2023

GASUM ANNUAL REVIEW

Contents

A year of stabilization and strong market recovery during H2 – strategy implementation progressed

After a slower start during the first half of the year we experienced a strong market recovery during the second half of 2023. Gasum's result was, however, burdened by costs that have resulted from adjusting operations during the energy crisis. Towards the end of the year our supply chain in the Finnish gas market changed yet again as the Balticconnector pipeline was shut down because of a rupture. Despite the challenges, we continued to implement our renewed strategy according to plan.

The year 2023 was marked with the gradual healing and stabilization of the market but at the same time we faced some significant challenges and surprises. While there was slower volume development through the first half of the year, we saw a brisker ramping up of demand in the second half, especially in the maritime segment. Throughout the year Gasum's result was burdened by costs that have resulted from adverse impacts of the market turmoil and adjusting operations to the changing energy landscape from 2022 onwards.

Adjusted operating result for financial year 2023 was EUR 3.8 million negative (2022: EUR 37.1 million) and adjusted operating profit margin -0.3% (2022: 1.4%). Despite the somewhat weaker than expected financial result, the company was able to improve gearing, gearing rate being 37.3% at the end of the year 2023 (December 31, 2022: 57.0%) positioning the company stronger for year 2024.

2023 was the first full year of implementing the new strategy which we launched in the autumn of 2022. During the year we saw the main structures of our next new biogas plant in Götene, Sweden, go up according to schedule. Installation work continues in 2024 and production is expected to come online at the end of the year as planned. We also continued with the planning of the second large greenfield plant project in Borlänge, which reached final investment decision early January 2024. Each of these large-scale plants will produce 133 gigawatt hours (GWh) of biogas per year once finished.

During the year we also started expansion and improvement work on three of our existing biogas plants with one project at the Vehmaa plant in Finland already finished. These projects will result in a combined increase of 60 GWh of biogas per year once the rest are also completed. We also expanded our biogas portfolio with an acquisition whereby we bought majority ownership of a biogas upgrading company in the city of Helsinborg, Sweden.

We've also been successful at increasing biogas sourcing in accordance with our strategy. During the year we were able to close a number of new sourcing contracts, enabling us to offer more renewable gas to our customers.

In the power business, we have made headway in, for example, starting the expansion of the power business to the Swedish market and sourcing new fuel flex customers who are looking to Gasum expertise to decide which source of energy to use at each moment in time. Power trading volumes also improved significantly on the previous year.

In May 2023 Gasum cancelled the long-term natural gas supply contract it had had with Gazprom Export. Natural gas supplies through the pipeline had already been discontinued since May 2022 and Gasum had been in arbitration proceedings with Gazprom Export concerning the agreement.

At the start of the final quarter of the year the Balticconnector gas pipeline between Finland and Estonia suffered a rupture and was shut down. Gasum was quick to respond to the exceptional situation and took action immediately.

The situation has meant that, for the final quarter of the year, we have had to meet all the natural gas demand of Gasum's Finnish pipeline gas customers by importing liquefied natural gas (LNG) through the Inkoo floating terminal. I'm very pleased with our ability to pivot once more as the situation around us has yet again changed and would like to thank Gasum's staff for their exceptional work through this unsuspected challenge.

One of the highlights of the year was the launch of Gasum's new values: respect, sustainability and positive energy. The values were created together with the entire staff of Gasum and include a Gasum Compass that helps us to live those values every day. I am proud of our new values and, like everyone at Gasum, am committed to working towards fulfilling them every day.

We closed the year by signing a long-term sales and purchase agreement with Nordic Power-to-Gas developer Nordic Ren-Gas. Gasum will buy all of the e-methane produced by Nordic Ren-Gas at its Tampere plant from 2026 onwards and distribute it to its customers. The e-methane is produced using renewable electricity from Finnish wind power and biogenic carbon dioxide captured from power plants. E-methane is fully interchangeable with natural gas and biogas and holds great emissions reduction potential in both maritime and land traffic. We hope that this agreement is the first step of many on the e-methane pathway for Gasum.

Although there is a lot of continued hard work ahead of us in 2024, the stabilized landscape of 2023 gives us a significantly more solid ground from which to push forward. I would like to extend my deepest gratitude to our customers for the excellent co-operation and to all Gasum employees for their continued hard work on implementing our strategy consistently and resolutely all through 2023 and into the new year.

Mika Wiljanen
Chief Executive Officer

Financial statements and Board of Directors' report 2023

Board of Directors’ report

Financial development of Gasum Group’s business in 2023

In 2023 market started to recover from challenging energy market and confidence started to return to the market as prices were stabilizing. Total volumes in 2023 were 12.5 Twh (15.6 Twh). Decrease in total volumes were due to planned decrease in pipeline natural gas volumes with increased attention to margins. Natural gas volumes were partly also affected by the breakdown of the Balticconnector pipeline. At the same time, more affordable gas prices and increasing number of LNG vessels led to the positive increase of LNG volumes as more maritime customers started to switch back to gas from more polluting alternatives.

In the Industry business, volumes delivered to customers increased by 4% year on year. During 2023, the customer demand started to pick-up after challenging 2022 as prices stabilized. The recent price turbulence in the energy markets have increased the demand for risk management services and products amongst customers. Gasum is in a unique position to help its customers to hedge their energy related risks with years of experience in portfolio and risk management. Customers are keen to move towards sustainable future and set ambitious sustainability goals where LNG, LBG and e-methane play a significant role.

Volumes delivered in the Traffic business increased by 19% year on year. In road transport, Gasum continued to expand the market and filling station network for passenger cars and heavy-duty vehicles in the Nordic countries and opened a total of six new gas filling stations around the Nordic countries during the year.

In the Maritime business, volumes delivered to customers increased by 66% year on year. Customer demand picked-up after prices decreased to a competitive level against alternative fuels in 2023. With record number of LNG vessels entering the market, Gasum is in excellent position to capture the Maritime LNG market potential. Also, increasing Maritime regulation towards more sustainable future (e.g. FuelEU Maritime, EU ETS) increases the demand for lower emission fuels, such as LNG, LBG and e-methane which Gasum offers to its customers.

The Gasum Group’s revenue for the period under review totaled EUR 1,456.9 million, decrease of 44 % compared to the previous year (2022: EUR 2,601.8 million). Decrease in the revenue was result of steep decline in gas market prices during 2023. The Group’s operating result was EUR 45.1 million positive (2022: EUR 149.9 million) and operating result margin was 3.1 % (2022: 5.8%). Gasum’s financial result was impacted by decline in gas market prices but more significantly, the costs resulting from the need to reorganize the entire supply chain for pipeline-delivered natural gas and risk mitigation activities that were implemented to response to the surrounding geopolitical situation and changes in energy market. The Group’s adjusted operating profit was EUR -3.8 million (2022: 37.1 million). Items affecting comparability and were adjusted include unrealized profit in operative hedge derivatives of EUR 36.3 million, change of inventory values to net realizable value of EUR 14.2 million, legal costs related to ongoing claims of EUR -1.6 million. In 2023, Group’s result was also positively influenced by recognised biogas subsidies in Sweden from years 2022-2023, totalling EUR 12.5 million in other operating income.

The Group’s balance sheet totaled EUR 1,637.9 million (December 31, 2022: EUR 1,947.3 million) on December 31, 2023. Decrease in balance sheet was mainly due to decrease in gas prices which resulted in lower market values of hedging derivatives. In 2023 Gasum derecognized EUR 158 million of current assets and liabilities related to natural gas contract with Gazprom Export. More information of the arbitration and derecognized items is provided in Legal proceedings and Claims and in the note 5.2 Guarantees and Commitments.

At end of December 2023, cash and cash equivalents including short-term deposits amounted to EUR 278.9 (December 31, 2022: 206.2) million and unused committed credit facilities to EUR 220 million. Cash flow from operating activities was EUR 167.0 million (2022: EUR 181.6 million). Change in the cash flow from operating activities was mainly driven by decrease in working capital and change in cash collaterals. During 2023, Gasum continued investments in all its' businesses. The Gasum Group's capital expenditure before government grants in 2023 was EUR 62,7 million (2022: EUR 37.5 million). Capital expenditure was especially related to the construction of new biogas plants and the expansion of existing plants as well as expansion of the Nordic filling station network Gasum received a total of EUR 2.6 million in investment support during the financial year (2022: EUR 20.7 million).

The Group's net interest-bearing debt at the reporting date totalled EUR 215.1 million (December 31, 2022: EUR 309.4 million), including borrowings from financial institutions as well as finance lease liabilities. Decrease of 30.5% in net interest-bearing debt resulted from a decrease in net working capital. Gearing at end of December 2023 was at 37.3% (December 31, 2022: 57.0%).

Equity at end of 2023 was at EUR 577.0 million, an increase of 6,3% % from EUR 543.1 million on December 31, 2022. The Group's equity ratio was 35.6 % (December 31,2022: 28.3%). Gasum has a capital loan of EUR 200 million from Governia Oy. The capital loan was given in 2021 to strengthen the financial position and provide support for consequences from the general market situation and uncertainty. More information regarding capital loan can be found on Note 4.4 Equity.

Key financial indicators

EUR million	2023	2022
Revenue*)	1,456.9	2,601.8
Adjusted operating profit**	-3.8	37.1
Operating profit	45.1	149.9
Adjusted operating profit (%)**	-0.3%	1.4%
Operating profit (%)	3.1%	5.8%
Equity ratio (%)	35.6%	28.3%
Adjusted return on equity (%)* **	-1.6%	6.8%
Return on equity (%)*	5.4%	25.3%
Adjusted return on investment (%)**	-2.7%	2.4%
Return on investment (%)*	1.9%	12.0%
Balance sheet total	1,637.9	1,947.3
Net interest-bearing debt	215.1	309.4
Gearing ratio (%)	37.3%	57.0%
Gearing ratio (%) excluding the impact of IFRS 16 leases	11.3%	25.5%
Personnel at the end of period	337	321

*) The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income.

**) In 2023, adjusted items include unrealized gain/loss in hedge derivatives of EUR 36.3 million, increase of inventory values to net realizable value of EUR 14.2 million, legal costs related to arbitration of EUR 1.6 million. In 2022 items affecting comparability and were adjusted include unrealized gain/loss in hedge derivatives of EUR 157.8 million, reduction of inventory values to net realizable value of EUR 25.0 million, impairment charge of goodwill related to Skangas acquisition of EUR 11.0 million, legal costs related to arbitration of EUR 7.8 million and write-down of fixed assets of EUR 0.8 million for Suomenoja plant closure.

Operating environment

Energy market – Industry and power

The start of the year saw energy prices drop significantly from the previous year's levels. Volumes started recovering slowly as confidence returned to the market after the turbulence of 2022 ended. Affordable gas prices started driving many customers to switch back to gas from more polluting alternatives.

The amount of LNG cargoes arriving to European LNG terminals continued at record high levels throughout the first quarter. Power prices were trading close to the levels seen before the start of the war in Ukraine.

In the second quarter European gas prices continued to drift lower as gas storages were filled significantly above the long-term averages and plenty of LNG was still available. Power prices dropped as the weather was windier and rainier.

Pipeline natural gas volumes remained modest in the third quarter, but the price environment drove a significant improvement in LNG demand especially in the maritime segment. While the first half of 2023 was marked with slow and steady recovery, the second half of the year saw a more significant ramping up of demand.

In the third quarter gas prices stayed on a relatively low and steady level despite strike announcements in Australian LNG production facilities during late August. From mid-August onwards there was a slight hike on power prices as several simultaneous nuclear power plant maintenance periods in Finland and in Sweden coincided with power cable outages between the countries. This period of slightly higher prices lasted a few weeks and by the end of the quarter, power prices traded close to zero again throughout the Nordics.

During the fourth quarter of the year there were many exceptional events affecting the market. Adding to the uncertainty caused by the continuing war in Ukraine, terrorist attacks in Israel flared tensions to outright war in the Middle East, both in the Gaza strip between Israel and the terrorist organization Hamas and in the Strait of Hormuz by Houthi rebels.

Gas prices in Europe moved up mid-October but started to drift lower since. In December, European gas prices traded below 30 EUR/MWh, which was not necessarily expected for the current winter heating season.

The Finnish gas market was affected by the rupture and shutdown of the Balticconnector pipeline running under the Baltic Sea connecting Finland and Estonia. Finnish gas prices reacted heavily, and local prices traded over 20 EUR/MWh higher than European or Baltic gas prices. Gas supplies in Finland have since the rupture relied fully on LNG deliveries, mostly through the floating storage and regasification unit (FSRU) in Inkoo.

There were some occasional jumps in power prices in Finland, where prices first traded almost at 300 EUR/MWh and then a few days later – due to an error committed by a trading company – traded at -200 EUR/MWh level. In December, spot power prices jumped to 890 EUR/MWh for one trading day while Nordic power prices remained stable at around 100 EUR/MWh. This was due to a combination of cold weather, low wind and congestion in the power grid transport capacity.

Road and maritime

In the heavy-duty vehicle segment the number of gas-powered trucks in the Nordic market has continued on a steadily increasing path. The long-term development is expected to continue as biogas use is seen as a cost-effective way to decarbonize logistics already today.

There have been some problems in the supply chain that have caused delays in deliveries of new trucks. This hasn't slowed down new orders of LNG-powered trucks as the current challenges are expected to be short-term.

The maritime industry has continued to pick up significantly with the lower price levels of LNG. The price differential between marine gasoil (MGO) and LNG has continued to shift the demand towards the more environmentally friendly choice, namely LNG.

This has continued to impact the growth of the LNG-powered vessels market very positively. LNG has been the cheaper alternative of the two fuel options for most of the year. The number of LNG-powered vessels has continued to increase significantly as has the orderbook for new vessels. The interest in and demand for liquified biogas (LBG, bio-LNG) has also increased during 2023 in the maritime sector as the industry is looking to clean-up shipping even further.

Biogas and circular economy

The geopolitical situation is boosting the development of biomethane availability in Europe as natural gas supply from Russia is limited. This is, in particular, seen in Finland where also the gas supply line Balticconnector has been out of operation since October 2023 due to a rupture. The growth target of Biomethane production in EU is boosted by the REPowerEU program. The target is a more than tenfold increase in EU's biomethane production to 35 bcm per year by 2030, which represents 15% of the total natural gas demand in 2030 and 40% of former Russian imports. To reach the REPowerEU target, investments of approximately EUR 83 billion are needed in around 5,000 new production installations to be operational at the end of 2029.

The biogas industry together with associations and regulatory stakeholders have founded a public-private-partnership organization called the Biomethane Industry Partnership (BIP) to facilitate the growth. Gasum is a member of BIP and is involved in various working groups and as a member of the support group.

The growth of biomethane production in Finland is not developing very rapidly and based on the plans of the current government, subsidies for biogas investments or promoting the use of biogas are expected to be modest. This is impacted by the tight economic situation in Finland and even some already granted investment subsidies have been cancelled. Cancelling investments is impacted by the changing regulatory environment, such as taxation and sustainability criteria, and the uncertainties related to the gas and energy market in general, like the government's decision to change the blending mandate level of traffic fuel. The biogas industry is promoting the preparation of a national circular economy and biogas program to be prepared jointly with several ministries. The program would also include other renewable gases like hydrogen and carbon dioxide in it.

In Finland, gate fees of feedstock have been declining due to fierce competition and the first purchase-based feedstock agreements were made during the year. Partly due to the short availability and cost of traditional feedstocks, closure of biogas production took place in 2023. Regardless of new regulation to expand source separation of biowaste that will increase the available feedstock volumes, new feedstock sources, such as industrial side streams previously used by the fur industry, need to be utilized to increase biogas production. The national fertilizer regulation was implemented in Finland and the regulation limits the use of digestate-based fertilizers, i.e. it does not promote the use of recycled nutrients.

In Sweden, generous investment subsidies are supporting new plant projects together with production support that is now within the regulation until the end of 2026. The competition to secure feedstock volumes and use of biofertilizers in certain areas of the country is fierce. Biogas use in logistics has already good traction and the discussion on its wider use in industrial processes is being opened. However, the biogas tax exemption that was removed in March 2023 by an EU court ruling resulted in a high tax on biogas which caused a drop in demand for compressed biogas as traffic fuel. Biogas demand in Sweden is clearly shifting towards liquefied biomethane instead of compressed.

The market environment for biomethane production in Norway differs from Finland and Sweden as Norway is not regulated according to the EU rules. Investment subsidies are allocated to new biogas plants. Gasum is investigating a biogas plant project near Trondheim, which would be Gasum's first plant in Norway.

Strategy

During 2023 Gasum has continued to implement the strategy that was launched in the fall of 2022. The strategy is being implemented through 50 projects, which range from business development to operational as well as culture and employee experience. Some projects were already completed during the year.

Gasum's goal is to bring 7 TWh of renewable gas to the market by 2027, which will mean a total emissions reduction of 1.8 million tons of carbon dioxide for our customers. This will be achieved through both increasing investment in own biogas production but also sourcing renewable gas from partners. In its business Gasum aims to increase the share of renewable volumes, meaning renewable gas and power, to 45% by 2027.

Two of the five planned new large biogas plants in Sweden are now underway, as the second located in Borlänge received the final investment decision right after the reporting period in January 2024. The construction of the plant in Götene has been proceeding as planned throughout 2023 as have expansion and improvement projects at existing plants. Each of the large-scale plants will produce 133 GWh of biogas per year and the expansions and improvements are expected to result in a combined increase of 60 GWh of biogas per year once completed.

Gasum also expanded the company's biogas portfolio with a majority acquisition of a biogas upgrading company in the city of Helsinborg, Sweden. For more information on the acquisition, please see note 5.1 Business acquisitions and disposals.

During the year Gasum was able to close a significant number of new biogas sourcing contracts and made the first long-term sales and purchase agreement on synthetic gas, e-methane, with Nordic Power-to-Gas developer Nordic Ren-Gas concerning its Tampere plant which is expected to produce e-methane from 2026 onwards.

Natural gas, and its liquefied form LNG, continues to be an important stepping stone on the journey towards even lower emissions fuels such as biogas and e-methane. The maritime segment saw demand for LNG develop strongly and the interest towards liquefied biogas grew through several pilot projects and bunkerings.

In the power business Gasum started expansion activities to the Swedish market and in Finland was able to secure new business within the fuel flex customer group, who are looking to switch between gas and electricity according to the current market situation. Power trading volumes also developed positively.

During the year several strategy projects concentrated on the improvement of data flow within different operational and support functions. Towards the end of the year Gasum also launched a new set of values: respect, sustainability, and positive energy. The values are a part of the ongoing culture development project and were developed together with the entire staff. Competence development and leadership quality remain high priorities at Gasum.

Sustainability is an integral part of the strategy and ties into all activities. Sustainability means enabling emission reductions for customers, reducing the environmental impacts of Gasum's own operations, promoting a safe work environment, and ensuring responsible business practices.

Sustainability

During 2023 Gasum's sustainability work was governed by a sustainability program focusing on six key themes: safety and security, climate change, access to energy, people, circular economy and responsible business. The program will be developed and adjusted during 2024. Gasum has started to prepare for the requirements of the Corporate Sustainability Reporting Directive (CSRD), which will apply to the company in 2025. A Sustainability Program update is planned for the year 2024 in accordance with the results of CSRD compliant double materiality assessment conducted in 2023.

The sustainability program applies to the company in all operating countries. Gasum tracks development and reports on performance in its annual sustainability report, which includes key performance indicators (KPIs) on each sustainability program theme.

The report is prepared in accordance with the Global Reporting Initiative, GRI Standards, core option, and reports on the content of the GRI index. The 2023 sustainability report is published and accessible on Gasum's website.

Research and development

The circular economy and opportunities arising from renewable gases are at the core of Gasum's research and product development. Gasum was involved, for example, in two large research projects: Hydrogen and Carbon Value Chains in Green Electrification (HYGCEL) and Circular Economy of Water in Industrial processes (CEIWA).

In late 2023, Gasum joined a new research project, that focuses on real time analysis of methane emissions from industrial sites (CISAT). In spring 2023 Gasum organized together with Jamk University of Applied Sciences an innovation competition to create value from biogenic carbon dioxide. Discussions were continued with the winners Carbonaide and Inherit Carbon Solutions.

Gasum supports research and development in the gas sector through the Gasum Gas Fund. In 2023, five research grants, amounting to a total of EUR 75,000 (2022: EUR 74,960), were given out from the Gasum Gas Fund administered by the Finnish Foundation for Technology Promotion.

Personnel

On December 31, 2023, the Gasum Group had a total of 337 employees (December 31, 2022: 321). Of these, 60% were employed in Finland, 28% in Sweden, 11% in Norway and 1% in Germany.

The strategic culture development project continued in 2023 with work to develop up-to-date values for Gasum. The whole staff of the Group were consulted and activated during the development process. Later, a working group comprised of staff representatives from different functions and locations was assembled to finalize the work with the management team.

The work culminated at the end of the year in the new Gasum values: respect, sustainability, and positive energy, as well as the Gasum Compass, which is a set of guidelines on how everyone at Gasum can live the values in their everyday work lives.

Also, during 2023 the Leading for Impact leadership journey continued at Gasum with asking all employees to evaluate their line managers and the climate their line managers are creating for them. The monthly employee Pulse survey, introduced in 2020, continued to be an active part of improving the employee experience at Gasum.

Changes in management

There were no changes in management during 2023.

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. More information regarding Group structure and shares can be found on Notes 4.4 Equity and 5.3 Group companies.

The ordinary general meeting of Gasum Ltd on 31 March 2023 confirmed the number of members of the Board of Directors to be six. Elina Engman was re-elected as the Chair, Stein Dale was elected as the Deputy Chair, the current members Ari Vanhanen and Erkka Repo were re-elected as members and Jari-Pekka Punkari and Sirpa-Helena Sormunen were elected as new members for the next term of office of the Board of Directors.

Risk factors affecting financial performance

The geopolitical risks are discussed in detail in 'Geopolitical uncertainty' later in the Board of Directors' Report.

The unprecedented volatility in the gas and power market seen in 2021 and 2022 was reduced in 2023. The increased focus on certain financial risks, especially commodity price risks and liquidity risks has continued.

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

Strategic

The company's most important strategic risks relate to the demand of its main products, such as biogas, liquefied natural gas (LNG) and renewable power. Over the long-term, demand for natural gas, biogas and LNG is affected by the economic and energy political operating environment and the price level of gas compared with other available fuels. Over the short term, demand for gas is affected by the prices of gas and other substitute energy sources, weather conditions and the operating environment of customers.

Energy policy objectives as well as customers' need to switch to cleaner energy are increasing interest in especially biogas and LNG as fuel for industry, maritime and road transport. Customers' switch to gas use is affected by access to technologies, availability of renewable biogas as part of gas supply and the general price level of gas compared with other fuels. Gasum from its part facilitates access to technologies and invests in biogas production.

Regulation has a crucial role in Gasum's business, as it in part drives the customer's energy choice. There are risks related to changes in EU and national legislation, energy support and 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 the largest producer of renewable biogas in the Nordics, and it also procures biogas from its partners. The demand for renewable energy as well as feedstock for renewable energy production is expected to increase as the world and Europe moves towards renewable sources of energy. The increasing competition for feedstock and renewable energy may affect Gasum's position. Alternatively, delays in green transition may affect the demand of Gasum's products.

Gasum procures liquefied natural gas from Norway, globally through terminals in Central Europe, USA and from Russia. Changes in surrounding environment may affect the availability of gas in Europe and for Gasum. The geopolitical risks are discussed in more detail in 'Geopolitical uncertainty' later in the Board of Directors' Report.

Operational

Gasum is exposed in its activities to operational risks which relate in particular to the supply chain and supply security, project risks, contractual risks as well as the functioning and efficiency of various processes and controls.

The company uses biogas plants, liquefaction plants, terminals, transmission pipelines, trucks and ships for the production and distribution of 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 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.

Gasum has an ambitious investment plan into biogas production and the investment projects are subject to risks in project execution, rising construction prices and counterparty risks. Gasum manages these risks through diligent processes, and by diversifying the project commencements over time.

Some of the gas and power supply and sales agreements include minimum purchase and delivery obligations that result in price risks for Gasum. Volume risks are highlighted in contracts where the minimum purchase volume is not agreed. These risks are managed in the contracting phase through risk assessments and in the delivery phase through daily forecasting and hedging processes.

Cyber risks continue to be prominent, and Gasum is investing continuously in employee training and in technical solutions to improve cybersecurity and resilience in case of a cyber-attack.

Financial

Gasum's business involves risks relating to the market price development of gas and other energy products, which the company hedges with derivative instruments. Derivative instruments' valuation has an effect on Group's cash and equity, which is monitored closely.

Other financial risks include credit risk, interest rate risk, other price risks, foreign currency risk and liquidity risk. Financial risks and their management are discussed further in the relevant note to the financial statements.

Gasum is in legal proceedings with Gazprom Export related to a long-term natural gas supply contract, which may possibly have a negative effect on Gasum's financial position. The legal proceedings are described in more detail in the financial statement note 5.5. Legal proceedings and claims.

Safety and security, the environment

Gasum has adopted the objective of preventing harm to people, the environment, assets and business relations. Gasum continuously identifies, manages and monitors these risks and protects against them by means of diligent processes and controls as well as normal insurance cover.

Risk management processes

The company's general risk management framework is described in the Gasum Governance and Remuneration Report and in more detail in the Enterprise Risk Management Policy accepted 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 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 unit is responsible for identifying, assessing and managing its own risks, and management monitors and manages the interdepencies between these risks.

The Audit and Risk Committee is responsible for guidance and oversight of the company's risk management. Group Risk Management supports business activities, coordinates the risk management processes and reports to the CFO. Group Risk Management is also responsible for monitoring the key risks of the Group and for guidelines and tools to ensure effective risk management in the company's business activities.

Geopolitical uncertainty

The tensions between Europe and Russia have continued to increase since the Russian attack on Ukraine in February 2022, which has affected Gasum's business environment and operations. The company does not have operations or assets in Russia.

The extraordinary turbulence in the energy market during 2022 decreased in 2023, although volatility and price level has remained higher compared to pre-war time. The commodity price risks, derivative risks and liquidity risks remain in close monitoring and Gasum has continued to develop the capability to react to possible challenges in the energy markets.

Gasum always complies with applicable sanctions and restrictions and is continuously monitoring geopolitical risk development as well as conducting active dialogue with the relevant national authorities and stakeholders regarding the situation. Gasum has a long-term LNG sourcing contract with Gazprom Export, which includes take-or-pay clauses for minimum quantities. Although the majority of the LNG directly sourced by Gasum is coming from outside of Russia, for example sanctions or other measures against Russian gas sector, or countermeasures by Russia could have an impact on Gasum's operating environment, the surrounding markets and the company's LNG supply chain and related result. The EU has recently enabled member countries to effectively ban Russian shipments of LNG. Gasum has prepared for the possible supply cuts e.g. through alternative supply sources.

Finnish officials have indicated the relations between Finland and Russia have deteriorated and this imposes an increased threat on Finnish critical infrastructure. Gasum has taken measures to further improve the safety of its assets and personnel.

The geopolitical tensions increasing around the world as well as the upcoming elections in many countries may imply risks in the general operating environment for Gasum through for example shifts in international and national climate targets or changing supply chains for gas.

Future outlook

Volumes are expected to develop positively during 2024. However, there are factors and events still creating uncertainties for the energy market.

The brutal war Russia started against Ukraine continues in 2024 with no resolution in sight yet. The extraordinary turbulence in the energy markets caused by the war seems to be over, at least for the time being. The global geopolitical situation grew even more complicated during 2023 with war erupting in the Middle East after terrorist attacks on Israel in October. There is a growing risk of escalation in the region. The ramifications of both these wars for the coming years are unclear.

The rupture and resulting shutdown of the Balticconnector pipeline between Finland and Estonia causes further uncertainty in the Finnish energy market. Gas procurement arrangements for 2024 are dependent on when the pipeline is repaired and back in use.

The future of LNG and LBG (Bio-LNG) looks promising. Demand is expected to be positively impacted by the maritime sector EU emissions regulation starting in 2024 as well as the steadily growing numbers of gas-powered trucks in the heavy traffic sector in the long term.

Gasum's profitability continues to be burdened by costs that have resulted from adverse impacts of the market turmoil and adjusting operations to the changed energy landscape in 2022. According to the current understanding in the company, these costs will continue to affect Gasum's profitability still in the first quarter of 2024.

The implementation of Gasum's strategy continues in 2024, while the company is also managing the impacts of energy crises. The first of five new large biogas plants in Sweden in Götene will be finished during the year and on-site work on the second one in Borlänge will begin. Expansions and improvements to existing biogas plants are proceeding as planned and procurement agreements of renewable gas are increasing.

Events after reporting period

At the beginning of January 2024 Gasum made a final investment decision on a new large scale biogas plant to be built in Borlänge, Sweden. The size of the investment is EUR 62 million and the project has been granted a subsidy of EUR 15 million from the Swedish Environmental Protection Agency's Klimatklivet investment program.

Construction of the plant will begin during spring 2024. The plant will use a feedstock mixture of regionally sourced organic household waste and manure and produce 133 gigawatt hours (GWh) of liquefied biogas (LBG) per year from 2026 onwards. In addition, the plant will produce 250,000 tons of high quality environmentally friendly fertilizers and process a total amount of 270,000 tons of feedstock per year. Household waste will be collected and processed by Gasum's local partner Borlänge Energi, and manure will be sourced from farmers in the Borlänge area.

The Borlänge plant is the second plant in a series of five large-scale biogas plants Gasum plans to construct in Sweden. The projects are part of Gasum's strategy to invest in Nordic biogas availability. Gasum's goal is to bring seven terawatt hours (7 TWh) of renewable gas yearly to the market by 2027.

Board of directors' proposal for distribution of profits

On December 31, 2023, the parent company had distributable funds of EUR 362,385,410.84. The Board of Directors proposes to the general meeting of shareholders that no dividend is to be paid for the financial year from January 1 to December 31, 2023.

Formulas for key financial indicators

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

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

$$\text{Adjusted return on equity (\%)} = 100 \times \frac{\text{Result for the period – unrealized derivatives*80\% - NRI*80\%}}{\text{Total equity (average for the period)}}$$

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

$$\text{Adjusted return on investment (\%)} = 100 \times \frac{\text{Profit before tax – unrealized derivatives – NRI}}{\text{Total equity + interest-bearing debt (average for the period)}}$$

Net interest-bearing debt = Interest-bearing debt - Cash and cash equivalents

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

$$\text{Gearing ratio (\%) excluding the impact of IFRS16 Leases} = 100 \times \frac{\text{Interest-bearing debt - IFRS16 leasing debt - Cash and cash equivalents}}{\text{Total equity}}$$

Consolidated financial statements

Consolidated statement of income

EUR thousand	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Revenue*	2.1	**1,456,925**	**2,601,812**
Other operating income*	2.2	192,103	643,212
Materials and services*	2.3	-1,226,074	-2,224,881
Personnel expenses	2.4	-34,929	-35,473
Depreciation, amortization and impairment	2.5	-76,816	-92,886
Other operating expenses*	2.6	-267,211	-742,650
Share of profit/loss from investments accounted for using the equity method		1,125	764
Operating profit		**45,123**	**149,898**
Finance income and expenses	2.8	-25,348	-8,706
Result before taxes		**19,775**	**141,192**
Taxes	2.9, 3.9	10,403	-17,874
Result for the period		**30,177**	**123,318**
Result for the period attributable to:			
Owners of the parent		29,668	123,310
Non-controlling interest		510	8

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income and under other operating expenses.

Consolidated statement of comprehensive income

EUR thousand	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Result for the period		**30,177**	**123,318**
Other items in comprehensive income			
Items that will not be reclassified to profit or loss			
Remeasurement of post-employment benefit obligations	3.10	255	774
Taxes related to items that will not be reclassified to profit or loss		-51	-155
Total		204	619
Items that may be reclassified subsequently to profit or loss			
Translation differences		63	-14,694
Total		63	-14,694
Total comprehensive result for the period		**30,444**	**109,243**
Total comprehensive income for the period attributable to:			
Owners of the parent		29,933	109,236
Non-controlling interest		511	7

Consolidated balance sheet

EUR thousand	Note	Dec 31, 2023	Dec 31, 2022
ASSETS			
Non-current assets			
Intangible assets	3.1	161,668	169,001
Property, plant and equipment	3.2	627,043	621,527
Equity-accounted investments	3.3	12,631	11,648
Other investments at fair value through profit or loss		50	50
Derivative financial instruments	4.3	41,387	133,655
Deferred tax assets	3.9	17,049	0
Other non-current assets		217	212
Total non-current assets		**860,045**	**936,093**
Current assets			
Inventories	3.5	137,395	257,862
Derivative financial instruments	4.3	88,715	186,652
Trade and other receivables	3.4	267,856	354,627
Current tax assets		4,673	5,908
Assets held for sale	3.7	300	0
Cash and cash equivalents	3.8	278,873	206,190
Total current assets		**777,812**	**1,011,239**
TOTAL ASSETS		**1,637,857**	**1,947,332**

Consolidated balance sheet

EUR thousand	Note	Dec 31, 2023	Dec 31, 2022
EQUITY AND LIABILITIES			
Share capital	4.4	10,000	10,000
Reserve for invested unrestricted equity		159,739	159,739
Capital loan	4.5	200,000	200,000
Retained earnings		192,362	66,284
Result for the period		29,668	123,310
Translation differences		-16,227	-16,290
Total equity attributable to owners of the parent		**575,542**	**543,043**
Non-controlling interest		1,493	25
TOTAL EQUITY		**577,035**	**543,068**
LIABILITIES			
Non-current liabilities			
Loans	4.6	343,986	344,498
Non-current lease liabilities	3.2	137,218	139,430
Derivative financial instruments	4.3	28,332	104,054
Deferred tax liabilities	3.9	13,889	11,480
Provisions	3.10	12,713	11,918
Post-employment benefits	3.11	3,586	4,386
Total non-current liabilities		**539,724**	**615,766**

EUR thousand	Note	Dec 31, 2023	Dec 31, 2022
Current liabilities			
Derivative financial instruments	4.3	66,251	211,924
Trade and other payables	3.6	439,111	563,109
Current income tax liabilities		14,150	13,465
Provisions	3.10	1,585	0
Total current liabilities		**521,098**	**788,498**
TOTAL LIABILITIES		**1,060,822**	**1,404,264**
TOTAL EQUITY AND LIABILITIES		**1,637,857**	**1,947,332**

Consolidated Statement of changes in equity

2023 EUR thousand	Share Capital	Paid-up unrestricted equity reserve	Retained earnings	Translation differences	Capital loan	Total	Non-controlling interest	Total Equity
Equity at January 1, 2023	**10,000**	**159,739**	**189,594**	**-16,289**	**200,000**	**543,043**	**25**	**543,068**
Result for the period			29,668			29,668	510	30,177
Other items in comprehensive income								
Remeasurement of post-employment benefits			204			204		204
Translation differences				62		62	1	63
Total comprehensive income for the period			**29,872**	**62**		**29,934**	**511**	**30,444**
Acquisition of subsidiaries							958	958
Other items			2,564			2,564		2,564
Equity at the end of December, 2023	**10,000**	**159,739**	**222,030**	**-16,227**	**200,000**	**575,542**	**1,493**	**577,035**

2022 EUR thousand								
Equity at January 1, 2022	**10,000**	**159,739**	**66,527**	**-1,596**	**199,000**	**433,670**	**18**	**433,688**
Result for the period			123,310			123,310	8	123,318
Other items in comprehensive income								
Remeasurement of post-employment benefits			619			619		619
Translation differences				-14,693		-14,693	-1	-14,694
Total comprehensive income for the period			**123,929**	**-14,693**		**109,236**	**7**	**109,243**
Other items			-863		1,000	137		137
Equity at the end of December, 2022	**10,000**	**159,739**	**189,594**	**-16,289**	**200,000**	**543,043**	**25**	**543,068**

Consolidated statement of cash flows

EUR thousand	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Cash flows from operating activities			
Result before income tax		19,775	141,184
Adjustments			
Depreciation, amortization and impairment	2.5	76,816	92,860
Finance items – net	2.8	25,348	8,706
Unrealized gains/losses on financial instruments		-36,275	-157,798
Other non-cash adjustments *		9,438	9,634
Change in working capital*		74,511	11,759
Change in non-current receivables**		5,557	115,894
Cash inflow from operating activities before financial items and taxes		175,169	222,239
Interest paid, leasing interest and other financial items		-38,661	-50,148
Received financial income		30,738	30,354
Taxes paid		-211	-20,797
Cash flow from financial items and taxes		-8,133	-40,591
Net cash flows from operating activities		**167,036**	**181,648**

EUR thousand	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Cash flows from investing activities			
Investments in tangible assets		-62,531	-37,155
Investments in intangible assets		-221	-358
Investment grants received		2,655	20,681
Business acquisitions and disposals		-2,113	0
Net cash flows from investing activities		**-62,210**	**-16,832**
Cash flows from financing activities			
Repayments of non-current borrowings		0	-100,448
Repayments of current borrowings		0	-210,000
Payment of leasing liabilities		- 31,659	- 37,324
Net cash flows from financing activities		**-31,659**	**-347,771**
Net decrease (-)/increase (+) in cash and cash equivalents		**73,167**	**-182,955**
Cash and cash equivalents at the beginning of the period*		206,190	387,364
Exchange rate differences/Losses on cash and cash equivalents		-484	1,782
Cash and cash equivalents at the end of the period	**3.8**	**278,873**	**206,190**

The Net debt reconciliation is presented under 4.1 Capital management.

*Figures from comparison period has been adjusted to correspond same accounting principles.
**Collaterals transfer under cash flow from operating activities

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, FI-02151 Espoo, Finland.

The energy company Gasum is a Nordic gas sector and energy market expert that offers cleaner energy and energy market expert services for industry and for combined heat and power (CHP) production as well as cleaner fuel solutions for road and maritime transport. Gasum produces biogas in its Nordic biogas plant network and sources biogas from the production of certified European partners. Besides biogas, the plants also produce recycled nutrients for agricultural and industrial uses. Gasum is the leading supplier of biogas in the Nordic countries.

Gasum imports natural gas to Finland and is the biggest liquefied natural gas (LNG) supplier in the Nordic countries. The company strengthens the position and infrastructure of LNG and supplies LNG for maritime transport, industry and heavy-duty vehicles in the Nordic countries. Gasum has expanded the maritime LNG distribution operating area further to Central Europe, including the Amsterdam-Rotterdam-Antwerp (ARA) area. The company has a Nordic gas filling station network that serves heavy-duty vehicles as well as passenger vehicles.

Gasum helps its customers to reduce their own carbon footprint and that of their customers. Together with its partners, Gasum promotes development towards a carbon-neutral future on land and at sea. The Gasum Group has around 330 employees in Finland, Norway, Sweden and Germany.

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, 02150 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 March 11, 2024.

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, 2023. 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 figures in the consolidated financial statements have been rounded and consequently the sum of individual figures may deviate from the sum presented. The financial statements are presented in thousands of euros unless otherwise stated.

1.3. Consolidation principles

The consolidated financial statements are for the parent company and all 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 and losses on transactions between Group companies are 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 significant influence and where the Group, as a general rule, has a holding of 20–50%. 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.

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 relating to loans and finance are presented under finance costs in the income statement. All other foreign exchange gains and losses are presented in net amounts in the income statement as part of other profit/loss (-) from operations.

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 has companies operating in Norway and Sweden with the euro determined as its functional currency. These companies operate in the gas market and gas market prices are determined according to world market prices in euros, whereby the company's revenue and sourcing are based on euros in accordance with IAS 21.

1.4. New and revised standards

The consolidated financial statements have been prepared in compliance with the same accounting policies as in 2022. Other new standards, interpretations and amendments to existing standards effective from 2023 did not affect the Group.

Forthcoming IFRS Standards, interpretations, and amendments

Several new standards, amendments and interpretations will only take effect later than in the reporting period which started on January 1, 2023, and have not been applied in the preparation of these financial statements. Other forthcoming standards, interpretations and amendments to existing standards are not expected to have significant effects on the Group.

Since the Pillar Two legislation was not effective at the reporting date, the Group has no related current tax exposure for the year 2023. Pillar 2 legislation can still be amended and refined during the financial year 2024, which is why the effects of the regulation cannot yet be assessed with sufficient certainty. The Group has reviewed its corporate structure considering the introduction of Pillar Two Model Rules in various jurisdictions. In most of the jurisdictions the effective tax rate is well above 15% and therefore, the Group has assessed there is no material exposure to paying Pillar Two “top-up” taxes.

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.

Valuation of inventories

The Group regularly monitors any decline of the net realizable value of inventories below cost and, where necessary, recognizes an impairment loss. Valuations take account of fluctuations after the reporting period in selling prices and selling costs insofar as there is additional evidence of these at the end of the reporting period. Prepayments reported under inventories include minimum annual Take-or-Pay obligations regarding the undelivered gas, which are estimated to be used in the years ahead. For more information on inventory values see Note 3.5.

Leases

When recognizing leases in the balance sheet, assumptions must be made concerning the lease term and the discount rate used. When assessing the term of new leases, renewal options extending the lease term are not acknowledged until the use of an extension option is likely. For more information on leases see Note 3.2.

Other contractual obligations

The Group has certain contractual obligations relating to procurement and sales contracts concerning different forms of gas. At the reporting date, the Group assesses the grounds for the obligations as well as related sales and procurement entries and impacts on stock inventories and non-interest-bearing liabilities. Management judgment is based on the contracts, negotiations conducted with counterparties and, where necessary, contractual expert opinions. Any compensation for non-compliance with daily minimum purchase obligations is recognized by Gasum in profit or loss for the period and with annual purchase obligations under inventories.

Geopolitical situation and estimation uncertainty

Changes in the market environment and developments in the geopolitical situation as well as changes in interest, inflation and currency rates in different countries may have future effects on the Consolidated Financial Statement. These factors can affect in the future the carrying amounts of assets and liabilities, the timing and amount of recognized earnings and cash flows. Russia’s war against Ukraine and possible actions in the energy market may also have a negative impact on Gasum’s financial position. The company has taken various mitigating actions, such as reducing the derivative exposure in the commodity market and developing an alternative sourcing arrangement for the pipeline natural gas. During recent years, the company has developed good capabilities to react to challenges in the energy markets.

Related management judgements are presented in the notes to the Financial Statement, including:

- Legal proceedings and claims (5.5)
- Guarantees and Commitments (5.2)

The financial statements are prepared on a going concern basis.

Provisions

Deciding on the existence of grounds for recognizing provisions and determining the amounts of provisions necessitates estimates of the existence and amounts of the obligation.

The company has not recognized provisions such as those relating to a penalty fee submission made by the Energy Authority to the Market Court. For more information about the Energy Authority's submission see Note 5.5. For more information about provisions see Note 3.10.

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 factors resulting in net costs (or income) arising from pension benefits depending on the assumptions employed in the determination. Any changes in these assumptions will impact the carrying amount of pension obligations.

Goodwill and impairment testing

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. The units determined by Gasum as CGUs are Industry, Maritime and Traffic business units. The intangible and tangible assets of the Supply and Trading unit have been allocated to the Industry and Maritime business units for impairment testing. Goodwill relating to Biogas in turn has been allocated to the Traffic business unit as it primarily serves Traffic customers.

On December 31, 2023, goodwill on the Gasum balance sheet amounted to EUR 89.3 million (2022: EUR 88.9 million). Goodwill is tested annually or whenever there are indications of impairments. 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, expected development of volumes and the discount rate used. Further information on the sensitivity of the recoverable amount to changes in assumptions is provided under Note 3.1 Intangible assets.

Taxes

The Group companies are liable to income tax in Finland, Sweden, Norway and Germany. 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. Gasum estimates the recoverability of tax losses in the course of its ordinary cycle and based on this assessment makes decision to which extend it recognize tax assets on its balance sheet. The Group's balance sheet at December 31, 2023 includes a deferred income tax asset of EUR 21.8 million recognized for adopted losses (2022: EUR 9.0 million). Further information regarding taxes is presented under Note 2.9 Income tax expenses and Note 3.9 Deferred taxes.

Fair value measurement of certain financial instruments

Gasum's accounting policy for determining the fair value of financial instruments is described in Note 4.3. Management adjustment is exercised when determinizing the level 3 derivatives that lack quoted prices or where recently observed market prices are not available. The judgement relates to the following areas:

- The choice of valuation techniques
- Estimates related to long term commodity price forward curves
- Estimates related to wind power capture rates applied in valuation of certain commodity contracts
- The calculation of fair value adjustments in order to incorporate relevant risk factors such as credit risk and liquidity risk
- The judgement of which market parameters are observable

2 Notes to the income statement

2.1. Revenue

Business structure

The Gasum Group's functions are grouped into two sales units and three units supporting business activities. The sales units are Industry & Traffic and Maritime. The supporting units are Commercial Product Management & Business Development, Supply & Trading and Projects & Biogas Production.

The **Industry sales unit** markets and sells gas, power and energy solutions as well as energy market services to industrial companies primarily in the Nordic countries. The unit sells industry fuels comprising liquefied natural gas (LNG), liquefied biogas (LBG) and compressed biogas (CBG) as well as energy market services, including Guarantees of Origin for electricity, power market portfolio management and trading services, LNG and grid gas portfolio management services, 24/7 control room services for risk management and price optimization, expert services in emissions trading, and demand-side management services for electricity consumption optimization. The unit's sales constitute external sales.

The **Traffic sales unit** markets and sells fuels and develops the road transport market in the Nordic countries. The products sold by the unit are liquefied natural gas (LNG) and liquefied biogas (LBG) as well as compressed natural gas (CNG) and compressed biogas (CBG). The products are used in heavy-duty long-haul transport as well as in delivery and passenger vehicles, including buses, waste management vehicles and passenger cars. The unit's sales constitute external sales.

The **Maritime sales unit** markets and sells fuel for maritime transport and builds the maritime gas market in Northern Europe. The products sold by the unit are liquefied natural gas (LNG), liquefied biogas (LBG), LNG and EU allowance portfolio management services for ferries, passenger ships, tankers, bulk carriers and supply and container ships as well as bunkering services for a global maritime transport clientele in the Baltic Sea, North Sea and ARA areas as well as in France. The unit's sales constitute external sales.

The **Supply and Trading (ST) unit** sources, supplies, and produces services mainly for the sales units. ST sales are divided into internal sales to sales units and external sales to customers outside the Group. Power and natural gas sales via grid make up most of the external sales while most of the off-grid gas (LNG, LBG, CNG and CBG) are sold via Industry, Maritime, and Traffic sales units. ST is divided into three functions: Trading and Optimizing, Terminals, and Logistics Operations. ST functions are described in more detail below:

- **Trading and Optimizing function** sources and supplies compressed natural gas, liquefied natural gas (LNG), renewable power (from hydro, wind, solar and bioenergy sources) as well as biogas from the production of certified European partners for the needs of the business units. Trading and Optimizing is also responsible for pricing of the Group's products, and the sales of natural gas in the transmission network to customers in the Nordics and Baltics. The function also trades in the following financial products: natural gas index products, physically delivered gas products, emission allowances (EUAs), oil derivatives (Brent, Propane), and power derivatives.
- **Terminals function** is responsible for managing and maintaining 5 import LNG/LBG terminals across Nordics
- **Logistic Operations function** is responsible for the logistics of Gasum's off-grid gas supply chain, which consists of 1 terminal through a joint venture, 2 bunkering vessels, 3 carrier vessels and hundreds of road tankers and gas containers.

The **Projects & Biogas Production** produces biogas from wastewater sludge, industrial side streams, animal-based side streams and biowaste in Finland and Sweden and provides waste processing and circular economy services in Finland. The unit produces biogas at 17 biogas plants and 4 partnership facilities in Finland and Sweden. The unit builds new but also develops and maintains the existing biogas plants, LNG customer terminals and gas filling stations. It also sells and markets recycled fertilizers and nutrients created as by-products of biogas production for agricultural and industrial needs. Gas produced by the Biogas unit is sold via ST to sales units and further to external customers. Fertilizers and waste processing constitute external sales of the unit.

Commercial Product Management (CPM) is responsible for communications, marketing and productization of Gasum's offering of services and products. CPM is also responsible for business development activities.

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 and energy tax 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, either.

Natural gas sales

Natural gas is transmitted via the transmission network owned by Gasgrid Finland Oy (since the demerger effective from January 1, 2020) 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 prices in effect at the time or, depending on the sales channel, on the basis of the time of delivery, for example.

Sales revenue is recognized monthly on the basis of actual invoiced unit quantities. As a general rule, uncertainty relating to variable considerations is resolved each month when Gasum recognizes monthly revenue, for example, based on the price index in accordance with the sales agreement and the volume or the quantity of services or units supplied. In some cases, the estimation of variable consideration requires management judgment regarding the timing of performance obligations e.g. in situations where Take-or-Pay clauses apply. An amount of variable consideration is adjusted for the effects of the time value of money if its significance is material. The management estimates transaction prices under sales agreements and amounts of money allocated to one or more performance obligations.

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. If Gasum expects to be entitled to a penalty, the amount of expected penalty is recognized in proportion to the delivery rights not exercised by the customer.

Biogas sales

Biogas is transmitted using methods including the transmission network and containers 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.

Waste processing and fertilizer sales

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 waste processing services, the customer at the same time receives and consumes the service provided by Gasum. Revenue from waste processing services 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. Fertilizer sales revenue is recognized when control is transferred to the customer in accordance with the terms and conditions of delivery.

Energy market services

Energy market services cover power market portfolio management and trading 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.

The tables below present the breakdown of revenue in accordance with the Group business structure. The figures for 2022 have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income. In 2023, no individual customer accounted for more than 10% of Group revenue. Trade receivables relating to sales revenue are presented in Note 3.4 Trade and other receivables.

Revenue by business unit EUR thousand	2023	2022*
Industry	407,954	658,282
Maritime	120,625	169,148
Traffic	194,885	175,857
Supply & Trading	1,218,143	2,428,510
Projects & Biogas Production	84,734	74,436
Others and internal sales	-569,416	-904,421
Total	**1,456,925**	**2,601,812**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income

Revenue by region EUR thousand	2023	2022*
Finland	720,555	1,576,617
Others	736,371	1,025,195
Total	**1,456,925**	**2,601,812**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income

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 receivable and as reduction of unfinished investments. Other income includes production subsidies received by biogas plants and insurance recovery.

Gains from realized and unrealized derivative financial instruments

Gains from realized and unrealized derivative financial instruments attributable to movements in their fair value are recognized by Gasum in other operating income. For more information on derivative financial instruments see Notes 4.2 and 4.3.

Other operating income EUR thousand	2023	2022*
Gains from sale of fixed assets	1	84
Proceeds from sale and leaseback arrangement	0	860
Gains from realized derivative financial instruments	109,971	376,712
Gains from unrealized derivative instruments	64,549	263,026
Government grants	15,086	314
Other income	2,496	2,216
Total	**192,103**	**643,212**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income.

2.3. Materials and services

Materials and services EUR thousand	2023	2022*
Materials and supplies	-1,210,050	-2,206,022
External services	-16,024	-18,859
Total	**-1,226,074**	**-2,224,881**

The change in materials and services from 2022 to 2023 is due to a large change in natural gas market price.

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating expenses.

2.4. Personnel

Personnel expenses EUR thousand	2023	2022
Salaries and remunerations	-26,093	-27,401
Pension expenses – defined contribution pension plans	-4,831	-4,422
Pension expenses – defined benefit pension plans	-187	80
Statutory employer contributions	-3,817	-3,730
Total	**-34,929**	**-35,473**

Salaries and remunerations of CEO and Members of the Board of Directors EUR thousand	2023	2022
CEO	-511	-350
Members of the Board of Directors	-211	-279
Total	**-722**	**-629**

Personnel on average	2023	2022
Finland	197	212
Sweden	92	90
Norway	37	42
Germany	2	3
Personnel on average	**327**	**347**

Personnel at the end of the period	2023	2022
Finland	202	196
Sweden	96	85
Norway	38	38
Germany	1	2
Personnel at the end of the period	**337**	**321**

2.5. Depreciation, amortization and impairment

Accounting policies

Depreciation, amortization and impairment

Items are depreciated straight-line over their estimated useful lives. Land and water areas are not depreciated. Depreciations of right-of-use assets are included in depreciation of fixed assets in the statement of income. 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

Depreciation, amortization and impairment EUR thousand	2023	2022
Depreciation of land*	-1,547	-1,403
Depreciation of buildings and structures	-22,491	-21,679
Depreciation of machinery and equipment	-43,666	-49,388
Depreciation of other tangible assets	-828	-700
Depreciation of tangible assets**	-68,532	-73,170
Amortization of intangible assets	-7,965	-8,292
Impairment***	-326	-11,398
Total	**-76,822**	**-92,860**

* Right-of-use assets in accordance with IFRS 16.
** Right of use asset plant Risavika has been included in fixed assets until October 2023.
*** The write down of assets held for sale 0.3 million euros in 2023. The write down of Goodwill 11.4 million euros year 2022.

According to company's assessment, climate-change related regulatory changes will not have significant negative impacts on estimated useful lives of the company's assets.

2.6. Other operating expenses

Losses from realized and unrealized derivative financial instruments attributable to movements in their fair value are recorded by Gasum in other operating expenses.

Other operating expenses EUR thousand	2023	2022*
Rents	-1,495	-1,876
Maintenance expenses	-20,392	-16,777
External services	-27,419	-29,418
Loss from realized derivative financial instruments*	-168,069	-571,406
Loss from unrealized derivative instruments*	-28,274	-105,228
Personnel-related expenses other than salary expenses	-3,500	-2,938
Fixed operating expenses	-2,364	-2,616
Administrative expenses	-4,243	-3,854
Marketing and entertainment expenses	-1,282	-1,587
Insurance policies	-2,975	-1,434
Compensation for daily minimum purchase obligation of natural gas	0	4,054
Other contractual penalties	-389	-63
Other**	-6,810	-9,506
Total	**-267,211**	**-742,650**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating expenses.

**Other items under operating expenses include the increase in the expected credit loss provision (ECL) concerning open due sales receivables.

2.7. Audit fees

Audit fees Deloitte EUR thousand	2023	2022
Statutory audit fees	-310	0
Audit opinions	0	0
Tax services	0	0
Other services	0	0
Total	**-310**	**0**

Audit fees PricewaterhouseCoopers EUR thousand	2023	2022
Statutory audit fees	-383	-830
Audit opinions	-89	-58
Tax services	-35	-82
Other services	-56	-5
Total	**-563**	**-974**

2.8. Finance income and finance expenses

Finance income EUR thousand	2023	2022
Foreign exchange gains	185,632	122,647
Realized and unrealized gains on interest rate derivatives	9,935	16,139
Other finance income	10,414	1,407
Total	**205,981**	**140,193**

Finance expenses EUR thousand	2023	2022
Interest expenses on finance loans	-20,121	-7,895
Foreign exchange losses	-188,363	-122,493
Interest on lease liabilities	-10,437	-10,642
Realized and unrealized losses on interest rate derivatives	-8,884	-4,413
Other finance expenses	-3,523	-3,456
Total	**-231,329**	**-148,899**
Total finance income and finance expenses	**-25,348**	**-8,706**

Other finance expenses mainly consist of amortized collateral payments and brokerage fees.

Changes in finance income and expenses compared to the financial year 2022 are mainly due to changes in foreign currency rates and related currency derivatives as well as changes in fair value of interest rate derivatives. The increase in the interest rates on the financial loan is the reason for the increased interest costs in 2023.

2.9. Income tax expenses

Income taxes

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 that 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.

Taxes EUR thousand	2023	2022
Current tax	-1,348	-12,617
Taxes for previous periods	0	-102
Change in deferred taxes	11,751	-5,155
Total	**10,403**	**-17,874**

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

EUR thousand	2023	2022
Result before income tax	19,775	141,218
Mathematical tax based on Finland’s corporate tax rate	-3,955	-28,244
Effect of different tax rates applied to foreign subsidiaries	-224	-201
Tax exempt income	2,463	341
Non-deductible expenses	-5,664	-12,570
Previously unrecognized deferred tax assets	21,243	0
Unrecognized deferred tax receivables on losses	-6,621	0
Utilization of previously unrecognized tax losses	88	23,005
Taxes for previous periods	0	207
Permanent differences	0	17
Translation differences*	2,375	901
Other items	698	-1,330
Total	**10,403**	**-17,874**

*Translation differences include the differences in tax rate due to functional currency and translation differences in the calculation of current tax.

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

Tax effects relating to components of other comprehensive income EUR thousand	2023			2022		
	Before tax	Tax effect	After tax	Before tax	Tax effect	After tax
Remeasurement of post-employment benefits	255	-51	204	774	-155	619
Other comprehensive income	**255**	**-51**	**204**	**774**	**-155**	**619**

Effects of Pillar Two model rules

The Group is within the scope of the OECD Pillar Two model rules for global minimum tax. Pillar Two legislation was enacted in Finland 1 January 2024. This legislation was also enacted of 2024 in the following Gasum's operative countries: Sweden, Germany and Norway. Estonia has postponed implementation of global minimum tax. Since the Pillar Two legislation was not effective at the reporting date, the Group has no related current tax exposure for the year 2023. The Group has reviewed its corporate structure considering the introduction of Pillar Two Model Rules in various jurisdictions. In most of the jurisdictions the effective tax rate is well above 15% and therefore, the Group has assessed there is no material exposure to paying Pillar Two "top-up" taxes.

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.

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.

Reconciliation of intangible assests

2023 EUR thousand	Goodwill	Intangible rights	Other intangible assets	Total
Cost at January 1	99,923	113,586	17,591	231,100
Additions	0	1	221	222
Disposals	0	0	-377	-377
Reclassifications	0	0	0	0
Acquisition of subsidiary (note 5.1)	1,734	0	0	1,734
Adjustments	0	0	0	0
Changes in exchange rates	-1,322	2	0	-1,320
Cost at December 31	**100,334**	**113,589**	**17,434**	**231,358**
Accumulated amortization at January 1	11,000	41,808	9,290	62,098
Amortization for the period	0	5,112	2,853	7,965
Impairment	0	0	0	0
Disposals	0	0	-378	-378
Changes in exchange rates	0	4	0	4
Accumulated amortization at December 31	**11,000**	**46,924**	**11,765**	**69,690**
Net book value at January 1, 2023	88,922	71,778	8,301	169,001
Net book value at December 31, 2023	89,334	66,665	5,669	161,668

2022 EUR thousand	Goodwill	Intangible rights	Other intangible assets	Total
Cost at January 1	107,416	113,479	14,963	235,857
Additions	0	1	357	357
Disposals	0	-9	-252	-261
Reclassifications	0	0	2,524	2,524
Adjustments	0	116	0	116
Changes in exchange rates	-7,493	0	0	-7,493
Cost at December 31	**99,923**	**113,586**	**17,591**	**231,100**
Accumulated amortization at January 1	0	36,461	6,608	43,069
Amortization for the period	0	5,356	2,935	8,291
Impairment	11,000	0	0	11,000
Disposals	0	-9	-252	-261
Changes in exchange rates	0	0	0	0
Accumulated amortization at December 31	**11,000**	**41,808**	**9,290**	**62,098**
Net book value at January 1, 2022	107,416	77,018	8,354	192,788
Net book value at December 31, 2022	88,922	71,778	8,301	169,001

Goodwill

Accounting policy

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. The units determined by Gasum as CGUs are the Industry, Maritime and Traffic business units as well as the unbundled natural gas sales business, which is part of the Supply and Trading unit. No goodwill is allocated to the natural gas sales business. The intangible and tangible assets of the Supply and Trading unit have been allocated to the Industry and Maritime business units for impairment testing. Following the organizational change, goodwill relating to the LNG and Energy Market Services businesses has been allocated to the Industry and Maritime business units in proportion to their fair values, whereas goodwill relating to the Biogas business has been allocated to the Traffic business unit as it primarily serves Traffic customers.

Goodwill EUR thousand	2023	2022
CGU: Industry business	61,164	62,472
CGU: Maritime business	25,475	25,967
CGU: Traffic business*	2,694	483
Total	**89,334**	**88,922**

*Traffic CGU increased via new subsidiary (see note 5.1 Acquisitions in 2023)

Reconciliation of goodwill EUR thousand	2023	2022
Net book value at January 1	88,922	107,416
Additions	1,734	0
Impairment losses for the financial period	0	-11,000
Changes in exchange rates	-1,322	-7,493
Book value at December 31	**89,334**	**88,922**

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. 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 rate of 2% (2022: 1%), which is 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.

Any impairment is recognized as an expense in the income statement. Goodwill impairment losses are not reversed. The recoverable amounts in the testing model exceeded the carrying amounts of the assets of the CGUs by tens of percent or more. In comparison period, an impairment loss of EUR 11.0 million related to Maritime business CGU goodwill was recognized in the income statement in December 2022. The main assumptions behind the impairment of Maritime goodwill were related to the significant turbulence in the energy market. There were no impairments of goodwill during the 2022 reporting period concerning Industry and Traffic CGUs.

Main variables used in the value-in-use calculation:

1. Volume growth, which is based on an estimate of the sales growth at existing business units
2. Market environment and prevailing market prices and price scenarios
3. Discount rate, which is determined using the Weighted Average Cost of Capital (WACC), a reflection of the Group's average cost of capital. WACC reflects market view concerning time value of money and risk associated with the industry sector of the Group. Parameters used to determine WACC are based on observable figures of comparable companies in the same industry sector and market risk premium. Management determines components of the WACC so that risk-free rate, expected return and beta are consistent with external information sources. WACC is computed with targeted long-term capital structure of the Group.

The pre-tax discount rate used in the calculations for the CGUs is 13.61% (2022: 9.47%).

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 change in the discount rate, poorer than estimated development of EBITDA, and lower volume growth in the period beyond the forecast period.

On the basis of the sensitivity analyses, the probability of impairment losses on goodwill of Industry, Maritime and Traffic CGU units is low. Company evaluates that circumstances that led to the impairment of Maritime goodwill in financial year 2022 have stabilized. Volumes in Maritime business segment have started to recover when gas market prices declined. Company evaluates that risk of impairment loss in Maritime segment considering the recent estimates is low. However, significant changes in the energy market environment could have influences on sensitivity analyses of both Industry and Maritime CGU.

3.2. Tangible assets

Accounting policies

Tangible assets

Tangible assets mainly consist of LNG distribution terminals, 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 includes 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. There are no material borrowing costs capitalized in PPE.

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 depreciation 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. 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.

Reconciliation of tangible assets

2023 EUR thousand	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Construction in progress	Total
Cost at January 1	33,419	500,013	421,021	33,091	30,187	1,017,730
Additions	3,567	15,427	12,038	24	49,328	80,384
Disposals	-1,270	-4,206	-403	0	-499	-6,377
Reclassifications	0	11,499	1,332	0	-12,832	0
Acquisition of subsidiary (note 5.1)	336	506	3	0	0	845
Adjustments	0	0	0	0	-316	-316
Changes in exchange rates	25	-1,015	-70	0	-335	-1,395
Cost at December 31	**36,077**	**522,224**	**433,921**	**33,115**	**65,534**	**1,090,871**
Accumulated depreciation at January 1	11,161	179,173	188,698	9,156	8,015	396,203
Depreciations for the period	1,547	22,491	43,666	828	0	68,532
Impairment	0	0	0	0	326	326
Accumulated depreciation on disposals	-34	-1,202	-302	0	0	-1,538
Reclassifications	0	0	195	-194	0	1
Adjustments	0	-42	14	26	0	-2
Changes in exchange rates	-60	204	162	1	0	307
Accumulated depreciation at December 31	**12,614**	**200,625**	**232,432**	**9,817**	**8,340**	**463,828**
Net book value at January 1, 2023	22,258	320,840	232,323	23,934	22,172	621,527
Net book value at December 31, 2023	23,463	321,599	201,489	23,298	57,194	627,043

2022 EUR thousand	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Construction in progress	Total
Cost at January 1	32,665	461,910	407,350	29,604	83,711	1,015,240
Additions	1,949	16,148	6,885	837	13,773	39,591
Disposals	-120	-17,098	-9,056	-769	-2,247	-29,290
Reclassifications	0	33,806	764	0	-37,104	-2,534
Adjustments	0	12,563	15,365	3,419	-27,946	3,401
Changes in exchange rates	-1,076	-7,316	-288	0	0	-8,679
Cost at December 31	**33,419**	**500,013**	**421,021**	**33,091**	**30,187**	**1,017,730**
Accumulated depreciation at January 1	9,758	157,772	139,588	8,465	7,720	323,303
Depreciations for the period	1,403	21,679	49,388	700	0	73,170
Impairment	0	192	206	0	0	398
Accumulated depreciation on disposals	0	-474	-479	0	0	-953
Reclassifications	0	4	-5	-9	0	-10
Adjustments	0	0	0	0	295	295
Accumulated depreciation at December 31	**11,161**	**179,173**	**188,698**	**9,156**	**8,015**	**396,203**
Net book value at January 1, 2022	22,908	304,137	267,762	21,139	75,991	691,937
Net book value at December 31, 2022	22,258	320,840	232,323	23,934	22,172	621,527

Tangible assets include right-of-use assets in accordance with IFRS 16 Leases.

Accounting policies

Leases where the Group is the lessee

In accordance with the IFRS 16 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. Right-of-use assets 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. When recognizing leases in the balance sheet, management judgment is exercised when estimating the actual term of a lease and the discount rate used. When estimating the actual term of a lease, the management takes into account any contractual penalties concerning lease termination, lease incentives and renewal options extending the lease term. When assessing the term of new leases, renewal options are not acknowledged until the use of an extension option is likely.

The Group applies the exemptions allowed by the standard concerning short-term leases with a lease term of 12 months or 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 leases recognized on the balance sheet comprise carriers and trailers used for LNG transport, liquefaction plant for LNG, land areas, facilities, vehicle leasing agreements and other leased machinery and equipment.

Carriers 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.

The Group does not act as a lessor in the manner referred to in IFRS 16.

Right-of-use assets in accordance with IFRS 16

2023 EUR thousand	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Total
Net book value at January 1, 2023	**16,457**	**1,056**	**123,053**	**0**	**140,565**
Additions	3,567	3,161	9,079	0	15,807
Disposals	-1,236	-264	-78	0	-1,577
Acquisition of subsidiary (note 5.1)	336	12	0	0	349
Depreciation	-1,547	-1,341	-29,942	0	-32,830
Reclassifications	0	0	0	0	0
Changes in exchange rates	77	48	-178	0	-53
Net book value at December 31, 2023	**17,654**	**2,672**	**101,934**	**0**	**122,260**

2022 EUR thousand	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Total
Net book value at January 1, 2022	**16,708**	**2,219**	**163,859**	**9**	**182,795**
Additions	1,924	444	454		2,822
Disposals	-10	-253	-4,251	0	-4,513
Depreciation	-1,393	-1,273	-35,635	-9	-38,309
Reclassifications			-628		-628
Changes in exchange rates	-773	-82	-747		-1,601
Net book value at December 31, 2022	**16,457**	**1,056**	**123,053**	**0**	**140,565**

Lease liabilities

EUR thousand	2023	2022
Non-current lease liability	137,218	139,430
Current lease liability	12,751	31,628
Book value at December 31	**149,969**	**171,058**

Cash flow from leases

EUR thousand	2023	2022
Interest expenses of lease liabilities	10,437	10,642
Repayments of lease liabilities	31,659	37,232
Rents remaining in income statement	1,640	1,996
Total	**43,736**	**49,869**

3.3. Share of investments consolidated using the equity method

Accounting policies

Joint ventures and associates

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 associates December 31, 2023	Country of incorporation	% of ownership interest	Measurement method	
Manga LNG Oy	Finland	25.0	Equity method	Joint venture
Vatsbo Biogas AB	Sweden	50.0	Equity method	Joint venture
Kiertoravinne Oy	Finland	19.9	Equity method	Associate

Interests in joint ventures and associate	2023	2022
Net book value at January 1	11,648	11,022
Share of result of the period	969	553
Additions	0	100
Changes in exchange rates	14	-26
Net book value at December 31	**12,631**	**11,648**

Reconciliation of book value of joint ventures and associate 2023	Manga Group Oy*	Vadsbo Biogas AB	Kiertoravinne Oy
Net assets of joint ventures and associates	46,843	1,740	211
Group's ownership interest in net assets	11,711	870	42
Book value of joint ventures and associates	11,711	870	42

Summarized financial information for joint ventures and associates

Summarized financial information of joint ventures and associates EUR thousand	Non-current		Current				
	Assets	Liabilities	Assets	Liabilities	Revenue	Result	Ownership interest
2023							
Manga LNG Oy	72,208	26,991	29,586	27,960	72,634	3,056	25%
Vadsbo Biogas AB	1,267	1,053	2,522	996	2,659	307	50%
Kiertoravinne Oy	0	0	762	550	3,374	-249	19,9%
Total	**73,475**	**28,044**	**32,870**	**29,506**	**78,668**	**3,114**	

Summarized financial information of joint ventures and associates EUR thousand	Non-current		Current				
	Assets	Liabilities	Assets	Liabilities	Revenue	Result	Ownership interest
2022							
Manga LNG Oy*	76,541	33,995	33,897	32,171	91,042	2,842	25%
Vadsbo Biogas AB	1,599	1,299	1,436	778	1,826	4,441	50%
Kiertoravinne Oy	0	0	633	166	308	-33	19,9%
Total	**78,140**	**35,294**	**35,966**	**33,116**	**93,176**	**7,250**	

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

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. Gasum analyzes credit loss risk in accordance with IFRS 9. 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.

Gasum Ltd has trade receivable factoring arrangements with three Nordic banks to enhance its working capital. In this arrangement, Gasum sells selected clients' trade receivables borne by most recent gas and power sales transactions to the bank and receives cash on immediate basis. The bank carries the credit risk of a sold trade receivable. Gasum is responsible for satisfying performance obligations, i.e. that the client receives the promised goods or services in the agreed manner.

Trade and other receivables EUR thousand	2023	2022
Trade receivables	195,953	292,777
Accrued income	34,911	27,736
Other receivables*	41,665	40,021
Total	**272,528**	**360,534**

*Gasum has derecognized prepayment of EUR 13.3 million under inventory related to non-taken gas from financial year 2020 and recognized it as financial receivable.

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

Ageing analysis of trade receivables after impairment EUR thousand	2023	2022
Not due	149,073	247,304
Overdue by		
Less than 3 months	26,600	45,233
More than 3 months	20,280	240
Total	**195,953**	**292,777**

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 asset-specifically using the average or the first-in first-out (FIFO) method and comprises all costs incurred in bringing the inventories to their present location and condition.

Inventories EUR thousand	2023	2022
Product inventories	132,826	80,180
Other inventories	785	385
Prepayments	3,784	177,298
Total	**137,395**	**257,862**

In 2023 product inventories include a write-off to net realizable value amounting to EUR 12.4 million (in 2022: EUR 25.3).

Prepayments reported under inventories in 2022 included minimum annual Take or Pay obligation regarding the undelivered gas. Due to the proceeding in the Svea Court of Appeal and cancellation of the long-term natural gas supply contract with Gazprom Export in 2023, Gasum has derecognized the asset (EUR 158.0) related to the prepayment of non-taken gas from financial year 2021. Gasum has also derecognised the prepayment of EUR 13.3 million under inventory related to non-taken gas from financial year 2020 and recognised it as financial receivable from Gazprom Export. See further details under 5.5 Legal Proceedings and Claims and 5.2 Guarantees and Commitments.

3.6. Trade and other current payables

Current liabilities to others EUR thousand	2023	2022
Trade payables	276,877	260,605
Contract liabilities	15,924	30,293
Participation fee revenue recognition liability	37	83
Other liabilities	44,712	57,663
Accruals and deferred income	88,811	182,837
Lease liabilities	12,751	31,628
Total	**439,111**	**563,109**

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 include a value-added tax liability EUR 20.3 million (2022: EUR 41.9 million). Contract liabilities include advance payments related to transfers of goods taking place in the future.

Current liabilities include EUR 144.8 million trade payables and other provisions for gas deliveries and supply contract related other costs from years 2021–2022. Accruals include natural gas daily minimum purchase obligations amounting to EUR 11.6 million, which is based on arbitration award. In addition, other liabilities include accrue interest for trade payables set out in the arbitral award, interest totaling at EUR 5.4 million on December 31, 2023. (see note 5.5 Legal claims and proceedings).

Due to the proceedings in the Svea Court of Appeal and further cancellation on the supply contract on May 22, 2023, Gasum has derecognized the asset related to the prepayment of non-taken gas from financial year 2021 and reclassified the liability as contingent liability amounting to EUR 158.0 million (see note 5.2 Guarantees and Commitments).

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.

Assets held for sale EUR thousand	2023	2022
Assets held for sale	300	0
Total	**300**	**0**

3.8. Cash and cash equivalents

Accounting policies

Cash and cash equivalents

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

Cash and cash equivalents EUR thousand	2023	2022
Cash and cash equivalents	278,873	206,190
Total	**278,873**	**206,190**

3.9. Deferred tax

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 if 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.

Deferred tax EUR thousand	2023	2022
Deferred tax assets		
Financial instruments	44	303
Pensions and employee benefits	717	919
Adopted losses	21,764	9,038
Provisions	1,706	3,887
Fixed assets & depreciation difference	376	853
Lease liabilities	7,714	5,592
Other temporary differences	74	114
Intangible assets	517	691
Total	**32,913**	**21,397**
At January 1	21,397	26,434
Netted from deferred tax liability	0	-24,183
Recognized in income statement	11,334	17,275
Recognized in other comprehensive income	-51	0
Other changes	-58	1,653
Translation differences	291	218
Book value at December 31	**32,913**	**21,397**
Netted from deferred tax liability	15,864	1,263
Total, net	**17,049**	**20,134**

Deferred tax EUR thousand	2023	2022
Deferred tax liability		
Fixed assets and depreciation difference*	14,529	14,130
Intangible assets	14,594	16,350
Provisions	0	221
Financial instruments	154	3
Other temporary differences	420	2,146
Total	**29,697**	**32,850**
At January 1	32,850	31,233
Netted from deferred tax assets	0	-24,183
Recognized in income statement	-976	22,730
Recognized in other comprehensive income	0	0
Other changes	-2,415	1,653
Translation differences	238	1,417
Book value at December 31	**29,697**	**32,850**
Netted from deferred tax assets	15,864	1,263
Total, net	**13,833**	**31,587**
Deferred tax assets and liabilities, net	**3,216**	**-11,453**

*Presentation of previous year figures reclassified to follow same principles.

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. On December 31, 2023, the Group had unused tax losses of EUR 163.7 million (December 31, 2022: EUR 189 million), of which EUR 9.6 million are not due and EUR 154.2 million are due during 2031-2033.

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. The Group has material temporary differences for which no deferred tax asset has been recognized, such as unused tax losses.

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.

Provisions EUR thousand	2023	2022
Provisions at the beginning of period	**11,918**	**27,329**
Increase in provisions	2,376	466
Decrease in provisions	0	-15,686
Unwinding of discount	0	9
Translation differences	4	-200
Provisions at the end of period	**14,298**	**11,918**
Of which non-current provisions	12,713	11,918
Of which current provisions	1,585	0

The provisions include contractual terminal and plant dismantling obligations and provision regarding onerous contracts EUR 1.6 million.

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 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.

Post-employment benefits EUR thousand	2023	2022
Balance sheet obligations for:		
Post-employment benefits	3,586	4,386
Liability in the balance sheet	**3,586**	**4,386**
Income statement charge included in operating result for: *		
Defined benefit pension plans	187	-80
Total	**187**	**-80**

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

Defined benefit pension 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.

Defined benefit pension plans EUR thousand	2023	2022
Present value of funded obligations	13,445	14,922
Fair value of plan assets	-9,859	-10,536
Deficit of funded plans	3,586	4,386
Liability in the balance sheet	**3,586**	**4,386**

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

EUR thousand	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit obligation
January 1, 2023	**14,922**	**10,563**	**4,386**
Current service cost	28		28
Interest expense or income (-)	546	387	159
	15,496	10,923	4,573
Remeasurements:			
Gain (-)/ loss from change in demographic assumptions			
Gain (-)/ loss from change in financial assumptions	-1,127		-1,127
Experience gains (-) / losses			
Return on plan assets, excluding amounts included in interest expense or income		-872	872
Contributions:			
Employers		732	-732
Plan participants			
Payments from plans:			
Benefit payments	-924	-924	0
December 31,2023	**13,445**	**9,859**	**3,586**

EUR thousand	Present value of defined benefit obligations	Fair value of plan assets	Net defined benefit obligation
January 1, 2022	**20,699**	**15,099**	**5,600**
Current service cost	55		55
Interest expense or income (-)	181	132	49
	20,935	15,231	5,704
Remeasurements:			
Gain (-)/ loss from change in demographic assumptions			
Gain (-)/ loss from change in financial assumptions	-4,317		-4,317
Experience gains (-) / losses			
Return on plan assets, excluding amounts included in interest expense or income		-3,543	3,543
Contributions:	-659	-474	-184
Employers		360	-360
Plan participants			
Payments from plans:			
Benefit payments	-1,037	-1,037	0
December 31, 2022	**14,922**	**10,536**	**4,386**

The discount rate used to calculate the situation on December 31, 2023, was 4.10%, while for the year before it had been 3.80%. The inflation rate used on December 31, 2023, is 2.50% as in previous year it was 2.60%. These changes caused a gain to defined benefit obligation.

Significant actuarial assumptions	2023	2022
Discount rate	4.10%	3.80%
Inflation	2.50%	2.60%
Benefit increase	2.74%	2.84%
Wage coefficient	3.50%	3.60%

Assumptions regarding future mortality are 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 the age of 65	Male	Female
Aged 45 at balance sheet date	22.0	27.0
Aged 65 at balance sheet date	21.4	25.4

The table below presents the sensitivity analysis concerning a 0.5% change in the discount rate. The sensitivity analysis is based on a change in an assumption while holding all other assumptions constant.

EUR thousand	Present value of defined benefit obligation	Fair value of plan assets	Net defined benefit obligation	Current service cost	Net interest
Discount rate 4.10%	13,445	9,859	3,586	0	131
Discount rate +0.50%	12,771	9,444	3,327	0	135
Discount rate -0.50%	14,181	10,309	3,872	0	126
Impact in percentage terms					
Discount rate 4.10%	0.0%	0.0%	0.0%	0.0%	0.0%
Discount rate +0.50%	-5.0%	-4.2%	-7.2%	0.0%	3.2%
Discount rate -0.50%	5.5%	4.6%	8.0%	0.0%	-4.3%

Through its defined benefit pension plans the Group is exposed to several 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 inflation, the acceleration of inflation may increase the deficit of defined benefit plans.

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.

Capital management EUR thousand	2023	2022
Interest-bearing liabilities	493,955	515,556
Cash and cash equivalents	-278,873	-206,190
Net debt	**215,082**	**309,366**
Total equity	577,035	543,068
Total capital	792,116	852,434
Gearing ratio	**37%**	**57%**

Interest-bearing liabilities EUR thousand	2023	2022
Loans from financial institutions	343,986	344,498
Lease liabilities	149,969	171,058
Interest-bearing liabilities	**493,955**	**515,556**

Net debt reconciliation

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

Net debt EUR thousand	2023	2022
Cash and cash equivalents	-278,873	-206,190
Current interest-bearing liabilities	12,751	31,628
Non-current interest-bearing liabilities	481,204	483,928
Net debt	**215,082**	**309,366**

Net debt EUR thousand	Cash and cash equivalents	Current financial lease liabilities	Non-current financial lease liabilities	Current interest-bearing liabilities	Non-current interest-bearing liabilities	Total
Net debt at December 31, 2021	**-387,364**	**36,919**	**169,972**	**207,911**	**445,656**	**473,095**
Cash flows	181,174	-37,232		-207,911	-101,158	-165,127
Foreign exchange adjustments		-126	-581			-707
Business disposals		-341				-341
Other non-cash movements*		32,409	-29,962			2,447
Net debt at December 31, 2022	**-206,190**	**31,628**	**139,429**	**0**	**344,498**	**309,366**
Cash flows	-72,683	-31,659				-104,342
Foreign exchange adjustments		-29	-188			-217
Business disposals						0
Other non-cash movements*		12,811	-2,023		-512	10,276
Net debt at December 31, 2023	**-278,873**	**12,751**	**137,218**	**0**	**343,986**	**215,082**

*Mainly includes transfers between non-current and current increases and decreases in lease liabilities not involving cash flows.

4.2. Financial risk management

The Gasum Group's financial risks are managed in accordance with the Commodity Risk, Counterparty and Credit Risk and Treasury Policies approved by the Gasum Board of Directors. The purpose of the risk policies is to identify the Group's risks, establish the appropriate target risk level as well as risk management principles and risk limits. The risk policies are regularly reviewed to ensure that they support the Group's business functions in the pursuit of their objectives and respond to any changes in market conditions or Group operations.

Financial risks include interest rate risk, price risk, foreign currency risk, credit risk and liquidity risk. Group Risk Management monitors Group's risk position and reports regularly to the Market Risk Committee consisting of the company's management and to the Gasum Board of Directors.

Commodity derivatives and risks

Gasum is exposed through its business activities to gas, power, and fuel market price fluctuation. Commodity derivatives are used to hedge the Group's open commodity position relating to business activities as well as price risk relating to power sourcing for own use. The nominal value of the commodity derivatives totaled EUR 685.8 million at the reporting date (2022: EUR 822.5 million). The fair values of commodity derivatives are based on available market quotes at the reporting date. For more information see Note 4.3.

The extreme volatility in gas and power markets that was seen in 2021 and 2022 has decreased in 2023. In 2023, the TTF index for gas fluctuated between EUR 23.3 and EUR 75.0 per megawatt hour (2022: EUR 62.3 – 342.9 /MWh). For power, the Nord Pool power price moved between EUR -4.1 and EUR 137.7 per megawatt hour (2022: EUR 2.0–462.1 /MWh).

Commodity price risk positions arise from the underlying business and Gasum has categorized these risks as fair value price risks and cash flow price risks. Gasum is exposed to fair value commodity price risks when it holds assets and liabilities, which are subject to commodity market price changes, or has entered into firm commitments, which are subject to commodity market price changes. Cash flow price risks arise when Gasum has forecasted future cashflows, which are subject to commodity market price changes. These cash flows include for example sales and purchases where the price is determined by different indices and the volumes are considered highly probable. Gasum has different hedging strategies for these types of risk positions and uses commodity derivatives to hedge the exposures according to the limits set in the risk policies.

Commodity risk position and related derivatives are followed in Risk Management on a daily basis and the company has processes in place for identifying, reporting and taking corrective measures on any breaches. Commodity risk positions are limited with different open position and hedge level limits. Gasum implemented significant changes and improvements to its commodity risk management principles and reporting during the year. Gasum does not execute derivatives in other than hedging purpose.

Gas and propane

As a general rule, the pricing of the Group's gas contracts reflects developments in the international market prices of gas. The pricing of Gasum's gas transactions is mainly linked to European gas price indices, other energy (such as propane) and cost development indices.

Power

The gas businesses consume significant amounts of electricity in their processes, resulting in price risk when there are changes in the price of electricity. Derivatives are therefore used to hedge electricity price risk in production. Gasum has entered into long-term Power Purchase Agreements (PPA) for wind power sales and purchases, which are treated as derivate contracts in accordance with IFRS 9 on the balance sheet. Portfolio risk can be hedged with financial derivatives according to risk limits.

Sensitivity analyses for commodity risk arising from financial instruments

Sensitivity analyses for significant commodity price risks are presented in the following table. In the calculation of commodity price risk arising from financial instruments, 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 is presented in the table below. The figures assume that there has been a 10% increase/decrease in commodity price throughout the forward price curve while all other variables have been held constant. A 10% change has been considered a reasonably possible change to commodity prices and held constant in the financial statements' sensitivity analysis for comparability. The gas and power price volatility in recent years has been extreme and daily price movements can have been above 10%.. The sensitivity analysis only includes the effect of the hedge derivatives on the result. The hedged exposure typically moves in the opposite direction from the hedge derivatives, which partly offsets the derivative effect on the result. The timing difference in accounting is, however, significant as the derivative market value change is booked in result immediately and the underlying business items are booked in result mostly when they realize.

Sensitivity to commodity risk

EUR million	2023	2022
Impact of 10% increase in gas and propane prices on result for the period	2.6	3.3
Impact of 10% decrease in gas and propane prices on result for the period	-2.6	-3.3
Impact of a 10% increase in power prices on result for the period	-4.3	8.9
Impact of a 10% decrease in power prices on result for the period	4.3	-8.9

Interest rate derivatives and risks

The Group's business is capital intensive. The current long- and short-term loan portfolio consists of bank financing. All loans are euro-denominated. Primary methods employed to finance seasonal fluctuations in working capital are income financing, working capital management, commercial paper program 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 (2022: 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-rate risk within the limits set by the Group 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 euro area reference rate reform did not affect the interest rate derivatives portfolio. Strategies for interest-rate risk management are continuously developed to find an optimal ratio between risks and hedging expenses. The funding has been raised only to the parent entity.

Interest rate derivatives are used to hedge against the interest rate risk of the Group's borrowings. Interest rate derivatives are measured at fair value and changes in fair value recognized in profit or loss. As of December 31, 2023, the nominal values of the outstanding interest rate derivatives were EUR 490 million (2022: EUR 917.5 million). Gains and losses on interest rate swaps and/or caps 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 Group 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 Group Treasury Policy, the average maturity of the debt portfolio should be more than 2 years. For interest rate derivatives, the Treasury Policy sets the limits for both the hedging rate (varies between 0–100% for different periods) as well as the interest rate duration (3–18 months).

As of December 31, 2023, the Group's interest-bearing liabilities totaled EUR 494.0 million (2022: EUR 515.6 million). Interest-bearing liabilities include loans from financial institutions and lease liabilities. The average duration of Gasum's debt portfolio at the end of 2023 was 1.3 years (2022: 1.3 years). The average duration of Gasum's interest-rate hedge portfolio was 1.2 years (2022: 10.1 months).

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

EUR thousand Nominal value	Loans from financial institutions	Floating rate debt	Derivative financial instruments
December 31, 2023	343,986	343,986	490,000
December 31, 2022	344,498	344,498	917,500

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 profit and loss. 1% percentage point change in interest rate has been considered a constant reasonably possible change in interest rates as risks and sensitivities change throughout time. The impact on profit and loss 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 EUR million	2023	2022
Impact on profit/loss of increase of 1 percentage point in market interest rates	-0.5	-0.8
Of which the impact of interest expenses of borrowings	-4.7	-4.8
Of which changes in the market value of interest rate derivatives	4.2	4.0
Impact on profit/loss of decrease of 1 percentage point in market interest rates	0.4	1.0
Of which the impact of interest expenses of borrowings	4.7	4.9
Of which changes in the market value of interest rate derivatives	-4.3	-3.9

Currency derivatives and foreign currency risks

The Group's foreign currency risk is managed in accordance with the Group 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 Group 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. Generally, balance sheet foreign currency risk is hedged fully, and the outstanding transaction position mandate is €10 million. Generally, translation risk is not hedged.

The Group's operating cash flows are primarily denominated in euro. In addition, in some of the Group's Swedish and Norwegian subsidiaries the functional currency is euro and expenses are incurred in local currencies that are not netted against corresponding local currency revenues. These expenses expose the Group to foreign currency risk, which is primarily hedged with either forwards or options. The euro denominated transactions of above mentioned Swedish and Norwegian subsidiaries do not present a foreign currency risk for the group. On December 31, 2023, the nominal values of the outstanding currency derivatives totaled EUR 96.8 million (2022: EUR 144.3 million). The fair value of currency derivatives is calculated on the basis of observable forward prices and volatilities of currencies. The Group did not apply hedge accounting to currency derivatives at year-end 2023. Subsidiaries for which a local currency 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 Group 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 such as, foreign currency derivatives, cash, internal borrowings, and trade receivables and payables in the balance sheet. Translation risk is not hedged and is not included in the table below.

Currency risk against EUR thousand	NOK	SEK	GBP	USD	DKK	Total
December 31, 2023	-987	180	-410	-2,351	785	-2,783
December 31, 2022	-16,649	-15,016	175	914	76	-30,500

Sensitivity analyses for foreign currency risk

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

Sensitivity to currency risk EUR million	2023	2022
Appreciation of NOK by 10%	1.7	-4.5
Depreciation of NOK by 10%	-1.4	3.6
Appreciation of SEK by 10%	17.2	7.7
Depreciation of SEK by 10%	-14.1	-6.3
Appreciation of USD by 10%	1.2	0.1
Depreciation of USD by 10%	-0.3	-0.1

Credit risk

The Gasum Group's credit risk management process and division of responsibilities are determined in the Gasum Counterparty and Credit Risk Policy. According to the Gasum Counterparty and Credit Risk Policy, the credit profile of all new counterparties is checked prior to commencing business and monitored regularly. Credit exposures are monitored in Risk Management. Credit loss risk has been analyzed in accordance with IFRS 9.

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. The Group aims for a dispersed debt structure in terms of both maturity and sources of finance. The Group also had significant cash holdings at the reporting date as well as unused liquidity reserves by means of which the company seeks to ensure the performance of future obligations also in adverse market situations. At the date of the financial statements on December 31, 2023, the Group had undrawn committed reserve facilities totaling EUR 220 million (2022: EUR 220 million).

The Group's borrowings are subject to financial covenants concerning both the gearing ratio and available liquidity. These covenants are reported to the lenders on a quarterly and monthly basis respectively.

The company's business results in recognizing unrealized derivative receivables and payables in the balance sheet, with the related cash realizing in the future through the realization of commodity sales. 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 table does not include the effect of a capital loan treated as an equity instrument as the related amounts will not be recognized until the decision on the payment of interest has been made and the obligation of Gasum Ltd to pay the interest arises. The time of interest payment is decided by the company at its discretion. The maturity of derivative financial assets is also disclosed.

Maturity of non-derivative and derivative financial liabilities:

December 31, 2023 EUR thousand	Less than 1 year	1–2 years	2–5 years	5+ years	Total
Loans from financial institutions		343,986			343,986
Trade payables	276,877				276,877
Derivative financial instruments (no hedge accounting)	66,251	7,436	12,340	8,556	94,583
Lease liabilities*	12,751	8,256	25,004	103,958	149,969
Used overdraft facilities	0				0
Interest payments on loans	17,853	17,902			35,755
Total	**373,732**	**377,580**	**37,344**	**112,514**	**901,170**

December 31, 2022 EUR thousand	Less than 1 year	1–2 years	2–5 years	5+ years	Total
Loans from financial institutions		344,498			344,498
Trade payables	260,605				260,605
Derivative financial instruments (no hedge accounting)	211,924	50,813	26,380	26,862	315,978
Lease liabilities*	31,628	5,727	18,863	114,839	171,058
Used overdraft facilities	0				0
Interest payments on loans	8,147	12,578			20,725
Total	**512,304**	**413,617**	**45,243**	**141,701**	**1,112,864**

* Includes interest effect

Maturity of derivative financial assets:

December 31, 2023 EUR thousand	Less than 1 year	1–2 years	2–5 years	5+ years	Total
Derivative financial instruments (no hedge accounting)	84,840	9,818	15,973	13,379	124,010
Total	**84,840**	**9,818**	**15,973**	**13,379**	**124,010**

December 31, 2022 EUR thousand	Less than 1 year	1–2 years	2–5 years	5+ years	Total
Derivative financial instruments (no hedge accounting)	186,636	63,631	35,433	34,591	320,290
Total	**186,636**	**63,631**	**35,433**	**34,591**	**320,290**

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 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 as well as short-term money market investments, which include bank deposits and commercial papers where the maximum maturity is 3 months. Overdraft facilities are included in other current liabilities presented under current liabilities. The Group applies the IFRS 9 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 macroeconomic conditions.

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 re-measured at their fair value at the date of the financial statements. The method of recognizing the resulting gain or loss from re-measurement at fair value depends on the type of the derivative contract and is either as operating income and expense or as financial items. Hedge accounting is not applied for derivative financial instruments.

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 and loss 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. 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.

Failed own use of physical contracts

Gasum is actively engaged in the purchase and sale of physical goods across a broad range of energy commodities. Gasum enters and continues to hold these contracts for the purpose of receipt or delivery of the physical goods, i.e. a physical fulfillment of the contract and not through a net cash settlement of underlying physical obligation. Gasum has Failure to deliver or receive the underlying physical contract partially or in full may result in penalties between Gasum and the counterparty as stipulated in the agreement between Gasum and the counterparty. According to company's assessment, Gasum has not identified failed own use contracts based on the IFRS 9 criteria. Company follows fulfillment of own-use conditions regularly.

Financial instruments by category

December 31, 2023 EUR thousand	At fair value through profit or loss	At amortized cost	Total
Assets as per balance sheet:			
Other investments at fair value through profit or loss	50		50
Derivative financial instruments (no hedge accounting)	130,103		130,103
Gas	62,057		
Power	61,946		
Interest rate	4,999		
Foreign exchange	1,093		
EUA	6		
Trade and other receivables		237,561	237,561
Other non-current assets		217	217
Cash and cash equivalents		278,873	278,873
Total	**130,153**	**516,652**	**646,804**

December 31, 2022 EUR thousand	At fair value through profit or loss	At amortized cost	Total
Assets as per balance sheet:			
Other investments at fair value through profit or loss	50		50
Derivative financial instruments (no hedge accounting)	320,290		320,290
Gas	94,214		
Power	217,323		
Interest rate	7,597		
Foreign exchange	1,156		
EUA	0		
Trade and other receivables		333,687	333,687
Other non-current assets		212	212
Cash and cash equivalents		206,190	206,190
Total	**320,340**	**540,089**	**860,429**

December 31, 2023 EUR thousand	At fair value through profit or loss	At amortized cost	Total
Liabilities as per balance sheet:			
Loans		343,986	343,986
Lease liabilities		149,969	149,969
Derivative financial instruments (no hedge accounting)	94,583		94,583
Gas	47,973		
Power	43,704		
Interest rate	2,175		
Foreign exchange	730		
EUA	1		
Trade and other current payables		349,180	349,180
Other non-current liabilities		3,586	3,586
Total	**94,583**	**846,721**	**941,304**

December 31, 2022 EUR thousand	At fair value through profit or loss	At amortized cost	Total
Liabilities as per balance sheet:			
Loans		344,498	344,498
Lease liabilities		171,058	171,058
Derivative financial instruments (no hedge accounting)	315,978		315,978
Gas	139,382		
Power	174,607		
Interest rate	0		
Foreign exchange	1,989		
EUA	0		
Trade and other current payables		464,796	464,796
Other non-current liabilities		4,386	4,386
Total	**315,978**	**984,738**	**1,300,716**

The table below presents commodity derivatives by type of contract. Commodity derivatives comprise gas and power derivatives.

Volume and maturity of commodity derivatives December 31, 2023 EUR thousand	2024 Volume			2024 Fair value	2025 Volume			2025 Fair value
	MWh	MT	Bbl	Net	MWh	MT	Bbl	Net
Sales agreements – Gas								
No hedge accounting	-4,498,534	-8,000	0	61,045	-4,380	0	0	18
Sales agreements – Power								
No hedge accounting	-894,971			-10,985	-551,880			-2,069
Total	**-5,393,505**	**-8,000**	**0**	**50,076**	**-556,260**	**0**	**0**	**-2,051**
Purchase agreements – Gas								
No hedge accounting	3,555,755	9,000		-45,643	94,726			-1,336
Purchase agreements – Power								
No hedge accounting	1,002,910			15,093	718,482			6,103
Total	**4,558,665**	**9,000**	**0**	**-30,550**	**813,208**	**0**	**0**	**4,767**

Volume and maturity of commodity derivatives December 31, 2022 EUR thousand	2023 Volume			2023 Fair value	2024 Volume			2024 Fair value
	MWh	MT	Bbl	Net	MWh	MT	Bbl	Net
Sales agreements – Gas								
No hedge accounting	-2,254,306	-6,400	0	-29,476	-380,903	0	0	-12,448
Sales agreements – Power								
No hedge accounting	-975,086			-68,760	-544,582			-22,392
Total	**-3,229,392**	**-6,400**	**0**	**-98,235**	**-925,485**	**0**	**0**	**-34,841**
Purchase agreements – Gas								
No hedge accounting	2,270,144	51,900		-11,315	403,797	9,000		7,416
Purchase agreements – Power								
No hedge accounting	1,062,360			81,890	642,669			29,421
Total	**3,332,504**	**51,900**	**0**	**70,574**	**1,046,466**	**9,000**	**0**	**36,837**

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:

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities
- 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)
- Level 3: inputs for assets or liabilities that are not based on observable market data (that is, unobservable inputs)

Derivative financial instruments EUR thousand	At December 31, 2023		At December 31, 2022	
	Assets	Liabilities	Assets	Liabilities
Commodity derivatives (hierarchy level 1)	2,609	1,275	19,463	3,039
Commodity derivatives (hierarchy level 2)	78,229	60,628	153,943	210,852
Commodity derivatives (hierarchy level 3)	43,173	29,775	138,131	100,098
Interest rate derivatives (hierarchy level 2)	4,999	2,175	7,597	0
Currency derivatives (hierarchy level 2)	1,093	730	1,156	1,989
Total	**130,103**	**94,583**	**320,290**	**315,978**
Non-current portion:				
Commodity derivatives (hierarchy level 1)	0	0	2,107	406
Commodity derivatives (hierarchy level 2)	5,849	4,668	24,851	26,710
Commodity derivatives (hierarchy level 3)	33,321	21,468	102,222	76,856
Interest rate derivatives (hierarchy level 2)	2,154	2,175	4,474	0
Currency derivatives (hierarchy level 2)	63	21	0	82
Total non-current portion	**41,387**	**28,332**	**133,654**	**104,054**
Total current portion	**88,716**	**66,251**	**186,636**	**211,924**

Commodity derivatives classified to hierarchy level 3 are presented in the table below.

Commodity derivatives level 3 EUR thousand	At December 31, 2022	Settlements	Gains/losses	Other changes	At December 31, 2023
Derivative financial instruments (no hedge accounting)	38,033	-4,303	-20,332	-1,624	13,397
Total	**38,033**	**-4,303**	**-20,332**	**-1,624**	**13,397**

Commodity derivatives level 3 EUR thousand	At December 31, 2021	Settlements	Gains/losses	Other changes	At December 31, 2022
Derivative financial instruments (no hedge accounting)	14,687	-16,111	39,658	0	38,033
Total	**14,687**	**-16,111**	**39,658**	**0**	**38,033**

Power derivatives are recognized at fair values by calculating the discounted difference between the contract price and the forecasted electricity price. The forecasted price of electricity is based on quoted market prices, price predictions and when market price data is not available, on Gasum management judgement. The fair values of level 3 power derivatives are subject to credit value adjustment and liquidity adjustment as described in the accounting policies. Valuation adjustments (Credit value adjustment and close-out cost adjustment) made when determining the fair value of financial instruments amounted to EUR 2.1 million (2022: EUR 8.2 million).

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.

Offsetting of derivative financial instruments December 31, 2023 EUR thousand	Gross amounts of recognized financial instruments in the balance sheet	Related financial instruments not set off in the balance sheet	Net amount
Financial assets			
Derivative financial instruments			
Interest rate derivatives	4,999	2,175	2,824
Commodity derivatives	124,010	30,214	93,796
Currency derivatives	1,093	340	753
Total	**130,102**	**32,729**	**97,373**
Financial liabilities			
Derivative financial instruments			
Interest rate derivatives	2,175	2,175	0
Commodity derivatives	91,679	30,214	61,464
Currency derivatives	730	340	390
Total	**94,584**	**32,729**	**61,854**

Offsetting of derivative financial instruments December 31, 2022 EUR thousand	Gross amounts of recognized financial instruments in the balance sheet	Related financial instruments not set off in the balance sheet	Net amount
Financial assets			
Derivative financial instruments			
Interest rate derivatives	7,597	0	7,597
Commodity derivatives	311,537	105,362	206,175
Currency derivatives	1,156	714	442
Total	**320,290**	**106,076**	**214,214**
Financial liabilities			
Derivative financial instruments			
Interest rate derivatives	0	0	0
Commodity derivatives	313,990	105,362	208,628
Currency derivatives	1,989	714	1,275
Total	**315,979**	**106,076**	**209,902**

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. 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.

Share capital EUR thousand	Number of Series A shares	Number of Series K shares	Total number of shares	Share capital
31.12.2023	50,200,000	2,800,001	53,000,001	10,000
31.12.2022	50,200,000	2,800,001	53,000,001	10,000

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.

The reserve for invested unrestricted equity includes other equity investments and the part of the share subscription price that has not specifically been recognized under share capital.

In December 2021, Gasum Ltd issued a capital loan of EUR 200.0 million treated as an equity instrument targeted at Governia Oy which The Prime Minister's Office acquired during financial year 2022. The loan has no maturity date. The loan's annual coupon interest rate is 10% + 1-month EURIBOR for the first three years and after that increases to 15% + 1 month EURIBOR per year, starting in 2025. The recognition principle for the interest rate is the same as for dividends. The interest is recognized when a decision to pay the interest has been made and the obligation of

Gasum Ltd to pay the interest arises. The time of interest payment is decided by the company at its discretion. The loan is treated in the Group's IFRS financial statements as equity and does not dilute the ownership of the company's shareholders.

On 31 December 2023 accrued cumulative interest for capital loan was EUR 46.4 million.

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. No dividend was paid on the basis of the financial statements for the 2022 financial year.

4.5. Loans

Accounting policies

Loans

The non-current loans are based on variable interest rates and recognized in the financial statements at amortized cost. Transaction costs have been added to the fair value of loans using the effective interest method. All loans from financial institutions are euro-denominated bank loans that mature in 2025. The covenant terms of the loan are the net debt to equity ratio and minimum liquidity. The covenant terms were not violated at the time of reporting.

Loans EUR thousand	2023	2022
Non-current:		
Loans from financial institutions	343,986	344,498
Total	**343,986**	**344,498**
Current:		
Loans from financial institutions	0	0
Total	**0**	**0**
Total loans	**343,986**	**344,498**

5 Other notes

5.1. Business acquisitions and disposals

Acquisitions in 2023

On July 2023, Gasum closed the acquisition of Liquidgas Biofuel Genesis AB in Sweden. Gasum's ownership is 66.7 percent of ownership interest in the entity. With the acquisition, Gasum aims to support its growth strategy through increased LBG volumes. Acquisition generated new goodwill EUR 1.7 million. The final consideration paid, or the balance sheet acquired are not published according to the Agreement.

Disposals in 2023

There were no business disposals or discontinued operations during the 2023 financial year.

Acquisitions in 2022

There were no business acquisitions during the 2022 financial year.

Disposals in 2022

There were no business disposals or discontinued operations during the 2022 financial year.

5.2. Guarantees and commitments

Guarantees

Guarantees and pledges EUR thousand	2023	2022
Pledges	193	193
Guarantees given	192,325	282,411
Total	**192,518**	**282,604**

Gasum has towards its normal course of business both guarantees issued by financial institutions on behalf of Gasum and guarantees issued by Gasum itself. The guarantees issued by financial institutions on behalf of Gasum are mostly requirements in different frame agreements and environmental guarantees for projects. The guarantees issued by Gasum are typically issued in cases where the counterpart deems the credit profile of Gasum subsidiary to be unsatisfactory. Guarantees issued by Gasum are used for similar purposes as the guarantees issued by financial institutions.

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 exemptions concerning short-term or low-value leases enabled by the IFRS 16 Leases standard have been applied.

Rental commitments EUR thousand	2023	2022*
Expiry no later than 1 year	680	613
Expiry later than 1 year but no later than 5 years	248	392
Expiry later than 5 years	0	0
Total	**928**	**1,005**

*Comparison figures have been adjusted to follow the same principle

Legal claims Contingencies

Legal claims Contingency EUR thousand	Dec 31,2023	Dec 31,2022
Contingent Liabilities	169,806	0

Gasum has had a long-term gas supply contract with Russian Gazprom Export LLC under which, in addition to the contracted volumes of natural gas supply, the minimum annual volume has been agreed. In case Gasum did not take the minimum annual volume of gas, Gasum was obliged to pay a prepayment under the contract, which gave Gasum the right to receive the not taken amount of the agreed minimum annual volume in later years. Gasum has cancelled the long-term natural gas supply contract with Gazprom Export on May 22, 2023. See further details under Note 5.5 Legal Proceedings and Claims. Gasum has derecognised EUR 158.0 million asset under inventories regarding the undelivered gas from financial year 2021 and corresponding EUR 158.0 million financial liability. Based on legal advice and management assessment, realisation of the provision is possible, but not probable and therefore contingent liability has been recognised according to IAS 37. The contingent liability EUR 158.0 million accrue interest, totalling EUR 5.8 million on December 31, 2023. Accrued interest for contingent liability is presented as part of the contingent liability, total contingent liability being EUR 163.8 million on December 31, 2023.

Gasum has also disclosed a contingent liability regarding the Swedish Tax Agency's decision of excise duty EUR 6.0 million. Gasum disagrees with the Swedish Tax Agency's decision and is assessing available options to rectify the Swedish Tax Agency's decision. See further details under note 5.5. Legal claims and proceedings Company assess that there is possible, although not probable, obligation arising from past events and therefore company has disclosed contingent liability according to IAS 37. Disclosed contingent liability covers also similar items outside the audited period in all relevant legal entities in Sweden.

5.3. Group companies

The following table presents the Group companies and the Group's associates and joint ventures at December 31, 2023.

Parent company

	Country of incorporation
Gasum Ltd	Finland

Subsidiaries

Subsidiaries	Country of incorporation	Group's ownership interest (%)	% of voting rights
Gasum LNG Oy	Finland	100	100
Gasum Portfolio Services Oy	Finland	100	100
Gasum AB	Sweden	100	100
Gasum Västerås AB	Sweden	98.7	98.7
Gasum Clean Gas Solutions Holding AB	Sweden	100	100
Gasum Clean Gas Solutions AB	Sweden	100	100
Skövde Biogas AB	Sweden	100	100
Liquidgas Biofuel Genesis AB*	Sweden	66.7	66.7
Gasum AS**	Norway	100	100
Gasum Oü	Estonia	100	100
Gasum AB German Branch	Germany	100	100

*Liquidgas Biofuel Genesis AB has been acquired on July 2023.
**Gasum Clean Gas Solutions AS has been merged to Gasum AS on August 31, 2023.

Joint ventures and associates

Joint ventures and associated companies		Country of incorporation	Group's ownership interest (%)	% of voting rights
Manga LNG Oy	Joint venture	Finland	25.0	25.0
Vadsbo Biogas AB	Joint venture	Sweden	50.0	50.0
Kiertoravinne Oy	Associate	Finland	19.9	19.9

5.4. Transactions with related parties

Related parties of the Group are (a) Gasum Ltd's associated companies and joint ventures and (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.

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 100% owned by the State of Finland. Transactions with the related parties are carried out on market terms.

Transactions with related parties

Transactions with related parties 2023 EUR thousand	Sales of goods and services	Purchases of goods and services	Finance income and costs	Receivables	Liabilities
Joint ventures	56,993	25,401	0	6,706	6,384
Total	**56,993**	**25,401**	**0**	**6,706**	**6,384**

Transactions with related parties 2022 EUR thousand	Sales of goods and services	Purchases of goods and services	Finance income and costs	Receivables	Liabilities
Joint ventures	80,706	9,120	0	6,250	3,651
Total	**80,706**	**9,120**	**0**	**6,250**	**3,651**

Management's employee benefits EUR thousand	2023	2022
Salaries and other short-term employee benefits	2,888	2,704
Post-employment benefits	0	0
Total	**2,888**	**2,704**

5.5. Legal proceedings and claims

The Energy Authority's appeal to the Supreme Administrative Court

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. On July 17, 2020 the Energy Authority submitted to the Market Court that the court impose on Gasum a penalty fee for non-compliance with the unbundling provisions of the Natural Gas Market Act in conjunction with the demerger concerning the natural gas transmission network operations. The Energy Authority proposed that the amount of penalty fee be €79.7 million. On April 30, 2021 the Energy Authority supplemented its penalty fee submission with its response and secondarily proposed a penalty fee of the same size on the basis of Gasum's conduct that has continued for years in consecutive financial statements, involving either intentional or negligent breach of or non-compliance with provisions of the Natural Gas Market Act on unbundling of activities in case of the eventuality that the unbundling provisions of the Natural Gas Market Act would not be applicable to the demerger of Gasum. According to the Energy Authority, the continued conduct first took place at least in the 2017 financial statements and the 2016 comparative figures included in them and continued until the 2019 financial statements.

By a ruling given on 7 November 2022, the Market Court reversed, following Gasum's appeal, the decisions issued by the Energy Authority concerning Gasum's financial statements. In addition, the Market Court dismissed the Energy Authority's proposal concerning the penalty fee. The Energy Authority has appealed the Market Court's ruling to the Supreme Administrative Court. The Energy Authority requested in its appeal that the Supreme Administrative Court refer the matter to the Court of Justice of the European Union (CJEU) for a preliminary ruling relating to the interpretation of the Natural Gas Market Directive underlying the unbundling provisions of the Natural Gas Market Act. Based on current understanding the decision by the Supreme Administrative Court is expected during the first quarter of 2024.

The Energy Authority has, in addition, issued decisions on January 28, 2022, and June 16, 2022 concerning the company's unbundled 2020 financial statements. The company has appealed against the decisions made by the Energy Authority to the Market Court and submitted that the Market Court postpone the consideration of the matters until the Supreme Administrative Court has ruled on the above-described appeal matters as well as on the Energy Authority's the penalty fee submission. No related accounting provisions have been made.

Arbitration proceedings against Venator P&A Finland Oy

In spring 2020, the Gasum subsidiary Gasum LNG Oy filed arbitration proceedings against Venator P&A Finland Oy for failure by Venator to comply with its obligation to purchase the minimum quantity of gas under a natural gas supply agreement. The arbitration procedure resulted in a decision in favor of Gasum LNG Oy in August 2021.

Venator terminated the natural gas supply agreement as of 1 September 2022, whereby all remaining amounts under the agreement fell due. Venator has not paid its outstanding invoice despite of Gasum LNG Oy's several reminders. In early November 2022, Gasum LNG Oy filed arbitration proceedings against Venator to be able to enforce the outstanding payment. On May 14, 2023, Venator Materials PLC, and 23 affiliated companies filed petitions in the United States seeking relief under chapter 11 of the United States Bankruptcy Code. The arbitration was under stay for the duration of said chapter 11 proceedings and resumed unaffected in October 2023. In its counterclaim, Venator has made requests related to the due dates of the outstanding payments as well as adjustment of the compensation. A decision is expected during fall 2024.

The company has recognized an amount of EUR 32.7 million as a receivable under operating revenue during previous financial periods. Due to the circumstances, Gasum has recognized a credit loss provision (ECL) according to IFRS 9.

Company’s appeal to Vaasa Administrative Court on administrative enforcement decision of September 30, 2021 made by Centre for Economic Development, Transport and the Environment for Southwest Finland and appeal against the amended environmental permit

By its administrative enforcement decision of September 30, 2021, the Centre for Economic Development, Transport and the Environment for Southwest Finland has considered that Gasum’s Turku biogas plant has not, regardless of requests, taken sufficient measures to eliminate odor nuisance from the activities. Gasum appealed against the decision to Vaasa Administrative Court on October 28, 2021. To reinforce the first main obligation included in the decision, the Centre has imposed a periodic notice of a conditional fine with its basic component amounting to €200,000 and its additional component to €100,000. To reinforce six (of a total of twelve) other main obligations included in the decision, a separate fixed notice of a conditional fine amounting to €50,000 per obligation has also been imposed. Because the administrative enforcement decision is enforceable, Gasum has, regardless of its appeal, performed all measures in compliance with the Centre’s administrative enforcement decision by the due dates set for the measures in the enforcement decision. The appeal process regarding the administrative enforcement decision is currently pending in Vaasa Administrative Court, and the court decision is expected during spring 2024.

In addition, the Regional State Administrative Agency of Southern Finland has in spring 2022 issued an amended environmental permit decision for the Turku biogas plant. The amended environmental permit decision has not become legally valid yet due to objections filed against the decision by local residents, and therefore the new requirements of the environmental permit have not been implemented yet. The appeal process regarding the amended environmental permit is currently pending in Vaasa Administrative Court, and the court decision is expected during spring 2024.

Possible further measures and processes on these matters cannot be ruled out.

Gasum cancelled its pipeline natural gas supply contract with Gazprom Export

Gasum has had a long-term pipeline natural gas supply contract with Russian Gazprom Export. In April 2022, Gazprom Export presented Gasum with a demand that the payments agreed in the supply contract should be paid in rubles instead of euros. In addition, the companies had a significant disagreement regarding certain other demands made based on the contract. Due to these reasons, Gasum referred the matter to arbitration in accordance with the supply contract. In November 2022, the arbitral tribunal issued an award in the matter and ordered Gasum and Gazprom Export to continue their bilateral contract negotiations to resolve the situation. The parties were not able to resolve the situation within the period defined by the arbitral tribunal and therefore, Gasum has cancelled the long-term natural gas supply contract with Gazprom Export on May 22, 2023. Gasum has in January 2023 filed with the Svea Court of Appeal a challenge concerning parts of the arbitral award received in the arbitration based on competition law grounds.

Due to the proceedings in the Svea Court of Appeal and further cancellation of the supply contract on May 22, 2023, Gasum has in the second quarter of 2023 derecognised the asset related to the prepayment of non-taken gas from financial year 2021 and reclassified the liability as contingent liability amounting to 158.0 million euros (see note Guarantees and Commitments).

Gasum has also derecognised the prepayment of EUR 13.3 million under inventory related to non-taken gas from financial year 2020 and recognised it as financial receivable from Gazprom Export. Based on legal assessment, Gasum sees that the company is entitled to restitution of the prepayment. Balance sheet values on December 31, 2023 include 144.8 million euros trade payables and other provisions for gas deliveries and supply contract related other costs from 2021–2022. Gasum has taken preliminary actions to set off the financial receivable of EUR 13.3 million from the aforementioned trade payables and other provisions. The liabilities set out in the arbitral award accrue interest, totaling at EUR 11.2 million on December 31, 2023.

Swedish Tax Agency imposing excise duty and tax surcharges on Gasum AB for the period January 2021 – June 2022

The Swedish Tax Agency performed a tax audit of Gasum AB during 2023 regarding the period January 1, 2021 – June 30, 2022. Based on the findings made in the tax audit, the Swedish Tax Agency issued a partial decision on December 21 2023 obligating Gasum AB to pay SEK 31.2 million in excise duty and SEK 4.7 million in tax surcharges, mainly concerning energy and carbon dioxide tax deductions made by Gasum AB on gas imported from Belgium and Norway to Sweden as liquefied biogas. The liquified gas in question had been purchased and sold as biogas based on biogas purchase and supply agreements, and in accordance with valid mass balancing principles in the Renewable Energy Directive and Gas Market Directive as well as ISCC standards. Gasum disagrees with the Swedish Tax Agency's decision and is assessing available options to rectify the Swedish Tax Agency's decision. Gasum has disclosed a contingent liability regarding the Tax Agency's decision (see note Guarantees and Commitments).

Additionally, the Swedish Tax Agency has in a proposal for decision indicated that it will impose SEK 37.5 million in excise duty and SEK 5.6 million in tax surcharges on Gasum AB for biogas deliveries made during the above-mentioned period that the company failed to declare due to an administrative error, but which were tax-exempt at the time of delivery. Following a ruling from the European Court of Justice the right to tax-exemption for biogas has from March 7, 2023 not been granted by the Swedish Tax Agency on formal grounds. Gasum has indicated that it finds the Swedish Tax Agency's assessment to impose taxes and tax surcharges on Gasum to be legally questionable and incorrect and is assessing available options.

5.6. Events after the reporting period

At the beginning of January 2024 Gasum made a final investment decision on a new large scale biogas plant to be built in Borlänge, Sweden. The size of the investment is EUR 62 million and the project has been granted a subsidy of EUR 15 million from the Swedish Environmental Protection Agency's Klimatklivet investment program.

Construction of the plant will begin during spring 2024. The plant will use a feedstock mixture of regionally sourced organic household waste and manure and produce 133 gigawatt hours (GWh) of liquefied biogas (LBG) per year from 2026 onwards. In addition, the plant will produce 250,000 tons of high quality environmentally friendly fertilizers and process a total amount of 270,000 tons of feedstock per year. Household waste will be collected and processed by Gasum's local partner Borlänge Energi, and manure will be sourced from farmers in the Borlänge area.

The Borlänge plant is the second plant in a series of five large-scale biogas plants Gasum plans to construct in Sweden. The projects are part of Gasum's strategy to invest in Nordic biogas availability. Gasum's goal is to bring seven terawatt hours (7 TWh) of renewable gas yearly to the market by 2027.

Parent company financial statements

Parent company income statement

EUR	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Revenue*	1	**948,639,587.21**	**1,732,831,748.18**
Other operating income*	2	234,119,516.46	871,059,773.70
Materials and services	3		
Raw materials and consumables			
Purchases during the financial year*		-765,315,452.01	-1,725,798,036.83
Change in stocks		-118,835,104.92	-938,069.30
External services		-9,408,737.75	-10,771,006.62
		-893,559,294.68	-1,737,507,112.75
Personnel expenses	4		
Salaries and remunerations		-14,103,365.98	-15,521,991.16
Employer's contributions			
Pension costs		-3,812,644.73	-3,095,872.71
Other employer's contributions		-381,036.36	-793,915.17
		-18,297,047.07	-19,411,779.04
Depreciation, amortization, and impairment	5		
Depreciation according to plan		-30,153,319.84	-30,003,970.76
Impairment		-325,500.00	-398,106.80
		-30,478,819.84	-30,402,077.56
Other operating expenses*	6	-255,873,705.70	-717,918,545.57
Operating profit		**-15,449,763.62**	**98,652,006.96**

EUR	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Finance income and costs			
Other interest and finance income	8		
From group companies		16,768,377.12	12,576,987.01
From others		20,983,866.36	20,099,524.65
		37,752,243.48	32,676,511.66
Other interest and finance costs	8		
To group companies		-12,893,655.88	-4,231,665.78
To others		-33,148,319.96	-16,402,444.07
		-46,041,975.84	-20,634,109.85
Profit before appropriations and taxes		**-23,739,495.98**	**110,694,408.77**
Appropriations	10		
Received group contribution		1,165,000.00	1,950,000.00
		1,165,000.00	1,950,000.00
Taxes	11	0.00	117.76
Profit/loss for the financial year		**-22,574,495,98**	**112,644,526.53**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income and under other operating expenses.

Parent company balance sheet

EUR	Note	Dec 31, 2023	Dec 31, 2022
Assets			
Non-current assets			
Intangible assets			
Intangible rights		15,990.70	59,597.53
Other long-term expenditure		58,545,805.13	76,655,694.91
	12	58,561,795.83	76,715,292.44
Property, plant and equipment			
Land and water areas		440,759.08	440,759.08
Buildings and structures		72,954,831.53	69,623,559.61
Machinery and equipment		49,056,287.50	53,632,898.38
Other tangible assets		5,687,918.36	6,045,592.29
Advances paid and construction in progress		8,665,750.78	4,413,706.50
	13	136,805,547.25	134,156,515.86
Investments			
Shares in Group companies		389,786,886.26	339,786,886.26
Receivables from Group companies		164,280,821.92	235,270,891.40
Other shares and holdings		149,353.60	149,353.60
	14	554,217,061.78	575,207,131.26
Total non-current assets		**749,584,404.86**	**786,078,939.56**

EUR	Note	Dec 31, 2023	Dec 31, 2022
Current assets			
Inventories	15	46,280,509.74	178,387,442.83
Receivables			
Non-current receivables			
Derivative financial instruments		41,408,451.33	133,737,533.20
Other non-current receivables		201,881.48	211,881.48
	16	41,610,332.81	133,949,414.68
Current receivables			
Trade receivables		68,885,356.38	111,134,943.58
Current receivables from Group companies		200,793,501.95	285,518,332.70
Current receivables from associated companies		3,285,794.48	5,836,034.97
Other current receivables		31,321,654.31	18,256,772.43
Short-term accruals		26,472,358.43	19,941,950.55
Derivative financial instruments		89,228,618.34	186,635,707.17
	17	419,987,283.89	627,323,741.40
Cash and cash equivalents	18	270,953,475.77	203,178,032.06
Total current assets		**778,831,602.21**	**1,142,838,630.97**
Total assets		**1,528,416,007.07**	**1,928,917,570.53**

EUR	Note	Dec 31, 2023	Dec 31, 2022
Shareholders' equity and liabilities			
Equity			
Share capital		10,000,000.00	10,000,000.00
Capital loan		200,000,000.00	200,000,000.00
Other reserves		124,303,645.75	124,303,645.75
Retained result		260,656,261.07	148,011,734.54
Result for the period		-22,574,495.98	112,644,526.53
		238,081,765.09	**260,656,261.07**
Total equity	**19**	**572,385,410.84**	**594,959,906.82**
Provisions for liabilities and charges	**20**	**1,585,596.57**	**0.00**
Liabilities			
Non-current liabilities			
Non-current loans from financial institutions		345,000,000.00	345,000,000.00
Derivative financial instruments		28,394,998.37	104,054,345.42
	21	373,394,998.37	449,054,345.42

EUR	Note	Dec 31, 2023	Dec 31, 2022
Current liabilities			
Advances received		14,802,433.04	29,188,413.19
Trade payables		217,119,361.82	202,783,919.67
Liabilities to Group companies		213,609,588.87	271,554,991.42
Other liabilities		26,271,143.60	40,613,070.57
Derivative financial instruments		67,281,434.17	212,945,549.91
Accruals and deferred income		37,701,951.39	127,320,319.56
Other current liabilities to participating interest undertakings		4,264,088.40	497,053.97
	22	581,050,001.29	884,903,318.29
Total liabilities		**954,444,999.66**	**1,322,699,850.50**
Total equity and liabilities		**1,528,416,007.07**	**1,928,917,570.53**

Parent company cash flow statement

EUR	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Cash flows from operating activities			
Result before appropriations and taxes		-23,739,496	110,694,409
Adjustments:			
Depreciation and amortization according to plan	5	30,153,320	30,003,971
Unrealized gains/losses on financial instruments	8	-34,783,183	-153,889,650
Finance income and costs	8	8,289,732	-12,042,402
Other non-cash items*		1,286,948	1,156,312
Net cash flow before change in working capital		-18,792,679	-24,077,360
Change in working capital			
Increase (-)/Decrease (+) in current non-interest-bearing receivables**		116,436,101	50,888,538
Increase (-)/Decrease (+) in inventories*		-39,823,779	1,577,060
Increase (-)/Decrease (+) in current non-interest-bearing liabilities**		44,938,103	-65,184,969
Cash flow from operating activities before financial items and taxes		102,757,747	-36,796,730
Interest paid and other finance costs arising from operations		-21,488,229	-21,308,809
Interest received from operating activities		41,530,169	21,057,180
Direct taxes paid		0	118
Net cash flow from operating activities		**122,799,686**	**-37,048,241**

EUR	Note	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
Cash flows from investing activities			
Capital expenditure on tangible and intangible assets		-13,357,794	-81,225,451
Investments in shares in associated companies		0	-99,500
Loans given*		-207,500,000	-239,142,119
Repayment of loans**		228,696,155	370,265,397
Investment grants received		0	7,279,254
Net cash flow from investing activities		**7,838,361**	**57,077,581**
Cash flows from financing activities			
Proceeds from current borrowings		0	1,755,741
Repayments of current borrowings		0	-210,000,000
Change in current liabilities**		-64,812,603	106,503,298
Proceeds from non-current borrowings		0	-101,157,983
Group contributions received/given		1,950,000	0
Net cash flow from financing activities		**-62,862,603**	**-202,898,945**
Net decrease (-)/increase (+) in cash and cash equivalents		**67,775,444**	**-182,869,605**
Cash and cash equivalents at the beginning of the period		203,178,032	386,146,239
Foreign exchange gains and losses on cash and cash equivalents		0	-98,602
Cash and cash equivalents at the end of the period		270,953,476	203,178,032

*Comparison figures have been adjusted to follow the same principle as in 2023

**Change in cash pool receivables has been reclassified under cash flow from investing activities and change in cash pool liabilities has been reclassified under cash flow from financing activities

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, 2023.

Revenue recognition principle

The revenue of Gasum Ltd consists primarily of gas and power sales. Sales revenue is recognized upon delivery of gas or power. 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 parent company's Enterprise Risk Management Policy is included in Group-level risk management documentation. Risk management aims to use derivatives to hedge the outstanding commodity position, the interest rate risk of borrowings based on variable interest rates as well as the foreign currency risk between foreign currencies and the euro. For more detailed information on risk management, see the Group's Notes 4.2 and 4.3.

Gasum Ltd has adopted the principle of fair value under chapter 5, section 2a of the Accounting Act regarding the recognition of derivative financial instruments. Changes in the fair value of derivatives (positive or negative) are recognized through profit or loss in the statement of income and hedge accounting is not applied. Changes in the fair value of commodity derivatives are recognized in other operating income or expenses, changes in the fair value of interest rate derivatives in finance income or costs, and changes in the fair value of foreign currency derivatives in above-mentioned items based on the nature of the hedged item for the business activity.

Exchange traded derivatives are marked to market and the fair value of non-exchange traded derivatives is determined using market data available from market information providers.

Provisions for liabilities and charges

Provisions for liabilities and charges in the balance sheet comprise items that are either contractual or otherwise binding obligations but that have yet to be realized.

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 or 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.

Fair value measurement of certain financial instruments

Gasum's accounting policy for determining the fair value of financial instruments is described in Note 4.3. Management adjustment is exercised when determinizing the level 3 derivatives that lack quoted prices or where recently observed market prices are not available. The judgement relates to the following areas:

- The choice of valuation techniques
- The calculation of fair value adjustments in order to incorporate relevant risk factors such as credit risk and liquidity risk
- The judgement of which market parameters are observable

Other

Gasum Ltd demerged into two separate companies as per January 1, 2020, with the assets and liabilities relating to the transmission business unbundled into a new company, Gasgrid Finland Oy, on that date.

Parent company notes
Notes to the parent company income statement

1. Revenue

Revenue by region EUR	2023	2022*
Finland	629,684,035.14	1,424,722,994.35
Other countries	318,955,552.07	308,108,753.83
Total	**948,639,587.21**	**1,732,831,748.18**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income.

2. Other operating income

Other operating income EUR	2023	2022*
Rental income	0.00	15,800.78
Proceeds from sale of fixed assets	1,000.00	4,189.12
Gains from derivative financial Instruments	177,266,248.78	646,884,105.84
Other income**	56,852,267.68	224,155,677.96
Total	**234,119,516.46**	**871,059,773.70**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating income.

**Other income includes management fees to EUR 12.9 million (2022: EUR 8.9 million) as well as transmission price income amounting to EUR 43.7 million (2022: EUR 214.8 million).

3. Materials and services

Materials and services EUR	2023	2022*
Materials and supplies		
Purchases during the period	-765,315,452.01	-1,725,798,036.83
Change in stocks	-118,835,104.92	-938,069.30
Total materials and supplies	-884,150,556.93	-1,726,736,106.13
External services	-9,408,737.75	-10,771,006.62
Total	**-893,559,294.68**	**-1,737,507,112.75**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating expenses.

4. Personnel expenses and number of personnel

Personnel expenses EUR	2023	2022
Salaries and remunerations	-14,103,365.98	-15,521,991.16
Pension costs	-3,812,644.73	-3,095,872.71
Statutory employer contributions	-381,036.36	-793,915.17
Total	**-18,297,047.07**	**-19,411,779.04**

Additional information of the remuneration of the CEO and Board members in Group Note 2.4.

Personnel on average	2023	2022
White collar	151	162
Blue collar	30	30
Total	**181**	**192**

5. Depreciation, amortization and impairment

Depreciations, amortization and impairment EUR	2023	2022
Amortization of intangible rights	-43,606.83	-129,125.24
Amortization of other long-term expenditure	-18,331,776.11	-18,415,583.84
Depreciation of buildings and structures	-4,448,883.71	-4,119,635.08
Depreciation of machinery and equipment	-6,947,762.40	-6,980,423.11
Depreciations of other tangible assets	-381,290.78	-359,203.49
Total depreciation and amortization	**-30,153,319.84**	**-30,003,970.76**
Impairment	-325,500.00	-398,106.80
Total	**-30,478,819.84**	**-30,402,077.56**

6. Other operating expenses

Other operating expenses EUR	2023	2022*
Rents	-2,427,877.82	-6,208,333.78
Maintenance costs	-8,338,969.02	-8,104,363.30
External services	-15,192,948.11	-22,517,078.10
Marketing costs	-850,078.15	-1,132,899.63
Realized losses on derivatives	-169,261,731.14	-571,874,839.25
Unrealized losses on derivatives	-29,765,364.86	-103,507,775.86
Other	-30,036,736.60	-4,573,255.65
Total	**-255,873,705.70**	**-717,918,545.57**

*The figures for the comparison period have been adjusted to correspond to the reclassification of realized electricity hedges under other operating expenses.

7. Audit fees

Audit fees Deloitte EUR	2023	2022
Statutory audit fees	-130,000.00	0.00
Audit opinions	-14,500.00	0.00
Other services	-5,000.00	0.00
Total	**-149,500.00**	**0.00**

Audit fees PwC EUR	2023	2022
Statutory audit fees	-295,024.20	-525,918.20
Audit opinions	-37,215.20	-32,033.00
Tax services	-15,750.00	-37,847.25
Other services	-17,018.40	-5,000.00
Total	**-365,007.80**	**-600,798.45**

8. Finance income and costs

Finance income EUR	2023	2022
Interest income on other non-current receivables	7,542,253.51	1,305,533.05
Interest and finance income from others	13,441,612.85	18,793,991.60
Interest and finance income from Group companies	16,768,377.12	12,576,987.01
Total	**37,752,243.48**	**32,676,511.66**

Changes in interest income include income received from interest rate derivates and short-term deposit rates.

Finance costs EUR	2023	2022
Interest expenses on finance loans	-14,945,942.09	-5,769,707.35
Other finance costs	-31,096,033.75	-14,864,402.50
Total	**-46,041,975.84**	**-20,634,109.85**

9. Financial instruments

Fair values EUR	2023 Assets	2023 Liabilities	Net position
Foreign currency derivatives	1,627,805.09	1,822,767.03	-194,961.94
Interest rate derivatives	4,999,241.00	2,175,162.00	2,824,079.00
Commodity derivatives	124,010,023.84	91,678,503.91	32,331,519.93
Total	**130,637,069.93**	**95,676,432.94**	**34,960,636.99**
Current portion of fair value	89,228,618.34	67,281,434.17	21,947,184.03
Non-current portion of fair value	41,408,451.33	28,394,998.37	13,013,452.96

Fair values EUR	2022 Assets	2022 Liabilities	Net position
Foreign currency derivatives	3,144,922.06	3,010,368.24	134,553.82
Interest rate derivatives	7,597,094.00	0.00	7,597,094.00
Commodity derivatives	311,537,121.63	313,989,513.23	-2,452,391.60
Total	**322,279,137.69**	**316,999,881.47**	**5,279,256.22**
Current portion of fair value	188,542,302.26	212,945,534.88	-24,403,232.62
Non-current portion of fair value	133,736,835.43	104,054,346.59	29,682,488.84

Fair value maturities 2023 EUR	Less than 1 year	1–2 years	2–5 years	5 + years	Total
Foreign currency derivatives	-194,961.94	0.00	0.00	0.00	-194,961.94
Interest rate derivatives	2,845,080.00	2,154,161.00	-2,175,162.00	0.00	2,824,079.00
Commodity derivatives	19,297,065.97	2,403,493.63	5,808,116.42	4,822,843.91	32,331,519.93
Total cash flow	**21,947,184.03**	**4,557,654.63**	**3,632,954.42**	**4,822,843.91**	**34,960,636.99**

Fair value maturities 2022 EUR	Less than 1 year	1–2 years	2–5 years	5 + years	Total
Foreign currency derivatives	134,553.82	0.00	0.00	0.00	134,553.82
Interest rate derivatives	3,122,939.00	2,418,800.00	2,055,355.00	0.00	7,597,094.00
Commodity derivatives	-27,660,725.43	1,996,002.83	13,026,479.85	10,185,851.15	-2,452,391.60
Total cash flow	**-24,403,232.61**	**4,414,802.83**	**15,081,834.85**	**10,185,851.15**	**5,279,256.22**

Financial instruments valued at fair value are classified and valued as disclosed in note 4.3 in the Group financial statements.

Fair values by hierarchy level EUR	31.12.2023		31.12.2022	
	Assets	Liabilities	Assets	Liabilities
Commodity derivatives (hierarchy level 1)	2,608,869.12	1,275,370.56	19,463,286.77	3,039,373.34
Commodity derivatives (hierarchy level 2)	78,228,616.60	60,627,791.05	153,942,784.91	210,851,749.86
Commodity derivatives (hierarchy level 3)	43,172,538.13	29,775,342.31	138,131,049.96	100,098,390.03
Foreign currency derivatives (hierarchy level 2)	1,627,805.09	1,822,767.03	3,144,922.06	3,010,368.24
Interest rate derivatives (hierarchy level 2)	4,999,241.00	2,175,162.00	7,597,094.00	0.00
Total	**130,637,069.94**	**95,676,432.94**	**322,279,137.69**	**316,999,881.47**
Non-current portion				
Commodity derivatives (hierarchy level 1)	0.00	0.00	2,107,495.23	406,453.34
Commodity derivatives (hierarchy level 2)	5,849,078.45	4,667,673.28	24,850,703.18	26,709,508.31
Commodity derivatives (hierarchy level 3)	33,321,393.58	21,468,344.79	102,222,443.91	76,856,346.83
Foreign currency derivatives (hierarchy level 2)	83,818.51	83,818.51	82,038.11	82,038.11
Interest rate derivatives (hierarchy level 2)	2,154,161.00	2,175,162.00	4,474,155.00	0.00
Total non-current portion	**41,408,451.54**	**28,394,998.58**	**133,736,835.43**	**104,054,346.59**
Total current portion	**87,074,456.40**	**65,106,272.37**	**188,542,302.26**	**212,945,534.88**

10. Appropriations

Appropriations EUR	2023	2022
Group contribution received	1,165,000.00	1,950,000.00
Total	**1,165,000.00**	**1,950,000.00**

11. Taxes

Taxes EUR	2023	2022
Taxes for previous periods	0.00	-117.76
Total	**0.00**	**-117.76**

12. Intangible assets

2023 EUR	Intangible rights	Other long-term expenditure	Total
Cost at January 1	1,463,684.84	110,231,619.97	111,695,304.81
Additions	0.00	221,005.18	221,005.18
Disposals	0.00	-269,232.73	-269,232.73
Reclassifications	0.00	0.00	0.00
Cost at December 31	**1,463,684.84**	**110,183,392.42**	**111,647,077.26**
Accumulated amortization at January 1	1,404,087.31	33,575,925.06	34,980,012.37
Amortization	43,606.83	18,331,776.11	18,375,382.94
Accumulated amortization of disposals	0.00	-270,113.88	-270,113.88
Accumulated amortization at December 31	**1,447,694.14**	**51,637,587.29**	**53,085,281.43**
Net book value at January 1, 2023	59,597.53	76,655,694.61	76,715,292.44
Net book value at December 31, 2023	15,990.70	58,545,805.13	58,561,795.83

2022 EUR	Intangible rights	Other long-term expenditure	Total
Cost at January 1*	1,472,634.84	42,846,038.78	44,318,673.62
Additions	0.00	65,113,877.08	65,113,877.08
Disposals	-8,950.00	-252,337.37	-261,287.37
Reclassifications	0.00	2,524,041.48	2,524,041.48
Cost at December 31*	**1,463,684.84**	**110,231,619.97**	**111,695,304.81**
Accumulated amortization at January 1*	1,283,912.07	15,413,559.73	16,697,471.80
Amortization	129,125.24	18,414,702.70	18,543,827.94
Accumulated amortization of disposals	-8,950.00	-252,337.37	-261,287.37
Accumulated amortization at December 31*	**1,404,087.31**	**33,575,925.06**	**34,980,012.37**
Net book value at January 1, 2022	188,722.77	27,432,479.05	27,621,201.82
Net book value at December 31, 2022	59,597.53	76,655,694.91	76,715,292.44

*Gross amounts have been adjusted to follow the same principle as in 2023.

13. Tangible assets

2023 EUR	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Construction in progress	Total
Cost at January 1	440,759.08	98,896,052.94	96,384,066.86	7,909,489.75	4,413,706.50	208,044,075.13
Additions	0.00	5,495,330.98	2,029,326.86	24,498.00	7,511,327.84	15,060,483.68
Disposals	0.00	-990,379.53	-167,400.20	0.00	-198,911.76	-1,356,691.49
Reclassifications	0.00	2,393,047.14	341,824.66	0.00	-2,734,871.80	0.00
Investment subsidies received	0.00	0.00	0.00	0.00	0.00	0.00
Cost at December 31	**440,759.08**	**105,794,051.53**	**98,587,818.18**	**7,933,987.75**	**8,991,250.78**	**221,747,867.32**
Accumulated depreciation at January 1	0.00	29,272,493.33	42,751,168.48	1,863,897.46	0.00	73,887,559.27
Depreciation	0.00	4,448,883.71	6,947,762.40	381,290.78	0.00	11,777,936.89
Impairment	0.00	0.00	0.00	0.00	325,500.00	325,500.00
Accumulated depreciation of disposals	0.00	-882,157.04	-167,400.20	0.00	0.00	-1,049,557.24
Reclassifications	0.00	0.00	0.00	881.15	0.00	881.15
Accumulated depreciation at December 31	**0.00**	**32,839,220.00**	**49,531,530.68**	**2,246,069.39**	**325,500.00**	**84,942,320.07**
Net book value at January 1, 2023	440,759.08	69,623,559.61	53,632,898.38	6,045,592.29	4,413,706.50	134,156,515.86
Net book value at December 31, 2023	440,759.08	72,954,831.53	49,056,287.50	5,687,918.36	8,665,750.78	136,805,547.25

2022 EUR	Land and water	Buildings and structures	Machinery and equipment	Other tangible assets	Construction in progress	Total
Cost at January 1*	440,759.08	83,003,957.22	82,793,408.58	4,997,338.26	31,055,704.48	202,291,167.62
Additions	0.00	6,699,788.35	1,077,064.03	262,458.00	3,877,879.91	11,917,190.29
Disposals	0.00	-411,171.55	-547,248.43	0.00	0.00	-958,419.98
Reclassifications	0.00	12,562,772.62	16,611,495.36	3,419,001.57	-30,519,877.89	2,073,391.66
Investment subsidies received	0.00	-2,959,293.70	-3,550,652.68	-769,308.08	0.00	-7,279,254.46
Cost at December 31*	**440,759.08**	**98,896,052.94**	**96,384,066.86**	**7,909,489.75**	**4,413,706.50**	**208,044,075.13**
Accumulated depreciation at January 1*	0.00	25,371,824.03	36,107,149.89	1,503,812.83	0.00	62,982,786.75
Depreciation	0.00	4,119,635.08	6,980,423.11	360,084.63	0.00	11,460,142.82
Impairment	0.00	192,205.77	205,901.03	0.00	0.00	398,106.80
Accumulated depreciation of disposals	0.00	-411,171.55	-542,305.55	0.00	0.00	-953,477.10
Accumulated depreciation at December 31*	**0.00**	**29,272,493.33**	**42,751,168.48**	**1,863,897.46**	**0.00**	**73,887,559.27**
Net book value at January 1, 2022	440,759.08	57,632,133.19	46,686,258.69	3,493,525.43	31,055,704.48	139,308,380.87
Net book value at December 31, 2022	440,759.08	69,623,559.61	53,632,898.38	6,045,592.29	4,413,706.50	134,156,515.86

*Gross amounts have been adjusted to follow the same principle as in 2023.

14. Investments

2023 EUR	Shares in Group companies	Shares in Associated companies	Other investments	Receivables from Group companies	Total
Cost at January 1	339,786,886.26	99,500.20	49,853.40	235,270,891.40	575,207,131.26
Additions	50,000,000.00	0.00	0.00	160,009,930.52	210,009,930.52
Disposals	0.00	0.00	0.00	-231,000,000.00	-231,000,000.00
Net book value at December 31	**389,786,886.26**	**99,500.20**	**49,853.40**	**164,280,821.92**	**554,217,061.78**

2022 EUR	Shares in Group companies	Shares in Associated companies	Other investments	Receivables from Group companies	Total
Cost at January 1	339,786,886.26	0.00	49,853.40	232,913,159.22	572,749,898.88
Additions	0.00	99,500.20	0.00	39,105,165.68	39,204,665.88
Disposals	0.00	0.00	0.00	-36,747,433.50	-36,747,433.50
Net book value at December 31	**339,786,886.26**	**99,500.20**	**49,853.40**	**235,270,891.40**	**575,207,131.26**

15. Inventories

Inventories EUR	2023	2022
Product inventories	46,280,509.74	7,111,044.66
Prepayments*	0.00	171,276,398.17
Total	**46,280,509.74**	**178,387,442.83**

*Prepayments under inventories in 2022 included minimum annual Take or Pay obligations, which Gasum has derecognized during financial year 2023. See further details under Group notes section 3.5. Inventories.

16. Non-current receivables

Non-current receivables EUR	2023	2022
Other non-current receivables	41,589,128.87	133,867,376.57
Non-current receivables from Group companies	21,203.94	82,038.11
Total	**41,610,332.81**	**133,949,414.68**

17. Current receivables

Current receivables, external EUR	2023	2022
Trade receivables	68,885,356.38	111,134,943.58
Other receivables	31,321,654.31	18,256,772.43
Advance payments	1,229,812.87	1,188,819.43
Short-term given collaterals	11,504,173.00	17,067,953.00
Other receivables	18,587,668.44	0.00
Accrued income	26,472,358.43	19,941,950.55
Derivative financial instruments	88,714,791.76	186,635,707.17
Total	**215,394,160.88**	**335,969,373.73**

Accrued income EUR	2023	2022
Balance power accrual	0.00	14,614,857.61
FSRU, joint use receivable	22,016,046.00	0.00
Energy authority	1,631,000.00	1,631,000.00
Other accrued income	2,825,312.43	3,696,093.14
Total	**26,472,358.43**	**19,941,950.75**

Current receivables, Group companies EUR	2023	2022
Trade receivables	152,951,699.55	59,385,728.65
Group bank account receivable	2,629,007.13	2,815,161.64
Other receivables	45,158,013.04	217,301,541.21
Accrued income	54,782.23	4,109,260.99
Derivate financial instruments	513,826.58	1,906,640.21
Total	**201,307,328.53**	**285,518,332.70**

Current receivables from Group companies contains derivative receivable from Group companies which is included in derivative financial instruments in the balance sheet.

Current receivables from participating interest undertakings EUR	2023	2022
Trade receivables	3,032,046.66	5,490,241.24
Other receivables	253,747.82	345,793.73
Total	**3,285,794.48**	**5,836,034.97**

18. Cash and cash equivalents

Cash and cash equivalents EUR	2023	2022
Cash and cash equivalents	270,953,475.77	203,178,032.06
Total	**270,953,475.77**	**203,178,032.06**

19. Equity

Equity EUR	Share capital	Reserve for invested unrestricted equity	Capital loan	Retained earnings	Total
Equity at January 1	10,000,000.00	124,303,645.75	200,000,000.00	260,656,261.07	594,959,906.82
Result for the period	0.00	0.00	0.00	-22,574,495.98	-22,574,495.98
Net book value at December 31	**10,000,000.00**	**124,303,645.75**	**200,000,000.00**	**238,081,765.09**	**572,385,410.84**

In December 2021, Gasum Ltd issued a capital loan of EUR 200.0 million treated as an equity instrument targeted at Governia Oy which The Prime Minister's Office acquired during financial year 2022. The loan has no maturity date. The loan's annual coupon interest rate is 10% + 1-month EURIBOR for the first three years and after that increases to 15% + 1-month EURIBOR per year, starting in 2025. The recognition principle for the interest rate is the same as for dividends. The interest rate is recognized when a decision to pay the interest has been made and the obligation of Gasum Ltd to pay the interest arises. The time of interest payment is decided by the company at its discretion.

On 31 December 2023 cumulative interest for capital loan EUR 46.4 million accrued.

Statement of distributable equity EUR	2023	2022
Reserve for invested unrestricted equity	124,303,645.75	124,303,645.75
Retained earnings	260,656,261.07	148,011,734.54
Result for the period	-22,574,495.98	112,644,526.53
Total	**362,385,410.84**	**384,959,906.82**

20. Provisions for liabilities and charges

Provisions for liabilities and charges EUR	2023	2022
Onerous contracts	1,585,596.57	0.00
Total	**1,585,596.57**	**0.00**

21. Non-current liabilities

Non-current liabilities EUR	2023	2022
Loans from financial institutions	345,000,000.00	345,000,000.00
Other non-current liabilities	28,394,998.37	104,054,345.42
Total	**373,394,998.37**	**449,054,345.42**

All financial loans expire in less than 5 years.

Non-current liabilities to group companies EUR	2023	2022
Derivative financial instrument	62,614.57	0.00
Total	**62,614.57**	**0.00**

22. Current liabilities

Current liabilities, external

EUR	2023	2022
Trade payables	217,119,361.82	202,783,919.67
Advances paid	14,802,433.04	29,188,413.19
Other liabilities*	92,522,417.77	252,536,930.56
Accruals and deferred expenses	37,701,951.39	127,320,319.56
Total	**362,146,164.02**	**611,829,582.98**

* Consist primarily of a derivative instrument liability of EUR 66.2 million and a value-added tax liability of EUR 12.6 million (2022: derivative instrument liability of EUR 211.9 million and a value-added tax liability of EUR 31 million).

Accrued liabilities

EUR	2023	2022
Accrued interest liabilities	13,737,419.38	1,812,054.86
Salary related items	3,652,333.09	4,847,526.96
Natural gas related liabilities	11,630,763.69	116,319,857.67
Other accruals and deferred income	8,681,435.23	4,340,880.07
Total	**37,701,951.39**	**127,320,319.56**

Natural gas related liabilities in 2022 included minimum annual Take or Pay obligations, which Gasum has derecognized during financial year 2023. See further details under Group notes section 5.5 Legal proceedings and claims.

Current liabilities to group companies

EUR	2023	2022
Trade payables to Group companies	48,350,109.25	3,969,556.15
Derivate financial instruments	1,030,160.00	1,021,689.92
Group bank account payable	134,229,798.82	199,042,401.82
Accrual interest liabilities	7,426,405.58	0.00
Other accrued liabilities to group companies	1,724,876.92	765,976.64
Other short-term liabilities to Group companies	21,878,398.27	67,777,056.81
Total	**214,639,748.87**	**272,576,681.34**

Current liabilities to Group companies contains derivative liability to Group companies which is included in derivative financial instruments in the balance sheet.

Current liabilities to participating interest undertakings

EUR	2023	2022
Accounts payable to associated companies	582,064.61	0.00
Liabilities to participating interest undertakings	3,682,023.79	497,053.97
Total	**4,264,088.40**	**497,053.97**

23. Guarantees and commitments

Guarantees given and contingent liabilities EUR	2023	2022
On own behalf:		
Commitments and other liabilities	53,290,741.57	39,141,618.79
Pledges	179,535.40	179,535.40
On behalf of Group companies:		
Commitments and other liabilities	139,031,322.21	243,266,503.28
Total	**192,501,599.18**	**282,587,657.47**

Operating lease commitments EUR	2023	2022
Expiry no later than 1 year	339,990.22	518,274.43
Expiry later than 1 year and no later than 5 years	221,540.93	559,035.06
Total	**561,531.15**	**1,077,309.49**

Rental commitments EUR	2023	2022
Expiry no later than 1 year	1,518,870.69	789,193.27
Expiry later than 1 year and no later than 5 years	3,099,685.46	4,578,561.37
Expiry later than 5 years	2,582,155.59	0.00
Total	**7,200,711.74**	**5,367,754.64**

Financial instruments EUR	2023	2022
Fair value of derivative financial instruments		
Currency derivatives	-1,822,767.03	-3,010,368.24
Commodity derivatives	-91,678,503.91	-313,989,513.23
Interest rate derivatives	-2,175,162.00	0.00
Total fair value of derivative financial instruments	**-95,676,432.94**	**-316,999,881.47**
Nominal value of derivative financial instruments		
Currency derivatives	94,950,160.20	139,909,476.29
Commodity derivatives	291,476,525.75	418,813,779.31
Interest rate derivatives	90,000,000.00	0.00
Total nominal value of derivative financial instruments	**476,426,685.95**	**558,723,255.60**

* The net fair value of the parent company’s derivative financial instruments totaled EUR 34,960,636.99 (2022: EUR 5,279,256.22).

The parent company had derivative financial instruments with a positive fair value and their nominal value totaled EUR 735,197,937.43 (2022: EUR 1,206,747,475.44).

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, provisions on calculated unbundling are laid down in the Decree of the Ministry of Economic Affairs and Employment on the unbundling of natural gas operations (1306/2019).

Accounting policies

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 activities in accordance with the matching principle are allocated using a method based on the scope of business activities. Following the allocation of all the balance sheet items allocated under the matching principle and the allocation principles based on the scope of business activities, the remaining balance sheet difference is balanced out under the balance sheet item ‘Cash and cash equivalents’.

The company has appealed against the decisions taken by the Energy Authority related to the company's unbundled 2020 financial statements. For more information see 5.5. Legal proceedings and claims.

Gasum Ltd, sales activities

Income statement EUR	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
REVENUE	**352,457,321.15**	**899,406,536.77**
Other operating income	22,371,884.65	127,852,447.56
Materials and services		
Purchases during the financial year	-205,791,459.95	-817,300,254.60
Change in stock	-152,929,720.00	0.00
External services	-66,934.36	-101.22
	-358,788,114.31	-817,300,355.82
Personnel expenses		
Salaries and remunerations	-1,341,666.,53	-1,659,463.98
Employer's contributions	-534,166.46	-183,624.73
	-1,875,832.99	-1,843,088.71
Depreciation, amortization and impairment		
Depreciation and amortization according to plan	-1,189,477.57	-1,108,663.91
	-1,189,477.57	-1,108,663.91
Other operating expenses	-59,926,752.74	-12,911,854.05

Income statement EUR	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
OPERATING PROFIT/LOSS	**-46,950,971.80**	**194,095,021.84**
Finance income and expenses		
Other interest and finance expenses	-1,002,172.63	0.00
	-1,002,172.63	0.00
PROFIT/LOSS BEFORE APPROPRIATIONS AND TAXES	**-47,953,144.43**	**194,095,021.84**
Appropriations		
Group contributions (given -, received +)	778,227.11	195,000.00
Income taxes	0.00	-38,819,004.37
PROFIT/LOSS FOR THE FINANCIAL YEAR	**-47,174,917.32**	**155,471,017.48**

Gasum Ltd, sales activities

Balance sheet EUR	Dec 31, 2023	Dec 31, 2022
ASSETS		
NON-CURRENT ASSETS		
Intangible assets		
Intangible rights	2,572.44	1,799.60
Other long-term expenditure	1,878,682.65	2,747,313.14
	1,881,255.09	2,749,112.74
Property, plant and equipment		
Machinery and equipment	44,724.95	60,388.92
	44,724.95	60,388.92
TOTAL NON-CURRENT ASSETS	**1,925,980.04**	**2,809,501.66**

Balance sheet EUR	Dec 31, 2023	Dec 31, 2022
CURRENT ASSETS		
Inventories *	5,074,850.00	171,276,398.17
Non-Current receivables		
Derivative financial receivable	1,206,265.27	3,457,400.93
Current receivables		
Derivative financial receivable	93,211,567.36	52,607,914.15
Trade receivables	41,538,094.85	90,905,260.50
Current receivables from Group companies	134,161,341.95	61,605,971.07
Other short-term receivables	13,271,828.17	0.00
Short-term accruals	23,821,417.77	62,440.02
	306,004,250.10	205,181,585.74
Cash and cash equivalents	110,838,255.12	86,328,440.49
TOTAL CURRENT ASSETS	**423,123,620.49**	**466,243,825.33**
TOTAL ASSETS	**425,049,600.52**	**469,053,326.99**

Balance sheet EUR	Dec 31, 2023	Dec 31, 2022
EQUITY AND LIABILITIES		
SHAREHOLDERS' EQUITY		
Share capital	58,042.31	58,042.31
Retained earnings	161,620,511.08	6,149,493.61
Profit (loss) for the period	-47,174,917.32	155,471,017.48
	114,445,593.77	161,620,511.08
TOTAL EQUITY	**114,503,636.08**	**161,678,553.39**
LIABILITIES		
Non-Current liabilities		
Derivative financial liability	1,127,656.47	0.00
Current liabilities		
Derivative financial liability	69,250,701.88	3,274,154.02
Trade payables	170,303,679.88	170,064,465.83
Liabilities to Group companies	46,215,764.85	0.00
Other liabilities	4,718,036.75	15,314,068.66
Accruals and deferred income	18,930,124.62	118,722,085.10
	309,418,307.98	307,374,773.60
TOTAL LIABILITIES	**310,545,964.45**	**307,374,773.60**
TOTAL EQUITY AND LIABILITIES	**425,049,600.52**	**469,053,326.99**

*In the financial statement for 2022, Gasum recognized 171.3 million euros asset under inventories regarding the undelivered gas from financial years 2020–2021 under the terms of the gas supply contract. The recognized asset is for the most part unpaid. Gasum has recognized 158.0 million euros obligation as liability under accrued trade payables in the company balance sheet on 31 December 2022. Due to the proceedings in the Svea Court of Appeal and further cancellation of the supply contract on May 22, 2023, Gasum has derecognized the asset related to the prepayment of non-taken gas from financial year 2021 and reclassified the liability as contingent liability amounting to 158.0 million euros (see note Guarantees and Commitments). Gasum has also derecognized the prepayment of EUR 13.3 million under inventory related to non-taken gas from financial year 2020 and recognized it as financial receivable.

Financial instruments related to sales activities in Gasum Ltd.

The parent company's Enterprise Risk Management Policy is included in Group-level risk management documentation. Risk management aims to use derivatives to hedge the outstanding commodity position, the interest rate risk of borrowings based on variable interest rates as well as the foreign currency risk between foreign currencies and the euro. For more detailed information on risk management, see the Group's Notes 4.2 and 4.3.

Realized gains and losses on commodity derivatives related to natural gas and unrealized gains and losses on changes in fair values are recognized in other operating income and expenses presented for the unbundling activities.

Financial instruments in the income statement EUR	2023	2022
Other operating income		
Realized gains	22,371,884.65	57,139,497.72
Unrealized gains	0.00	58,246,073.26
Other operating expenses		
Unrealized losses	-28,846,589.94	0.00

Fair values EUR	2023 Assets	2023 Liabilities	Net position
Commodity derivatives	94,417,832.63	70,378,358.35	24,039,474.28
Total	**94,417,832.63**	**70,378,358.35**	**24,039,474.28**
Current portion of fair value	93,211,567.36	69,250,701.88	23,960,865.48
Non-current portion of fair value	1,206,265.27	1,127,656.47	78,608.80

Fair values EUR	2022 Assets	2022 Liabilities	Net position
Commodity derivatives	56,065,315.08	3,274,154.02	52,791,161.06
Total	**56,065,315.08**	**3,274,154.02**	**52,791,161.06**
Current portion of fair value	52,607,914.15	3,274,154.02	49,333,760.13
Non-current portion of fair value	3,457,400.93	0.00	3,457,400.93

Fair value maturities 2023 EUR	Less than 1 year	1–2 years	2–5 years	Over 5 years	Total
Commodity derivatives	23,960,865.48	78,608.80	0.00	0.00	24,039,474.28
Total cash flow	**23,960,865.48**	**78,608.80**	**0.00**	**0.00**	**24,039,474.28**

Fair value maturities 2022 EUR	Less than 1 year	1–2 years	2–5 years	Over 5 years	Total
Commodity derivatives	49,333,760.13	3,457,400.93	0.00	0.00	52,791,161.06
Total cash flow	**49,333,760.13**	**3,457,400.93**	**0.00**	**0.00**	**52,791,161.06**

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

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities
- 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)
- Level 3: inputs for assets or liabilities that are not based on observable market data (that is, unobservable inputs)

Fair values by hierarchy level EUR	2023		2022	
	Assets	Liabilities	Assets	Liabilities
Commodity derivatives (hierarchy level 2)	94,417,832.63	70,378,358.35	56,065,315.08	3,274,154.02
Total	**94,417,832.63**	**70,378,358.35**	**56,065,315.08**	**3,274,154.02**
Non-current portion				
Commodity derivatives (hierarchy level 2)	1,206,265.27	1,127,656.47	3,457,400.93	0.00
Total non-current portion	**1,206,265.27**	**1,127,656.47**	**3,457,400.93**	**0.00**
Total current portion	**93,211,567.36**	**69,250,701.88**	**52,607,914.15**	**3,274,154.02**

Unbundling of electricity operations

According to Section 77.1 of the Electricity Market Act (588/2013), a company operating in the electricity market must separate electricity network operations from other electricity business operations and electricity business operations from other business operations conducted by the company.

In accordance with the interpretation confirmed by the Energy Agency's unbundling recommendation (Energy Agency's recommendation Dnro 2449/421/2015), the unbundling calculations of other (non-electricity) businesses do not have to be published by law in connection with the official financial statements. However, the company must also prepare and document calculations for other business operations.

Gasum's obligation to separate the electricity business from other (non-electricity businesses) is based on Section 77 of the Electricity Market Act (588/2013) and Section 2 of the Decree of the Ministry of Labor and Economy on the separation of electricity businesses (1305/2019). According to Section 77.1 of the Electricity Market Act (588/2013), a company operating in the electricity market must separate electricity network operations from other electricity business operations and electricity business operations from other business operations conducted by the company.

In the government's proposal to parliament on amending the Electricity Market Act and the Market Rights Act (HE 127/2004 vp. p. 50) it is stated that other electricity business activities mean electricity production and electricity sales. In the Energy Agency's recommendation on the computational and legal separation of electricity and natural gas businesses (Dnr. 2449/421/2015), it is stated that retail sales of electricity (sales through the distribution network directly to end consumers), trading activities and other similar sales of electricity are part of the electricity sales activity. The sale of electricity typically also includes the purchase of electricity, i.e. the purchase of wholesale electricity from sellers or from one's own production plant.

As a result of the subsidiary merger of Gasum Consulting Oy, which took place on 31 March 2021, Gasum Oy has transferred business that has included services and trading activities related to the physical electricity market. The Energy Agency considers that the business related to the electricity market and Gasum Oy's PPA and electricity block brokering business transferred to Gasum Oy following the merger of Gasum Consulting Oy are electricity business activities referred to in Section 77 of the Electricity Market Act. Gasum's share of the electricity business is not small, so the obligation to separate the electricity sales business applies to Gasum. n (10% of turnover and less than 500,000 euros per year) Electricity business must be separated from other businesses in accordance with Section 77 of the Electricity Market Act. The separation obligation has started from the financial year in which electricity businesses have exceeded the limit of minor business. The separation must be corrected by separating the electricity business from other businesses in the 2022 financial statements, which must also include comparative balances from 2021.

Accounting policies

Under the Electricity 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 activities in accordance with the matching principle are allocated using a method based on the scope of business activities. Following the allocation of all the balance sheet items allocated under the matching principle and the allocation principles based on the scope of business activities, the remaining balance sheet difference is balanced out under the balance sheet item ‘Cash and cash equivalents’.

Income statement EUR	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
REVENUE	**270,655,837.90**	**519,284,244.25**
Other operating income	46,562,880.77	108,345,027.65
Materials and services		
Purchases during the financial year	-263,503,183.76	-516,140,127.44
External services	-70,571.81	-28,043.92
	-263,573,755.57	-516,168,171.36
Personnel expenses		
Salaries and remunerations	-1,620,525.26	-1,782,204.34
Employer's contributions	-429,142.47	-253,205.33
	-2,049,667.73	-2,035,409.68
Depreciation, amortization and impairment		
Depreciation and amortization according to plan	-11,828.70	-18,639.15
	-11,828.70	-18,639.15
Other operating expenses	-75,415,854.73	-92,022,364.35

Income statement EUR	Jan 1–Dec 31, 2023	Jan 1–Dec 31, 2022
OPERATING PROFIT/LOSS	**-23,832,388.07**	**17,384,687.36**
Finance income and expenses		
Other interest and finance income	57.42	0.00
	57.42	0.00
Other interest and finance expenses	-13.00	-15,815.01
	-13.00	-15,815.01
PROFIT/LOSS BEFORE APPROPRIATIONS AND TAXES	**-23,832,343.65**	**17,368,872.35**
Appropriations		
Group contributions (given -, received +)	386,772.89	175,192.93
Income taxes	0.00	-3,473,774.47
PROFIT/LOSS FOR THE FINANCIAL YEAR	**-23,445,570.76**	**14,070,290.81**

Balance Sheet EUR	Dec 31, 2023	Dec 31, 2022
ASSETS		
NON-CURRENT ASSETS		
Intangible assets		
Intangible rights	853.21	1,315.60
Other long-term expenditure	111,917.92	175,084.34
	112,753.13	176,399.94
Property, plant and equipment		
Machinery and equipment	5,533.92	9,991.52
	5,533.92	9,991.52
TOTAL NON-CURRENT ASSETS	**118,287.05**	**186,391.46**

Balance Sheet EUR	Dec 31, 2023	Dec 31, 2022
CURRENT ASSETS		
Non-Current receivables		
Derivative financial receivable	34,479,210.92	102,223,142.42
	34,479,210.92	102,223,142.42
Current receivables		
Derivative financial receivable	10,778,741.58	35,908,645.79
Trade receivables	14,559,571.12	8,792,650.88
Current receivables from Group companies	86,668.27	175,061.66
Short-term accruals	634,438.00	14,850,414.11
	26,059,418.97	59,726,772.44
Cash and cash equivalents	0.00	6,696,716.45
TOTAL CURRENT ASSETS	**60,538,629.89**	**168,646,631.30**
TOTAL ASSETS	**60,656,916.94**	**168,833,022.77**

Balance Sheet EUR	Dec 31, 2023	Dec 31, 2023
EQUITY AND LIABILITIES		
SHAREHOLDERS' EQUITY		
Share capital	1,455.07	1,455.07
Retained earnings	23,326,975.99	9,256,685.18
Profit (loss) for the period	-23,445,570.76	14,070,290.81
	-118,594.77	23,326,975.99
TOTAL EQUITY	**-117,139.71**	**23,328,431.06**

Balance Sheet EUR	Dec 31, 2023	Dec 31, 2023
LIABILITIES		
Non-Current liabilities		
Derivative financial liability	23,078,076.61	76,856,346.83
	23,078,076.61	76,856,346.83
Current liabilities		
Derivative financial liability	8,686,282.16	23,242,043.20
Trade payables	1,288,537.49	24,378,421.34
Liabilities to Group companies	8,611,839.52	2,477.57
Other liabilities	11,596,466.74	20,325,321.70
Accruals and deferred income	7,512,854.13	699,981.08
	37,695,980.03	68,648,244.88
TOTAL LIABILITIES	**60,774,056.64**	**145,504,591.71**
TOTAL EQUITY AND LIABILITIES	**60,656,916.94**	**168,833,022.77**

Financial instruments related to electricity activities in Gasum Ltd.

The parent company's Enterprise Risk Management Policy is included in Group-level risk management documentation. Risk management aims to use derivatives to hedge the outstanding commodity position, the interest rate risk of borrowings based on variable interest rates as well as the foreign currency risk between foreign currencies and the euro. For more detailed information on risk management, see the Group's Notes 4.2 and 4.3.

Unrealized gains and losses on changes in fair values related to commodities related to electricity are recognized in other operating income and expenses presented for the unbundling activities.

Financial instruments in the income statement EUR	2023	2022
Other operating income		
Realized gains	1,304,928.27	0.00
Unrealized gains	45,257,952.50	108,345,027.65
Other operating expenses		
Realized losses	-657,588.06	0.00
Unrealized losses	-69,797,756.95	-84,998,640.62

Fair values EUR	2023 Assets	2023 Liabilities	Net position
Commodity derivatives	45,257,952.50	31,764,358.77	13,493,593.73
Total	**45,257,952.50**	**31,764,358.77**	**13,493,593.73**
Current portion of fair value	10,778,741.58	8,686,282.16	2,092,459.42
Non-current portion of fair value	34,479,210.92	23,078,076.61	11,401,134.31

Fair values EUR	2022 Assets	2022 Liabilities	Net position
Commodity derivatives	138,131,788.21	100,098,390.03	38,033,398.18
Total	**138,131,788.21**	**100,098,390.03**	**38,033,398.18**
Current portion of fair value	35,908,645.79	23,242,043.20	12,666,602.59
Non-current portion of fair value	102,223,142.42	76,856,346.83	25,366,795.59

Fair value maturities 2023 EUR	Less than 1 year	1–2 years	2–5 years	Over 5 years	Total
Commodity derivatives	2,092,459.46	2,741,281.77	3,972,575.95	4,687,276.77	13,493,593.73
Total	**2,092,459.46**	**2,741,281.77**	**3,972,575.95**	**4,687,276.77**	**13,493,593.73**

Fair value maturities 2022 EUR	Less than 1 year	1–2 years	2–5 years	Over 5 years	Total
Commodity derivatives	12,666,602.59	8,566,795.32	9,071,137.87	7,728,862.40	38,033,398.18
Total	**12,666,602.59**	**8,566,795.32**	**9,071,137.87**	**7,728,862.40**	**38,033,398.18**

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

- Level 1: quoted prices (unadjusted) in active markets for identical assets and liabilities
- 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)
- Level 3: inputs for assets or liabilities that are not based on observable market data (that is, unobservable inputs)

Fair values by hierarchy level	2023		2022	
EUR	Assets	Liabilities	Assets	Liabilities
Commodity derivatives (hierarchy level 2)	45,257,952.50	31,764,358.77	138,131,788.21	100,098,390.03
Total	**45,257,952.50**	**31,764,358.77**	**138,131,788.21**	**100,098,390.03**
Non-current portion				
Commodity derivatives (hierarchy level 2)	34,479,210.92	23,078,076.61	102,223,142.42	76,856,346.83
Total non-current portion	**34,479,210.92**	**23,078,076.61**	**102,223,142.42**	**76,856,346.83**
Total current portion	**10,778,741.58**	**8,686,282.16**	**35,908,645.79**	**23,242,043.20**

Board of Directors' proposal for distribution of profits

On December 31, 2023, the parent company had distributable funds of EUR 362,385,410.84. The Board of Directors proposes to the general meeting of shareholders that no dividend to be paid for the financial year from January 1 to December 31, 2023.

Signatures to the financial statements and Board of Directors' report

Espoo, March 11, 2024

Elina Engman
Chair of the Board of Directors

Stein Dale
Vice Chair
Member of the Board of Directors

Ari Vanhanen
Member of the Board of Directors

Erkka Repo
Member of the Board of Directors

Sirpa-Helena Sormunen
Member of the Board of Directors

Jari-Pekka Punkari
Member of the Board of Directors

Mika Wiljanen
Chief Executive Officer

Auditor’s note

A report of the audit performed has been issued today.

Helsinki, March 11, 2024

Deloitte Oy
Audit Firm

Aleksi Martamo
Authorized Public Accountant (KHT)

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

We have audited the financial statements of Gasum Oy (business identity code 0969819–3) for the year ended 31.12.2023. 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 material accounting policy information, as well as the parent company’s balance sheet, income statement, statement of cash flows and notes.

In our opinion

- the consolidated financial statements give a true and fair view of the group’s financial position, financial performance and cash flows in accordance with IFRS Accounting Standards 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 financial statements in Finland and comply with statutory requirements.

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 the Financial Statements section of our report.

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.

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

Emphasis of Matter – Legal proceedings and claims

We draw your attention to the description of pending matters between the company and the Energy Authority in the notes to the consolidated financial statements in section 5.5. Legal proceeding and claims. Our opinion is not modified in respect of this matter.

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 IFRS Accounting

Standards 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 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 the 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 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.

Helsinki, March 11, 2024

Deloitte Oy
Audit firm

Aleksi Martamo
Authorised Public Accountant (KHT)

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