative financial instruments (no hedge accounting)	1,276	766	0	0	2,042
Derivative financial instruments (included in hedge accounting)	5,127	357	0	0	5,483
Total	**6,403**	**1,123**	**0**	**0**	**7,526**

4.3. Financial instruments

Accounting policies

Financial assets

The Group classifies its financial assets in the following categories: financial assets measured at fair value through profit or loss (or through other comprehensive income) and financial assets measured at amortized cost. The classification is based on the business model employed for managing the financial assets and the contractual cash flow characteristics of the financial assets.

Financial assets at fair value through profit or loss

Financial assets at fair value through profit or loss comprise financial assets held for trading and investments that the Group has decided not to recognize through other comprehensive income. Financial assets are classified as current unless they mature in more than 12 months after the end of the reporting period.

In addition, derivative financial instruments to which hedge accounting is not applied are classified as financial assets at fair value through profit or loss. The fair value of derivatives is determined on the basis of published price quotations. As regards commodity and foreign currency derivatives, fair value gains and losses are presented under other operating expenses/income, and derivatives hedging financial items under financial items.

Financial assets at amortized cost

Gasum classifies its financial assets as at amortized cost if both of the following criteria are met: the asset is held within a business model whose objective is to collect the contractual cash flows, and the contractual terms give rise to cash flows that are solely payments of principal and interest.

Financial assets classified as at amortized cost include loans and other receivables which are non-derivative financial assets with fixed or determinable payments that are not quoted in an active market. Loans and other receivables are classified as current unless they mature in more than 12 months after the end of the reporting period, which is when they are classified as non-current.

Cash and cash equivalents include cash on hand and in bank accounts. Overdraft facilities are included in other current liabilities presented under current liabilities.

The Group applies the IFRS 9 simplified approach to measuring expected credit losses associated with trade receivables. To measure the expected credit losses, trade receivables have been grouped based on shared credit risk characteristics and the days past due. The expected credit loss rates are based on historical credit losses and reflect current and forward-looking information on circumstances. Credit losses incurred from trade receivables have been immaterial, whereby no expected credit losses have been recognised for trade receivables.

Financial liabilities

The Group's financial liabilities are classified as financial liabilities measured at fair value through profit or loss and financial assets measured at amortized cost. Financial liabilities are classified as current unless the company has an unconditional right to defer settlement of the liability for at least 12 months after the reporting period, which is when they are classified as non-current.

Financial liabilities at fair value through profit or loss

Financial liabilities at fair value through profit or loss include derivative financial instruments to which hedge accounting is not applied. Realized or unrealized gains and losses attributable to movements in the fair value of derivatives are recorded in the statement of profit or loss for the period during which they were acquired or incurred.

Financial liabilities at amortized cost

Borrowings are recognized initially at fair value, net of transaction costs incurred. Borrowings are subsequently carried at amortized cost using the effective interest method. Transaction costs are included in the original book value of financial liabilities.

Derivative financial instruments

Derivatives are initially recognized at fair value on the date a derivative contract is entered into by the Group and are subsequently re-measured at their fair value. The method of recognizing the resulting gain or loss from re-measurement at fair value depends on the designation of the derivative contract.

The Group uses derivatives to hedge against financial and business risks in accordance with the Commodity Risk and Treasury Policy adopted by the Group. Unrealized fair value movements of derivatives are recorded through profit or loss (or through other comprehensive income) at the end date of each reporting period. Gasum has an ISDA or a corresponding master agreement with each derivative counterparty.

Derivative financial instruments to which hedge accounting is not applied are classified as financial items at fair value through profit or loss and gains and losses from their fair value movements are, for commodity derivatives, recorded in other operating income or expenses and, for interest rate derivatives, in finance income or costs for the period during which they were acquired or incurred. Changes in the fair values of foreign currency derivatives taken to hedge exchange rate movements of items denominated in foreign currency are recognized in the income statement as other operating income/expenses. Changes in the fair values of foreign currency derivatives taken to hedge the Group's internal borrowings are recognized through profit and loss in financial income or loss. Changes in the fair values of derivatives for future purchases of electricity are recognized in the income statement as purchases of materials. At the reporting date instruments with a positive fair value have been recognized in the balance sheet as assets and instruments with a negative fair value as liabilities. Items which mature in more than 12 months are recorded in non-current receivables and liabilities and those which mature earlier in current receivables and liabilities.

The Group may apply hedge accounting to risk components that qualify for hedge accounting as determined by IFRS 9. Such items include interest payable on borrowings, open foreign currency positions, commodity sourcing and structured sales agreements. Fair value hedge accounting is applied to derivatives hedging the Group's fixed-price sales agreements. The fair value of these sales agreements is recognized on the balance sheet as assets and changes in the corresponding assets as gains or losses in profit or loss. The fair value of derivatives hedging fixed-price sales agreements is presented on the balance sheet as liabilities or receivables and changes in value are recognized in profit or loss. Those derivative financial instruments to which cash flow hedge accounting is applied are recognized in the fair value reserve under other comprehensive income. Gains and losses from derivatives accumulated in equity are recognized in the income statement as income or expenditure for the financial year during which the hedged item is recorded in the income statement. When applying hedge accounting to a derivative, the Group documents, at the inception of the hedge relationship, the relationship between hedging instruments and hedged items as well as its risk management objective and strategy. This process connects hedging instruments to the related assets or liabilities, forecast transactions or binding contracts. The Group documents its assessment of hedge effectiveness at the inception of a hedge relationship and monitors effectiveness continuously during the hedge relationship.

FINANCIAL INSTRUMENTS BY CATEGORIES

€ thousand At December 31, 2019	Fair value through the statement of income	Fair value through other comprehensive income	Amortized cost	Total
Assets as per balance sheet:				
Other investments at fair value through the statement of income	56			56
Derivative financial instruments (no hedge accounting)	25,381			25,381
Gas	23,566			
Oil	190			
Power	1,341			
Foreign exchange	284			
Derivative financial instruments (included in hedge accounting)		14,526		14,526
Gas		14,343		
Power		183		
Trade and other current receivables			153,133	153,133
Other non-current receivables			1,542	1,542
Cash and cash equivalents			1,852	1,852
Total	**25,437**	**14,526**	**156,527**	**196,491**

€ thousand At December 31, 2018	Fair value through the statement of income	Fair value through other comprehensive income	Amortized cost	Total
Assets as per balance sheet:				
Other investments at fair value through the statement of income	56			56
Derivative financial instruments (no hedge accounting)	2,042			2,042
Gas	888			
Interest rate	11			
Foreign exchange	1,143			
Derivative financial instruments (included in hedge accounting)	125	5,358		5,483
Gas	125	5,358		
Trade and other current receivables			192,404	192,404
Other non-current receivables			31,054	31,054
Cash and cash equivalents			17,850	17,850
Total	**2,223**	**5,358**	**241,308**	**248,890**

€ thousand

At December 31, 2019	Fair value through the statement of income	Fair value through other comprehensive income	Amortized cost	Total
Liabilities as per balance sheet:				
Loans			229,411	229,411
Lease liabilities			194,222	194,222
Derivative financial instruments (no hedge accounting)	9,313			9,313
Gas	2,715			
Oil	357			
Power	1,582			
Interest rate	1,385			
Foreign exchange	3,274			
Derivative financial instruments (included in hedge accounting)	473	6,122		6,594
Gas	471	4,920		
Oil	0	778		
Power	1			
Interest rate		424		
Foreign exchange				
Trade and other current payables			153,878	153,878
Bank overdraft			4,484	4,484
Total	**9,786**	**6,122**	**581,995**	**597,903**

€ thousand

At December 31, 2018	Fair value through the statement of income	Fair value through other comprehensive income	Amortized cost	Total
Liabilities as per balance sheet:				
Loans			434,919	434,919
Lease liabilities			145,646	145,646
Derivative financial instruments (no hedge accounting)	6,997			6,997
Gas	433			
Interest rate	3,030			
Foreign exchange	3,534			
Derivative financial instruments (included in hedge accounting)	125	8,042		8,167
Gas	125	8,042		
Trade and other current payables			171,086	171,086
Other non-current liabilities			2,274	2,274
Total	**7,122**	**8,042**	**753,925**	**769,089**

The table below presents commodity derivatives by type of contract. Commodity derivatives comprise oil, gas and electricity derivatives. Commodity derivatives included in hedge accounting at year-end 2019 hedge the purchase and sales agreements of the LNG business. In addition, the Group has electricity derivatives used to hedge the company's electricity sourcing.

Commodity derivatives 31.12.2019	Volume 2020 MWh	Volume 2020 MT	Volume 2020 Bbl	Fair value 2020 Net, 1,000 €	Volume 2021 MWh	Volume 2021 MT	Volume 2021 Bbl	Fair value 2021 Net, 1,000 €
Sales agreements – Gas								
No hedge accounting	-3,695,251	-6,000		15,599	-2,601,765	-3,000		3,496
Included in hedge accounting:	-2,308,208	-5,615	0	13,431	0	0	0	0
Cash flow hedging	-2,308,208	-5,615		13,431	0	0		0
Sales agreements – Oil								
No hedge accounting			-120,000	-350				
Sales agreements – Power								
No hedge accounting	-328,256			1,191	-94,077			3
Included in hedge accounting:	-26,352	0	0	-364	0	0	0	0
Cash flow hedging	-26,352			-364				
Total	**-6,358,067**	**-11,615**	**-120,000**	**29,508**	**-2,695,842**	**-3,000**	**0**	**3,499**
Purchase agreements – Gas								
No hedge accounting	182,280	111,856		827	0	79,000		929
Included in hedge accounting:	1,907,770	5,101	0	-5,525	114,000	0	0	267
Cash flow hedging	1,836,508	4,360		-5,053	114,000	0		267
Fair value hedging	71,262	741		-473	0	0		0
Purchase agreements – Oil								
No hedge accounting			120,000	183				
Included in hedge accounting:	0	0	820	0	0	0	0	0
Fair value hedging			820	0			0	0
Purchase agreements – Power								
No hedge accounting	293,161			-1,379	199,941			-55
Included in hedge accounting:	93,951	0	0	133	131,424	0	0	-10
Cash flow hedging	93,951			133	131,424			-10
Total	**2,477,162**	**116,957**	**120,820**	**-5,762**	**445,365**	**79,000**	**0**	**1,131**

Commodity derivatives 31.12.2018	Volume 2019 MWh	Volume 2019 MT	Volume 2019 Bbl	Fair value 2019 Net, 1,000 €	Volume 2020 MWh	Volume 2020 MT	Volume 2020 Bbl	Fair value 2020 Net, 1,000 €
Sales agreements – Gas								
No hedge accounting	57,190	0		162	0	0		0
Included in hedge accounting:	1,512,287	0		4,964	343,140	0		196
Cash flow hedging	1,512,287	0		4,964	343,140	0		196
Total	**1,569,477**	**0**		**5,126**	**343,140**	**0**		**196**
Purchase agreements – Gas								
No hedge accounting	431,142	0		292	0	0		0
Included in hedge accounting:	433,685	42,000		-7,088	0	8,000		-846
Cash flow hedging	323,850	42,000		-6,997	0	8,000		-846
Fair value hedging	109,835	0		-91	0	0		0
Total	**864,827**	**42,000**		**-6,797**	**0**	**8,000**		**-846**

FAIR VALUE ESTIMATION

Financial instruments valued at fair value are classified according to the valuation method. The hierarchy levels used have been determined as follows:

a) Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities

b) Level 2: inputs other than quoted prices included within level 1 that are observable for the asset or liability, either directly (that is, as prices) or indirectly (that is, derived from prices)

c) Level 3: inputs for assets or liabilities that are not based on observable market data (that is, unobservable inputs)

€ thousand	At December 31, 2019		At December 31, 2018	
Derivative financial instruments	**Assets**	**Liabilities**	**Assets**	**Liabilities**
Commodity derivatives (hierarchy level 1)	931	1,138	0	0
Commodity derivatives (hierarchy level 2)	38,692	10,209	6,371	8,601
Interest rate derivatives (hierarchy level 2)	0	1,287	11	3,030
Currency derivatives (hierarchy level 2)	284	3,274	1,143	3,534
Total	**39,907**	**15,908**	**7,526**	**15,165**
Less non-current portion:				
Commodity derivatives (hierarchy level 1)	50	60	0	0
Commodity derivatives (hierarchy level 2)	5,495	954	357	1,007
Interest rate derivatives (hierarchy level 2)	0	1,284	0	2,833
Currency derivatives (hierarchy level 2)	11	0	766	1,647
Non-current portion	**5,556**	**2,298**	**1,123**	**5,488**
Current portion	**34,351**	**13,610**	**6,403**	**9,677**

In addition to derivative financial instruments, the Group has approximately €56,000 in investments recognized at fair value on the balance sheet which have been classified as falling under Level 3 in the hierarchy. These have not been analyzed further because the item is not material.

OFFSETTING OF DERIVATIVE FINANCIAL INSTRUMENTS

Gasum's derivative transactions involve a valid master agreement (e.g. ISDA, EFET or FK master agreement for derivatives trading) with each counterparty. The derivatives falling under the scope of a master agreement can be netted in conditional circumstances such as default or bankruptcy. The Group does not have any other offsetting agreements than those related to derivatives. The fair values of derivatives are reported gross on the balance sheet. The following table presents the recognized derivative financial instruments that are offset or subject to netting agreements but not offset. The column 'net amount' shows the impact on the Group's balance sheet if set-off rights were exercised.

€ thousand

Offsetting of derivative financial instruments 31.12.2019	Gross amounts of recognized financial instruments	Related financial instruments not set off in the balance sheet	Net amount
Financial assets			
Derivative financial instruments			
Commodity derivatives	39,623	10,194	29,429
Currency derivatives	284	284	0
Total	**39,907**	**10,478**	**29,429**
Financial liabilities			
Derivative financial instruments			
Interest rate derivatives	1,287	0	1,287
Commodity derivatives	11,347	10,194	1,153
Currency derivatives	3,274	284	2,991
Total	**15,908**	**10,478**	**5,431**

€ thousand

Offsetting of derivative financial instruments 31.12.2018	Gross amounts of recognized financial instruments	Related financial instruments not set off in the balance sheet	Net amount
Financial assets			
Derivative financial instruments			
Interest rate derivatives	11	11	0
Commodity derivatives	6,371	2,719	3,652
Currency derivatives	1,143	1,143	0
Total	**7,526**	**3,874**	**3,652**
Financial liabilities			
Derivative financial instruments			
Interest rate derivatives	3,030	11	3,019
Commodity derivatives	8,601	2,719	5,882
Currency derivatives	3,534	1,143	2,390
Total	**15,165**	**3,874**	**11,291**

4.4. Equity

Accounting policies

Equity
The Group classifies issued equity instruments on the basis of their nature into either equity or financial liabilities. An equity instrument is any contract which contains the right to the entity's assets after deducting all its liabilities. Transaction costs directly attributable to the issue or redemption of shares are shown in equity as a deduction from the proceeds.

Share capital	Number of A shares	Number of K shares	Total number of shares	Share capital (€ thousand)
December 31, 2019	50,200,000	2,800,001	53,000,001	178,279
December 31, 2018	50,200,000	2,800,001	53,000,001	178,279

The company's share capital is divided into Series A and Series K shares. There are 50,200,000 Series A shares and 2,800,001 Series K shares. According to the Articles of Association, there are a minimum of 30,000,000 and a maximum of 120,000,000 Series A shares. In addition to Series A shares, there is a minimum of 1 Series K share.

A Series K share carries ten votes and a Series A share one vote at general meetings of shareholders. A holder of a Series K share has the right to demand that the share be converted to a Series A share by notifying the company's Board of Directors thereof.

DIVIDENDS
Dividend distribution proposed by the Board of Directors is not deducted from the distributable equity prior to the approval of the company's general meeting of shareholders.

The dividend paid on the basis of the financial statements for the 2018 financial year was €0.6208 per share.

4.5. Fair value reserve

Accounting policies

The fair value reserve contains the changes in fair value for instruments used in cash flow hedging that are effective and met the conditions for hedge accounting. Changes in the fair values of items are recognized in comprehensive income and any ineffective portion is recognized immediately in profit or loss. Any cumulative change in the fair value of cash flows in recognized in the income statement when the corresponding estimated future cash flow in recognized in profit or loss. Changes in fair values moved to the income statement pertain in the balance sheet to other operating income and expenses and, as regards the Group's electricity position, materials and purchases.

€ thousand

Fair value reserve	Gas hedges	Power hedges	Total
Cash flow hedges in other comprehensive income	-2,684		-2,684
Cash flow hedges transferred to profit or loss	0		0
Deferred tax assets related to cash flow hedges	537		537
At December 31, 2018	**-2,147**		**-2,147**
Cash flow hedges in other comprehensive income	14,646	-351	14,295
Cash flow hedges transferred to profit or loss	-1,674	35	-1,639
Cash flow hedges reclassified to profit or loss	-1,643		-1,643
Deferred tax assets related to cash flow hedges	-2,266	59	-2,207
At December 31, 2019	**6,916**	**-257**	**6,660**

Amounts for gas and electricity derivatives recognized through profit and loss:

€ thousand	2019
Net result from cash flow hedges included in Other operating income/Other operating expenses	-1,674
Net result from reclassified cash flow hedges included in Other operating income/Other operating expenses	-1,643
Net result from cash flow hedges included in Materials and services	35
At December 31, 2019	**-3,282**

4.6. Loans

Accounting policies

Loans

The fair value of the current loans equals their carrying amount as the impact of discounting is not significant. The non-current loans are based on variable interest rates and recognized in the financial statements at fair value. Transaction costs have been added to the fair value of loans using the effective interest method.

€ thousand

Loans	2019	2018
Non-current:		
Loans from financial institutions	229,411	415,111
Total	**229,411**	**415,111**
Current::		
Loans from financial institutions	0	19,808
Total	**0**	**19,808**
Total	**229,411**	**434,919**

All loans from financial institutions are euro-denominated bank loans that mature during 2022.

4.7. Other non-current liabilities

€ thousand

Other non-current liabilities	2019	2018
Lease liabilities – non-current portion	186,005	141,219
Participation fee revenue recognition liability	0	2,274
Total	**186,005**	**143,493**

Further information on the classification of lease liabilities is presented in Note 4.2 Financial risk management.

The gross minimum lease payments of lease liabilities mature as follows:

€ thousand

Minimum lease payments	2019	2018
No later than 1 year	21,521	11,868
Later than 1 year and no later than 5 years	82,915	47,787
Later than 5 years	259,668	192,478
Total	**364,104**	**252,133**

€ thousand

Net present value of minimum lease payments	2019	2018
No later than 1 year	20,700	11,381
Later than 1 year and no later than 5 years	72,433	39,953
Later than 5 years	172,337	102,885
Total net present value of minimum lease payments	265,469	154,219
Future finance costs	98,635	97,914
Total	**364,104**	**252,133**

5 Other notes

5.1. Business acquisitions and disposals

ACQUISITIONS IN 2019

On November 13, 2019 Gasum Ltd signed an agreement under which it will acquire AGA's Clean Energy business and Nauticor's Marine Bunkering from Linde AG. In the transaction, an LNG production plant, two LNG terminals, two LNG bunkering vessels and a total of 48 gas filling stations in Sweden and Norway will be transferred to Gasum's ownership. The transaction is subject to approval by the competition authorities and is anticipated to be completed during 2020.

The transaction takes Gasum's strategy forward by advancing the development of the Nordic gas market and further expanding the offering of energy solutions for industrial as well as road and maritime transport needs. It also speeds up the implementation of Gasum's growth strategy focusing on cleaner transport solutions in the Nordic countries in particular.

On May 17, 2019 Gasum completed the acquisition of the Mäkikylä biogas plant from Kouvolan Vesi Oy in Finland. Under the agreement concluded between Gasumin and Kouvolan Vesi, the Mäkikylä biogas plant and its business, including agreements, were transferred to Gasum on June 17, 2019. The plant consists of a biogas plant building and process equipment located in conjunction with the Mäkikylä wastewater treatment facility. The transaction enables investments in significant increases in the plant's production capacity. The transaction was not of material significance to the Gasum Group.

DISPOSALS IN 2019

On February 28, 2019 Gasum Ltd completed a transaction where it sold its 100%-owned subsidiary Gasum Tekniikka Oy to the industrial maintenance partner Viafin Service Oyj. The transaction made Gasum Tekniikka part of the Viafin Service Group. The transaction is part of Gasum's strategy of focusing on the development of the gas market and energy infrastructure in the Nordic countries. The gains from the transaction are reported under other operating income.

On April 23, 2019 Gasum sold 33.3% of the shareholding of the Danish Green LNG A/S to Fjord Line Danmark A/S and Eniig Energi Naturgas A/S. Until the disposal, Green LNG A/S was consolidated into the Gasum Group as an associated company and the transaction did not have an impact on the Group's balance sheet or profit for the period.

Gasum sold the Suomen kaasupörssipalvelut gas exchange business to the Lithuanian gas exchange player UAB GET Baltic in August 2019. Under the agreement, the Gasum-owned Gas Exchange Ltd ceases operations on January 1, 2020 and at the same time UAB GET Baltic begins its operations in Finland.

BUSINESS ACQUISITIONS AND TRANSACTIONS WITH NON-CONTROLLING INTERESTS IN 2018

On August 31, 2018 Gasum completed an acquisition resulting in the entire shareholdings of Enegia Consulting Oy, Enegia Portfolio Services Oy and IntStream Oy being transferred to Gasum. The acquisition strengthened Gasum's Nordic strategy by enabling service expansion in the energy wholesale market. Following the acquisition, Enegia Consulting Oy was renamed Gasum Consulting Oy and Enegia Portfolio Services Oy was renamed Gasum Portfolio Services Oy.

The Energy Market Service business formed by the acquired companies is reported in the Gasum Group's figures from September 1, 2018. On the basis of purchase price allocation, fair value allocations have been carried out on intellectual property rights amortized in accordance with the average life of customer contracts over an average of 10–15 years. Goodwill totaling €2.5 million arose from the acquisition. Acquisition-related costs totaled €0.5 million.

The accounting policies for acquisitions are presented in 1.3 Consolidation principles.

On October 10, 2018 Gasum exercised a call option for the shares of Skangas AS (renamed Gasum AS), raising its shareholding in the company to 100%. This acquisition of a non-controlling interest's 30% share was recognized within equity and presented as financing cash flows in the cash flow statement. A liability for the call option had been recognized under the Group's other non-current liabilities. The exercise price of the option was €25.1 million and the revaluation of the recognized liability resulted in an expense impact of €1.2 million on the consolidated balance sheet. Control of the company had already been held before the exercise of the call option, whereby the acquisition was not treated as a business acquisition.

At the end of 2018, Baltic Connector Oy, which was building a gas interconnector between Finland and Estonia, was transferred from the State of Finland to the Gasum Group. Baltic Connector Oy was transferred to the Group as private equity investment and was not treated as a business acquisition. This was an investment for no consideration of assets and liabilities which together constitute a business. The company was consolidated into the Group using the predecessor value method in accordance with the IFRS, according to which balance sheet values at carrying values in accordance with IFRS are consolidated into the Group.

DISPOSALS IN 2018

There were no disposals in 2018.

5.2. Discontinued operations

Accounting policies

Discontinued operations

A discontinued operation is a component of the Group that has been disposed of or is classified as held for sale and that is one of the following: it represents a separate major line of business or geographical area of operations, is part of a single coordinated plan to dispose of such a line of business or area of operations, or is a subsidiary acquired exclusively with a view to resale. The results of discontinued operations are presented separately in the consolidated income statement. The assets of discontinued operations and liabilities related to them are presented separately from other items.

Under Finland's new Natural Gas Market Act, the gas transmission business is unbundled from the Gasum Group into a separate company on January 1, 2020. The ownership unbundling takes place as a partial demerger so that the assets and liabilities related to the transmission business transfer from the demerging separate entity Gasum Ltd to the new acquiring company. The name of the acquiring company is Gasgrid Finland Oy.

With regard to the transmission business, the Gasum Group owns the Finnish natural gas transmission pipelines and the gas interconnector pipeline project constructed between Finland and Estonia (Baltic Connector). The transmission business comprises the parent company Gasum Ltd's transmission business, Baltic Connector Ltd, Suomen Kaasunsiirtopalvelut Oy and Gas Exchange Ltd.

At its meeting of June 12, 2019 the Board of Directors of Gasum Ltd approved of the demerger plan and the demerger was registered on June 27, 2019. The demerging transmission business-related entity of the Group's figures is disclosed as a discontinued operation in the financial statements of December 31, 2019. The figures related to the income statement disclosed in the financial statements, including the corresponding periods of 2018, only include the continuing operations. The balance sheet is reported in accordance with the IFRS 5 standard, and the figures for the reference periods prior to the partial demerger also include the assets and liabilities transferred in the demerger and, consequently, the balance sheet for the reference periods does not reflect the financial position of the continuing operations.

The below presents the results, transferred net assets and share of cash flows of the discontinued operations.

€ thousand

Discontinued operations	2019	2018
Net sales	202,162	209,807
Expenses	-113,600	-108,617
Profit before taxes	**88,562**	**101,190**
Income taxes	-18,651	-20,581
Profit for the period from discontinued operations	**69,911**	**80,609**

€ thousand

Net assets of discontinued operations	31.12.2019
ASSETS	
Non-current assets	
Intangible assets	13,838
Tangible assets	392,258
Other non-current assets	63
Total non-current assets	**406,159**
Current assets	
Inventories	3,266
Trade and other receivables	69,432
Cash and cash equivalents	12,686
Total current assets	**85,384**
Total assets	**491,543**

€ thousand	31.12.2019
LIABILITIES	
Non-current liabilities	
Loans	159,694
Other non-current liabilities	4,534
Derivative financial instruments	1,247
Deferred tax liabilities	36,989
Post-employment benefits	515
Total non-current liabilities	**202,980**
Current liabilities	
Loans	40,000
Trade and other payables	29,626
Total current liabilities	**69,626**
Total liabilities	**272,607**

€ thousand

Net cash flows from discontinued operations	2019	2018
Cash flow from operating activities	61,290	98,473
Cash flow from investing activities	-8,432	-4,642
Cash flow from financing activities	-18,013	-26,472
Net cash flow	**34,845**	**67,359**

5.3. Guarantees and commitments

€ thousand

Guarantees given and contingent liabilities	2019	2018
Pledges	175	193
Contingent liabilities and other commitments*	112,700	304,225
Total	**112,875**	**304,418**

Gasum Ltd is responsible for the sourcing and sea carriage for liquefied natural gas (LNG) under the long-term supply agreement between the co-venturers of the Tornio LNG terminal of Manga LNG Oy. Manga LNG Oy is a joint venture of its co-venturers and responsible for gas sourcing and LNG terminal service provision for the co-venturers. Gasum LNG Oy holds 25% of Manga LNG Oy and is responsible under its agreements for sourcing gas from Manga LNG Oy and its ownership-based share of the investment costs, administrative and operational costs of Manga LNG Oy and its subsidiary Manga Terminal Oy as well as costs of terminal services provided by Manga Terminal Oy. Manga LNG Oy and Gasum Oy have agreed on the minimum annual volumes to be delivered. In case Manga LNG Oy does not use the minimum annual volumes required in the contract, the company will pay a prepayment for the difference, which is recorded in Gasum's balance sheet after the actual payment.

RENTAL COMMITMENTS

Disclosed under rental commitments are leases where a substantial portion of the risks and rewards of ownership is retained by the lessor and which are charged to profit or loss on a straight-line basis over the period of the lease. Rental payments are determined on the basis of passage of time and the leases do not include call options or index linkages with a material impact on amount of rent. Rental commitments include operating leases to which the IFRS 16 Leases standard has not been applied. The impacts of the adoption of the IFRS 16 standard are described in 3.2 Tangible assets.

€ thousand

Rental commitments	2019	2018
Expiry no later than 1 year	222	4,116
Expiry later than 1 year and no later than 5 years	413	11,001
Later than 5 years	0	32,572
Total	**636**	**47,689**

5.4. Group companies

The following table presents the Group companies and the Group's associated companies and joint ventures for the continuing operations at December 31, 2019.

Parent company	Country of incorporation
Gasum Ltd	Finland

Subsidiaries	Country of incorporation	Group´s ownership interest %	% of the voting rights
Gasum Consulting Oy	Finland	100	100
Gasum LNG Oy	Finland	100	100
Gasum Portfolio Services Oy	Finland	100	100
Intstream Oy	Finland	100	100
Riihimäen Biotehdas Oy	Finland	100	100
Gasum AB	Sweden	100	100
Gasum LNG AB	Sweden	100	100
Gasum Stigtomta AB	Sweden	71.3	71.3
Gasum Västerås AB	Sweden	98.7	98.7
Gasum AS	Norway	100	100
Gasum Oü	Estonia	100	100

Joint ventures and associated companies		Country of incorporation	Group´s ownership interest %	% of the voting rights
Hirtshals LNG A/S	Joint venture	Denmark	50.0	50.0
Manga LNG Oy	Joint venture	Finland	25.0	25.0
Vadsbo Biogas AB	Joint venture	Sweden	50.0	50.0

5.5. Transactions with related parties

Related parties of the Group are (a) Gasum Ltd's associated companies and joint ventures; (b) senior management of the company, including members and secretary of the Board of Directors of Gasum Ltd, the CEO and members of the Gasum Management Team and their close family members and the enterprises over which they or their close family members have control; and (c) the owner of Gasum Ltd.

Gasum Ltd is the parent company of the Gasum Group. Transactions between the Group and subsidiaries have been eliminated in consolidation and are not included in the amounts of this note. Transactions with other companies included in related parties are specified in the table below, excluding the owner of Gasum Ltd as Gasum is a government-related entity. Transactions with the related parties are carried out on market terms.

TRANSACTIONS WITH RELATED PARTIES

€ thousand

Transactions with related parties 2019	Sales of goods and services	Purchases of goods and services	Finance income and expenses	Receivables	Liabilities
Joint venture	32,495	4,626	0	3,153	8,328
Total	**32,495**	**4,626**	**0**	**3,153**	**8,328**

€ thousand

Transactions with related parties 2018	Sales of goods and services	Purchases of goods and services	Finance income and expenses	Receivables	Liabilities
Joint venture	22	3,173	0	2,280	885
Total	**22**	**3,173**	**0**	**2,280**	**885**

€ thousand

Management´s employee benefits	2019	2018
Salaries and other short-term employee benefits	2,623	2,722
Other long-term benefits	27	209
Termination benefits	82	251
Post-employment benefits	457	437
Total	**3,189**	**3,618**

5.6. Legal proceedings and claims

In July 2018, the company's Norwegian company Gasum LNG Production AS (merged with its parent company Gasum AS), which carries out LNG production plant activities, initiated legal proceedings at Stavanger District Court against the Norwegian Ministry of Trade, Industry and Fisheries concerning the statistical classification made by Norwegian authorities which has had a negative impact on the company's energy consumption taxation. In the legal proceedings, the company has made a claim for the refund of taxes paid, together with interest, in accordance with the higher classification in 2014–2018, as well as for compensation for legal costs. The District Court ruled in favor of the State of Norway on April 26, 2019. The company has appealed against the judgement to a court of appeal where an oral hearing is scheduled for May 2020. For more information, refer also to Note 1.5 Critical accounting estimates and judgemental items.

In spring 2019, the company appealed to the Market Court on a decision made by the Finnish Energy Authority on February 26, 2019 on the application of the unbundling rules concerning the calculated unbundling of natural gas operations and on a decision relating to the same set of matters made by the Energy Authority on March 15, 2019 on corrective measures to the company's unbundling calculations regarding the financial statements for January 1 to December 31, 2018. In its claim lodged with the Market Court, Gasum seeks the partial annulment of the decision of February 26, 2019 and the full annulment of the decision of March 15, 2019. The company further claims that the Energy Authority be ordered to pay the company's legal costs. In its appeal, the company states that the Energy Authority's decisions are unfounded and in part contrary to the applicable laws. The company submits that the calculated unbundling principles applied by the company have been in compliance with the Natural Gas Market Act and there have been reasonable grounds for the amendment to the unbundling principles applied. The company further submits that, in its decision, the Energy Authority has erroneously found that the unbundling calculations presented by the company and made in accordance with the unbundling principles applied by it concerning natural gas operations would cause cross-subsidization between natural gas operations. The company further submits that the Energy Authority did not have any grounds for obliging the company to amend or correct financial statements information in the manner stated in the decisions nor the competence to prohibit the issue of the financial statements for January 1 to December 31, 2018 before the taking of the corrective measures. The Energy Authority's decisions do not contain specific payment demands in euros against the company. The Market Court is considering both of the pending matters together and is anticipated to rule on both during 2020. For more information, refer also to the Note Unbundling of natural gas operations.

5.7. Events after the reporting period

The ownership unbundling of Gasum's transmission business in Finland took effect at the beginning of 2020 in accordance with the Natural Gas Market Act. The new transmission network company Gasgrid Finland Oy began operations on January 1, 2020. Gasum acted as the Transmission System Operator (TSO) with system responsibility until the end of 2019.

PARENT COMPANY FINANCIAL STATEMENTS

PARENT COMPANY INCOME STATEMENT

EUR

	Note	1.1.-31.12.2019	1.1.-31.12.2018
Revenue	1	**855,579,652.50**	**885,791,086.54**
Other operating income	2	65,067,695.29	7,221,716.64
Materials and services			
Raw materials and consumables			
Purchases during the financial year	3	-645,169,999.59	-675,229,181.52
Change in stocks	3	-931,651.45	2,328,582.29
External services		-8,506,187.34	-4,317,053.21
		-654,607,838.38	-677,217,652.44
Personnel expenses			
Salaries and remunerations	4	-15,991,781.95	-13,931,473.64
Employer's contributions			
Pension costs	4	-3,086,287.94	-2,625,771.06
Other employer's contributions	4	-508,209.01	-633,031.58
		-19,586,278.90	-17,190,276.28
Depreciation, amortization and impairment			
Depreciation according to plan	5	-27,040,737.85	-22,467,487.72
Impairment	5	-825,096.91	-1,590,308.10
		-27,865,834.76	-24,057,795.82
Other operating expenses	6	-122,279,292.98	-55,663,320.89
Operating profit		**96,308,102.77**	**118,883,757.75**
Finance income and costs			
Other interest and finance income			
From Group companies	8	13,056,533.58	8,233,712.08
From others	8	3,998,156.76	3,319,247.98
		17,054,690.34	11,552,960.06
Other interest and finance costs			
To Group companies		-101,738.95	0.00
To others	8	-14,735,995.78	-8,156,021.13
		-14,837,734.73	-8,156,021.13
Profit before appropriations and taxes		**98,525,058.38**	**122,280,696.68**
Appropriations			
Depreciation difference (increase -, decrease +)	9	23,237,338.91	20,020,011.52
Group contribution received	9	0.00	692,250.00
Group contribution given	9	0.00	-1,015,000.00
		23,237,338.91	19,697,261.52
Income taxes	10	-27,113,901.08	-31,354,988.48
Profit/loss for the financial year		**94,648,496.21**	**110,622,969.72**

PARENT COMPANY BALANCE SHEET

EUR

	Note	31.12.2019	31.12.2018
Assets			
Non-current assets			
Intangible assets			
Intangible rights		26,909.02	5,379.89
Other long-term expenditure		26,701,952.27	9,269,314.77
	11	26,728,861.29	9,274,694.66
Property, plant and equipment			
Land and water areas		2,673,000.74	2,587,851.78
Buildings and structures		326,635,124.82	314,033,120.58
Machinery and equipment		48,175,045.80	31,692,398.52
Other tangible assets		7,542,235.55	6,147,778.32
Advances paid and construction in progress		38,713,536.62	31,671,264.00
	12	423,738,943.53	386,132,413.20
Investments			
Shares in Group companies		349,112,708.97	324,290,120.81
Receivables from Group companies		324,892,650.00	97,147,522.17
Other shares and holdings		49,853.40	49,853.40
	13	674,055,212.37	421,487,496.38
Total non-current assets		**1,124,523,017.19**	**816,894,604.24**
Current assets			
Inventories	14	16,700,201.62	11,596,717.06
Receivables			
Non-current receivables			
Other non-current receivables		226,886.52	207,921.48
	15	226,886.52	207,921.48
Current receivables			
Trade receivables		134,703,358.44	132,811,913.62
Current receivables from Group companies		38,660,042.56	90,028,466.09
Current receivables from associated companies		3,152,555.08	2,280,273.13
Other current receivables		383,983.48	0.00
Short-term accruals		11,454,979.24	3,514,834.48
	16	188,354,918.80	228,635,487.32
Cash and cash equivalents	17	620,188.41	8,219,403.85
Total current assets		**205,902,195.35**	**248,659,529.71**
Total assets		**1,330,425,212.54**	**1,065,554,133.95**

PARENT COMPANY BALANCE SHEET

EUR

	Note	31.12.2019	31.12.2018
Shareholder's equity and liabilities			
Shareholder's equity			
Share capital		178,279,205.41	178,279,205.41
Other reserves		26,313,227.74	26,313,227.74
Retained earnings		309,919,371.38	232,198,802.28
Profit for the period		94,648,496.21	110,622,969.72
		404,567,867.59	342,821,772.00
Equity	18	**609,160,300.74**	**547,414,205.15**
Accumulated appropriations			
Accumulated depreciation difference	19	132,405,365.81	155,642,704.72
Liabilities			
Non-current liabilities			
Non-current loans from financial institutions		390,000,000.00	160,000,000.00
Other non-current loans		3,810,546.61	4,472,783.96
	20	393,810,546.61	164,472,783.96
Current liabilities			
Trade payables		68,860,690.40	35,264,857.79
Liabilities to Group companies		69,658,721.39	95,534,167.84
Other liabilities		47,573,133.87	47,948,105.22
Accruals and deferred income		8,199,608.75	18,392,505.19
Other current liabilities to associated companies		756,844.97	884,804.08
	21	195,048,999.38	198,024,440.12
Total liabilities		**588,859,545.99**	**362,497,224.08**
Total shareholder's equity and liabilities		**1,330,425,212.54**	**1,065,554,133.95**

PARENT COMPANY CASH FLOW STATEMENT

EUR

	Note	1.1.–31.12.2019	1.1.–31.12.2018
Cash flows from operating activities			
Profit before appropriations and taxes		98,525,058	122,280,697
Adjustments:			
Depreciation and amortization according to plan	5	27,865,835	24,057,796
Other non-cash income and expenses	8	9,045,944	13,222,020
Finance income and costs	8	-2,216,956	-3,396,939
Other adjustments		673,488	1,846,346
Net cash flow before change in working capital		133,893,369	158,009,919
Change in working capital			
Increase (-)/Decrease (+) in current non-interest-bearing receivables		-8,400,153	-39,956,165
Increase (-)/Decrease (+) in inventories		-4,835,697	64,412,624
Increase (-)/Decrease (+) in current non-interest-bearing liabilities		55,686,615	3,430,081
Cash flow from operating activities before financial items and taxes		176,344,134	185,896,469
Interest paid and other finance costs arising from operations		-4,693,313	-3,048,421
Interest received from operating activities		8,503,017	8,978,990
Direct taxes paid		-43,462,743	-36,640,908
Net cash flow from operating activities		**136,691,095**	**155,186,120**
Cash flows from investing activities			
Capital expenditure on tangible and intangible assets		-40,318,216	-32,392,121
Proceeds from sale of tangible and intangible assets		211,932	334,056
Business acquisitions and disposals		133,746	-35,516,540
Loans given		-302,134,876	-14,070,965
Net cash flow from investing activities		**-342,107,414**	**-81,645,570**
Cash flows from financing activities			
Proceeds from current borrowings		3,161,412	5,077,382
Repayments of current borrowings		-2,269,159	-33,156,585
Proceeds from non-current borrowings		393,000,000	0
Repayments of non-current borrowings		-163,000,000	-3,037,672
Received/given Group contributions		-172,750	-1,313,000
Dividends paid		-32,902,401	-32,902,401
Net cash flow from financing activities		**197,817,103**	**-65,332,276**
Net decrease (-)/increase (+) in cash and cash equivalents		**-7,599,215**	**8,208,274**
Cash and cash equivalents at the beginning of the period		8,219,404	11,130
Cash and cash equivalents at the end of the period		620,188	8,219,404

ACCOUNTING POLICIES FOR PARENT COMPANY FINANCIAL STATEMENTS

The financial statements of Gasum Ltd have been prepared according to Finnish accounting law and principles. The financial statements have been prepared for the 12-month period from January 1 to December 31, 2019.

REVENUE RECOGNITION PRINCIPLE

The revenue of Gasum Ltd consists primarily of gas sales. Sales revenue is recognized upon delivery of gas. Service sales revenue is recognized upon performance of service.

RESEARCH AND DEVELOPMENT EXPENDITURE

Research and development expenditure is expensed in the year it is incurred.

PENSIONS

Gasum Ltd has obtained statutory pension cover from an external pension insurance company. Pension costs are expensed in the year they are incurred.

LEASING

Leasing costs are recognized under other operating expenses. The remaining leasing payments are stated in the notes under guarantees and commitments. The leasing contracts have been concluded under ordinary terms.

DERIVATIVES

The Gasum Board of Directors has adopted a Treasury Policy for the company. The aim of the Treasury Policy is to protect the revenue gas sales margin and reduce fluctuation in the company's results.

Unrealized losses arising from changes in the fair value of derivative contracts used for interest rate risk management are recognized immediately in the income statement, while in accordance with the precautionary principle any gains are recognized at maturity. The fair values of interest rate swaps are calculated by discounting the estimated future cash flows of the contracts with the market interest rate yield curves on the valuation date.

The company uses currency derivatives and commodity derivatives to hedge against transaction risk arising the company's transactions and from subsidiaries. Foreign currency and commodity derivatives are measured at fair value at financial reporting date, taking interest factors into account for currency derivatives. Unrealized losses arising from changes in the fair value of derivatives are recognized immediately in the income statement, while any gains are recognized at maturity.

TAXES

Taxes comprise current income tax. Taxes for previous periods are included in income taxes in the income statement.

NON-CURRENT ASSETS AND DEPRECIATION AND AMORTIZATION

Intangible and tangible assets are stated on the balance sheet at cost less accumulated depreciation and amortization. Accumulated depreciation and amortization is recorded on a straight-line basis over the expected useful life of intangible and tangible assets.

The depreciation periods are as follows:

- Buildings and structures 15–65 years
- Machinery and equipment 3–15 years
- Other tangible assets 20–40 years
- Other long-term expenditure 5–10 years
- Intellectual property 3–5 years.
- No depreciation is made on land..

Shares in subsidiaries as well as other shares and similar rights of ownership under investments in non-current assets are measured at cost.

INVENTORIES

Inventories are stated on the balance sheet in accordance with first-in first-out (FIFO) method at the lower of cost and replacement cost/probable sales price.

FOREIGN CURRENCY ITEMS

Receivables and liabilities denominated in foreign currencies have been converted into the currency of Finland, the euro, at the exchange rate quoted at the reporting date.

NOTES TO THE PARENT COMPANY INCOME STATEMENT

1 Revenue

EUR

Revenue by region	2019	2018
Finland	836,485,676.73	879,911,320.70
Other	19,093,975.77	5,879,765.84
Total	**855,579,652.50**	**885,791,086.54**

2 Other operating income

EUR

Other operating income	2019	2018
Rental income	422,576.46	251,285.00
Rental income from Group companies	14,515.50	92,135.25
Proceeds from sales	210,500.00	811,545.96
Gains from derivatives	61,187,528.63	3,332,438.17
Other income	3,232,574.70	2,734,312.26
Total	**65,067,695.29**	**7,221,716.64**

3 Materials and services

EUR

Materials and services	2019	2018
Materials and supplies		
Purchases during the period	645,169,999.59	675,229,181.52
Change in stocks	931,651.45	-2,328,582.29
Total materials and supplies	646,101,651.04	672,900,599.23
External services	8,506,187.34	4,317,053.21
Total	**654,607,838.38**	**677,217,652.44**

The excise duty included in the purchase price of gas delivered for taxable use, €63.3 million (2018: €67.1 million), has been recorded in purchases.

4 Personnel expenses and number of personnel

EUR

Personnel expenses	2019	2018
Salaries and remunerations	15,991,781.95	13,931,473.64
Pension costs	3,086,287.94	2,682,529.02
Statutory employer contributions	508,209.01	633,031.58
Total	**19,586,278.90**	**17,190,276.28**

Personnel on average	2019	2018
White collar	172	148
Blue collar	21	8
Personnel on average	**193**	**156**

5 Depreciation and amortization

EUR

Depreciations, amortization and impairment	2019	2018
Amortization of intangible assets	6,598.17	68,968.12
Amortization of other long-term expenditure	3,881,731.63	2,820,882.96
Depreciation of buildings and structures	16,056,266.02	14,764,034.11
Depreciation of machinery and equipment	6,702,672.56	4,539,011.99
Depreciations of other tangible assets	393,469.47	274,590.54
Total depreciation and amortization	**27,040,737.85**	**22,467,487.72**
Impairment	825,096.91	1,590,308.10
Total	**27,865,834.76**	**24,057,795.82**

6 Other operating expenses

EUR

Other operating expenses	2019	2018
Rents	11,019,722.26	9,010,948.04
Maintenance costs	13,669,108.94	10,931,345.76
External services	11,114,100.09	10,860,053.62
Marketing costs	2,130,449.32	2,389,131.13
Realized losses on derivatives	47,490,050.99	2,712,564.25
Unrealized losses on derivatives	8,906,331.44	13,745,761.47
Other*	27,949,529.94	6,013,516.62
Total	**122,279,292.98**	**55,663,320.89**

* Item Other includes e.g. costs related to the change in transfer pricing model in 2019.

7 Audit fees

EUR

Audit fees	2019	2018
Statutory audit fees	132,000.00	85,017.60
Audit opinions	50,330.00	5,050.00
Tax services	258,416.46	38,950.00
Other services	237,137.50	88,774.63
Total	**677,883.96**	**217,792.23**

8 Finance income and costs

EUR

Finance income	2019	2018
Interest income on other non-current receivables	291,618.74	679,919.98
Other finance income from others	3,706,538.02	2,533,967.98
Other finance income from Group companies	13,056,533.58	8,339,072.10
Total	**17,054,690.34**	**11,552,960.06**

EUR

Finance costs	2019	2018
Interest expenses on finance loans	1,727,946.53	1,136,874.35
Fair value losses on derivative financial instruments	4,619,667.57	1,170,832.20
Other finance costs*	8,490,120.63	5,848,314.58
Total	**14,837,734.73**	**8,156,021.13**

* Other finance costs include e.g. a merger loss of €2.8 million resulting from mergers of subsidiaries in 2019.

9 Appropriations

EUR

Appropriations	2019	2018
Depreciation difference (increase -, decrease +)	23,237,338.91	20,020,011.52
Group contribution received	0.00	692,250.00
Group contribution given	0.00	-1,015,000.00
Total	**23,237,338.91**	**19,697,261.52**

10 Taxes

EUR

Taxes	2019	2018
Currrent tax	-27,148,816.88	-30,930,950.27
Taxes for previous periods	34,915.80	-424,038.21
Total	**-27,113,901.08**	**-31,354,988.48**

NOTES TO PARENT COMPANY BALANCE SHEET

11 Intangible assets

EUR

2019	Intangible rights	Other long-term expenditure	Total
Cost at January 1	1,228,901.70	30,848,230.87	32,077,132.57
Additions	31,515.63	18,911,799.82	18,943,315.45
Transferred through merger	0.00	82,600.42	82,600.42
Disposals	0.00	-6,936,635.89	-6,936,635.89
Reclassifications	0.00	2,921,437.28	2,921,437.28
Cost at December 31	**1,260,417.33**	**45,827,432.50**	**47,087,849.83**
Accumulated amortization at January 1	1,223,521.81	21,578,916.10	22,802,437.91
Amortization	6,598.17	3,881,731.63	3,888,329.80
Amortization for the period	3,388.33	601,468.39	604,856.72
Accumulated amortization of disposals	0.00	-6,936,635.89	-6,936,635.89
Accumulated amortization at December 31	**1,233,508.31**	**19,125,480.23**	**20,358,988.54**
Net book value at January 1, 2019	5,379.89	9,269,314.77	9,274,694.66
Net book value at December 31, 2019	26,909.02	26,701,952.27	26,728,861.29

EUR

2018	Intangible rights	Other long-term expenditure	Total
Cost at January 1	1,228,901.70	29,187,011.31	30,415,913.01
Additions	0.00	1,872,967.81	1,872,967.81
Disposals	0.00	-1,638,917.45	-1,638,917.45
Reclassifications	0.00	1,427,169.20	1,427,169.20
Cost at December 31	**1,228,901.70**	**30,848,230.87**	**32,077,132.57**
Accumulated amortization at January 1	1,154,553.69	20,119,697.46	21,274,251.15
Amortization	68,968.12	2,820,882.96	2,889,851.08
Amortization for the period	0.00	277,253.13	277,253.13
Accumulated amortization of disposals	0.00	-1,638,917.45	-1,638,917.45
Accumulated amortization at December 31	**1,223,521.81**	**21,578,916.10**	**22,802,437.91**
Net book value at January 1, 2018	74,348.01	9,067,313.85	9,141,661.86
Net book value at December 31, 2018	5,379.89	9,269,314.77	9,274,694.66

12 Tangible assets

EUR

2019	Land and water	Buildings	Machinery and equipment	Other tangible assets	Advances paid and construction in progress	Total
Cost at January 1	2,587,851.78	625,940,245.18	133,670,731.72	10,211,685.18	31,860,175.42	804,270,689.28
Additions	31,405.92	4,598,000.00	3,688,077.84	10,507.25	36,502,597.54	44,830,588.55
Transferred through merger	53,743.04	16,269,668.72	19,032,475.08	2,567,000.27	142,839.85	38,065,726.96
Disposals		-3,016,582.09	-1,831,947.04	0.00	0.00	-4,848,529.13
Reclassifications	0.00	11,089,922.28	7,493,737.85	0.00	-21,505,097.41	-2,921,437.28
Received subsidies	0.00	-486,835.73	0.00	0.00	-320,778.78	-807,614.51
Adjustments	0.00	0.00	0.00	0.00	-7,966,200.00	-7,966,200.00
Cost at December 31	**2,673,000.74**	**654,394,418.36**	**162,053,075.45**	**12,789,192.70**	**38,713,536.62**	**870,623,223.87**
Accumulated depreci-ation at January 1	0.00	311,907,124.60	101,978,333.20	4,063,906.86	0.00	417,949,364.66
Depreciation	0.00	16,056,266.02	6,702,672.56	393,469.47	0.00	23,152,408.05
Impairment	0.00	0.00		0.00	0.00	0.00
Disposals	0.00	-2,917,714.08	-1,831,947.04	0.00	0.00	-4,749,661.12
Transferred through merger	0.00	2,713,617.05	7,028,970.95	789,580.82	0.00	10,532,168.82
Changes in exchange rates	0.00	0.00	0.00	0.00	0.00	0.00
Accumulated amortization at December 31	**0.00**	**327,759,293.59**	**113,878,029.67**	**5,246,957.15**	**0.00**	**446,884,280.41**
Net book value at January 1, 2019	2,587,851.78	314,033,120.58	31,692,398.52	6,147,778.32	31,671,264.00	386,132,413.60
Net book value at December 31, 2019	2,673,000.74	326,635,124.77	48,175,045.78	7,542,235.55	38,713,536.62	423,738,943.46

EUR

2018	Land and water	Buildings	Machinery and equipment	Other tangible assets	Advances paid and construction in progress	Total
Cost at January 1	2,666,891.78	624,732,930.02	131,974,947.56	9,345,895.08	8,021,736.05	776,742,400.49
Additions	0.00	2,693,758.36	3,133,348.24	865,790.10	28,946,060.34	35,638,957.04
Disposals	-79,040.00	-1,663,229.44	-1,341,947.68	0.00	-1,084,999.07	-4,169,216.19
Reclassifications	0.00	1,226,514.74	419,996.40	0.00	-3,073,680.34	-1,427,169.20
Received subsidies	0.00	-1,049,728.50	-515,612.80	0.00	0.00	-1,565,341.30
Adjustments	0.00	0.00	0.00	0.00	-948,941.56	-948,941.56
Cost at December 31	**2,587,851.78**	**625,940,245.18**	**133,670,731.72**	**10,211,685.18**	**31,860,175.42**	**804,270,689.28**
Accumulated depreci-ation at January 1	0.00	297,576,891.66	98,698,404.22	3,789,316.32	0.00	400,064,612.20
Depreciation	0.00	14,764,034.11	4,539,011.99	274,590.54	0.00	19,577,636.64
Impairment	0.00	1,124,143.55		0.00	188,911.42	1,313,054.77
Disposals	0.00	-1,557,944.72	-1,259,083.01	0.00	0.00	-2,817,027.73
Accumulated amortization at December 31	**0.00**	**311,907,124.60**	**101,978,333.20**	**4,063,906.86**	**188,911.42**	**418,138,276.08**
Net book value at January 1, 2018	2,666,891.78	327,156,038.36	33,276,543.34	5,556,578.76	8,021,736.05	376,677,788.29
Net book value at December 31, 2018	2,587,851.78	314,033,120.58	31,692,398.52	6,147,778.32	31,671,264.00	386,132,413.60

13 Investments

EUR

2019	Shares in subsidiaries	Other investments	Receivables from group companies	Financial assets
Cost at January 1	324,290,120.81	49,853.40	97,147,522.17	421,487,496.38
Additions	65,811,501.19	0.00	240,306,046.62	306,117,547.81
Disposals	8,436,021.95	0.00	789,798.91	9,225,820.86
Merger	-32,552,891.08	0.00	-11,771,119.88	-44,324,010.96
Net book value at December 31	**349,112,708.97**	**49,853.40**	**324,892,650.00**	**674,055,212.37**

EUR

2018	Shares in subsidiaries	Other investments	Receivables from group companies	Financial assets
Cost at January 1	263,023,579.28	49,853.40	83,076,557.23	346,149,989.91
Additions	65,516,541.53	0.00	14,070,964.94	79,587,506.47
Disposals	-4,250,000.00	0.00	0.00	-4,250,000.00
Net book value at December 31	**324,290,120.81**	**49,853.40**	**97,147,522.17**	**421,487,496.38**

14 Inventories

EUR

Inventories	2019	2018
Product inventories	6,407,405.21	6,407,405.21
Other inventories	1,579,800.96	1,579,800.96
Prepayments	9,297,983.00	3,609,510.89
Total	**16,700,201.62**	**11,596,717.06**

A prepayment of €9.3 million related to an LNG supply contract is included in inventories.

15 Non-current receivables

EUR

Non-current receivables	2019	2018
Other non-current receivables	226,886.52	207,921.48
Total	**226,886.52**	**207,921.48**

16 Current receivables

EUR

Current receivables	2019	2018
Trade receivables	134,703,358.44	132,811,914.76
Accrued income	11,454,979.24	3,514,834.48
Other receivables	383,983.48	0.00
Total	**146,354,918.80**	**136,326,749.24**

EUR

Accrued income	2019	2018
Investment subsidy receivables	0.00	2,845,928.20
Project related receivables	3,336,758.07	0.00
Tax receivable	4,553,412.86	0.00
Other accrued receivable	3,564,808.31	671,906.28
Total	**11,454,979.24**	**3,517,834.48**

EUR

Current receivables, group	2019	2018
Trade receivables	5,697,099.12	1,136,933.19
Accrued income	4,549,992.09	37,147.21
Group bank account receivables	25,386,864.44	85,552,524.20
Other receivables	3,026,086.91	3,301,861.49
Total	**38,660,042.56**	**90,028,466.09**

EUR

Current receivables from associated companies	2019	2018
Trade receivables	3,152,555.08	2,280,273.13
Total	**3,152,555.08**	**2,280,273.13**

17 Cash and cash equivalents

EUR

Cash and cash equivalents	2019	2018
Cash and cash equivalents	620,188.41	8,219,403.85
Total	**620,188.41**	**8,219,403.85**

18 Equity

EUR

Statement of changes in equity	Share capital	Reserve for invested unrestricted equity	Retained earnings	Total
Equity at January 1	178,279,205.41	26,313,227.74	342,821,772.00	547,414,205.15
Profit distribution			-32,902,400.62	-32,902,400.62
Profit for the period			94,648,496.21	94,648,496.21
Net book value at December 31	**178,279,205.41**	**26,313,227.74**	**404,567,867.59**	**609,160,300.74**

EUR

Statement of distributable equity	2019	2018
Reserve for invested unrestricted equity	26,313,227.74	26,313,227.74
Profit (loss) from previous financial periods	309,919,371.38	232,198,802.28
Profit for the period	94,648,496.21	110,622,969.72
Total	**430,881,095.33**	**369,134,999.74**

19 Accumulated appropriations

EUR

Accumulated appropriations	2019	2018
Accumulated depreciation difference at January 1	155,642,704.72	175,662,716.24
Depreciation difference (increase -, decrease +)	-23,237,338.91	-20,020,011.52
Accumulated depreciation difference at December 31	**132,405,365.81**	**155,642,704.72**

20 Non-current liabilities

EUR

Non-current liabilities	2019	2018
Loans from financial institutions	390,000,000.00	160,000,000.00
Other non-current liabilities	3,810,546.61	4,472,783.96
Total	**393,810,546.61**	**164,472,783.96**

All financial loans expire in less than 5 years.

21 Current liabilities

EUR

Current liabilities to others	2019	2018
Trade payables	68,860,690.40	35,264,857.79
Other liabilities*	47,573,133.87	47,948,105.22
Accruals and deferred income	8,199,608.75	18,392,505.19
Total	**124,633,433.02**	**101,605,468.20**

* Consist primarily of a value-added tax liability of €32.3 million and a financial instrument liability of €6.2 million.

EUR

Current liabilities to Group companies	2019	2018
Trade payables to Group companies	427,919.05	2,923,412.27
Accrued accounts payable to Group companies	20,469,917.74	112,204.35
Group bank account liabilities	29,580,950.52	84,587,039.54
Other accrued liabilities to group companies	4,525,859.79	795,846.66
Other short-term liabilities to Group companies	14,654,074.29	7,115,665.02
Total	**69,658,721.39**	**95,534,167.84**

EUR

Current liabilities to joint ventures	2019	2018
Current liabilities to joint ventures	756,844.97	884,804.08
Total	**756,844.97**	**884,804.08**

EUR

Accrued liabilities	2019	2018
Accrued interest liabilities	1,119,213.89	273,777.78
Accrued income tax liabilities	0.00	11,795,428.95
Salary-related items	5,361,297.81	4,250,920.55
Other accruals and deferred income	1,719,097.05	2,072,377.91
Total	**8,199,608.75**	**18,392,505.19**

22 Guarantees and commitments

EUR

Guarantees given and contingent liabilities	2019	2018
On own behalf:		
Commitments and other liabilities	29,183,505.04	1,961,117.00
Pledges	174,535.40	174,535.40
On behalf of joint ventures:		
Commitments and other liabilities	72,753,334.34	300,145,908.57
Total	**102,111,374.78**	**302,281,560.97**

EUR

Operating lease commitments	2019	2018
No later than 1 year	449,167.90	709,131.11
Later than 1 year and no later than 5 years	329,258.12	495,325.49
Total	**778,426.02**	**1,204,456.60**

EUR

Renting lease commitments	2019	2018
No later than 1 year	802,427.40	531,349.62
Later than 1 year and no later than 5 years	2,173,931.62	1,485,988.61
Total	**2,976,359.02**	**2,017,338.23**

EUR

Derivative financial instruments	2019	2018
Fair value of derivative financial instruments		
Currency derivatives	-3,151,536.28	-1,729,045.38
Commodity derivatives	-25,817,213.37	156,102.15
Interest rate derivatives	-2,632,551.73	-1,919,793.46
Total fair value of derivative financial instruments	**-31,601,301.38**	**-3,492,736.69**
Nominal value of derivative financial instruments		
Currency derivatives	111,032,444.16	150,533,334.00
Commodity derivatives	143,928,236.26	176,829,723.13
Interest rate derivatives	357,234,828.02	195,000,000.00
Total nominal value of derivate financial instruments	**612,195,508.44**	**522,363,057.13**

* The net fair value of the parent company derivative financial instruments was in total 16,801,950.90 euros. The nominal value of the parent company positive fair value derivative financial instruments was in total 817,735,451.58 euros.

UNBUNDLING OF NATURAL GAS OPERATIONS

Provisions concerning the unbundling of natural gas operations in accounting from each other and from non-natural gas operations are laid down in chapter 13 of the Finnish Natural Gas Market Act (587/2017). In addition, as regards the financial period ending on December 31, 2019, provisions on calculated unbundling are laid down in the Decree of the Ministry of Trade and Industry on the unbundling of natural gas operations (222/2005).

Gasum Ltd's network operations in accordance with the unbundling calculations include the transmission network, gas transmission charges and energy taxes. In the unbundling calculations, natural gas sales activities include the share of gas energy charges. According to the Energy Authority's recommendation (2449/421/2015) concerning calculated and legal unbundling of electricity and natural gas operations, the unbundling calculations of other business activities need not be published in conjunction with financial statements.

Under the Natural Gas Market Act, transactions and balance sheet items are recognized in the income statements and balance sheets of the business units in accordance with the matching principle. Furthermore under the Act, shared income and expenditure and balance sheet items must in conjunction with the unbundling be allocated mathematically to the various activities so that the matching principle is realized where possible. Income statement and balance sheet items which cannot be directly allocated to business units are allocated using a method based on the scope of business activities. Cash and cash equivalents are allocated between the business units on the basis of calculations based on ratios of profit for previous financial years.

On February 26, 2019 and March 15, 2019 the Energy Authority issued decisions concerning the unbundled financial statements of Gasum Ltd's natural gas operations, which must be complied with regardless of any appeal. Gasum has lodged an appeal against the above-mentioned decisions of the Energy Authority to the Market Court, where the matter is currently pending. Consequently, the company discloses the unbundling calculations for natural gas operations for 2019 and for the reference period 2018 below treated in the manner required by the Energy Authority in its decisions. Gasum has lodged an appeal against the decisions as the decisions and, consequently, some of the figures provided in this note do not correspond to the company's view of the interpretation of the Natural Gas Market Act and provisions issued under the Act on unbundling calculations. The appeal does not pertain to balance sheet items affecting the calculation of the company's reasonable rate of return from natural gas network operations in accordance with the regulation method.

Net investments of transmission activities in fixed assets were as follows in 2019:

EUR	
Intangible assets	1,646,257.43
Buildings and structures	1,824,872.36
Machinery and equipment	2,712,085.77
Total net investments	**6,183,215.56**

Return on investment for transmission activities:

	2019	2018
Return on investment	14%	16%

Gasum Ltd, transmission activities

EUR

Income statement	1.1.–31.12.2019	1.1.–31.12.2018
Revenue	**201,144,629.45**	**208,275,646.50**
Other operating income	445,250.81	687,043.81
Materials and services		
Raw materials and consumables		
Purchases during the financial year	-70,267,117.45	-70,437,280.85
Change in stocks	167,211.03	2,897,857.70
External services	-1,080,318.18	-371,003.92
	-71,180,224.60	-67,910,427.07
Personnel expenses		
Salaries and remunerations	-4,246,075.02	-4,678,492.72
Employer's contributions	-1,161,720.10	-1,150,554.60
	-5,407,795.12	-5,829,047.32
Depreciation, amortization and impairment		
Depreciation according to plan	-17,846,403.49	-18,331,129.00
Impairment	-371,986.88	-1,262,770.12
	-18,218,390.37	-19,593,899.12
Other operating expenses	-15,576,003.89	-14,894,549.64
Operating profit	**91,207,466.28**	**100,734,767.16**
Finance income and costs		
Other interest and finance income		
From group companies	5,324,994.46	2,457,589.55
From others	180,544.52	472,652.50
	5,505,538.98	2,930,242.05
Other interest and finance costs		
To others	-3,714,686.65	-2,888,009.90
	1,790,852.33	42,232.15
Profit before appropriations and taxes	**92,998,318.61**	**100,776,999.31**
Appropriations		
Depreciation difference (increase -, decrease +)	16,526,819.05	17,254,054.07
Income taxes	-21,818,036.11	-23,859,091.48
Profit/loss for the financial year	**87,707,101.55**	**94,171,961.90**

Gasum Ltd, transmission activities

EUR

Balance sheet	31.12.2019	31.12.2018
Assets		
Non-current assets		
Intangible assets		
Intangible rights	0.00	2,420.95
Other long-term expenditure	6,495,419.60	6,522,899.97
	6,495,419.60	6,525,320.92
Property, plant and equipment		
Property, plant and equipment in natural gas network	310,747,484.78	324,430,640.00
Advances paid and construction in progress	1,416,446.65	3,690,368.89
	312,163,931.43	328,121,008.89
Investments		
Shares in Group companies	26,793,321.52	26,702,500.00
	26,793,321.52	26,702,500.00
Total non-current assets	**345,452,672.55**	**361,348,829.81**
Current receivables		
Inventories	3,265,965.99	5,900,296.78
Receivables		
Non-current receivables		
Other non-current receivables	0.00	64,176.77
	0.00	64,176.77
Current receivables		
Calculative internal receivables	333,300,873,33	292,560,285.35
Trade receivables	34,873,417.34	30,794,522.95
Current receivables from Group companies	24,243.72	22,036.27
Current receivables from associated companies	6,559.60	6,559.60
Other current receivables	0.00	202,515.48
Short-term accruals	354,171.03	0.00
	368,559,265.03	323,585,919.65
Cash and cash equivalents	291,488.55	2,374,665.29
Total current assets	**372,116,719.57**	**331,925,058.49**
Total assets	**717,569,392.12**	**693,273,888.30**

Gasum Ltd, transmission activities

EUR

Balance sheet	31.12.2019	31.12.2018
Equity and liabilities		
Shareholder's equity		
Share capital	156,483,590.33	156,483,590.33
Paid-up unrestricted equity reserve	26,279,527.56	26,279,527.56
Retained earnings	128,354,041.81	67,084,480.53
Profit for the period	87,707,101.55	94,171,961.90
	242,340,670.92	187,535,969.99
Total equity	**398,824,261.25**	**344,019,560.32**
Accumulated appropriations		
Accumulated depreciation difference	137,913,575.72	159,392,066.45
Liabilities		
Non-current liabilities		
Non-current loans from financial institutions	160,000,000.00	160,000,000.00
Other non-current liabilities	967,355.07	0.00
	160,967,355.07	160,000,000.00
Current liabilities		
Trade payables	10,147,434.29	9,048,165.77
Liabilities to Group companies	29,816.63	548,658.31
Other liabilities	8,461,734.56	9,246,992.30
Accruals and deferred income	1,225,214.59	11,018,445.15
	19,864,200.08	29,862,261.53
Total liabilities	**180,831,555.15**	**189,862,261.53**
Total equity and liabilities	**717,569,392.12**	**693,273,888.30**

Gasum Ltd, sales activities

EUR

Income statement	1.1.–31.12.2019	1.1.–31.12.2018
Revenue	**563,729,291.83**	**632,639,834.98**
Other operating income	269,135.45	453,053.71
Materials and services		
Raw materials and consumables		
Purchases during the financial year	-512,054,039.59	-581,082,592.48
Change in inventory	-1,161,406.96	0.00
External services	-965.95	0.00
	-513,216,412.50	-581,082,592.48
Personnel expenses		
Salaries and remunerations	-1,565,248.68	-3,577,538.52
Employer's contributions	-282,367.99	-858,054.00
	-1,847,616.67	-4,435,592.52
Depreciation, amortization and impairment		
Depreciation according to plan	-222,738.23	-700,302.67
Impairment	-102,825.64	-83,175.94
	-325,563.87	-783,478.61
Other operating expenses	-2,565,858.75	-6,873,452.42
Operating profit	**46,042,975.49**	**39,917,772.66**
Finance income and costs		
Other interest and finance income		
From Group companies	2,366,664.20	1,129,926.23
From others	80,242.00	217,302.45
	2,446,906.20	1,347,228.68
Other interest and finance costs	-752,682.14	-804,709.37
	1,694,224.06	542,519.31
Profit before appropriations and taxes	**47,737,199.55**	**40,460,291.97**
Appropriations		
Depreciation difference (increase -, decrease +)	121,937.26	26,237.23
Income taxes	-9,569,214.95	-8,114,926.83
Profit/loss for the financial year	**38,289,921.86**	**32,371,602.37**

Gasum Ltd, sales activities

EUR

Balance sheet	31.12.2019	31.12.2018
Assets		
Non-current assets		
Intangible assets		
Intangible rights	3,229.08	1,721.56
Other long-term expenditure	405,234.46	1,441,229.04
	408,463,54	1,442,950.60
Property, plant and equipment		
Buildings and structures	1,958,000.00	0.00
Machinery and equipment	43,842.24	86,485.38
Advances paid and construction in progress	5,059,058.11	0.00
	7,060,900.35	86,485.38
Investments		
Other shares and holdings	9,853.40	9,853.40
	9,853.40	9,853.40
Total non-current assets	**7,479,217.29**	**1,539,289.38**
Current assets		
Inventories	2,968,994.10	5,189,311.85
Receivables		
Non-current receivables		
Other non-current receivables	14,464.25	45,636.81
	14,464.25	45,636.81
Current receivables		
Calculative internal receivables	121,496,138.21	67,815,576.17
Trade receivables	95,514,171.42	99,700,042.67
Current receivables from Group companies	141,249.15	47,035.67
Other current receivables	0.00	213,976.48
Short-term accruals	-23,647.24	0.00
	217,127,911.53	167,776,630.99
Cash and cash equivalents	186,056.52	2,546,996.68
Total current assets	**220,297,426.40**	**175,558,576.33**
Total assets	**227,776,643.69**	**177,097,865.71**

Gasum Ltd, sales activities

EUR

Balance sheet	31.12.2019	31.12.2018
Equity and liabilities		
Shareholder's equity		
Share capital	21,607,846.61	21,607,846.61
Retained earnings	104,324,458.31	71,952,855.94
Profit for the period	38,289,921.86	32,371,602.37
	142,614,380.17	104,324,458.31
Total equity	**164,222,226.78**	**125,932,304.92**
Accumulated appropriations		
Accumulated depreciation difference	-68,215.12	86,526.00
Liabilities		
Current liabilities		
Trade payables	40,948,266.08	18,580,637.41
Liabilities to Group companies	27,956.22	37,242.58
Other liabilities	21,856,542.16	27,518,301.88
Accruals and deferred income	789,867.57	4,942,852.92
	63,622,632.03	51,079,034.79
Total liabilities	**63,622,632.03**	**51,079,034.79**
Total equity and liabilities	**227,776,643.69**	**177,097,865.71**

FORMULAS FOR KEY FINANCIAL INDICATORS

$$\text{Equity ratio (\%)} = 100 \times \frac{\text{Total equity}}{\text{Balance sheet total – advances received}}$$

$$\text{Return on equity (\%)} = 100 \times \frac{\text{Profit for the period}}{\text{Total equity (average for the period)}}$$

$$\text{Return on investment (\%)} = 100 \times \frac{\text{Profit for the period + Finance costs}}{\text{Total equity + Interest-bearing debt (average for the period)}}$$

$$\text{Net interest-bearing debt} = \text{Interest-bearing debt - Cash and cash equivalents}$$

$$\text{Gearing ratio (\%)} = 100 \times \frac{\text{Interest-bearing debt - Cash and cash equivalents}}{\text{Total equity}}$$

$$\text{Net debt/EBITDA} = 100 \times \frac{\text{Interest-bearing debt - Cash and cash equivalents}}{\text{EBITDA}}$$

BOARD OF DIRECTORS' PROPOSAL FOR DISTRIBUTION OF PROFITS

At December 31, 2019 the parent company had distributable funds of €430,881,095.33, which includes the profit for the period, €94,648,496.21. The Board of Directors proposes to the general meeting of shareholders that a dividend of €0.3774 per share, i.e. a total of €20,002,200.38, be paid for the period now ended and that the remainder be retained.

SIGNATURES TO THE FINANCIAL STATEMENTS AND BOARD OF DIRECTORS' REPORT

Espoo, February 11, 2020

Juha Rantanen
Chair of the Board of Directors

Stein Dale
Member of the Board of Directors

Elina Engman
Member of the Board of Directors

Torbjörn Holmström
Member of the Board of Directors

Päivi Pesola
Member of the Board of Directors

Elisabet Salander Björklund
Member of the Board of Directors

Jarmo Väisänen
Member of the Board of Directors

Johanna Lamminen
Chief Executive Officer

AUDITOR'S NOTE

The auditor's report has been issued on this date.

Helsinki, 14th February, 2020
PricewaterhouseCoopers Oy
Authorized Public Accountants

Pasi Karppinen
APA

AUDITOR'S REPORT (TRANSLATION OF THE FINNISH ORIGINAL)

To the Annual General Meeting of Gasum Oy

REPORT ON THE AUDIT OF THE FINANCIAL STATEMENTS

Opinion

In our opinion

- the consolidated financial statements give a true and fair view of the group's financial position and financial performance and cash flows in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU
- the financial statements give a true and fair view of the parent company's financial performance and financial position in accordance with the laws and regulations governing the preparation of the financial statements in Finland and comply with statutory requirements.

WHAT WE HAVE AUDITED

We have audited the financial statements of Gasum Oy (business identity code 0969819-3) for the year ended 31 December 2019. The financial statements comprise:

- the consolidated balance sheet, income statement, statement of comprehensive income, statement of changes in equity, statement of cash flows and notes, including a summary of significant accounting policies
- the parent company's balance sheet, income statement, statement of cash flows and notes.

Basis for Opinion

We conducted our audit in accordance with good auditing practice in Finland. Our responsibilities under good auditing practice are further described in the Auditor's Responsibilities for the Audit of Financial Statements section of our report.

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

INDEPENDENCE

We are independent of the parent company and of the group companies in accordance with the ethical requirements that are applicable in Finland and are relevant to our audit, and we have fulfilled our other ethical responsibilities in accordance with these requirements.

Responsibilities of the Board of Directors and the Managing Director for the Financial Statements

The Board of Directors and the Managing Director are responsible for the preparation of consolidated financial statements that give a true and fair view in accordance with International Financial Reporting Standards (IFRS) as adopted by the EU, and of financial statements that give a true and fair view in accordance with the laws and regulations governing the preparation of financial statements in Finland and comply with statutory requirements. The Board of Directors and the Managing Director are also responsible for such internal control as they determine is necessary to enable the preparation of financial statements that are free from material misstatement, whether due to fraud or error.

In preparing the financial statements, the Board of Directors and the Managing Director are responsible for assessing the parent company's and the group's ability to continue as a going concern, disclosing, as applicable, matters relating to going concern and using the going concern basis of accounting. The financial statements are prepared using the going concern basis of accounting unless there is an intention to liquidate the parent company or the group or to cease operations, or there is no realistic alternative but to do so.

Auditor's Responsibilities for the Audit of the Financial Statements

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

As part of an audit in accordance with good auditing practice, we exercise professional judgment and maintain professional skepticism throughout the audit. We also:

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant

doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

We communicate with those charged with governance regarding, among other matters, the planned scope and timing of the audit and significant audit findings, including any significant deficiencies in internal control that we identify during our audit.

OTHER REPORTING REQUIREMENTS

Other Information

The Board of Directors and the Managing Director are responsible for the other information. The other information comprises the report of the Board of Directors.

Our opinion on the financial statements does not cover the other information.

In connection with our audit of the financial statements, our responsibility is to read the other information and, in doing so, consider whether the other information is materially inconsistent with the financial statements or our knowledge obtained in the audit, or otherwise appears to be materially misstated. Our responsibility also includes considering whether the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

In our opinion, the information in the report of the Board of Directors is consistent with the information in the financial statements and the report of the Board of Directors has been prepared in accordance with the applicable laws and regulations.

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

Other opinions based on statutory law

Based on our audit, it is our responsibility to express an opinion on the matters required by the Finnish Natural Gas Market Act Chapter 13, Section 64.

The unbundled income statements, balance sheets and notes are prepared in accordance with Finnish Natural Gas Market Act and with related rules and regulations.

Other Statements

We support that the financial statements and the consolidated financial statements should be adopted. The proposal by the Board of Directors regarding the use of the profit shown in the balance sheet is in compliance with the Limited Liability Companies Act. We support that the Board of Directors and the Managing Director of the parent company should be discharged from liability for the financial period audited by us.

Emphasis of matter – appeal in the Market Court

We pay attention to the note 5.6 of the consolidated financial statements and the notes of the parent company's financial statements regarding the unbundling of the natural gas business operations, stating that Gasum Oy has a pending appeal in the Market Court which relates to Energy Authority's decisions dated on 26 February 2019 and 15 March 2019 regarding unbundling of the natural gas business operations in accounting from other business operations in accordance with the Natural Gas Act. Our opinion is not modified in respect of this matter.

Helsinki 14.2.2020

PricewaterhouseCoopers Oy
Authorised Public Accountants

Pasi Karppinen
Authorised Public Accountant (KHT)

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