Financial year 2021

Outokumpu's financial statements according to the ESEF regulation are published at www.outokumpu.com/reports

Review by the Board of Directors

Highlights 2021

Stainless steel deliveries were **2,395,000** tonnes (2,121,000 tonnes).

Adjusted EBITDA amounted to EUR **1,021** million (EUR 250 million).

EBITDA was EUR **1,009** million (EUR 191 million).

Operating cash flow amounted to EUR **597** million (EUR 322 million).

Net result was EUR **553** million (EUR –116 million).

The year 2021 was a great success for Outokumpu. In an exceptionally strong market environment, the company delivered its best financial results in recent history. Adjusted EBITDA exceeded the remarkable EUR 1.0 billion milestone and amounted to EUR 1,021 million, while net debt decreased to EUR 408 million. Strong earnings per share was also a highlight of the year. In 2021 the safety performance was strongest on record, and the annual total recordable injury frequency rate improved to 2.0.

During 2021, Outokumpu focused on de-risking the company, and as a result of the various actions, Outokumpu reduced its net debt to EBITDA ratio to 0.4. Also, credit rating agency Moody's recognized the good development and upgraded Outokumpu's credit rating twice last year. In November, Outokumpu increased its EBITDA run-rate improvement target to EUR 250 million and has now reached a cumulative impact of EUR 198 million. De-risking continues through the first phase of the strategy until the end of 2022.

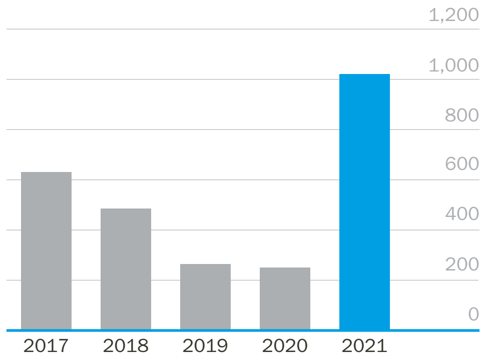
All business areas provided solid results in 2021 and development in realized stainless steel prices was favorable. The mills were running at full capacity throughout the year, and deliveries increased by 13% compared to the previous year. There have been logistical challenges throughout the year as global supply chains have been under pressure. Teams have worked very hard to overcome the difficulties.

In 2021, business area Europe's adjusted EBITDA reached EUR 485 million and deliveries increased by 7% compared to the previous year. In the exceptionally strong market, business area Americas' adjusted EBITDA rose to its highest level ever, EUR 297 million and deliveries increased by 26%. Also, business area Ferrochrome increased its adjusted EBITDA to EUR 246 million.

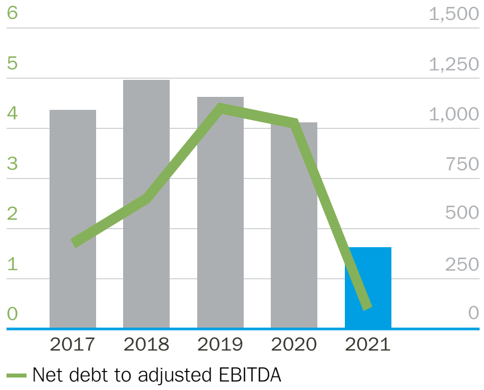
Sustainability has been a key focus area in 2021. Outokumpu is committed to the United Nations' Guiding Principles on Business and Human Rights. In particular, the company has invested time and resources to better understand and manage its supply chain by assessing its raw material suppliers starting with Brazil and followed by Guatemala, where the work continues. The results so far demonstrate the importance of this ongoing work. In 2022, the aim to conduct several supplier assessments in high-risk countries.

Outokumpu's updated and more ambitious climate targets have been approved by the Science Based Targets initiative (SBTi), and the targets are now aligned with keeping global warming below 1.5° degrees. Outokumpu is currently the only

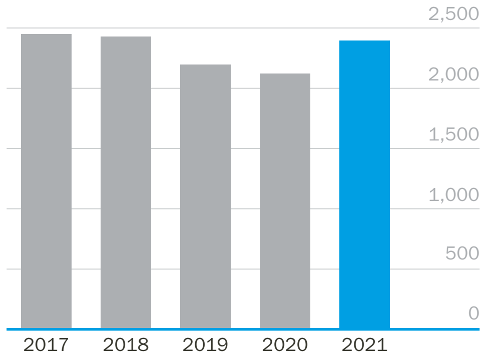
Adjusted EBITDA, € million



Net debt, € million, and net debt to adjusted EBITDA



Stainless steel deliveries, 1,000 tonnes



stainless steel producer to have its ambitious climate targets approved by the SBTi, and is firmly progressing on the path towards the vision of being the customer's first choice in sustainable stainless steel.

Managing COVID-19 pandemic

Safety is a key priority at Outokumpu and protecting the health and safety of the employees in the global COVID-19 pandemic continued in 2021.

The effects of the pandemic were twofold. Outokumpu had various safety measures in its sites and offices, while the rebound from the 2020 slowdown showed as increased deliveries and improved performance. The financial impacts of COVID-19 related mainly to the market rebound, and its impact on prices, order books and utilization rates were stronger than estimated. On the other hand, various restrictions have been in place, as the company has continued to do its utmost to safeguard the employees – working remotely, following social distancing as well as limiting traveling, face-to-face meetings, and visitor access to only the absolutely business critical instances.

Towards the end of 2021, the COVID-19 pandemic moved on to a point where the crisis was no longer steered centrally at the Group level. Instead, the situation is now managed at the local level within the company guidelines and local country rules. Nevertheless, the COVID-19 pandemic still remains a risk going forward.

Market development

According to CRU's latest estimates (November 2021), global apparent consumption of stainless steel flat products increased by 10.1% in 2021 compared to 2020. Global consumption of stainless steel has recovered strongly throughout 2021, supported by successful vaccination programs, supportive fiscal and monetary policy, and due to robust private consumption and high demand for durable goods containing stainless steel. The demand in EMEA and Americas grew by 10.8% and 25.5%, respectively, while the largest region APAC decreased by 8.5%.

Results

€ million	2021	2020
Sales	7,709	5,639
Adjusted EBITDA	1,021	250
Adjustments		
Litigation provisions	–15	–
Environmental provisions	–10	–
Gain on disposal of property	12	–
Restructuring costs	–	–59
EBITDA	1,009	191
EBIT	705	–55
Net result for the financial year	553	–116
Earnings per share, €	1.26	–0.28
Diluted earnings per share, €	1.17	–0.28
Adjusted EBITDA margin, %	13.2	4.4
Return on capital employed, %	18.8	–1.4

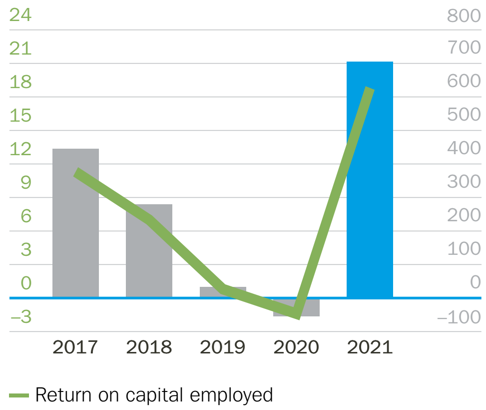
Outokumpu's sales grew by 37% compared to the previous year and amounted to EUR 7,709 million in 2021 (EUR 5,639 million). In the exceptionally strong market environment, adjusted EBITDA reached EUR 1,021 million (EUR 250 million). Total stainless steel deliveries grew by 13% and profitability was supported by higher realized prices for stainless steel in Europe and Americas, and a higher ferrochrome sales price. Fixed and variable costs increased from the previous year and profitability was especially impacted by significantly higher energy and consumable prices. In 2021, raw material-related inventory and metal derivative gains increased to EUR 76 million (losses of EUR 16 million), mainly due to positive timing impacts. Adjustment items in EBITDA totaled EUR –12 million and included an increase in litigation provisions, an increase in environmental provision related to closed mines in Finland, and a gain from property sales in Germany (EUR –59 million related to restructuring costs).

EBITDA amounted to EUR 1,009 million in 2021 (EUR 191 million) and EBIT increased to EUR 705 million (EUR –55 million). Adjustment items in EBIT totaled EUR –54 million (EUR –59 million), and in addition to adjustment items in EBITDA, they included single asset impairments in 2021. In 2021, net result increased to EUR 553 million (EUR –116 million).

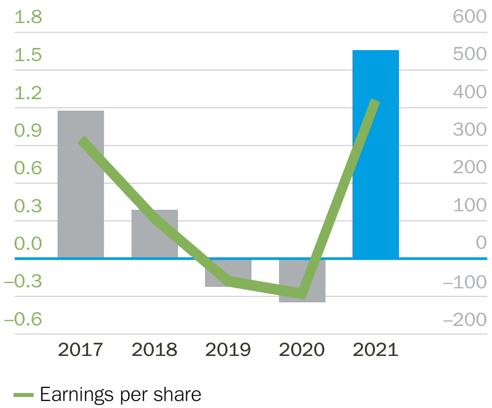
Strategy execution

Outokumpu launched a new strategy in November 2020 and set financial targets by the end of 2022. The targets included a EUR 200 million EBITDA run-rate improvement and a reduction of the net debt to EBITDA ratio to below 3.0. In November 2021, with the commitment to de-risk the company by the end of 2022, Outokumpu increased the initial EBITDA run-rate improvement target to EUR

EBIT, € million, and return on capital employed, %



Net result, € million, and earnings per share, €



250 million. The company continues to de-risk through the first phase of the strategy until the end of 2022. The strategy has three key focus areas: Lean & Agile Organization, Cost & Capital Discipline, and Commercial Excellence.

The closing of the year 2021 marked the one-year milestone in the first phase of Outokumpu's strategy. Outokumpu took various actions throughout 2021 to move forward in its strategy execution. More than 600 people from different functions and all areas of the business contributed, driving projects along through shared governance to collectively meet the commitment to the strategy. Projects focusing on efficiency in the usage of raw materials and consumables or ways to prioritize maintenance spend did not only deliver results in 2021 but changed the company's ways of working to ensure that the improvements are sustainable.

The cumulative EBITDA run-rate improvement amounted to EUR 198 million at the end of 2021. The impact was achieved through the execution of numerous small and medium-sized initiatives driven by all focus areas.

Looking ahead to 2022, Outokumpu is confident that it will reach its ambitions of EUR 250 million EBITDA run-rate improvement. The governance and ways of working in the company's strategy execution have been ingrained across the organization during the past year and the pre-validated initiative pipeline supports confidence to deliver against the increased target. Despite the already strong results in the Cost & Capital Discipline stream, it remains the focus area in 2022. Initiative ideation is largely focused on consumables consumption efficiency to mitigate inflationary pressure.

Financial position and cash flow

€ million	2021	2020
Net debt		
Non-current debt	**597**	1,153
Current debt	**112**	251
Cash and cash equivalents	**300**	376
Net debt	**408**	1,028
Net debt to adjusted EBITDA	**0.4**	4.1
Net cash generated from operating activities	**597**	322
Capital expenditure	**175**	180
Debt-to-equity ratio, %	**13.1**	43.6
Equity-to-assets ratio, %	**48.3**	40.8

Operating cash flow amounted to EUR 597 million in 2021 (EUR 322 million). In 2021, the increase in net working capital was EUR 266 million (decrease of EUR 247 million). The change in net working capital includes EUR 45 million of payments on the 2020 VAT deferral in Finland (EUR 61 million positive net impact from the VAT deferral). Inventories increased during 2021 and amounted to EUR 1,892 million at year-end (EUR 1,177 million). Approximately 60% of the annual inventory increase came from higher metal prices. Capital expenditure amounted to EUR 175 million in 2021 (EUR 180 million).

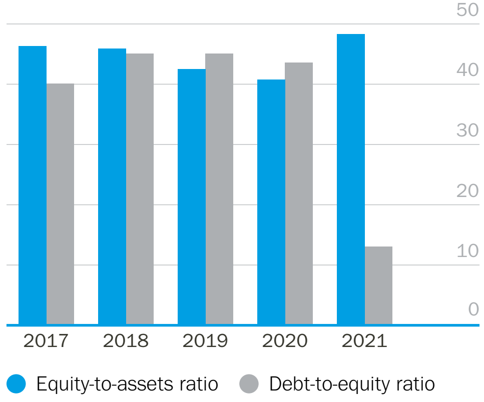
Net debt decreased to EUR 408 million during 2021 (EUR 1,028 million) and consequently gearing to 13.1% (43.6%). Net financial expenses were EUR 80 million in 2021 (EUR 98 million). Interest expenses amounted to EUR 65 million in 2021 (EUR 78 million).

Cash and cash equivalents were EUR 300 million on December 31, 2021 (EUR 376 million) and the overall liquidity reserves amounted to EUR 0.9 billion (EUR 1.0 billion). In addition to these reserves, Outokumpu has an unutilized EUR 42 million short-term portion of its main syndicated revolving credit facility available. The EUR 120 million Kemi mine facility was fully drawn at year-end. The outstanding commercial papers amounted to EUR 58 million on December 31, 2021 (EUR 231 million).

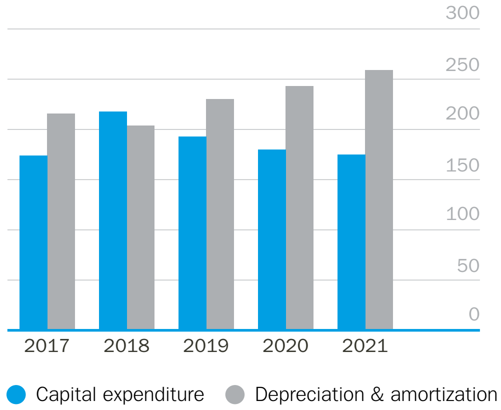
In April and in June, Outokumpu extended the maturities of its revolving credit facilities: the SEK 1,000 million facility was extended by one year until May 2023 and EUR 532 million facility by one year until May 2024. Both revolving credit facilities are fully unutilized. In May, Outokumpu carried out a private placement of 40,500,000 new shares and raised gross proceeds of EUR 209 million. With these proceeds Outokumpu prepaid EUR 210 million of its EUR 330 million term loan. The maturity for the remaining part of the loan was extended from June 2023 until May 2024.

In December, following the strong cash flow Outokumpu voluntarily redeemed its EUR 250 million fixed rate notes due in 2024 and prepaid EUR 70 million of the term loan and one of its pension loans amounting to EUR 56 million. Outokumpu also entered into a EUR 100 million secured revolving working capital facility with Finnvera Oyj. The facility is expected to be available for drawdown during the first quarter of 2022. In December, Outokumpu secured a GBP 390 million buy-in insurance contract with a pension insurer for its defined pension benefit scheme in the UK, impacting net pension assets as well as equity.

Equity-to-assets ratio and debt-to-equity ratio, %



Capital expenditure* and depreciation and amotization, € million



*Capital expenditure definition changed from accrual-based to cash-based capital expenditure in 2020. Figures for 2019 and 2018 have been restated accordingly. Figures for 2017 have not been restated.

Business areas

Outokumpu has four business areas which are also Group's operating segments. More information about the business areas can be found in note 2.1 in the consolidated financial statements.

Europe		2021	2020
Stainless steel deliveries	1,000 tonnes	**1,535**	1,440
Sales	€ million	**4,600**	3,568
Adjusted EBITDA	€ million	**485**	142
Adjustments to EBITDA	€ million	**12**	–47
EBITDA	€ million	**498**	95
Operating capital	€ million	**1,724**	1,573

Europe's sales increased to EUR 4,600 million in 2021 compared to EUR 3,568 million in 2020 and adjusted EBITDA increased to EUR 485 million (EUR 142 million). Stainless steel deliveries increased by 7% compared to the previous year. The 2021 result was positively impacted by significantly higher realized prices for stainless steel, but consumable prices and freight costs increased, as well. Raw material-related inventory and metal derivative gains were EUR 8 million in 2021 (losses of EUR 11 million). Adjustments to EBITDA included a gain of EUR 12 million from properties sold in Germany (EUR 47 million of restructuring costs relating to personnel reductions). In 2021, the share of EU cold-rolled stainless steel imports from third countries reached 27% remaining stable compared to previous year despite more sourcing from Asia in the second half of 2021. (Source: EUROFER, January 2022). Distributor inventories remained at a low level throughout 2021, given robust end-use demand.

Americas		2021	2020
Stainless steel deliveries	1,000 tonnes	**742**	588
Sales	€ million	**1,947**	1,195
Adjusted EBITDA	€ million	**297**	55
Adjustments to EBITDA	€ million	**–15**	–2
EBITDA	€ million	**283**	53
Operating capital	€ million	**879**	801

Americas' sales increased to EUR 1,947 million in 2021 (EUR 1,195 million). Adjusted EBITDA increased to EUR 297 million (EUR 55 million). Stainless steel deliveries increased by 26% in 2021. Profitability in 2021 was supported by significantly higher realized prices for stainless steel and the improved product mix, however consumable prices and freight costs increased, as well. Raw material-related inventory and metal derivative gains increased to EUR 55 million in 2021 (losses of EUR 1 million). Adjustment items in 2021 included EUR 15 million increase in litigation provisions. In 2021, US real demand increased by 21% compared to 2020 and the share of cold-rolled imports into the US was 18% and increased from previous year level (Source: American Iron & Steel Institute). Cold-rolled distributor inventories remained at a low level during 2021 but started to slightly increase at the end of the year.

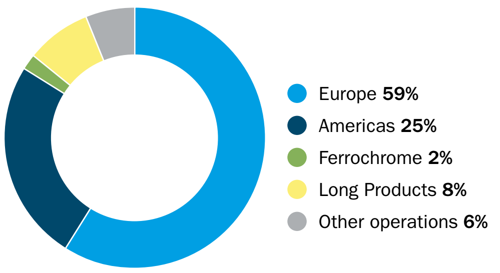
Ferrochrome		2021	2020
FeCr production	1,000 tonnes	**515**	498
Sales	€ million	**604**	411
Adjusted EBITDA	€ million	**246**	91
Adjustments to EBITDA	€ million	**–**	–1
EBITDA	€ million	**246**	90
Operating capital	€ million	**823**	766

Ferrochrome's sales amounted to EUR 604 million in 2021 (EUR 411 million). Adjusted EBITDA increased to EUR 246 million (EUR 91 million). Profitability was supported by a higher ferrochrome sales price, which was driven by the increased European benchmark price and Chinese spot market prices, slightly offset by a stronger EUR/USD exchange rate. Significantly increased electricity and reductant prices had a negative impact on profitability. The global ferrochrome supply market is overshadowed by uncertainties driven by availability and price of energy, environmental restrictions, and logistical disruptions.

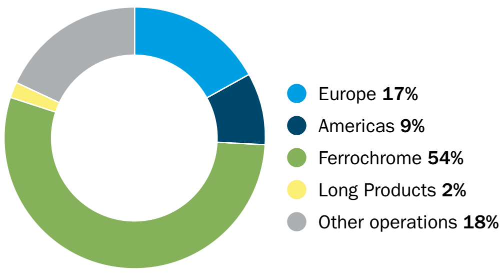
The finalization of the Kemi Mine expansion investment will be delayed by some six months due to an incident during hoisting shaft guide rope installation. The delay will not cause any risks regarding ore availability, and the costs of the investment are not expected to increase.

Long Products		2021	2020
Stainless steel deliveries	1,000 tonnes	**250**	175
Sales	€ million	**810**	493
Adjusted EBITDA	€ million	**47**	–8
Adjustments to EBITDA	€ million	**–**	–3
EBITDA	€ million	**47**	–11
Operating capital	€ million	**157**	133

Sales by business area, 7,709 € million



Capital expenditure by business area, 175 € million



Long Products' sales amounted to EUR 810 million in 2021 (EUR 493 million) and adjusted EBITDA amounted to EUR 47 million (EUR –8 million). Stainless steel deliveries increased by 43%, from both internal and external deliveries. Profitability was positively impacted by the improved product mix and higher realized prices for stainless steel. Energy and consumable prices were higher and also fixed costs increased as a result of higher sales volume and more maintenance. Raw material-related inventory and metal derivative gains were EUR 15 million compared to losses of EUR 3 million in 2020.

Non-financial development at Outokumpu

The information in this section fulfills the requirements in the EU Directive and the Finnish Accounting Act Chapter 3a on statement of non-financial information. Outokumpu is also reporting according to the EU taxonomy framework and with regard to the Task Force on Climate-related Financial Disclosures (TCFD) disclosure recommendations. The taxonomy reporting is based on the delegated act specifying the technical screening criteria under which certain economic activities qualify as contributing substantially to climate change mitigation and climate change adaptation.

Outokumpu is a leading global producer of stainless steel with world-class production assets in its key markets in Europe and the Americas, and a global sales and service network close to its international customers. Stainless steel is a significant contributor to building a sustainable world. Stainless steel is used in building and construction, infrastructure, appliances, transportation, and heavy industries. It is a strong, corrosion-resistant, hygienic, and aesthetic material with a high strength-to-weight ratio and no need for maintenance. Outokumpu's organization and businesses are presented in the company's annual report and in notes 2.1 and 6.3 of the consolidated financial statements.

Climate change is one of the three megatrends driving Outokumpu's business, together with economic and population growth and urbanization. The properties and the low carbon profile of Outokumpu's stainless steel can help customers to reduce their carbon footprint. Market for solutions enabling the transition into a low-carbon society will increase on the way to 2 degree or 1.5 degree scenarios for 2050 and give preference to low carbon profile companies such as Outokumpu.

Outokumpu acknowledges the recommendations from the Task Force on Climate-related Financial Disclosures (TCFD) and the underlying framework and acknowledges that there are financial impacts in a 2°C or lower transition scenario. Outokumpu has performed a stated policy scenario and sustainable development scenario analysis in line with the International Energy Agency Iron and Steel Technology Roadmap, 2020. The physical and transition risk of climate change are assessed and included in the general risk assessment and management of the company.

Outokumpu's business is based on a circular economy. About 90% of the raw material used in Outokumpu's stainless steel production is recycled. By converting scrap and metal waste into new products the company also protects virgin resources. Throughout the process, Outokumpu aims to minimize the environmental impact of its production. At the end of its long lifecycle, stainless steel is fully recyclable, without any loss of quality.

Outokumpu has an integrated production process, including the company's own chrome mine for one of the main raw materials of stainless steel, ferrochrome operations, melting, hot rolling and cold rolling, as well as finishing and service centers.

Outokumpu's production sites are often located in relatively small cities or towns. This means that Outokumpu is significant for the economies of small local communities and it is often one of the very few large private-sector employers in the area.

Sustainability strategy and material topics

Outokumpu's vision is to be the customer's first choice in sustainable stainless steel. Sustainability at Outokumpu is based on three aspects: environmental, social and governance, which all need to be in balance. Outokumpu introduced an updated sustainability strategy in May 2021 to further strengthen Outokumpu's position as the industry leader in sustainability.

As part of the new sustainability strategy, Outokumpu increased its greenhouse gas emission reduction target committing to the Science-Based Target initiative's (SBTi) 1.5 °C climate ambition. The new approved short-term Science Based Target on the way to 1.5°C target in 2050 is to reduce scope 1, 2 and 3 greenhouse gas emissions 42% per tonne stainless steel by 2030 from a 2016 base year.

Outokumpu regularly conducts a materiality analysis to map stakeholders' expectations and to assess business impact of the Group on sustainability. The materiality analysis was updated in 2021. According to the updated analysis, Outokumpu's focus areas for acceleration are emission and footprint reduction, circular economy and waste management, sustainable supply chain management and innovative technologies.

The company is a signatory of the United Nations Global Compact. Outokumpu is committed to the United Nations' Sustainable Development Goals, with a focus on the following six objectives: affordable and clean energy, decent work and economic growth, industry, innovation and infrastructure, responsible consumption and production, climate action and partnerships for goals.

Policies and principles of sustainability management

Outokumpu's Board of Directors approves Outokumpu's sustainability agenda and targets. On Group level, sustainability is managed by the Group sustainability team headed by Vice President – Sustainability, who reports to Chief Technology Officer responsible for Group sustainability. The Outokumpu Leadership Team regularly follows the progress of Outokumpu's sustainability agenda. The business areas and functions are responsible for ensuring that operations within their own organizations are conducted in a responsible manner and that monitoring, data collection and reporting are duly carried out. All Outokumpu operating sites are certified according to quality ISO 9001 and environment ISO 14001 management systems. The functioning of the systems is monitored by both internal and external audits.

In May 2021, Outokumpu established a new ESG Advisory Council to support Outokumpu in continuous improvement in sustainability. The council consists of four external advisors. The council's role is to challenge and comment the company's ESG strategy, roadmap development and actions as well as facilitate dialogue and exchange of views between Outokumpu and its stakeholders. More information about the council can be found on Outokumpu's website.

During 2021 an internal and cross-functional ESG core team was also established. The team drives, develops and supports the implementation Outokumpu's sustainability strategy giving executive proposals and drafts for decisions to the Outokumpu's management who will then implement necessary actions. The team includes members from Group sustainability, procurement, communications, compliance, HR and safety functions.

The most important policies guiding Outokumpu's sustainability management are the Group's Code of Conduct, Corporate Responsibility Policy and the Policy on Environment, Health, Safety and Quality (EHSQ), all available on Outokumpu's website. Outokumpu's Code of Conduct defines the common ways of working in the Group and sets principles for conducting business in a legal, compliant, and ethical manner, including zero tolerance for corrupt practices and requiring compliance with applicable laws and regulations, including competition laws and trade sanctions regulations.

The Corporate Responsibility Policy describes the main principles and rules followed by Outokumpu in relation to the sustainable development of the economic, environmental, and social aspects. Outokumpu's EHSQ policy describes the company's commitment to continuous improvement in these fields, compliance with legislation in all areas the company operates in, and the fulfilment of stakeholder requirements to which the company subscribes. Outokumpu has also an Anti-Corruption Instruction providing detailed guidance on responsible business practices.

In addition to the EHSQ policy, Outokumpu has strict guidelines for safety through the Outokumpu Safety Principles and Health and Safety Standards. Additionally, Outokumpu has ten Cardinal Safety Rules that are a part of the company's operating principles.

Corporate statements, policies and instructions are the basis of the Outokumpu operating model in governance, risk, and compliance. Policies and instructions are implemented through internal communication, mandatory training and internal control mechanisms. Outokumpu has currently five key corporate policies, which need to be well known by everyone working for Outokumpu:

- Code of Conduct
- Cardinal Safety Rules
- Approval Policy
- Competition Law Compliance Policy
- Acceptable Use of IT Policy

The internal audit function flanked by external audits consistently monitors and tests adherence to corporate guidance and standards, while the sustainability organization follows-up on environmental performance and legality on a quarterly basis. Regular internal environmental audits by the Group's environmental team are performed based on an internal risk assessment.

Outokumpu monitors its suppliers through self-assessment, screenings and audits. Most of suppliers are also going through a monthly compliance screening for sanctions. The self-assessments and audits are based on Outokumpu's Supplier Requirements and focused on evaluating the suppliers' social and environmental responsibility and quality management. In raw material procurement, supplier's sustainability performance is assessed by sustainability platform EcoVadis.

Outokumpu complies with international, national, and local laws and regulations, and honors and is committed to international agreements concerning human and labor rights, such as International Bill of Human Rights and condemns the use of forced and child labor. In 2021, Outokumpu focused on implementing the UN Guiding Principles on Business and Human Rights.

All Outokumpu employees are free to join trade unions according to local rules and regulations. There is zero tolerance of any form of discrimination, whether it is based on ethnic origin, nationality, religion, political views, gender, sexual orientation, age or any other factor.

Outokumpu expects its suppliers and contractors to comply with applicable laws and regulations as well as Outokumpu's Code of Conduct and to meet the company's Supplier Requirements. Outokumpu aims to ensure that modern slavery or human trafficking plays no part in its supply chain or in any part of the business.

Outokumpu has in place Supplier Requirements that set the minimum level for suppliers regarding sustainability and ethical standards, safety, environmental considerations, quality management and other criteria. In 2021, Outokumpu published an amendment to the Supplier Requirements for raw material suppliers.

More information about Outokumpu's sustainability related risks can be found in the section Risks and uncertainties.

Sustainability targets

The Group's main sustainability targets are:

Environmental

- Reducing scope 1, 2 and 3 greenhouse gas emissions 42% per tonne of stainless steel by 2030 on 2016 base year*). The new short-term Science Based Target on the way to 1.5°C target in 2050 replaces the former target on reducing scope 1, 2 and 3 greenhouse gas emissions 20% per ton stainless steel by 2023 from a 2014–2016 base period. (* The target boundary includes biogenic emissions and removals from bioenergy feedstock.)
- Increasing recycled material content to 92.5% by 2023 (all metallic input from

waste streams, such as scrap, scales or metals from slag and dust treatment per tonne stainless steel).

- Improving energy efficiency by 0.5% each year by 2030.
- Reducing the landfilled production waste other than slag by 0.5% each year by 2023.

Social

- Achieving total recordable injury rate of <2.2 per million working hours in 2021. The Group's long-term target is to achieve zero-level in injuries.
- High engagement rate in the annual Organizational Health Index survey.
- A regular performance development discussion held with all employees in applicable countries.

Governance

- All employees trained on Outokumpu's Code of Conduct.

Outokumpu's long-term target is to achieve carbon neutrality by 2050 in scope 1 (direct) and 2 (indirect) emissions. Currently, Outokumpu is the only stainless steel producer with an approved short-term Science Based Target towards the 1.5-degree scenario following the general rules of the initiative until the stainless steel sectoral decarbonization approach is available.

Environmental performance

The main environmental impacts from stainless steel production are the use of virgin materials, direct and indirect energy, dust emissions into the air, waste created in the production process and water discharges from production plants.

Outokumpu uses efficient dust-filtering systems that remove 99% of particles, and water is reused in production as much as possible and treated on production sites. In addition to material efficiency through using as much recycled material as possible, Outokumpu aims to reduce landfill waste and reuses waste from its production processes in its own production. Outokumpu also aims to increase the use of its by-product slag from its production outside the company for example in road construction, concrete production and water treatment.

In 2021, the use rate of slag (all slag compared to the used and landfilled slag) was 79% (77%). The total amount of slag increased by 7% compared to last year but more slag could be used. On top of production waste, tailing sand from mining is the most significant waste item to be deposited in the mine site. Landfilled waste intensity decreased. Although stainless steel production increased compared to the previous year, less waste was generated and about the same amount of waste as in the previous year was deposited.

The level of material recycling (all metallic input from waste streams, such as scrap, scales or metals from slag and dust treatment per tonne stainless steel) was at 90.1% (92.5%).

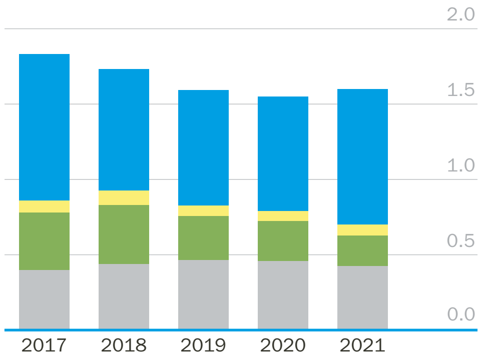
The improvement of the energy efficiency calculated as a sum of different process steps was very high with 6.1% compared to the previous year.

In 2021, CO_2 intensity reduced by about 14% from baseline period 2014–2016 and reached 72% of the targeted reduction by 2023.

All Outokumpu sites have environmental permits that set the basic framework for production operations. In 2021, emissions and effluents remained within permitted limits, and the 15 minor breaches in operations that occurred were temporary, identified, and had no or only a minimal impact on the environment. There were no significant environmental incidents.

Outokumpu's operations under the EU Emissions Trading Scheme (ETS) will continue to receive free emissions allocations according to efficiency-based benchmarks and historical activity for the next five years. In 2021, the ETS free emission allowances of Outokumpu

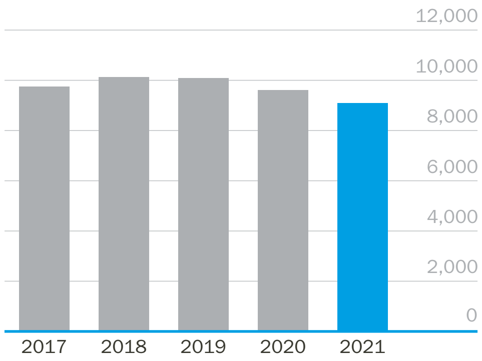
Outokumpu's CO_2 emission intensity, tonnes of CO_2 per tonne steel



Environmental indicators

	2021	2020
Scope 1, 2 and 3 (direct and indirect) CO_2 emission intensity, tonnes per tonne of stainless steel	**1.60**	1.55
Energy intensity, GJ per tonne stainless steel	**9.9**	11.0
Use rate of slag, including slag from ferrochrome production, %	**78.6**	77.1
Total landfill waste intensity, tonnes per tonne stainless steel	**0.517**	0.590
Recycled material content, %	**90.1**	92.5

Personnel on December 31



Personnel reported as full time equivalent number.

were below emissions within the ETS system, 1.0 million tonnes (1.0 million tonnes in 2020).

Outokumpu is not a party to any significant legal or administrative proceedings concerning environmental issues, nor is it aware of any realized environmental risks that could have a material adverse effect on its financial position.

Social performance

Outokumpu's main indicator for safety performance is the total recordable injury frequency rate (TRIFR), which includes fatal accidents, lost-time injuries, restricted work injuries, and medically treated injuries per million working hours. Group TRIFR improved from the previous year and was 2.0 against the target of <2.2 (2.4).

Outokumpu's personnel on full-time equivalent basis decreased by 506 during the year and totaled 9,096 at the end of December 2021 (2020: 9,602 and 2019: 10,078). Total wages and salaries amounted to EUR 557 million in 2021 (2020: EUR 547 million, 2019: EUR 568 million). Indirect employee benefit expenses totaled EUR 154 million in 2021 (2020: EUR 188 million, 2019: EUR 206 million).

Finnwatch, a Finnish NGO, published in February 2021 a report on Outokumpu's supply chain in Brazil. As a result of the report, Outokumpu took several actions to further develop the monitoring of its suppliers and to increase the transparency of its sourcing. Outokumpu's policies were reviewed according to the UN Guiding Principles on Business and Human Rights (UNGP). Outokumpu's Supplier Requirements were updated and an amendment for raw material suppliers was also published. Outokumpu conducted an on-site review with an external third party to one of its suppliers in Brazil. In 2021, the human rights risk assessment was conducted in accordance with the UNGP, and most salient human rights issues were identified.

Outokumpu encourages everyone to raise their concerns. All available reporting channels are detailed in the Code of Conduct, including the SpeakUp channel which is an externally operated communication channel to report misconduct confidentially and anonymously, if allowed by laws and regulations. The SpeakUp channel is available as a communication channel in Outokumpu's reporting process if other reporting channels do not feel suitable.

Outokumpu follows the number of potential misconducts as an indicator for its performance in matters related to anti-corruption, bribery and human rights. In 2021, 40 reports of potential misconduct were recorded through the various reporting channels. These incidents have been assessed, and if needed further investigated. Proper corrective and preventative actions have been or will be taken as a consequence. During 2021 the internal process for managing misconduct reports and investigations has been reviewed and redefined, partly in anticipation of the new legislations based on the EU Directive on whistleblower protection.

During 2021, the implementation of Outokumpu's ethics and compliance program continued in close co-operation with the leadership, business areas and Group functions. As part of these efforts, the revision of the core element of the program, Code of Conduct, was finalized and the revised Code of Conduct was implemented in 2021 with a mandatory e-learning for all Outokumpu employees together with various internal and external communications. In addition, efforts were continued to be made in competition law compliance, know your business partner and data protection areas in several ways, such as by process improvements, update of documentation and through various trainings and communications. Furthermore, communications on other ethics and compliance topics, such as anti-corruption, were made throughout the year. As part of these activities the importance of daily ethical decision making and responsible business practices, owned by all employees at Outokumpu, were highlighted.

Key social indicators

	2021	2020
Diversity		
Employees		
male, %	**84**	84
female, %	**16**	16
Managers		
male, %	**84**	84
female, %	**16**	16
Board of Directors		
male, %	**50**	50
female, %	**50**	50
Safety		
Total recordable injury frequency rate, per million working hours	**2.0**	2.4

EU taxonomy reporting

Companies required to report non-financial information need to disclose the taxonomy eligibility of their economic activities for year 2021. EU taxonomy is a classification system for categorization of sustainable business activities that could substantially contribute to the EU's environmental goals. Non-financial companies are required to disclose the share of their revenue (sales), and capital and operational expenditure associated with environmentally sustainable economic activities as defined in the EU Taxonomy Regulation (2020/852). For year 2021, companies are only required to report the proportion of their economic activities that are eligible, i.e. in scope of the regulation. For 2022, also the proportion of aligned economic activities need to be reported. Aligned economic activities means that the activity meets the criteria for sustainable economic activities that has been established by the Regulation and its delegated acts.

Outokumpu's approach to the EU taxonomy for the financial year 2021 was to assess which of its economic activities are included and listed in the taxonomy to define the taxonomy-eligibility of Outokumpu's sales, capital expenditure and restricted operating expenditure. Outokumpu representatives from finance, sustainability and business functions investigated the activities in relation to EU taxonomy, resulting in the identification of the eligible and non-eligible activities. Based on this analysis the taxonomy activity 3.9, manufacturing of iron and steel, was identified as an eligible economic activity for climate change mitigation. Production of ferrochrome is not eligible and thus is reported non-eligible activity. The key performance indicators were calculated using the consolidated financial information and further accounting policies are disclosed after the key performance indicator table below.

Taxonomy key performance indicators

2021	Total € million	Eligible %	Non-eligible %
Sales	7,709	89	11
Capital expenditure	155	39	61
Restricted operating expenditure	669	86	14

Outokumpu has defined the taxonomy key performance indicators as follows:

- Taxonomy sales is presented in accordance with IFRS, in line with the sales in the Group's consolidated financial statements. The manufacturing of iron and steel is listed as an eligible economic activity, i.e. covered by the taxonomy (EU taxonomy economic activity 3.9). This means that the main part of Outokumpu's economic activities and sales are eligible. The main items of sales that have been considered non-taxonomy-eligible include sales of ferrochrome, raw materials, other services, and energy.
- Taxonomy capital expenditure is presented and measured as cash-based, in line with the capital expenditure presented in the Group's financial statements. Taxonomy capital expenditure consists of purchases of property, plant and equipment and intangible assets, other than emission allowances. Leases and equity investments at fair value through other comprehensive income have been excluded from the amount. Capital expenditure associated with taxonomy-eligible economic activities has been considered eligible. Capital expenditure related to business area Ferrochrome and directly to corporate functions have been considered non-eligible. Currently plans to expand taxonomy-aligned economic activities, plans to allow the activities to become taxonomy-aligned, or individual measures enabling the target activities to become low-carbon have not been separately taken into consideration.
- Taxonomy restricted operating expenditure consists of expenses relating directly to maintenance and servicing of assets as well as research and development expenses. Of the total taxonomy restricted operating expenditure, the part supporting taxonomy-eligible economic activities has been considered eligible. Expenses related to business area Ferrochrome and corporate functions have been considered non-eligible. Research and development expenses have been included in full and considered eligible except for the part relating to ferrochrome manufacturing. In corporate functions, there were no research and development expenses in 2021. Scrap sourcing is not included in the figures for restricted operating expenditure, as scrap is a raw material for Outokumpu. However, the logistics and handling of scrap, especially the scrap produced internally as by-product, could be considered an action which helps Outokumpu in achieving the 70% minimum share of recycled raw material content that is set as a criterion for alignment in the delegated act for climate change mitigation. For this reporting, Outokumpu has chosen the conservative approach not to include these costs.
- The preparation of the key performance indicators requires management to make judgements, estimates and assumptions on eligible economic activities, capital expenditure allocated to those activities and related operating expenditure. Only one taxonomy-eligible economic activity has been considered in the calculations, together with one environmental objective, eliminating the risk of double counting relating to different activities or objectives. There are still considerable uncertainties regarding the requirements and guidelines provided by the EU, and Outokumpu continues to develop its calculations and definitions as new information becomes available.

Outokumpu continues to assess taxonomy alignment and will report on that in 2023. As a principle, the share of aligned economic activities can be the same or lower than the share of eligible economic activities. While the stainless steel manufacturing at Outokumpu meets the scrap input threshold of 70% required for a substantial contribution to climate change mitigation, a full assessment of the Do No Significant Harm principles and the compliance with the minimum safeguards will be performed in 2022 which will have an impact on the alignment level.

Research and development

Research and development (R&D) ensures that the partners inside and outside of Outokumpu receive exceptional value through leading technical expertise. Shaping the future by developing breakthrough innovations as well as enabling a sustainable future are the key parts of the R&D mission. Outokumpu has three R&D centers located in Avesta, Sweden, in Krefeld, Germany and in Tornio, Finland. R&D activities are focused on two R&D must win battles: sustainable production process technologies and future products and customer applications. In 2021, R&D expenditure totaled EUR 14 million, 0.2% of net sales (2020: EUR 21 million and 0.4%, 2019: EUR 17 million and 0.3%).

R&D programs related to sustainable production process technologies are focusing on development and implementation of technologies to reduce our CO_2 footprint and to improve the process efficiency and capabilities. R&D programs related to the future products and customer applications are focusing on developing new steel grades and improving existing grades for new applications. The focus is lying on the Pro product family for demanding end-use and offering sustainable solutions for high customer satisfaction.

Risks and uncertainties

Outokumpu operates in accordance with the risk management policy approved by the company's Board of Directors. The policy defines the objectives, approaches and areas of responsibility in the Group's risk management activities. Supporting Outokumpu's strategy, the aim of risk management is to identify, evaluate, mitigate, control and report risks from shareholders' and other stakeholders' point of view such as customers, suppliers, financiers, regulators and employees.

Outokumpu has defined risk as anything that could have an adverse impact on achieving the Group's objectives. Risks can therefore be threats, uncertainties or lost opportunities connected with current or future operations. More information on risks and mitigation activities can be found in Key risks section in the Annual Report, whereas Outokumpu's risk management and internal control processes and governance is described in the Corporate Governance Statement.

Strategic and business risks

Outokumpu's key strategic and business risks include: risks and uncertainties relating to the development of overcapacity of global stainless steel production, volatility of raw material and end product prices and availability; risks and uncertainties implementing new IT systems and processes; opportunities to improve operational reliability, drive competitiveness and further improve financial performance; the risk of trade defense measures initiated by the EU not being effective, adverse changes in the global political and economic environment; risks and uncertainties related to developments in the stainless steel and ferrochrome markets and competitor actions; changes in the prices of nickel, iron and molybdenum, energy and emission allowance impacting cash flow; fluctuations in exchange rates affecting the global competitive environment in stainless; and the risk of litigation or adverse political action or changes in legislation and environmental regulations affecting trade.

Operational risks

Key operational risks for Outokumpu include: a major fire or machinery breakdown causing business interruption; cyber security risks and IT failure; risks related to supply chain, raw material sourcing in high-risk countries and certain critical supplier dependencies; and investment and project implementation risks. Operational risks also include inadequate or failed internal processes, employee actions, systems, or events such as natural catastrophes, and misconduct or crime. These risks are often connected with production operations, logistics, financial processes, major investment projects, other projects or information technology and, should they materialize, can lead to personal injury, liability, loss of property, interrupted operations, or environmental and reputational impacts. Outokumpu's operational risks are partly covered by insurance. To minimize the possible damage to property and business interruption that could result from a fire occurring at some of its major production sites, Outokumpu has systematic fire safety and loss prevention surveys in place.

Environmental and climate change related risks

The main environmental business risks for Outokumpu are related to emissions trading schemes; new environmental and consumer protection demands, including changes in environmental legislation and the potential impact on Outokumpu's competitive position; as well as the risk of increased electricity prices and emissions costs due to the EU's and UK's ambitious Emissions Trading Systems (ETS).

The main environmental accident risks at production sites relate to the use of acids, the production of hazardous waste and toxic gases, landfill activities, long-term contamination of soil or groundwater, and the long-term effects of hazardous pollutants. Outokumpu also has some potential environmental liabilities and risks at closed mines and production sites.

Outokumpu also evaluates its climate change related risks, including main production locations' exposures on several threats. These physical acute and chronic climate change threats and risks include e.g. flood, sea water level changes, exposures to hurricanes, tornadoes and severe storms, extreme weather conditions like lightning, rain or hail. The transition risks to Outokumpu are driven by changes to climate policies, which can have adverse impact to Outokumpu's operating environment and financial position as by an increased price of greenhouse gas emissions and the linked rising electricity price. The risk on costs of lower emissions technology will become effective in the coming years. More and more customers are looking on sustainable products and we are working on our vision to be customer's first choice in sustainable stainless steel. The risk of losing customers and market share is assessed; but the company's low carbon profile stainless steel also drives opportunities.

Safety and personnel-related risks

The main risks related to safety and personnel are the risk of fatalities, serious injuries and continued COVID-19 pandemic to Outokumpu's own employees and contractors, which would also have a significant impact on the safety culture and the company's reputation as an employer; the loss of key individuals or other employees who have specific knowledge of, or relationships with, trade customers in markets in which Outokumpu operates; and the risk of being unable to attract, retain, motivate, train, and develop qualified employees at all levels, which could have a material adverse effect on Outokumpu's business, financial condition, and operational results.

Risks related to compliance, crime and reputational harm

Outokumpu operates globally and its activities span multiple jurisdictions and complex regulatory frameworks at a time of increased enforcement activity and enforcement initiatives globally in areas such as competition law, anti-corruption and bribery, anti-money laundering, data protection (including EU GDPR compliance); and trade restrictions, including sanctions. Outokumpu also faces the risk of fraud by its employees, external theft and crime, losses of critical research and development data, misconduct, as well as violations by its sales intermediaries or other third parties or at its joint ventures and other companies.

Social responsibility related risks

Outokumpu aims to actively identify risks and uncertainties related to its exposures in social responsibility, including human rights related topics. This applies to Outokumpu's own operations globally including supply chain and other business partners. In late 2021, the human rights risk assessment was conducted in accordance with the United Nations Guiding Principles on Business and Human Rights (UNGP) and most salient human rights issues were identified. Outokumpu takes seriously all identified human rights risks, labor practice violations and related threats as it insists on full transparency and compliance on human rights topics.

Financial risks

Key financial risks for Outokumpu are: changes in the prices of nickel, iron, molybdenum, energy and emission allowance; currency developments affecting the euro, the US dollar, the Swedish krona, and the British pound; interest rate changes connected with the euro, the Swedish krona and the US dollar; changes in levels of credit margins applied for Outokumpu; risk related to prices of equities and fixed-income securities; country and counterparty risk related to customers and other business partners, including financial institutions; risks related to liquidity and refinancing; breach of financial covenants or other terms and conditions leading to default; and changes in fair value of equity investments in energy production. The financial risks listed above and related risk mitigation activities are described in further detail in note 5 to the consolidated financial statements.

Short-term risks and uncertainties

Outokumpu continues to focus on mitigating its exposure to risks which present uncertainties to its business and operations, including but not limited to: impacts from the continued COVID-19 pandemic; increases and volatility in energy prices; cyber security risks and IT failures; the risk of business interruption at Outokumpu's production and distribution locations; delays or failures in Outokumpu's supply chain, such as impacts from the global supply chain challenges and including risk in overall price and availability of critical raw materials and supplies; the shortage of spare parts and logistical challenges; dependencies on certain critical suppliers; raw material sourcing in high-risk countries; changes in the prices of ferrochrome, nickel, electrical power, and CO_2 emission allowances; currency developments affecting the euro, US dollar, Swedish krona, and pound sterling; the realization of credit losses from customer receivables; negative impacts on the amount of defined pension benefit assets and liabilities; changes in interest margins applicable to Outokumpu; risks related to the fair value of shareholdings, such as the investment in the Fennovoima project as well as general project and investment implementation risks, including the ongoing project at the Kemi mine.

Possible further adverse changes in the global political and economic environment and their impact on demand for stainless steel may all have an impact on Outokumpu's business and access to financial markets, including COVID-19 related risks, uncertainty surrounding the sustainability of US economic growth, the global inflation outlook, geopolitical tensions related to Ukraine, the risk of unfair trade practices by third countries and ineffective trade defence measures by the EU against them as well as the environmental-social governance risk.

Significant legal proceedings

Claim in Spain related to the divested copper companies

Outokumpu divested all of its copper business in 2003–2008. One of the divested companies, domiciled in Spain, later faced bankruptcy. The administrator of the bankruptcy estate filed a claim against Outokumpu Oyj and two other non-Outokumpu companies for recovery of payments made by the bankrupt company in connection with the divestment. In 2014, the court of first instance in Spain accepted the claim of EUR 20 million brought against Outokumpu and the two other companies. In 2018, the Court of Appeal ruled the case in favor of Outokumpu. Finally, in March 2021, the Spanish Supreme Court ruled the case in favor of Outokumpu and released the company from all claims and liabilities. All legal cases against Outokumpu related to the recovery have now been closed.

Dispute over payment of wages in the US

A class of plaintiffs, consisting of 152 former and 126 current Outokumpu Calvert mill employees, has brough suit against Outokumpu in U.S. federal court with allegations of failure to pay full wages for regular work and overtime work they performed. In November 2021, the court entered a default judgment against Outokumpu with respect to liability as a sanction for alleged misconduct during the discovery phase of the legal proceeding. The process to finally determine the damages is pending in the court. Outokumpu does not consider the potential financial impact of the case material for the Group as a whole.

Shares and share capital

On December 31, 2021, Outokumpu Oyj's share capital was EUR 311 million, and the total number of shares was 456,874,448. At the end of the year, Outokumpu held 4,302,471 treasury shares. The adjusted average number of shares outstanding in 2021 was 438,871,175.

Principal shareholders and share price development is presented in the Stakeholder engagement section in the Annual report.

Management shareholdings and share based incentive programs

On December 31, 2021, the members of the Board of Directors and the members of the Outokumpu Leadership Team (OLT) altogether held 921,817 shares, or 0.20% of the total number of shares.

Outokumpu has established share-based incentive programs for the OLT members, selected managers and key employees. which include a Performance Share Plan and Restricted Share Pool for key employees. In 2021, after deductions for applicable taxes, a total of 69,765 shares were delivered to the participants of the programs based on the conditions of the programs. Outokumpu used its treasury shares for the reward payments.

The Performance Share Plan and the Restricted Share Pool Program are currently ongoing for the periods 2020–2022 and 2021–2023, and their continuation for the period 2022–2024 was approved by the Board of Directors in December 2021. The Performance Share Plan for all three periods focuses on earning criteria that measures Outokumpu's profitability and the efficiency with which its capital is employed. More details on the share-based incentive programs can be found in the note 3.4 in the consolidated financial statements.

The members of OLT and Board of Directors are introduced in the Corporate Governance Statement included in the Annual report and at Outokumpu website: https://www.outokumpu.

com/en/investors/governance. Their shareholding is also presented in the Corporate Governance Statement and remuneration in the note 3.2 in the consolidated financial statements. Remuneration report is also included in the Annual report.

Corporate governance

Outokumpu's Corporate Governance Statement can be found on the Outokumpu website: https://www.outokumpu.com/en/investors/governance

Annual General Meeting

Outokumpu's Annual General Meeting 2021 was held on March 31, 2021, at the company's head office in Helsinki, Finland, under special arrangements due to the COVID-19 pandemic. The Annual General Meeting supported all the Board of Directors' and the Shareholders' Nomination Board's proposals and approved the company's remuneration report in an advisory vote. The Annual General Meeting approved the financial statements and discharged the management of the company from liability for the financial year 2020. The Annual General Meeting also approved the proposals of the Shareholders' Nomination Board regarding the members of the Board of Directors and their remuneration.

The Annual General Meeting decided that no dividend will be paid for the financial year that ended on December 31, 2020 and authorized the Board of Directors to repurchase the company's own shares and to decide on the issuance of shares as well as special rights entitling to shares.

The Annual General Meeting decided in accordance with the proposal by the Nomination Board that the Board of Directors consists of 8 members. The Annual General Meeting re-elected the current members of the Board of Directors Kati ter Horst, Kari Jordan, Eeva Sipilä, Vesa-Pekka Takala, Pierre Vareille and Julia Woodhouse and elected Heinz Jörg Fuhrmann and Päivi Luostarinen as new members for the term of office ending at the end of the next Annual General Meeting. Kari Jordan was re-elected as the Chairman and Eeva Sipilä re-elected as the Vice Chairman of the Board of Directors.

Changes in the Outokumpu Leadership Team

In June, Outokumpu appointed Tamara Weinert as President of business area Americas. She had been the Acting President of the business area and a member of Outokumpu Leadership Team since October 2020.

Nomination Board

Outokumpu's Shareholders' Nomination Board consists of the representatives of the four largest shareholders registered in the shareholder register of the company following Nasdaq Helsinki's last trading day in August. The Nomination Board has been established to annually prepare proposals on the composition of the Board of Directors and director remuneration for the Annual General Meeting.

On August 31, 2021 the four largest shareholders of Outokumpu were Solidium Oy, Ilmarinen Mutual Pension Insurance Company, Varma Mutual Pension Insurance Company and The Social Insurance Institution of Finland. The shareholders appointed the following representatives to the Nomination Board: Antti Mäkinen, Managing Director at Solidium Oy, Jouko Pölönen, President and CEO at Ilmarinen Mutual Pension Insurance Company, Pekka Pajamo, CFO at Varma Mutual Pension Insurance Company, and Outi Antila, Director General at The Social Insurance Institution of Finland. In addition, Kari Jordan, Chairman of the Board of Directors of Outokumpu, acts as an expert member of the Nomination Board.

The Nomination Board submitted its proposals to Outokumpu's Board of Directors on December 2, 2021.

Board of Directors' proposal for profit distribution

According to Outokumpu's dividend policy, the dividend pay-out ratio throughout a business cycle shall be in a range of 30–50% of the Group's net income. According to the parent company's financial statements on December 31, 2021 distributable funds totaled EUR 2,560 million, of which retained earnings were EUR 228 million.

The Board of Directors proposes to the Annual General Meeting to be held on March 31, 2022 that a dividend of EUR 0.15 per share will be paid for year 2021.

Outlook for Q1 2022

Group stainless steel deliveries in the first quarter are expected to increase compared to the fourth quarter.

The European ferrochrome benchmark price remained stable at USD 1.80/lb for the first quarter. Higher stainless steel prices are reflected in the already received orders and more than offset the increase in energy and consumable prices. COVID-19 remains a risk and could potentially impact operations and logistics.

Adjusted EBITDA in the first quarter of 2022 is expected to be on a similar or higher level compared to the fourth quarter.

Group key figures

		2021	2020	2019 1)	2018	2017
Scope of activity						
Sales	€ million	**7,709**	5,639	6,403	6,872	6,356
– change in sales	%	**36.7**	–11.9	–6.8	8.1	11.7
– exports from and sales outside Finland, of total sales *	%	**96.6**	96.3	95.9	96.7	96.5
Capital employed on Dec 31 *	€ million	**3,744**	3,543	3,904	4,086	3,929
Capital expenditure 2) *	€ million	**175**	180	193	218	174
– in relation to sales	%	**2.3**	3.2	3.0	3.2	2.7
Depreciation and amortization	€ million	**259**	243	230	204	216
Impairments	€ million	**45**	3	3	12	1
Research and development costs	€ million	**14**	21	17	15	13
– in relation to sales	%	**0.2**	0.4	0.3	0.2	0.2
Personnel on Dec 31 3)	FTE	**9,096**	9,602	10,078	10,118	9,748
– average for the year	FTE	**9,372**	10,000	10,329	10,100	9,994
Personnel on Dec 31	headcount	**9,395**	9,915	10,390	10,449	10,141
Profitability						
Adjusted EBITDA *	€ million	**1,021**	250	263	485	631
– in relation to sales	%	**13.2**	4.4	4.1	7.1	9.9
EBITDA *	€ million	**1,009**	191	266	496	663
EBIT *	€ million	**705**	–55	33	280	445
– in relation to sales	%	**9.1**	–1.0	0.5	4.1	7.0
Result before taxes	€ million	**640**	–151	–41	175	327
– in relation to sales	%	**8.3**	–2.7	–0.6	2.5	5.1
Net result for the financial year	€ million	**553**	–116	–75	130	392
– in relation to sales	%	**7.2**	–2.1	–1.2	1.9	6.2
Return on equity *	%	**20.1**	–4.7	–2.8	4.8	15.4
Return on capital employed *	%	**18.8**	–1.4	0.8	7.0	11.3

		2021	2020	2019 1)	2018	2017
Financing and financial position						
Net debt *	€ million	**408**	1,028	1,155	1,241	1,091
– in relation to sales	%	**5.3**	18.2	18.0	18.1	17.2
Net financial expenses *	€ million	**80**	98	80	107	127
– in relation to sales	%	**1.0**	1.7	1.3	1.6	2.0
Interest expenses *	€ million	**65**	78	76	70	92
– in relation to sales	%	**0.8**	1.4	1.2	1.0	1.5
Net debt to adjusted EBITDA *		**0.4**	4.1	4.4	2.6	1.7
Share capital	€ million	**311**	311	311	311	311
Total equity	€ million	**3,120**	2,360	2,562	2,750	2,721
Equity-to-assets ratio *	%	**48.3**	40.8	42.5	45.9	46.3
Debt-to-equity ratio *	%	**13.1**	43.6	45.1	45.1	40.1
Net cash generated from operating activities	€ million	**597**	322	371	214	328

Alternative performance measures are marked with *. For more information, please see Alternative Performance Measures section.

1) IFRS 16 – Leases has been adopted on January 1, 2019 using the modified retrospective approach. Comparative information has not been restated.

2) Capital expenditure definition changed from accrual-based to cash-based capital expenditure in 2020. Figures for 2019 and 2018 have been restated accordingly. Figures for 2017 have not been restated.

3) In 2021, Outokumpu changed its main personnel amount measure from headcount to full-time equivalent personnel.

Alternative performance measures

Certain financial key figures and ratios presented in Outokumpu's Annual Report are not measures of financial performance, financial position or cash flows under IFRS and are therefore considered as alternative performance measures. These measures are not defined by IFRS and therefore may not be directly comparable with financial measures and ratios used by other companies, including those in the same industry. The reason for presenting these measures is that either they are statutory requirements applicable to the Annual Report of the Group or the management believes that these measures provide meaningful supplemental information on the underlying business performance or financial position of the Group. These financial measures should not be considered in isolation from, or as a substitute for, financial information presented in compliance with IFRS. Alternative performance measures are marked with * in the Group key figures table.

Key figure	Definition of the key figure or source in the consolidated financial statements		2021	2020
Exports from and sales outside Finland				
Exports from and sales outside Finland is an indicator of the international nature of the Group's business.				
Sales	Consolidated statement of income	€ million	**7,709**	5,639
Sales by destination to Finland	Note 2.2 Revenue	€ million	**259**	208
Exports from and sales outside Finland	Sales – Sales by destination to Finland	€ million	**7,450**	5,431
– exports from and sales outside Finland, of total sales	Comparison to sales	%	**96.6**	96.3
Capital employed				
Capital employed is a measure for the amount of capital invested in Group's operations.				
Capital employed is the sum of:				
Total equity	Consolidated statement of financial position	€ million	**3,120**	2,360
Net debt	Defined later in this section	€ million	**408**	1,028
Defined benefit and other long-term employee benefit obligations	Consolidated statement of financial position	€ million	**309**	329
Net interest rate derivative liabilities	Note 5.4 Derivative instruments	€ million	**–**	–6
Net accrued interest expenses	Note 4.5 Trade and other receivables and payables	€ million	**6**	11
Less:				
Defined benefit plan assets	Consolidated statement of financial position	€ million	**–**	64
Equity investments at fair value through other comprehensive income	Consolidated statement of financial position	€ million	**24**	48
Investments at fair value through profit or loss	Consolidated statement of financial position	€ million	**28**	26
Investments in associated companies	Consolidated statement of financial position	€ million	**43**	38
Capital employed on Dec 31		€ million	**3,744**	3,543

Key figure	Definition of the key figure or source in the consolidated financial statements		2021	2020

Operating capital

Operating capital is a measure for the amount of capital invested in Group's operations. It is used as a measure for the business areas' net assets.

Capital employed on Dec 31	Defined earlier in this section	€ million	**3,744**	3,543
Net deferred tax asset on Dec 31	Note 2.1 Operating segments	€ million	**221**	257
Operating capital on Dec 31	Capital employed – Net deferred tax asset	€ million	**3,523**	3,286

Capital expenditure

Capital expenditure indicates the investment in assets to generate future cash flows for the Group.

Capital expenditure	Purchases of property, plant and equipment and intangible assets, other than emission allowances; investments in equity at fair value through other comprehensive income and associated companies, and acquisitions of businesses	€ million	**175**	180
– in relation to sales	Comparison to sales	%	**2.3**	3.2

Adjusted EBITDA, EBITDA, and EBIT

Adjusted EBITDA is Outokumpu's main performance indicator in financial reporting. The adjustments to EBITDA relate to material income and expense items of unusual nature, and their purpose is to improve comparability of financial performance between reporting periods. EBITDA and EBIT are also measures of financial performance of the Group.

EBIT	Consolidated statement of income	€ million	**705**	–55
– in relation to sales	Comparison to sales	%	**9.1**	–1.0
Depreciation and amortization	Note 2.3 Cost of sales and selling and general administrative expenses	€ million	**259**	243
Impairments	Note 2.4 Other operating income and expenses	€ million	**45**	3
EBITDA	EBIT + depreciation and amortization + impairments	€ million	**1,009**	191
Adjustments to EBITDA	Note 2.1 Operating segment	€ million	**–12**	–59
Adjusted EBITDA	EBITDA – Adjustments to EBITDA	€ million	**1,021**	250
– in relation to sales	Comparison to sales	%	**13.2**	4.4

Key figure	Definition of the key figure or source in the consolidated financial statements		2021	2020

Return on equity

Return on equity is an indicator of the value the Group generates to the capital the shareholders have invested in the Group.

Total equity on Dec 31 of previous year	Consolidated statement of financial position	€ million	**2,360**	2,562
Total equity on March 31		€ million	**2,455**	2,605
Total equity on June 30		€ million	**2,809**	2,525
Total equity on Sept 30		€ million	**3,040**	2,449
Total equity on Dec 31	Consolidated statement of financial position	€ million	**3,120**	2,360
Total equity (4-quarter average)	Average of the opening and 4 quarter-end values	€ million	**2,757**	2,500
Net result for the financial year	Consolidated statement of income	€ million	**553**	–116
Return on equity	Net result for the financial year / Total equity (4-quarter average)	%	**20.1**	–4.7

Return on capital employed

Return on capital employed is a measure for the value the Group generates to the capital invested in its operations.

Capital employed on Dec 31 of previous year	Defined earlier in this section	€ million	**3,543**	3,904
Capital employed on March 31		€ million	**3,701**	4,006
Capital employed on June 30		€ million	**3,851**	3,939
Capital employed on Sept 30		€ million	**3,906**	3,707
Capital employed on Dec 31	Defined earlier in this section	€ million	**3,744**	3,543
Capital employed (4-quarter average)	Average of the opening and 4 quarter-end values	€ million	**3,749**	3,820
EBIT	Consolidated statement of income	€ million	**705**	–55
Return on capital employed	EBIT / Capital Employed (4-quarter average)	%	**18.8**	–1.4

Key figure	Definition of the key figure or source in the consolidated financial statements		2021	2020

Net debt

Net debt is a measure for the level of debt financing in the Group. The reduction of net debt is a key priority for the Group.

Non-current debt	Consolidated statement of financial position	€ million	**597**	1,153
Current debt	Consolidated statement of financial position	€ million	**112**	251
Cash and cash equivalents	Consolidated statement of financial position	€ million	**300**	376
Net debt	Non-current + current debt – cash and cash equivalents	€ million	**408**	1,028
– in relation to sales	Comparison to sales	%	**5.3**	18.2

Net financial expenses and interest expenses

Net financial expenses and interest expenses are measures for the cost of Group's financing.

Net financial expenses	Total financial income and expenses in the Consolidated statement of income	€ million	**80**	98
– in relation to sales	Comparison to sales	%	**1.0**	1.7
Interest expenses	Consolidated statement of income	€ million	**65**	78
– in relation to sales	Comparison to sales	%	**0.8**	1.4

Net debt to Adjusted EBITDA

Net debt to Adjusted EBITDA is an indicator of the Group's indebtedness.

Net debt	Defined earlier in this section	€ million	**408**	1,028
Adjusted EBITDA	Defined earlier in this section	€ million	**1,021**	250
Net debt to Adjusted EBITDA	Net debt / Adjusted EBITDA		**0.4**	4.1

Key figure	Definition of the key figure or source in the consolidated financial statements		2021	2020

Equity-to-assets ratio

Equity-to-assets ratio shows the proportion the Group's assets financed with equity. The equity-to-assets ratio indicates the financial risk level of the Group.

Total equity	Consolidated statement of financial position	€ million	**3,120**	2,360
Total assets	Consolidated statement of financial position	€ million	**6,482**	5,797
Advances received	Note 4.5 Trade and other receivables and payables	€ million	**27**	7
Equity-to-assets ratio	Total equity / (Total assets – advances received)	%	**48.3**	40.8

Debt-to-equity ratio

Debt-to-equity ratio or gearing is an indicator of the financial risk level and the indebtedness of the Group.

Net debt	Defined earlier in this section	€ million	**408**	1,028
Total equity	Consolidated statement of financial position	€ million	**3,120**	2,360
Debt-to-equity ratio	Net debt / Total equity	%	**13.1**	43.6

Share-related key figures

		2021	2020	2019	2018	2017
Earnings per share [1] [2]	€	**1.26**	–0.28	–0.18	0.32	0.95
Diluted earnings per share [1] [2]	€	**1.17**	–0.28	–0.18	0.32	0.90
Cash flow per share [2]	€	**1.36**	0.78	0.90	0.52	0.79
Equity per share [1] [3]	€	**6.89**	5.70	6.19	6.70	6.59
Dividend per share	€	**0.15** [4]	–	–	0.15	0.25
Dividend payout ratio [1]	%	**12.3**	–	–	47.4	26.3
Dividend yield	%	**2.7**	–	–	4.7	3.2
Price/earnings ratio [1]		**4.37**	neg.	neg.	10.00	8.15
Development of share price						
Average trading price	€	**4.96**	2.66	3.01	5.39	8.11
Lowest trading price	€	**3.36**	2.08	2.23	3.18	6.61
Highest trading price	€	**6.01**	4.44	4.04	8.26	10.05
Trading price at the end of the period	€	**5.50**	3.22	2.81	3.20	7.74
Change during the period	%	**70.8**	14.8	–12.2	–58.7	–9.0
Change in the OMX Helsinki index during the period	%	**18.3**	10.1	13.4	–8.0	6.4
Market capitalization at the end of the period [5]	€ million	**2,489**	1,327	1,155	1,312	3,194
Development in trading volume						
Trading volume [6]	1,000 shares	**880,092**	1,100,628	884,254	826,636	1,021,607
In relation to weighted average number of shares [2]	%	**200.5**	265.9	215.0	201.1	247.7
Adjusted average number of shares [2] [5]		**438,871,175**	413,907,618	411,198,002	411,065,622	412,363,204
Diluted average number of shares [2] [5]		**479,163,509**	437,336,296	446,209,235	447,181,306	450,247,639
Number of shares at the end of the period [5]		**452,571,977**	412,002,212	411,774,715	410,563,719	412,671,549

[1] IFRS 16 – Leases has been adopted on January 1, 2019 using the modified retrospective approach. Comparative information has not been restated.

[2] Reported based on share-issue-adjusted average number of shares. Comparative information for 2020 is presented accordingly. Information for 2019–2017 has not been restated.

[3] 2020 and 2019 calculated based on the share-issue-adjusted number of shares. 2018 and 2017 have not been restated.

[4] The Board of Directors' proposal to the Annual General Meeting.

[5] Excluding treasury shares.

[6] Includes only Nasdaq Helsinki trading.

Definitions of share-related key figures

$$\text{Earnings per share} = \frac{\text{Net result for the financial year attributable to the equity holders}}{\text{Adjusted average number of shares during the period}}$$

$$\text{Cash flow per share} = \frac{\text{Net cash generated from operating activities}}{\text{Adjusted average number of shares during the period}}$$

$$\text{Equity per share} = \frac{\text{Equity attributable to the equity holders}}{\text{Adjusted number of shares at the end of the period}}$$

$$\text{Dividend per share} = \frac{\text{Dividend for the financial year}}{\text{Adjusted number of shares at the end of the period}}$$

$$\text{Dividend payout ratio} = \frac{\text{Dividend for the financial year}}{\text{Net result for the financial year attributable to the equity holders}} \times 100$$

$$\text{Dividend yield} = \frac{\text{Dividend per share}}{\text{Adjusted trading price at the end of the period}} \times 100$$

$$\text{Price/earnings ratio (P/E)} = \frac{\text{Adjusted trading price at the end of the period}}{\text{Earnings per share}}$$

$$\text{Average trading price} = \frac{\text{EUR amount traded during the period}}{\text{Adjusted number of shares traded during the period}}$$

Market capitalization at end of the period = Number of shares at the end of the period × Trading price at the end of the period

Trading volume = Number of shares traded during the period, and in relation to the weighted average number of shares during the period

Non-financial indicators

Environmental indicators	**2021**	2020	2019	2018	2017
Scope 1, 2 and 3 (direct and indirect) CO_2 emission intensity, tonnes per tonne of stainless steel	**1.60**	1.55	1.61	1.72	1.84
Energy intensity, GJ per tonne stainless steel	**9.9**	11.0	10.9	10.1	9.3
Use rate of slag, including slag from ferrochrome production, %	**78.6**	77.1	90.8	89.9	91.1
Total landfill waste intensity, tonnes per tonne stainless steel	**0.517**	0.590	0.500	0.472	0.361
Recycled material content, %	**90.1**	92.5	89.6	88.6	87.0

Social indicators	2021	2020	2019	2018	2017
Diversity					
Employees					
male, %	**84**	84	85	85	86
female, %	**16**	16	15	15	14
Managers [1)]					
male, %	**84**	84	84	n/a	n/a
female, %	**16**	16	16	n/a	n/a
Board of Directors					
male, %	**50**	50	57	67	71
female, %	**50**	50	43	33	29
Safety					
Total recordable injury frequency rate, per million working hours	**2.0**	2.4	3.2	4.1	4.4

[1)] Manager diversity data is not available for 2018 or 2017.

Financial statements

Consolidated financial statements, IFRS

Parent company financial statements, FAS

Consolidated statement of income

€ million	Note	2021	2020
Sales	2.2	**7,709**	5,639
Cost of sales	2.3	**–6,732**	–5,403
Gross margin		**977**	236
Other operating income	2.4	**49**	22
Selling and marketing expenses	2.3	**–67**	–68
Administrative expenses	2.3	**–185**	–196
Research and development expenses	2.3	**–14**	–21
Other operating expenses	2.4	**–55**	–28
EBIT		**705**	–55
Share of results in associated companies	6.4	**15**	2
Financial income and expenses	2.5		
Interest income and other financial income		**7**	3
Interest expenses		**–65**	–78
Market price gains and losses		**–3**	–10
Other financial expenses		**–19**	–13
Total financial income and expenses		**–80**	–98
Result before taxes		**640**	–151
Income taxes	2.6	**–87**	34
Net result for the financial year		**553**	–116
Earnings per share attributable to the equity holders of the Company	2.7		
Earnings per share, €		**1.26**	–0.28
Diluted earnings per share, €		**1.17**	–0.28

Earnings per share figures are calculated based on the share-issue-adjusted weighted average number of shares. Comparative information is presented accordingly. Net result for the financial year is fully attributable to the equity holders of the company.

Consolidated statement of comprehensive income

€ million	Note	2021	2020
Net result for the financial year		**553**	–116
Other comprehensive income			
Items that may be reclassified to profit or loss:			
Exchange differences on translating foreign operations			
Change in exchange differences		**92**	–86
Cash flow hedges [1]	5.4		
Fair value changes during the financial year		**–1**	–8
Reclassification to profit or loss		**27**	–5
Income taxes	2.6	**–6**	0
Items that will not be reclassified to profit or loss:			
Remeasurements of defined benefit plans	3.3		
Changes during the financial year		**–72**	–12
Income taxes	2.6	**26**	4
Equity investments at fair value through other comprehensive income	5.6		
Fair value changes during the financial year		**–44**	4
Share of other comprehensive income in associated companies	6.4	**0**	0
Other comprehensive income for the financial year, net of tax		**22**	–104
Total comprehensive income for the financial year		**574**	–221

[1] The presentation of fair value changes reclassified to inventory has been changed in 2021 from other comprehensive income to movement in equity. Comparative information is presented accordingly.

Total comprehensive income for the financial year is fully attributable to the equity holders of the company.

Consolidated statement of financial position

€ million	Note	2021	2020
ASSETS			
Non-current assets			
Intangible assets	4.1, 4.3	**577**	610
Property, plant and equipment	4.1, 4.2	**2,573**	2,631
Investments in associated companies	6.4	**43**	38
Equity investments at fair value through other comprehensive income	5.6	**24**	48
Derivative financial instruments	5.4	**–**	6
Deferred tax assets	2.6	**222**	264
Defined benefit plan assets	3.3	**–**	64
Trade and other receivables	4.5	**5**	1
		3,444	3,663
Current assets			
Inventories	4.4	**1,892**	1,177
Investments at fair value through profit or loss		**28**	26
Derivative financial instruments	5.4	**31**	17
Trade and other receivables	4.5	**786**	537
Cash and cash equivalents	5.1	**300**	376
		3,038	2,134
TOTAL ASSETS		**6,482**	5,797

€ million	Note	2021	2020
EQUITY AND LIABILITIES			
Equity attributable to the equity holders of the Company			
Share capital		**311**	311
Premium fund and other restricted reserves		**717**	717
Invested unrestricted equity reserve		**2,308**	2,103
Fair value reserves		**–96**	–49
Retained earnings		**–120**	–721
Total equity	5.2	**3,120**	2,360
Non-current liabilities			
Non-current debt	5.1	**597**	1,153
Derivative financial instruments	5.4	**2**	–
Deferred tax liabilities	2.6	**1**	7
Employee benefit obligations	3.3	**309**	329
Provisions	4.6	**63**	84
Trade and other payables	4.5	**23**	45
		994	1,618
Current liabilities			
Current debt	5.1	**112**	251
Derivative financial instruments	5.4	**40**	32
Provisions	4.6	**29**	31
Current tax liabilities		**21**	6
Trade and other payables	4.5	**2,166**	1,500
		2,368	1,820
TOTAL EQUITY AND LIABILITIES		**6,482**	5,797

Consolidated statement of cash flows

€ million	Note	2021	2020
Cash flow from operating activities			
Net result for the financial year		**553**	–116
Adjustments for			
Depreciation, amortization and impairments	2.3, 2.4, 4.1	**304**	246
Net expenses on provisions and employee benefit obligations		**21**	59
Gains/losses on sale of non-current assets	2.4	**–19**	–6
Net interest income and expense	2.5	**58**	71
Income taxes	2.6	**87**	–34
Other non-cash adjustments		**0**	3
		450	339
Change in net working capital			
Change in trade and other receivables		**–241**	–37
Change in inventories		**–684**	237
Change in trade and other payables		**660**	47
		–266	247
Provisions and employee benefit obligations paid		**–80**	–71
Interest and dividends received		**10**	2
Interest paid		**–63**	–69
Income taxes paid		**–7**	–10
Net cash from operating activities		**597**	322

€ million	Note	2021	2020
Cash flow from investing activities			
Equity investments at fair value through other comprehensive income	5.6	**–19**	–13
Purchases of property, plant and equipment	4.1	**–145**	–146
Purchases of intangible assets	4.1	**–11**	–20
Proceeds from sale of property, plant and equipment	4.1	**24**	15
Other investing cash flow		**2**	–10
Net cash from investing activities		**–149**	–175
Cash flow before financing activities		**448**	147
Cash flow from financing activities			
Directed share issue	5.2	**205**	–
Borrowings of non-current debt	5.1	**63**	496
Repayments of non-current debt	5.1	**–587**	–688
Change in current debt	5.1	**–174**	130
Repayments of lease liabilities	4.2	**–32**	–33
Net cash from financing activities		**–525**	–94
Net change in cash and cash equivalents		**–77**	53
Cash and cash equivalents at the beginning of the financial year		**376**	325
Net change in cash and cash equivalents		**–77**	53
Foreign exchange rate effect on cash and cash equivalents		**2**	–1
Cash and cash equivalents at the end of the financial year	5.1	**300**	376

Consolidated statement of changes in equity

€ million	Note	Share capital	Premium fund	Other restricted reserves	Invested unrestricted equity reserve	Fair value reserve from equity investments	Fair value reserve from derivatives [1]	Cumulative translation differences	Remeasure-ments of defined benefit plans	Treasury shares	Other retained earnings	Total equity
Equity on Jan 1, 2020		**311**	**714**	**3**	**2,103**	**–49**	**6**	**–27**	**–116**	**–33**	**–350**	**2,562**
Net result for the financial year		–	–	–	–	–	–	–	–	–	–116	–116
Other comprehensive income		–	–	–	–	4	–13	–86	–8	–	0	–104
Total comprehensive income for the financial year		–	–	–	–	4	–13	–86	–8	–	–117	–221
Transactions with equity holders of the Company												
Contributions and distributions												
Convertible bond	5.1	–	–	–	–	–	–	–	–	–	14	14
Share-based payments	3.4	–	–	–	–	–	–	–	–	2	–1	1
Fair value transfer to inventory	5.4	–	–	–	–	–	4	–	–	–	–	4
Equity on Dec 31, 2020		**311**	**714**	**3**	**2,103**	**–45**	**–4**	**–113**	**–124**	**–31**	**–454**	**2,360**
Net result for the financial year		–	–	–	–	–	–	–	–	–	553	553
Other comprehensive income		–	–	–	–	–44	20	92	–46	–	0	22
Total comprehensive income for the financial year		–	–	–	–	–44	20	92	–46	–	553	574
Transactions with equity holders of the Company												
Contributions and distributions												
Directed share issue	5.2	–	–	–	205	–	–	–	–	–	–	205
Share-based payments	3.4	–	–	–	–	–	–	–	–	1	3	4
Fair value transfer to inventory	5.4	–	–	–	–	–	–23	–	–	–	–	–23
Other		–	–	–	–	–	–	–	1	–	–1	–
Equity on Dec 31, 2021		**311**	**714**	**3**	**2,308**	**–89**	**–7**	**–22**	**–169**	**–30**	**101**	**3,120**

[1] The presentation of fair value changes reclassified to inventory has been changed in 2021 from other comprehensive income to movement in equity. Comparative information is presented accordingly.

Equity is fully attributable to the equity holders of the company. See note 5.2 for more information on equity.

Notes to the consolidated financial statements

Outokumpu has renewed its financial statements in 2021, and presents the notes to the consolidated financial statements as grouped in the following six sections:

The basis of preparation, accounting principles and management judgements applicable to the entire consolidated financial statements are presented in the Basis of reporting section, but the accounting principles, management judgements, and risks related to each disclosure item are presented in the related note. The table outlines the notes structure and indicates which notes include accounting principle, management judgement and risk information, and the following icons are used to indicate these topics within the notes.

Accounting principles

Management judgements

Risk information

Note	Accounting principles	Management judgements	Risk information
1. Basis of reporting			
1.1 Corporate information			
1.2 Basis of preparation	■	▼	●
2. Business result			
2.1 Operating segments	■		
2.2 Revenue	■		
2.3 Cost of sales and selling, general and administrative expenses	■		
2.4 Other operating income and expenses	■		
2.5 Financial income and expenses	■		
2.6 Income taxes	■	▼	
2.7 Earnings per share	■		
3. Employee benefits			
3.1 Employee benefit expenses			
3.2 Employee benefits for key management	■		
3.3 Employee benefit obligations	■	▼	●
3.4 Share-based payments	■	▼	
4. Operating assets and liabilities			
4.1 Intangible assets and property, plant and equipment	■	▼	
4.2 Leases	■	▼	
4.3 Goodwill impairment test	■	▼	
4.4 Inventories	■	▼	
4.5 Trade and other receivables and payables	■		●
4.6 Provisions	■	▼	
5. Capital structure and financial risk management			
5.1 Net debt and capital management	■		●
5.2 Equity	■		
5.3 Financial risk management and insurances			●
5.4 Derivative instruments	■		
5.5 Financial assets and liabilities	■		
5.6 Equity investments at fair value through other comprehensive income	■	▼	
5.7 Commitments and contingent liabilities	■		
6. Other notes			
6.1 Disputes and litigations			
6.2 Related parties			
6.3 Subsidiaries			
6.4 Associated companies	■		
6.5 New IFRS standards			

1. Basis of reporting

This notes section covers the company information, general basis of preparation as well as accounting principles that are applicable to the entire consolidated financial statements.

1.1 Corporate information

Outokumpu Oyj is a Finnish public limited liability company organized under the laws of Finland and domiciled in Helsinki, Finland. The company has been listed on the Nasdaq Helsinki since 1988.

Outokumpu is the global leader in stainless steel. The foundation of Outokumpu's business is its ability to tailor stainless steel into any form and for almost any purpose. Stainless steel is sustainable, durable and designed to last forever. The Group's customers use it to create civilization's basic structures and its most famous landmarks as well as products for households and various industries. Outokumpu employs some 9,000 professionals in more than 30 countries.

Outokumpu's consolidated financial statements according to ESEF regulations are published in XHTML format at www.outokumpu.com/reports. Financial statements presented in other reports and formats, such as in the Annual report PDF or print, do not constitute as reports according to the ESEF regulations.

In its meeting on February 8, 2022, the Board of Directors of Outokumpu Oyj approved the publishing of these consolidated financial statements. According to the Finnish Limited Liability Companies Act, shareholders have the right to approve or reject the financial statements in the Annual General Meeting held after the publication of the financial statements. The Annual General Meeting also has the right to decide to amend the financial statements.

Corporate information

Company name	Outokumpu Oyj
Legal form	Public limited liability company
Country of incorporation	Finland
Domicile and principal place of business	Helsinki, Finland
Company address	P.O. Box 245, 00181 Helsinki, Finland
Ultimate parent company	Outokumpu Oyj

1.2 Basis of preparation

These consolidated financial statements of Outokumpu have been prepared on going concern basis for the financial year 2021 covering the period from January 1 to December 31, 2021.

The consolidated financial statements have been prepared in accordance with International Financial Reporting Standards (IFRSs) as adopted by the European Union including the IAS and IFRS standards as well as the SIC and IFRIC interpretations in force on December 31, 2021. The consolidated financial statements also comply with the regulations of Finnish accounting and company legislation complementing the IFRSs.

The consolidated financial statements are presented in millions of euros and have been prepared under the historical cost convention, unless otherwise stated in the accounting principles. All figures presented have been rounded, and consequently the sum of individual figures may deviate from the presented aggregate figure. Key figures have been calculated using exact figures.

Risk information

Managing COVID-19 pandemic

Safety is a key priority at Outokumpu and protecting the health and safety of the employees in the global COVID-19 pandemic continued in 2021.

The effects of the pandemic were twofold. Outokumpu had various safety measures in its sites and offices, while the rebound from the 2020 slowdown showed as increased deliveries and improved performance. The financial impacts of COVID-19 related mainly to the market rebound, and its impact on prices, order books and utilization rates were stronger than estimated. On the other hand, various restrictions have been in place, as the company has continued to do its utmost to safeguard the employees – working remotely, following social distancing as well as limiting traveling, face-to-face meetings, and visitor access to only the absolutely business critical instances.

Towards the end of 2021, the COVID-19 pandemic moved on to a point where the crisis was no longer steered centrally at the Group level. Instead, the situation is now managed at the local level within the company guidelines and local country rules. Nevertheless, the COVID-19 pandemic still remains a risk going forward.

Management judgements

The preparation of the financial statements in accordance with IFRSs requires management to make judgements, estimates and assumptions that affect the reported amounts of assets and liabilities and the disclosure of contingent assets and contingent liabilities at the reporting date, as well as the reported amounts of income and expenses during the reporting period.

The management estimates and judgements are continuously evaluated and they are based on prior experience and other factors, such as future expectations assumed to be reasonable considering the circumstances. Although these estimates are based on management's best knowledge of the circumstances at the end of the reporting period, actual results may differ from the estimates and the assumptions.

The table in the beginning of the notes to the consolidated financial statements outlines the notes that include material management judgements.

Accounting principles

Principles of consolidation

The consolidated financial statements include the parent company Outokumpu Oyj and all subsidiaries controlled by Outokumpu Oyj either directly or indirectly. The Group 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.

The financial statements of subsidiaries are included in the consolidated financial statements from the date on which control commences until the date on which control ceases. Changes in the parent company's ownership interest in a subsidiary are accounted for as equity transactions if the parent company retains control of the subsidiary.

All intra-group transactions, receivables, liabilities and unrealized margins, as well as distribution of profits within the Group, are eliminated in the preparation of consolidated financial statements.

Foreign currency transactions

Transactions of each subsidiary included in the consolidated financial statements are measured using the currency that best reflects the economic substance of the underlying events and circumstances relevant to that subsidiary (“the functional currency”). The functional currency is mainly the subsidiary’s local currency except for subsidiaries in Mexico and Argentina who use the US dollar as their functional currency.

The consolidated financial statements are presented in euros which is the functional and presentation currency of the parent company. Group companies’ foreign currency transactions are translated into local functional currencies using the exchange rates prevailing at the dates of the transactions. Receivables and liabilities in foreign currencies are translated into functional currencies at the exchange rates prevailing at the end of the reporting period.

Foreign exchange differences arising from interest-bearing assets and liabilities and related derivatives are recognized in financial income and expenses in the consolidated statement of income. Foreign exchange differences arising in respect of other financial instruments are included in EBIT under sales, purchases or other operating income and expenses. The accumulated exchange differences arisen from hedges of net investments in foreign operations are recognized in equity.

For those subsidiaries whose functional and presentation currency is not the euro, the items in the statements of income and comprehensive income, and in the statement of cash flows are translated into euro using the average exchange rates of the reporting period. The assets and liabilities in the statement of financial position are translated using the exchange rates prevailing at the reporting date. The translation differences arising from the use of different exchange rates explained above are recognized in the Group’s equity through other comprehensive income.

Any goodwill arising on acquisitions of foreign operations and any fair value adjustments to the carrying amounts of assets and liabilities arising on acquisitions of those foreign operations are treated as assets and liabilities of those foreign operations. They are translated into euro using the exchange rates prevailing at the reporting date. When a foreign operation is sold, or is otherwise partially or completely disposed of, the translation differences accumulated in equity are reclassified in profit or loss as part of the gain or loss on the sale.

Adoption of new and amended IFRS standards

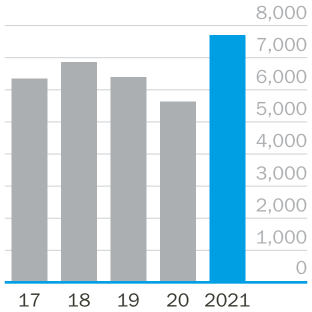
As of January 1, 2021, Outokumpu has applied the following new and amended standards, interpretations and decisions.

- **Amendments to IFRS 9, IAS 39, IFRS 7, IFRS 4 and IFRS 16 – Interest Rate Benchmark Reform, Phase 2** (effective for financial years beginning on or after January 1, 2021): The amendments address issues arising during the interest rate benchmark reform, including the replacement of one benchmark rate with an alternative one. The amendments cover: (1) accounting for changes in the basis for determining contractual cash flows as a result of IBOR reform; (2) additional temporary exceptions to applying specific hedge accounting requirements to avoid failure of hedge relationships solely due to IBOR reform; and (3) additional IFRS 7 disclosures related to IBOR reform. The amendments have been take into account in Outokumpu’s loan documentation. The amendments also impact the market information applied in the valuation of the derivative instruments’ interest component as of beginning of 2022. The amendments did not have material impact on Outokumpu’s consolidated financial statements.
- **IFRIC agenda decision Configuration or Customisation Costs in a Cloud Computing Arrangement (IAS 38)** in April 2021: The agenda decision gives guidelines on the accounting treatment of the costs related to implementing software as a service (SaaS), including evaluation whether an intangible asset can be identified, and, if not, timing of the recognition of the related operating expense. The agenda decision did not have material impact on Outokumpu’s consolidated financial statements for 2021. However, depending on the future decisions on entering into software as service arrangements, the agenda decision can impact the recognition of intangible assets as well as the timing and presentation of IT-related costs compared circumstances where such cost would arise from non-SaaS arrangements.

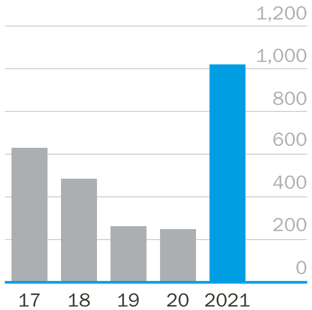
1. 1.1 1.2 2. 2.1 2.2 2.3 2.4 2.5 2.6 2.7 3. 3.1 3.2 3.3 3.4 4. 4.1 4.2 4.3 4.4 4.5 4.6 5. 5.1 5.2 5.3 5.4 5.5 5.6 5.7 6. 6.1 6.2 6.3 6.4 6.5

2. Business result

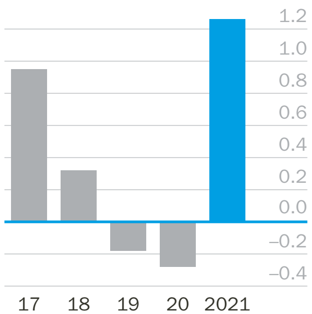
Sales, € million



Adjusted EBITDA, € million



Earnings per share, €



The market environment was exceptionally strong in 2021. This was reflected in favorable volume development and higher realized stainless steel prices. Together with benefits from the strategy execution, adjusted EBITDA reached its highest level in recent history. Net result and earnings per share were also at an excellent level.

2.1 Operating segments

Outokumpu's business is divided into four business areas which are Europe, the Americas, Ferrochrome and Long Products. The business areas have responsibility for commercials, supply chain management and operations and they are Outokumpu's operating segments under IFRS.

In addition to the business area structure, Group Functions cover Legal and compliance, Health and safety, Raw material procurement, Finance and IR, General procurement, Strategy, Transformation office, HR, Group communications, Global business services, R&D, Technology, Sustainability and Group IT.

Europe consists of both coil and plate operations in Europe. The high-volume and tailored standard stainless steel grades are primarily used for example in architecture, building and construction, transportation, catering and appliances, chemical, petrochemical and energy sectors, as well as other process industries. The production facilities are located in Finland, Germany and Sweden. The business area has an extensive service center and sales network across Europe, Middle East, Africa and APAC region.

Americas produces standard austenitic and ferritic grades as well as tailored products. Its largest customer segments are automotive and transport, consumer appliances, oil and gas, chemical and petrochemical industries, food and beverage processing, as well as building and construction industry. The business area has production units in the US and Mexico, as well as a service center in Argentina.

Ferrochrome produces charge grade of ferrochrome. The business area has a chrome mine in Kemi, Finland and ferrochrome smelters in Tornio, Finland.

Long Products are used in a wide range of applications such as springs, wires, surgical equipment, automotive parts and construction. The manufacturing is concentrated in the

1. 1.1 1.2 2. 2.1 2.2 2.3 2.4 2.5 2.6 2.7 3. 3.1 3.2 3.3 3.4 4. 4.1 4.2 4.3 4.4 4.5 4.6 5. 5.1 5.2 5.3 5.4 5.5 5.6 5.7 6. 6.1 6.2 6.3 6.4 6.5

integrated sites in the UK, Sweden and the US. Outokumpu concluded a strategic review of Long Products in 2020 and as a result, initiated a turnaround program for the Long Products business.

Other operations consist of activities outside the four operating segments, as well as industrial holdings. Such business development and Corporate Management expenses that are not allocated to the business areas are also reported under Other operations. Sales of Other operations consist of sales of electricity to the Group's production facilities in Finland and in Sweden, nickel procured under the Group's sourcing contract, and internal services.

					Reconciliation			
2021 € million	Europe	Americas	Ferrochrome	Long Products	Operating segments total	Other operations	Eliminations	Group
External sales	4,531	1,896	185	620	7,233	477	–	7,709
Inter-segment sales	69	51	418	189	727	307	–1,034	–
Sales	4,600	1,947	604	810	7,960	784	–1,034	7,709
Adjusted EBITDA	485	297	246	47	1,076	–26	–29	1,021
Adjustments to EBITDA								
Litigation provisions	–	–15	–	–	–15	–	–	–15
Environmental provisions	–	–	–	–	–	–10	–	–10
Gain on disposal of property	12	–	–	–	12	–	–	12
EBITDA	498	283	246	47	1,074	–35	–29	1,009
Depreciation and amortization	–141	–59	–44	–11	–255	–3	–1	–259
Impairments	–10	–3	–13	–	–27	–18	–	–45
EBIT	346	220	189	36	792	–57	–30	705
Assets in operating capital	3,126	1,359	996	410	5,892	325	–358	5,859
Other assets								401
Deferred tax assets								222
Total assets								6,482
Liabilities in operating capital	1,402	480	173	253	2,309	348	–320	2,336
Other liabilities								1,025
Deferred tax liabilities								1
Total liabilities								3,362
Operating capital	1,724	879	823	157	3,583	–23	–38	3,523
Net deferred tax asset								221
Capital employed								3,744

2020 € million	Europe	Americas	Ferrochrome	Long Products	Operating segments total	Reconciliation Other operations	Eliminations	Group
External sales	3,485	1,194	151	415	5,245	394	–	5,639
Inter-segment sales	83	1	260	78	422	271	–693	–
Sales	3,568	1,195	411	493	5,667	665	–693	5,639
Adjusted EBITDA	142	55	91	–8	280	–29	0	250
Adjustments to EBITDA								
Restructuring costs	–47	–2	–1	–3	–53	–6	–	–59
EBITDA	95	53	90	–11	227	–36	0	191
Depreciation and amortization	–140	–54	–34	–10	–238	–4	0	–243
Impairments	–2	–1	–	–	–3	0	–	–3
EBIT	–47	–1	56	–21	–14	–40	–1	–55
Assets in operating capital	2,610	1,097	931	255	4,894	292	–213	4,973
Other assets								561
Deferred tax assets								264
Total assets								5,797
Liabilities in operating capital	1,037	297	166	122	1,622	270	–205	1,687
Other liabilities								1,744
Deferred tax liabilities								7
Total liabilities								3,437
Operating capital	1,573	801	766	133	3,272	21	–8	3,286
Net deferred tax asset								257
Capital employed								3,543

Adjustments to EBITDA and EBIT

€ million	2021	2020
Litigation provisions	**–15**	–
Environmental provisions	**–10**	–
Gain on disposal of property	**12**	–
Restructuring costs	**–**	–59
Adjustments to EBITDA	**–12**	–59
Impairment of Group's ERP systems	**–18**	–
Impairments in Ferrochrome business area	**–13**	–
Impairments in lease agreements	**–10**	–
Adjustments to EBIT	**–54**	–59

In 2021, Outokumpu recognized increases in litigation provisions of EUR 15 million and in environmental provisions of EUR 10 million. The environmental provisions relate to the aftercare of closed mines in Finland. See note 6.1 for more information on litigations and note 4.6 on provisions.

In 2021, Outokumpu divested properties related to closed operations in Krefeld and Bochum in Germany, resulting in a gain of EUR 12 million.

For more information on impairments in 2021, see note 2.4.

In 2020, Outokumpu announced its new strategy with the first-phase focus on de-risking the company through deleveraging the balance sheet. Actions include cost savings through employee reductions, and the related restructuring costs amounted to EUR 59 million.

Accounting principles

Outokumpu's CEO, supported by the Leadership Team, is the Group's chief operating decision maker. The segments are reviewed regularly for the purpose of assessing performance and allocating resources to segments. The review is based on internal management reporting on IFRS based financial information.

Adjusted EBITDA

Adjusted EBITDA is Outokumpu's main performance indicator in financial reporting, and is also used to assess the segments' performance. Adjusted EBITDA is defined as EBIT before depreciation, amortization and impairment charges, and excluding such material income and expense items which affect the comparability between periods due to their unusual nature, size or incidence resulting from, for example, Group-wide restructuring programs or disposals of assets or businesses.

Adjusted EBITDA is an alternative performance measure meaning that it is not an IFRS-defined measure, so it is defined also in the Alternative performance measures section within the Review by the Board of Directors and reconciled to the consolidated statement of income.

2.2 Revenue

External sales by geographical destination

€ million	Finland	Other Europe	North America	APAC region	Other countries	Group
2021						
Operating segment						
Europe	244	3,933	79	227	49	4,531
Americas	–	0	1,829	4	63	1,896
Ferrochrome	14	113	27	31	1	185
Long Products	1	366	211	41	0	620
Other operations	–	476	–	–	–	476
	259	**4,890**	**2,146**	**302**	**112**	**7,709**
2020						
Operating segment						
Europe	196	2,940	47	262	41	3,485
Americas	–	0	1,144	5	45	1,194
Ferrochrome	10	66	2	73	0	151
Long Products	2	235	144	33	0	415
Other operations	–	394	–	–	–	394
	208	3,634	1,337	373	86	5,639

Other operations’ nickel sales is reported under Other Europe instead of Other countries. Comparative information is presented accordingly.

Accounting principles

Outokumpu generates revenue mainly from sales of stainless steel and ferrochrome. Outokumpu ships these goods to customers under a variety of Incoterms, and considers the physical possession as well as risks and rewards related to the ownership of the goods to be transferred accordingly. This also signifies the transfer of control of the goods to the customer.

Outokumpu’s performance obligations related to sale of stainless steel and ferrochrome are satisfied and revenue from contracts with customers recognized at a point of time. Only revenue from the performance obligation related to transportation of the goods is recognized over a period of time, and the period under which the revenue is recognized is relatively short. Moreover, the sales of goods and the transportation service are invoiced together from the customer, and consequently, the timing of revenue recognition does not affect the uncertainty associated with the cash flows. Outokumpu acts as a principal with regards to transportation of goods.

Outokumpu has bill-and-hold arrangements with selected European customers. Under these arrangements, based on a customer request, Outokumpu holds the readily available material at its own stock locations for the customer for up to a period of three months before the actual delivery of the material. Outokumpu has transferred control of these materials to the customer as Outokumpu is not able to direct the material to another customer, and consequently recognizes the revenue for the material sales. The revenue related to Outokumpu’s transportation service performance obligation to deliver the material is recognized over the time when the delivery takes place.

In the end of 2021, the amount of revenue recognized under the bill and hold arrangements for products not delivered yet was immaterial.

Stainless steel and ferrochrome sales prices are mainly fixed before delivery, and volume discounts estimated and accrued in the revenue recognition are the only variable component in pricing. In individual cases, the sales price of ferrochrome is based on the period of time when the customer uses the purchased ferrochrome. The payment terms vary from advance payment to 90 days payment term, and do not include any significant financing component.

Outokumpu also sells nickel procured under Group’s nickel sourcing agreement. These sales are recognized to revenue when the title to the material is transferred to the buyer.

Liabilities related to customer contracts are presented in note 4.5.

Outokumpu does not have individual significant customers as defined in IFRS 8.

2.3 Cost of sales and selling, general and administrative expenses

€ million	2021	2020
Cost of sales	**–6,732**	–5,403
Selling and marketing expenses	**–67**	–68
Administrative expenses	**–185**	–196
Research and development expenses	**–14**	–21
	–6,998	–5,688

Cost of sales and selling, general and administrative expenses by nature

€ million	2021	2020
Materials	**–4,220**	–3,170
Supplies	**–574**	–468
Energy	**–355**	–253
Maintenance	**–173**	–182
Freight	**–276**	–226
Employee benefits	**–711**	–735
Depreciation and amortization	**–259**	–243
Other	**–430**	–411
	–6,998	–5,688

Depreciation and amortization by function

€ million	2021	2020
Cost of sales	**–250**	–233
Selling and marketing expenses	**–1**	–2
Administrative expenses	**–7**	–7
Research and development expenses	**–1**	–1
	–259	–243

Auditor fees

€ million	2021	2020
Audit	**–2.3**	–2.0
Audit-related services	**–0.0**	–0.0
Tax advisory	**–0.0**	–0.0
Other services	**–0.3**	–0.1
	–2.7	–2.1

PricewaterhouseCoopers Oy has provided non-audit services to Outokumpu in total of EUR 0.3 million during 2021. These services comprised of sustainability reporting, ESG consulting and other agreed upon procedures.

Accounting principles

Cost of sales

Cost of sales includes expenses related to materials and supplies, energy, maintenance and freight. Employee benefit expenses, depreciation and amortization and other expenses are included to the extent they relate to operational activities.

Research and development costs

As a main rule, research and development costs are expensed as incurred. If development is expected to generate future economic benefits for the Group, related costs are capitalized as intangible assets and amortized on a systematic basis over their useful lives.

Repairs and maintenance costs

Ordinary repairs and maintenance is carried out to maintain operating conditions of the mills and the equipment, and the related costs are expensed as they are incurred.

The costs of major repairs and renovations are included in the asset's carrying amount as capital expenditure when these activities are expected to generate future economic benefits for the Group, for example in form of a longer useful life, a wider product range, a higher output, or an improved quality, in excess of the originally assessed standard performance level.

Depreciation and amortization methods and useful lives of non-current assets

Depreciation and amortization methods as well as estimates for useful lives of different types of intangible asset and property, plant and equipment items are described in the note 4.1.

2.4 Other operating income and expenses

Other operating income

€ million	2021	2020
Exchange gains and losses from foreign exchange derivatives	**22**	–
Market price gains and losses from commodity derivatives	**–12**	–
Market price gains and losses from derivative financial instruments	**11**	–
Gains on sale of non-current assets	**19**	6
Other income items	**19**	16
	49	22

Gains on sale of non-current assets in 2021 include EUR 12 million gains from disposal of property in Germany. Other income items do not include any material government support (2020: included EUR 5 million mainly related to COVID-19 support measures in various countries). Comparative information for exchange as well as market price gains and losses is reported as other operating expenses.

Other operating expenses

€ million	2021	2020
Exchange gains and losses from foreign exchange derivatives	–	–12
Market price gains and losses from commodity derivatives	–	5
Market price gains and losses from derivative financial instruments	–	–7
Impairments in non-current assets	**–45**	–3
Other expense items	**–10**	–18
	–55	–28

In 2021, Outokumpu recognized impairments in non-current assets based on reviews of individual assets for EUR 45 million. These impairments include EUR 18 million relating to the Group's ERP systems, EUR 13 million regarding mine properties and obsolete machinery in Ferrochrome business area, EUR 10 million regarding lease agreements on land and buildings in the business area Europe's operations in Germany, and EUR 4 million regarding obsolescence of various assets in the Group (2020: EUR 3 million related to obsolescence of various assets).

Other expense items do not include any material expenses on emission allowances (2020: EUR 11 million). See notes 4.1 and 5.3 for more information on emission allowances and related price risk.

Accounting principles

Other operating income and expenses include items such as gains or losses from disposals of non-current assets or businesses and gains or losses from derivate financial instruments that are not hedge accounted or do not relate to the Group's financing activities.

Other operating income also includes rental and lease income, insurance compensations and government and other grants and support.

Grants and other support are recognized as income over the same periods as the costs they are intended to compensate. Investment grants related to purchases of non-current assets are deducted from the cost of the asset and recognized as income on a systematic basis as a reduction in depreciation or amortization over the useful life of the asset.

Other operating expenses include costs related to emission allowances and impairment losses related to non-current assets.

2.5 Financial income and expenses

€ million	2021	2020
Interest income	**4**	3
Other financial income	**3**	0
Interest and other financial income	**7**	3
Interest expenses		
Debt at amortized cost	**–44**	–56
Factoring	**–7**	–6
Lease liabilities	**–11**	–12
Employee benefit obligations	**–2**	–3
Other	**–1**	–1
Interest expenses	**–65**	–78
Capitalized interests	**3**	3
Fees related to committed credit facilities	**–13**	–11
Other fees	**–9**	–5
Other financial expenses	**–19**	–13
Exchange gains and losses		
Derivatives	**8**	–4
Cash, loans and receivables	**–10**	–8
Other market price gains and losses		
Derivatives	**–5**	1
Other	**4**	1
Market price gains and losses	**–3**	–10
Total financial income and expenses	**–80**	–98

Exchange gains and losses in the consolidated statement of income

€ million	2021	2020
In sales	**9**	–12
In purchases	**–33**	30
In other operating income and expenses	**22**	–12
In financial income and expenses	**–2**	–11
	–4	–6

Exchange gains and losses include EUR 30 million of net exchange gain on derivative financial instruments (2020: EUR 16 million net exchange loss) of which a gain of EUR 22 million has been recognized in other operating income and a gain of EUR 8 million in financial income and expenses.

Accounting principles

Financial income includes mainly interest income on defined benefit plans and exchange and other market price gains on cash, debt and loan receivables and derivatives related to Group's financing activities.

Financial expenses include mainly interest expenses of borrowings, lease liabilities, factoring, and defined benefit plans, commitment and financial fees, capitalized interest expenses and exchange and other market price losses on cash, debt and loan receivables and derivatives related to financing activities.

Exchange and other market price gains and losses on operative items and related derivative instruments are recognized in EBIT. Exchange and other market price gains and losses on financing items and related derivative instruments are recognized in financial income and expenses.

2.6 Income taxes

Income taxes in the consolidated statement of income

€ million	2021	2020
Current taxes	**–23**	–4
Deferred taxes	**–64**	39
	–87	34

Reconciliation of effective tax rate

€ million	2021	2020
Result before taxes	**640**	–151
Income taxes at Finnish tax rate of 20%	**–128**	30
Difference between Finnish and foreign tax rates	**–26**	4
Non-deductible expenses and tax exempt income	**–2**	–6
Current year result for which no deferred tax asset has been recognized	**54**	0
Changes in deferred tax recognition	**4**	–1
Taxes for prior years	**1**	4
Tax rate changes and other changes in tax laws	**7**	3
Associated companies	**3**	0
	–87	34

Accumulated deferred taxes recognized in equity

€ million	2021	2020
Deferred tax on convertible bond equity component	**–2**	–3
Net investment hedging	**–4**	–4
Remeasurements of the net defined benefit liability	**87**	62
	81	55

Deferred tax assets and liabilities

€ million	Jan 1, 2021 Net deferred tax assets (+) and liabilities (–)	Movements Recognized in profit or loss	Recognized in other comprehensive income or directly in equity	Translation differences	Dec 31, 2021 Net deferred tax assets (+) and liabilities (–)
Intangible assets	6	–2	–	1	5
Property, plant and equipment	–190	–17	–	–5	–211
Inventories	–4	9	–	0	6
Net derivate financial assets	–2	3	0	0	1
Other financial assets	23	16	–	0	39
Employee benefit obligations	41	–24	24	0	41
Other financial liabilities	87	–52	–	3	38
Provisions	–10	5	–	0	–5
Tax losses and tax credits	306	–1	–	3	307
Net deferred taxes assets	257	–64	24	3	**221**
Deferred tax assets	264				**222**
Deferred tax liabilities	–7				**–1**

€ million	Jan 1, 2020 Net deferred tax assets (+) and liabilities (–)	Movements Recognized in profit or loss	Recognized in other comprehensive income or directly in equity	Translation differences	Dec 31, 2020 Net deferred tax assets (+) and liabilities (–)
Intangible assets	5	1	–	0	6
Property, plant and equipment	–212	22	–	0	–190
Inventories	–8	4	–	0	–4
Net derivate financial assets	–3	1	–	0	–2
Other financial assets	13	9	–	0	23
Employee benefit obligations	40	–3	4	0	41
Other financial liabilities	106	–16	–3	0	87
Provisions	–8	–2	–	0	–10
Tax losses and tax credits	283	22	–	1	306
Net deferred taxes assets	217	39	0	1	257
Deferred tax assets	229				264
Deferred tax liabilities	–12				–7

Tax losses and related deferred tax assets

	Tax losses carried forward		Recognized deferred tax assets		Unrecognized deferred tax assets	
€ million	**2021**	2020	**2021**	2020	**2021**	2020
Expire in less than 1 year	**0**	3	**0**	0	**–**	–
Expire in 2–5 years	**82**	217	**16**	43	**0**	0
Expire later than in 5 years	**1,601**	1,883	**119**	62	**308**	375
Never expire	**1,103**	1,283	**172**	200	**108**	91
	2,786	3,385	**307**	306	**415**	466

Tax losses by country

€ million	**2021**	2020
Finland	**161**	592
Germany	**217**	266
Sweden	**291**	374
The US	**1,871**	1,898
The UK	**190**	183
Other countries	**55**	73
	2,786	3,385

As of December 31, 2021, the tax attributes of the Outokumpu Group for which no deferred tax asset has been recognized amount to EUR 1,544 million (Dec 31, 2020: EUR 1,942 million). These tax attributes relate mainly to Outokumpu's operations in the US where the losses have not been valued to the extent they exceed the deferred tax liability in the US. The accounting assessment for deferred taxes does not support the recognition of a deferred tax asset on losses during the first profitable year, when the company has a history of recent losses. Therefore, Outokumpu has not recognized any deferred asset on these losses in 2021 but will continue to evaluate the possibility of recognition based on development in taxable income in its US operations.

No deferred tax liabilities were recorded on undistributed profits of foreign subsidiaries, as such profits are not to be distributed in the foreseeable future.

Management judgements

Outokumpu operates and earns income in numerous countries and is subject to changes in tax laws in multiple jurisdictions. When recognizing income tax liabilities, material judgements and estimates need to be made on tax uncertainties.

In deferred tax asset recognition, the management assesses whether the realization of future tax benefits is sufficiently probable to support the recognition. This assessment requires judgement regarding, for example, realizable benefits from future taxable income, available tax strategies, as well as other positive and negative factors. The recorded amount of deferred tax assets could be reduced as a result of changes in these estimates or in tax regulations imposing restrictions on the utilization of future tax benefits.

Accounting principles

Current and deferred income taxes are determined on entity level to the extent an entity is subject to income taxation. The income taxes in the consolidated statement of income include the Group companies' current income taxes based on taxable profit for the period, tax adjustments for previous periods, and the change in deferred income taxes. In several countries (Finland, Germany, Italy, the Netherlands, Sweden, the UK and the US) Outokumpu companies are included in income tax consolidation groups or group taxation systems. The share of results in associated companies is reported in the statement of income based on the net result and thus including the income tax effect.

Deferred income taxes are stated using the balance sheet liability method to reflect the net tax effects of temporary differences between the assets and the liabilities' carrying amounts in the financial statements and the corresponding tax basis at the reporting date, as well as for unused tax loss or credit carry forwards.

Deferred tax assets are recognized for all deductible temporary differences to the extent that it is probable that future taxable profits will be available for utilization of these differences. A valuation allowance is recognized if the realization of the tax benefits is not probable. The ability to recognize deferred tax assets is reviewed at the end of each reporting period.

Deferred tax liabilities are usually recognized in the statement of financial position in full. As an exception, deferred tax liabilities are not recognized if they arise from initial recognition of an asset or a liability in a transaction that is not a business combination and that does not affect the accounting nor taxable profit at the time of the transaction.

Deferred taxes are calculated at the enacted or substantially enacted tax rates that are expected to apply by the end of the reporting period. Generally, deferred tax is recognized to the statement of income. However, if the taxes are related to items of other comprehensive income or to transactions or other events recognized directly in equity, the related income taxes are also recognized either in other comprehensive income or directly in equity, respectively.

2.7 Earnings per share

	2021	2020
Net result attributable to the equity holders of the Company, € million	**553**	–116
Interest expenses on convertible bond, net of tax, € million	**8**	6
Adjusted net result attributable to the equity holders of the Company, € million	**561**	–110
Adjusted weighted average number of shares, in thousands	**438,871**	413,908
Adjusted diluted average number of shares, in thousands	**479,164**	437,336
Earnings per share, €	**1.26**	–0.28
Diluted earnings per share, €	**1.17**	–0.28

In May 2021, Outokumpu carried out an issue of 40,500,000 new shares directed to institutional investors. The new shares were registered on May 12, 2021. Earnings per share figures are calculated based on the share-issue-adjusted weighted average number of shares. Comparative information is presented accordingly.

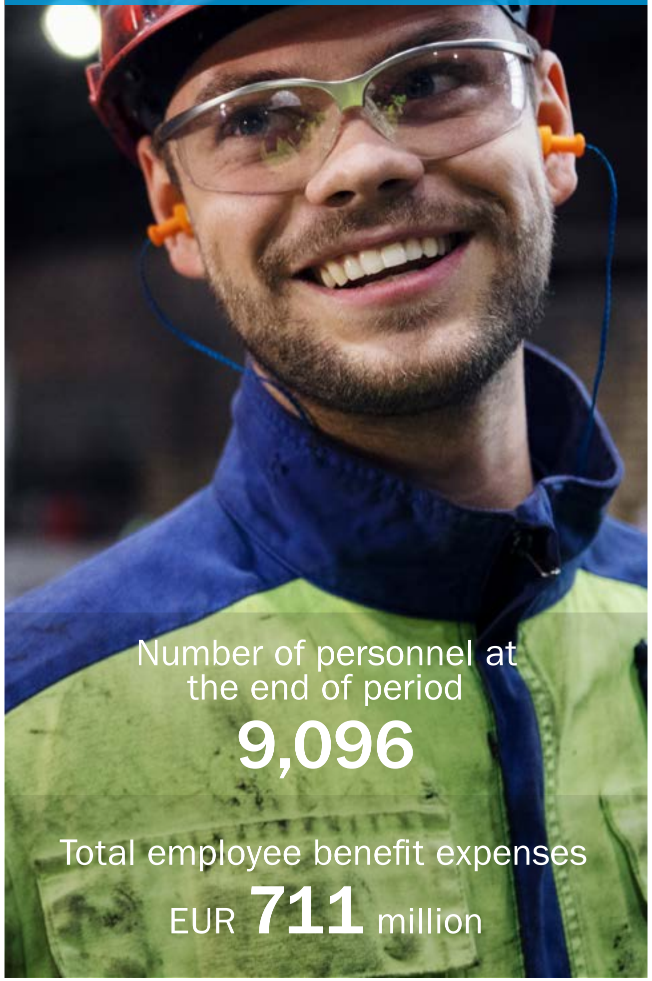
Accounting principles

Basic earnings per share is calculated by dividing the net result attributable to the equity holders of the company by the adjusted weighted average number of shares outstanding during the period, excluding shares held by Outokumpu as treasury shares.

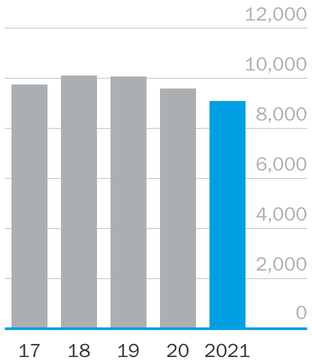
In a share issue, when shares are offered at discount compared to market price, the proportion of the issue representing the discount is retrospectively adjusted to the adjusted weighted number of shares.

Diluted earnings per share is calculated by adjusting the weighted average number of ordinary shares outstanding with the assumption that convertible instruments are converted. The profit or loss used in the calculation is adjusted for the interest expense related to the instrument and recognized in the period, net of tax. In addition, the shares estimated to be delivered based on the share-based incentive programs are taken into account. However, potential ordinary shares are only dilutive if the adjustments decrease the earnings per share ratio.

3. Employee benefits

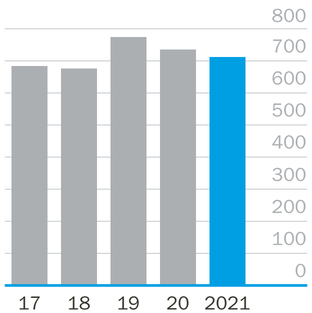


Personnel on December 31



Personnel reported as full time equivalent number.

Employee benefit expenses, € million



Outokumpu reduced its number of personnel by some 500 during 2021 towards the target of below 9,000, in line with the strategy-related actions initiated in 2020. Employee benefit expenses in 2021 were lower compared to the previous year due to the decrease in number of personnel and the redundancy costs recognized in 2020. On the other hand, expenses related to short-term incentives increased on the back of the strong performance in 2021.

3.1 Employee benefit expenses

€ million	2021	2020
Wages and salaries	**–557**	–547
Termination benefits	**–4**	–56
Social security costs	**–88**	–80
Post-employment and other long-term employee benefits		
Defined benefit plans	**–3**	–5
Defined contribution plans	**–46**	–40
Other long-term employee benefits	**–1**	–1
Share-based payments	**–4**	–1
Other employee benefit expenses	**–8**	–5
	–711	–735

Profit-sharing bonuses recognized in 2021 based on the Finnish Personnel Funds Act amounted to EUR 10 million (2020: no profit-sharing bonuses recognized).

In 2020, Outokumpu carried out employee negotiation processes in selected operating countries to create cost savings targeted in the Group's strategy. The restructuring costs were reported as termination benefits in the above table and as adjustments to EBITDA (see note 2.1).

3.2 Employee benefits for key management

€ thousand	2021	2020
Short-term employee benefits	6,171	3,889
Termination benefits	–	1,489
Post-employment benefits [1]	421	367
Share-based payments	1,048	205
Remuneration to the Board of Directors	781	658
	8,421	6,608

[1] Contains only supplementary pensions.

Key management includes the members of the Outokumpu Leadership Team and the members of the parent company Outokumpu Oyj's Board of Directors.

Employee benefits for the CEO

	Recognized in profit or loss		Remuneration paid	
€ thousand	2021	2020	2021	2020
Salaries and short-term benefits	796	989	796	989
Short-term incentives	1,065	–	–	276
Post-employment benefits	116	281	116	281
Share-based payments	278	4	–	–
	2,254	1,274	912	1,546

CEO Malinen participates in the Finnish TyEL pensions system, and the post-employment benefits have been calculated based on the general TyEL contribution percentage of the employer. Employee benefits for the CEO in 2020 include Heikki Malinen as of May 16, 2020 and Roeland Baan until May 15, 2020.

Remuneration to Board of Directors

€ thousand	2021	2020
Chairman Kari Jordan	176	181
Vice Chairman Eeva Sipilä, as of May 28, 2020, member until May 27, 2020	104	108
Vice Chairman Heikki Malinen, until April 30, 2020	–	7
Member Heinz Jörg Fuhrmann, as of March 31, 2021	78	–
Member Kati ter Horst	84	88
Member Päivi Luostarinen, as of March 31, 2021	80	–
Member Vesa-Pekka Takala	83	88
Member Pierre Vareille	85	94
Member Julia Woodhouse	93	93
	781	658

Remuneration of the CEO

The remuneration of the CEO consists of base salary, benefits, annually determined short-term incentives, and long-term share-based incentive programs.

CEO's base salary and the annual short-term incentive earning opportunity (target level 50% and the maximum level 100% of the gross annual base salary) remained unchanged in 2021. The basis of the short-term incentives for 2021 was the achievement of the pre-defined strategic targets, which were Outokumpu's adjusted EBITDA (80% weight, achieved above maximum level) and strategic projects (20% weight, achieved at target level). Observing the excellent business results, the Board of Directors decided to reward the CEO with short-term incentives exceeding the maximum level described in the policy.

The CEO participates in the Performance Share Plans (PSP) 2019–2021, 2020–2022, and 2021–2023. Outokumpu did not reach the targets for PSP 2018–2020 or 2019–2021 and subsequently no rewards were paid.

The Performance Share Plans include a strong share ownership recommendation: The members of the Leadership Team, including the CEO, are obliged to own Outokumpu shares received under the company's share-based incentive programs corresponding to the value of their annual gross base salary. Half of the net shares received from the share-based incentive programs must be used to fulfil this requirement.

CEO has the right to retire at the age of 65 and he participates in the Finnish TyEL pension system and there are no supplementary pensions in place. The service contract of the is valid until further notice. The CEO is entitled to a severance payment of 12 months, and the notice period is six months for both parties.

Remuneration of the Board of Directors

Outokumpu's Annual General Meeting approved the annual remuneration to the members of the Board of Directors, of which 40% was paid in the company's own shares using treasury shares. The annual fee is paid once a year and members of the Board are not entitled to any other share-based rewards. In addition to the annual remuneration, a meeting fee is paid. The Board members are not eligible for any pension schemes.

Accounting principles

Employee benefits for the key management include the benefits to each Leadership Team or Board of Directors member for the time they hold these positions.

Employee benefits are presented based on expenses recognized in profit or loss during the year on accrual basis except for the CEO whose remuneration is presented also based on paid during the year.

Short-term incentives are recognized to profit or loss during the period the relate to whereas bonuses are typically paid out during the following financial year. Expenses on share-based payments are recognized to profit or loss at the share price on the grant date of the benefit and over the period when the benefit is earned. Share-based benefits are reported as paid when delivered and at the share price on the delivery date.

3.3 Employee benefit obligations

Outokumpu has several defined benefit and defined contribution plans in various countries. The most significant defined benefit plans are in Germany and the UK, representing 37% and 60% of the Group's total defined benefit obligation, respectively.

Funding requirements of the defined benefit plans are generally based on the pension fund's actuarial measurement framework set out in the funding policies and local regulation.

Germany

Outokumpu has several defined benefit plans in Germany, of which major plans include a management plan, open pension plans for other staff, and other pension obligations, which are nearly all closed for new entrants. Bases to all pension obligations in Germany are bargaining agreements and/or individual contracts (management obligations). The management plan and other pension obligations are based on annuity payments, whereas plans for other employees are based on one lump sum payment after retirement.

In addition, all the obligations in Germany are embedded in the BetrAVG law. The law contains rules for vested rights, pension protection scheme and regulations for the pension adjustments. In Germany, no funding requirements exist, and the plans are funded only for a small part with a CTA model (Contractual Trust Arrangement) that was introduced in 2019.

The UK

The AvestaPolarit Pension Scheme (the "Scheme") is registered under UK legislation and is contracted out of the State Second Pension. The Scheme is subject to the funding requirements outlined in UK legislation. The Scheme's trustee is responsible for the operation and governance of the Scheme, including decisions regarding the Scheme's funding and investment strategy.

In December 2021, a GBP 390 million buy-in contract was implemented. This buy-in completes the Scheme's de-risking process which began with an initial buy-in in 2020, when a GBP 110 million buy-in insurance solution was implemented. The actuarial losses in 2021 amounted to EUR 86 million, mainly attributable to the buy-in arrangement.

A buy-in removes risks of investment, longevity, interest rate changes and inflation for the Scheme and is held as a Scheme asset. Until a buy-out is secured, the Scheme ultimately remains the responsibility of the Company. However, as a result of the buy-in arrangement, the risks related to the Scheme's obligation are now significantly reduced and mostly covered by insurance. Outokumpu has agreed with the trustees to hold cash in an escrow account to provide for small mismatches in the insurance coverage and liquidity to the scheme. At year-end 2021, the escrow balance was GBP 13 million.

The Scheme is triennially valued to ensure sufficient funding. The latest actuarial valuation was completed in 2021 and indicated continued improvement in the Scheme's funding with a surplus of GBP 4 million. In 2021, Outokumpu made the final contribution of GBP 3 million to cover the former deficit identified in 2018 valuation (2020: GBP 6 million). These valuations are not based on the same assumptions as the IFRS valuation. Due to the buy-in solutions, no further contributions are expected to be required as a result of the triennial valuations.

Defined benefit cost in profit or loss and other comprehensive income

€ million	2021	2020
In employee benefit expenses in EBIT	**–3**	–5
In financial income and expenses	**–1**	–2
Defined benefit cost in profit or loss	**–4**	–8
In other comprehensive income	**–72**	–12
Total defined benefit cost	**–76**	–19

Gross defined benefit obligations and plan assets

€ million	2021	2020
Present value of funded defined benefit obligations	**778**	781
Present value of unfunded defined benefit obligations	**3**	3
Fair value of plan assets	**–487**	–534
Net defined benefit liability	**294**	250

Amounts recognized in the consolidated statement of financial position

€ million	2021	2020
Defined benefit liability	**294**	314
Defined benefit plan assets	**–**	–64
Net defined benefit liability	**294**	250
Defined benefit liability	**294**	314
Other long-term employee benefit liabilities	**15**	16
Employee benefit obligations in statement of financial position	**309**	329

Gross defined benefit obligations and plan assets are presented in the statement of financial position netted per plan either as a liability or an asset depending on nature of the netted item.

Movement in net defined benefit liability

€ million	2021 Present value of obligation	2021 Fair value of plan assets	2021 Net defined benefit liability	2020 Present value of obligation	2020 Fair value of plan assets	2020 Net defined benefit liability
Total on Jan 1	783	–534	249	786	–537	249
Current service cost	5	–	5	5	–	5
Past service cost	–2	–	–2	–	–	–
Interest expense/(income)	7	–7	1	12	–10	2
Remeasurements arising from						
Return on plan assets	–	72	72	–	–32	–32
Demographic assumptions	14	–	14	–15	–	–15
Financial assumptions	–21	–	–21	68	–	68
Experience adjustment	5	–	5	–9	–	–9
Exchange differences	32	–34	–2	–25	28	2
Employer contributions	–	–28	–28	–	–22	–22
Benefits paid	–41	41	–	–38	38	–
Settlements	–2	2	0	–1	1	0
Total on Dec 31	**781**	**–487**	**294**	783	–534	250
Germany on Dec 31	**292**	**–16**	**276**	315	–13	302
The UK on Dec 31	**470**	**–464**	**6**	445	–509	–64

The weighted average duration of the overall defined benefit obligation is 17.0 years. In Germany and in the UK the weighted average durations are 12.8 and 20.0 years, respectively.

The expected contributions to be paid to the defined benefit plans in 2022 are EUR 24 million and relate mainly to the German plans.

Allocation of plan assets

€ million	2021	2020
Cash and cash equivalents	**5**	–
Equity instruments	**–**	33
Debt instruments	**–**	150
Insurance policies	**466**	128
Other assets	**–**	220
Total plan assets	**471**	531

Allocation of plan assets covers 96.7% of total defined benefit plan assets. On December 31, 2021, 1% of the plan assets were invested in quoted instruments (Dec 31, 2020: 76%). The changes are related to the 2021 buy-in contract in the UK where the scheme's assets now mostly comprise of insurance contracts.

Significant actuarial assumptions

		Germany	The UK	Other countries
Discount rate, %	**2021**	**0.92**	**1.75**	**3.76**
	2020	0.72	1.25	2.41
Future salary increase, %	**2021**	**–**	**–**	**3.99**
	2020	–	–	3.95
Inflation rate, %	**2021**	**–**	**3.30**	**–**
	2020	–	2.80	–
Future benefit increase, %	**2021**	**1.70**	**3.15**	**1.36**
	2020	1.70	2.75	1.37
Medical cost trend rate, %	**2021**	**–**	**–**	**5.80–6.10**
	2020	–	–	4.70
Life expectancy	**2021**	RT 2018 G mortality tables	96% SAPS All Pensioner Amounts tables with CMI Core Projection Model –2020	Standard mortality tables
	2020	RT 2018 G mortality tables	96% SAPS All Pensioner Amounts tables with CMI Core Projection Model –2019	Standard mortality tables

Sensitivity analysis of significant actuarial assumptions

	Change in assumption	Germany, %	The UK, %	Other countries, %
2021				
Discount rate	+/– 0.5%	–6/+7	–9/+10	–4/+4
Future benefit increase	+/– 0.5%	+3/–3	+7/–7	+3/–3
Medical cost trend rate	+/– 0.5%	–	–	+1/–1
Future salary increase	+/– 0.5%	–	–	+3/–3
Life expectancy	+ 1 year	+3	+3	+7
2020				
Discount rate	+/– 0.5%	–6/+7	–9/+10	–4/+4
Future benefit increase	+/– 0.5%	+3/–3	+6/–6	+3/–3
Medical cost trend rate	+/– 0.5%	–	–	+1/–1
Future salary increase	+/– 0.5%	–	–	+3/–4
Life expectancy	+ 1 year	+3	+3	+7

Sensitivity is presented for reasonably possible change at the reporting date in one of the principal assumptions, while holding all other assumptions constant.

Other long-term employee benefits

Other long-term employee benefits mainly relate to early retirement provisions in Germany and long-service remunerations in Finland. Under the German early retirement agreements, employees work additional time prior to retirement, which is subsequently paid for in instalments after retirement. In Finland, the employees are entitled to receive a one-time indemnity every five years after 20 years of service.

Multi-employer defined benefit plans

ITP pension plans operated by Alecta in Sweden and plans operated by Stichting Bedrijfspensioenfonds voor de metaalindustrie in the Netherlands are multi-employer defined benefit pension plans. However, it has not been possible to get sufficient information for the calculation of obligations and assets by employer from the plan operators, and therefore these plans have been accounted for as defined contribution plans in the consolidated financial statements.

Risk information

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

Asset volatility: The level of equity returns is a key factor in the overall investment return. If a plan holds significant proportion of equities, which are expected to outperform corporate bonds in the long-term, it might face higher volatility and risk in the short-term. The investment portfolio might also be subject to a range of other risks typical of the assets held, in particular credit risk on bonds and exposure to the property market.

Change in bond yields: A decrease in corporate bond yields will increase plan liabilities, although this will be partially offset by an increase in the value of the plan's bond holdings (if any). In a situation where the return on plan assets is lower than the corporate bond yields, a plan may face a shortfall which might lead to increased contributions.

Inflation risk: Inflation rate is linked to both future pension and salary increase, and higher inflation will lead to higher liabilities.

Longevity: The majority of Outokumpu's defined benefit obligations are to provide benefits for the life of the member, so increases in life expectancy will result in an increase in the plans' liabilities.

The buy-in solutions implemented in the UK in 2021 and 2020 significantly reduce the earlier-mentioned risks for the Scheme, which is mostly covered by insurance.

Management judgements

The present value of pension obligations is subject to actuarial assumptions which are used in calculating these obligations. These assumptions include, among others, discount rate, the annual rate of increase in future compensation levels, inflation rate and employee turnover rate. The assumptions are proposed by external independent actuaries separately for each defined benefit plan or each country where Outokumpu has defined benefit plan and approved by the management.

Accounting principles

The Group companies in different countries have various post-employment benefit plans in accordance with local conditions and practices. The plans are classified as either defined contribution plans or defined benefit plans.

The fixed contributions to defined contribution plans are recognized as expense in the period to which they relate. The Group has no legal or constructive obligation to pay further contributions if the receiving party is not able to pay the benefits in question. All such arrangements that do not meet these requirements are defined benefit plans.

Defined benefit plans are funded with payments to the pension funds or insurance companies. The present value of the defined benefit obligations is determined separately for each plan by using the projected unit credit method. The liability recognized in the statement of financial position is the defined benefit obligation less the fair value of plan assets at the closing date. When the fair value of plan assets exceeds the value of the obligation, the net amount is recognized as defined benefit plan assets.

Current service costs, past service costs and gains or losses on settlements are recognized in functional costs above EBIT. Net interest expense or income is recognized in financial items under interest expense or interest income. All remeasurements of the net defined benefit liability (asset) are recognized directly in other comprehensive income.

Buy-in contract in the UK does not result in a settlement because Outokumpu remains responsible for the benefit obligation. The buy-in contract is effectively an investment by which the plan can receive payments from the insurer corresponding to the benefits due to the participants, but ultimately the primary obligation to pay benefits has not been transferred.

For other long-term employee benefits, all service costs and remeasurements are recognized immediately in the statement of income. Interest expenses are recognized in financial items under interest expenses.

The significant actuarial assumptions are presented separately for the most significant countries, and for other countries a weighted average of the assumptions is presented.

3.4 Share-based payments

Share-based programs are part of the Group's incentive and commitment-building system for key employees. The objectives are to reward key personnel for good performance and thereby support Outokumpu's strategy, and to direct management attention towards Outokumpu's profitability and shareholder value.

The Performance Share Plan (PSP) includes an earning criterion and has maximum number of participants for each plan of 150. It is part of the regular compensation of top executives. The Restricted Share pool (RSP) does not have any specific earning criteria and it is used for a limited number of employees, for key recruitments, exceptional performance, high potential, retention needs and other individual specific situations.

For the financial year 2021, the share-based payment expenses included in the employee benefit expenses were EUR 4 million (2020: EUR 1 million). The total estimated value of the share-based payment plans is EUR 14 million on December 31, 2021. This value is recognized as an expense in the statement of income during the vesting periods.

Outstanding programs

During 2021, Outokumpu's share based payment programs included Performance Share Plan (Plans 2019–2021, 2020–2022 and 2021–2023) and Restricted Share Pool Program (Plans 2019–2021, 2020–2022 and 2021–2023).

In December 2021, the Board of Directors approved the commencement of the 2022–2024 plans for the Performance Share Plan and the Restricted Share Pool Program from the beginning of 2022.

Vested programs

In 2021, the Performance Share Plan 2018–2020 ended, and as the targets were not achieved, no shares were rewarded to the participants. Regarding the Restricted Share Pool Program plan 2018–2020, after deductions for applicable taxes, in total 58,815 shares were delivered to 42 participants based on the conditions of the plan. From the Restricted Share Pool Program plan 2019–2021, after deductions for applicable taxes, in total 10,950 shares were delivered to one participant in December 2021.

In 2020, after deductions for applicable taxes, in total of 49,147 shares were delivered to the participants of the Restricted Share Pool Program plan 2017–2019 and 178,350 shares were delivered to the participant of the Matching Share Plan as the last reward tranche of the plan. The matching share plan ended in 2020.

Outokumpu used its treasury shares for all share reward payments.

Share-based payment plan opportunity

Maximum number of shares Dec 31, 2021	2022	2023	2024	Total
PSP 2019–2021	1,698,922			1,698,922
RSP 2019–2021	151,000			151,000
	1,849,922			1,849,922
PSP 2020–2022		2,575,202		2,575,202
RSP 2020–2022		170,000		170,000
		2,745,202		2,745,202
PSP 2021–2023			3,217,800	3,217,800
RSP 2021–2023	75,532	75,534	75,534	226,600
	75,532	75,534	3,293,334	3,444,400
Total	**1,925,454**	**2,820,736**	**3,293,334**	**8,039,524**

The general terms and conditions of the outstanding share-based incentive programs

	Performance Share Plan		
Grant date	Feb 20, 2019	March 9, 2020	March 15, 2021
Vesting period	Jan 1, 2019–Dec 31, 2021	Jan 1, 2020–Dec 31, 2022	Jan 1, 2021–Dec 31, 2023
Number of participants	96	111	113
Share price at grant date, €	3.55	2.80	4.35
Exercised	In shares and cash in 2022	In shares and cash in 2023	In shares and cash in 2024
Vesting conditions			
Non-market	Outokumpu's return on operating capital compared to a peer group	Outokumpu's return on operating capital compared to a peer group	Outokumpu's return on capital employed as an absolute measure
Other relevant conditions	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits

	Restricted Share Pool Program		
Grant date	April 18, 2019	March 9, 2020	March 15, 2021
Vesting period	Jan 1, 2019–Dec 31, 2021	Jan 1, 2020–Dec 31, 2022	Jan 1, 2021–Dec 31, 2023
Number of participants	56	35	62
Share price at grant date, €	3.72	2.80	4.35
Exercised	In shares and cash in 2022	In shares and cash in 2023	In shares and cash, in 3 installments in 2022, 2023 and 2024
Vesting conditions	Continuation of employment until the shares are delivered, a salary-based limit for the maximum benefits		

Management judgements

In valuing the share-based payment plans, the management estimates the likelihood of achieving the non-market performance criteria and the number of participants remaining in the plan when the vesting period ends.

The evaluation of the likelihood of achieving the non-market performance criteria uses mainly external financial forecasts but also internal forecasts are used. The number of participants remaining in plans at the end of the vesting period is estimated based on historical forfeit ratios of similar plans. Also potential impacts from restructuring activities carried out in the Group are considered in the estimate.

Accounting principles

The share-based payments are settled net of tax withholdings, and they are accounted as fully equity-settled. The expense of the programs recognized over vesting periods is based on the grant date fair value and is reported as employee benefit expenses within the administrative expenses in profit or loss.

Applicable statistical models are used in valuation, and the valuation is revised at the end of each reporting period based on the likelihood of achieving the non-market performance criteria and the estimated retention rate of the participants.

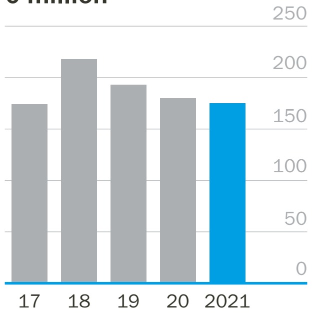
The salary-based maximum limits for the pay-outs have been taken into account in the valuation of the benefits.

Detailed information of the share-based incentive programs can be found in Outokumpu's home page www.outokumpu.com.

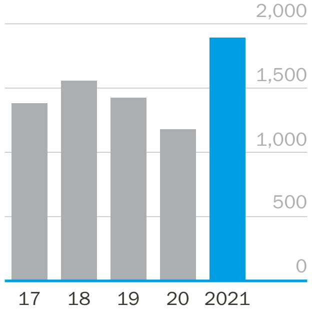
4. Operating assets and liabilities

* Capital expenditure definition changed from accrual-based to cash-based capital expenditure in 2020. Figures for 2019 and 2018 have been restated accordingly. Figure for 2017 has not been restated.

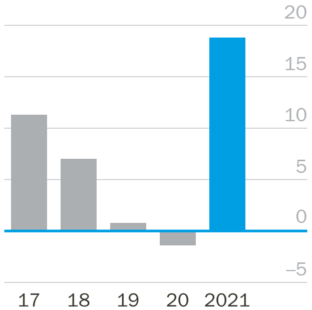
Capital expenditure*, € million



Inventories, € million



Return on capital employed, %



In line with the strategic focus to de-leverage the company, Outokumpu continued the tight capital expenditure discipline also in 2021. The Group's main capex project, the Kemi mine expansion, is expected to be finalized with approximately 6 months' delay in 2022. Outokumpu's working capital increased in 2021, and approximately 60% of the inventory increase came from metal prices. Return on capital employed shows the strong overall performance in 2021.

4.1 Intangible assets and property, plant and equipment

Intangible assets

2021 € million	Goodwill	Other intangible assets	Total
Historical cost on Jan 1, 2021	485	377	862
Translation differences	–2	1	–1
Additions	–	10	10
Disposals	–1	–24	–24
Reclassifications	–	3	3
Historical cost on Dec 31, 2021	**482**	**367**	**849**
Accumulated amortization and impairment on Jan 1, 2021	–19	–232	–252
Translation differences	1	0	1
Amortization	–	–17	–17
Impairments	–	–18	–18
Disposals	1	12	13
Accumulated amortization and impairment on Dec 31, 2021	**–17**	**–255**	**–272**
Carrying value on Dec 31, 2021	**465**	**112**	**577**
Carrying value on Jan 1, 2021	466	144	610

Impairments in other intangible assets relate mainly to the Group's ERP systems.

2020 € million	Goodwill	Other intangible assets	Total
Historical cost on Jan 1, 2020	487	361	848
Translation differences	–2	0	–2
Additions	–	17	17
Disposals	–	–4	–4
Reclassifications	–	2	2
Historical cost on Dec 31, 2020	485	377	862
Accumulated amortization and impairment on Jan 1, 2020	–21	–220	–241
Translation differences	2	–1	1
Amortization	–	–15	–15
Disposals	–	3	3
Accumulated amortization and impairment on Dec 31, 2020	–19	–232	–252
Carrying value on Dec 31, 2020	466	144	610
Carrying value on Jan 1, 2020	466	141	607

Emission allowances

Outokumpu had six active sites operating under EU's Emissions Trading Scheme (EU ETS) in 2021. These include the production plants in Tornio, Finland; Avesta, Degerfors, Fagersta and Nyby in Sweden; as well as Krefeld together with Dillenburg in Germany. Additionally, Outokumpu's site in Sheffield in the UK operates under the UK Emission Trading Scheme (UK ETS). There is no link between the EU ETS and UK ETS and allowances in each ETS are not transferrable nor convertible. All Outokumpu sites met the compliance requirements on time regarding the EU ETS Phase III.

The pre-verified carbon dioxide emissions under EU ETS were approximately 1.0 million tonnes in 2021 (2020: 1.0 million tonnes). For its 2021 emission allowance delivery, Outokumpu will use allowances received for free, but also allowances acquired from market in prior years, the cost of which has been recognized as other operating expenses.

The Group's emission position is composed of realized and forecasted carbon emissions netted against confirmed and forecasted emission allowances granted by governments. All relevant Outokumpu sites applied for free emission allowances for 2021–2030 trading period according to the efficiency-based benchmarks and historical activity, and the allocations for the first half of the period have been confirmed. These allocations combined with the allowances held from prior period are adequate to cover the forecasted needs of EU emission allowances for the first half of the trading phase (2021–2025).

The emission allowance price risk is presented in the note 5.3 under Energy price risk.

Property, plant and equipment

2021 € million	Land	Mine properties	Buildings	Machinery and equipment	Other tangible assets	Advances paid and construction work in progress	Total
Historical cost on Jan 1, 2021	123	112	1,283	4,668	137	330	6,654
Translation differences	2	–	15	62	0	2	80
Additions	4	17	2	36	9	99	167
Disposals	–7	0	–37	–172	0	–1	–218
Reclassifications	–	0	0	36	4	–44	–4
Other	–5	–	–4	–58	–	–	–66
Historical cost on Dec 31, 2021	**117**	**130**	**1,259**	**4,575**	**149**	**384**	**6,614**
Accumulated depreciation and impairment on Jan 1, 2021	–16	–48	–766	–3,105	–86	–2	–4,023
Translation differences	0	–	–3	–20	0	0	–22
Disposals	–	–	36	172	0	1	210
Depreciation	–1	–12	–47	–176	–6	0	–242
Impairments	–4	–10	–7	–7	0	0	–27
Other	4	–	4	56	–	–	–63
Accumulated depreciation and impairment on Dec 31, 2021	**–18**	**–70**	**–782**	**–3,079**	**–91**	**0**	**–4,041**
Own property, plant and equipment	68	59	452	1,387	57	384	2,407
Right-of-use assets	31	–	25	109	0	–	166
Carrying value on Dec 31, 2021	**99**	**59**	**477**	**1,496**	**58**	**384**	**2,573**
Carrying value on Jan 1, 2021	107	64	517	1,563	51	328	2,631

Impairments in property, plant and equipment include mine properties and obsolete machinery in Ferrochrome business area, lease agreements on land and buildings in the business area Europe's operations in Germany and various obsolete machinery and equipment items in the Group.

2020 € million	Land	Mine properties	Buildings	Machinery and equipment	Other tangible assets	Advances paid and construction work in progress	Total
Historical cost on Jan 1, 2020	128	72	1,286	4,691	135	294	6,606
Translation differences	–2	–	–12	–46	1	–3	–62
Additions	2	17	10	37	1	102	169
Disposals	–4	–	–10	–43	–1	–	–58
Reclassifications	–	23	8	31	1	–64	–2
Other	0	–	1	–2	–	–	0
Historical cost on Dec 31, 2020	123	112	1,283	4,668	137	330	6,654
Accumulated depreciation and impairment on Jan 1, 2020	–15	–39	–719	–2,983	–82	–2	–3,840
Translation differences	0	–	0	1	–1	0	1
Disposals	–	–	3	43	1	–	46
Depreciation	–1	–9	–47	–165	–4	0	–227
Impairments	–	–	–2	–1	–	–	–3
Accumulated depreciation and impairment on Dec 31, 2020	–16	–48	–766	–3,105	–86	–2	–4,023
Own property, plant and equipment	70	64	481	1,457	51	327	2,450
Right-of-use assets	37	–	37	106	0	1	181
Carrying value on Dec 31, 2020	107	64	517	1,563	51	328	2,631
Carrying value on Jan 1, 2020	112	33	567	1,708	53	293	2,767

Intangible assets and property, plant and equipment by geographical region

€ million	**2021**	2020
Finland	**1,726**	1,774
Other Europe	**679**	732
North America	**733**	723
APAC region	**10**	10
Other countries	**2**	2
	3,150	3,241

Capitalized interest expenses

During 2021, borrowing costs amounting to EUR 3 million were capitalized on investment projects under property, plant and equipment and intangible assets (2020: EUR 3 million). Total capitalized interests on December 31, 2021 were EUR 32 million (Dec 31, 2020: EUR 31 million). The average capitalization rate used in 2021 was 1.2%.

Management judgements

Management estimates relating to useful lives and recoverable amounts affect significantly the intangible asset and property, plant and equipment values in the consolidated statement of financial position, and different assumptions and assigned lives could have a material impact on the reported amounts.

Carrying amounts of intangible asset and property, plant and equipment items are regularly reviewed for any evidence of impairment. If any such evidence emerges, the asset's recoverable amount is assessed, which requires estimation of future cash flows attributable to the asset and related valuation parameters.

Indications for changes in useful lives are reviewed annually, and if changes to previous estimates are identified, the useful lives are revised accordingly. If an impairment loss is recognized, the estimated useful life of the asset is also reassessed.

Accounting principles

Intangible assets other than goodwill include capitalized development costs, patents, licenses and software. These assets comprise mainly of acquired assets that typically have definite useful lives. An intangible asset is recognized if it is probable that the asset will generate future economic benefits to the company and the cost of the asset can be measured reliably.

Property, plant and equipment consist mainly of facilities, machinery and equipment used in stainless steel and ferrochrome production. Intangible assets and property, plant and equipment are recognized initially at cost. Cost comprises of the asset's purchase price and all costs directly attributable to bringing the asset ready for its intended use. Government grants received for investment purposes are deducted from the asset's cost. Intangible assets and property, plant and equipment acquired in a business combination are measured at fair value at the acquisition date.

Borrowing costs (mainly interest costs) directly attributable to the acquisition of an asset are capitalized in the statement of financial position as part of the asset's carrying amount, when it takes a substantial period of time to get the asset ready for its intended use.

After initial recognition, intangible assets and property, plant and equipment are measured at cost less accumulated amortization, depreciation and impairment losses. Intangible assets and property, plant and equipment, other than land and mine properties, are amortized or depreciated on a straight-line basis over their expected useful lives. Assets tied to a certain fixed period are amortized over the contract term.

Amortization of intangible assets are based on the following estimated useful lives:

Software	up to 10 years
Capitalized development costs	up to 10 years
Intangible rights	up to 20 years

Depreciation of property, plant and equipment items is based on the following estimated useful lives:

Buildings	25–40 years
Heavy machinery	15–30 years
Light machinery and equipment	3–15 years

Land is not depreciated, except for leased land, as the useful life of land is assumed to be indefinite. Mine properties include preparatory work to utilize an ore body or part of it, such as shafts, ramps and ventilation and are depreciated using the units-of-production method based on the depletion of ore reserves over their estimated useful lives. Other tangible assets include items such as land improvements, asset retirement obligations related to landfill areas and infrastructure within the facilities, such as roads and railroads.

Recognition of amortization or depreciation on an asset is ceased when the item is classified as held for sale.

If evidence regarding an impairment of an asset is identified, the asset's recoverable amount is estimated as the higher of the fair value less costs to sell or the value in use. If the carrying amount of an asset exceeds its recoverable amount, an impairment loss is recognized. A previously recognized impairment loss is reversed if there is a change in the recoverable amount. However, the reversal must not result in a higher carrying amount than what it would have been if no prior impairment loss had been recognized. Impairment losses are presented as other operating expenses in the consolidated statement of income.

Gains or losses on disposals of property, plant and equipment or intangible assets are determined as the difference between the net proceeds received and the carrying amount of the asset. These gains or losses are presented in other operating income or expenses.

Goodwill

Goodwill arises from business combinations and is recognized at the acquisition date at the amount excess of the consideration transferred over the fair value of the identifiable assets acquired, liabilities assumed and any non-controlling interest and any previously held equity interests in the acquiree. Goodwill is not amortized but tested for impairment. Goodwill is measured at cost less accumulated impairment losses. Impairment losses on goodwill cannot be subsequently reversed. See note 4.3 for goodwill impairment testing.

Emission allowances

Emission allowances are reported as other intangible assets. They are measured at cost and initially recognized when control is obtained. Allowances received free of charge are recognized at nominal value, i.e. at zero carrying amount. Emission allowances are derecognized against the actual emissions, or when the emission allowances are sold.

Emission allowance expense is recognized when emission allowances received free of charge do not cover the annual emissions for the difference based on the cost of the purchased allowances. In case the Group does hold sufficient allowances to cover the actual emissions, a provision is recognized at fair value at the end of the reporting period. The expenses are presented as other operating expenses. Gains from the sale of allowances are recognized as other operating income.

4.2 Leases

Outokumpu leases land, buildings, and machinery and equipment used in the Group's operations. Outokumpu has also entered into service and supply contracts that contain lease elements. Contracts include typically fixed rental amounts, and for land and buildings, rents are linked to an index.

The terms of new vehicle leases are typically 3 to 5 years, and lease terms for other machinery and equipment range up to 15 years. Lease terms for land and buildings can be significantly longer with remaining terms for individual contracts on land of approximately 45–95 years.

Leases for machinery and equipment include also contracts with variable lease payments based on usage of the equipment. Machinery and equipment are also hired with daily rates for temporary use, in which case they are reported as short-term leases.

Right-of-use assets

2021 € million	Land	Buildings	Machinery and equipment	Advances paid	Total
Historical cost on Jan 1, 2021	41	49	210	1	301
Additions	0	2	29	0	31
Other changes	–5	–4	–56	–1	–65
Historical cost on Dec 31, 2021	**36**	**47**	**183**	**0**	**266**
Accumulated depreciation on Jan 1, 2021	–3	–13	–104	–	–120
Depreciation and impairments	–4	–13	–26	–	–44
Other changes	4	4	57	–	66
Accumulated depreciation and impairment on Dec 31, 2021	**–4**	**–22**	**–75**	**–**	**–101**
Carrying value on Dec 31, 2021	**31**	**25**	**109**	**–**	**166**
Carrying value on Jan 1, 2021	37	37	106	1	181

2020 € million	Land	Buildings	Machinery and equipment	Advances paid	Total
Historical cost on Jan 1, 2020	41	42	204	–	286
Additions	0	8	8	1	16
Other changes	0	0	–2	–	–2
Historical cost on Dec 31, 2020	41	49	210	1	301
Accumulated depreciation on Jan 1, 2020	–2	–6	–77	–	–85
Depreciation	–1	–6	–27	–	–34
Accumulated depreciation on Dec 31, 2020	–3	–13	–104	–	–120
Carrying value on Dec 31, 2020	37	37	106	1	181
Carrying value on Jan 1, 2020	38	35	126	–	200

Lease liabilities

€ million	2021	2020
Non-current	**157**	174
Current	**32**	18
	189	192

Maturity analysis of lease liabilities is presented in note 5.1.

Lease expenses

€ million	2021	2020
Depreciation	**–34**	–34
Impairments	**–10**	–
Interest expenses	**–11**	–12
Expenses on short-term and low-value leases	**–9**	–11
	–65	–56

Impairments are related to lease contracts of land and buildings in Germany.

Lease cash flows

€ million	2021	2020
Repayments	**–32**	–33
Interest paid	**–11**	–12
	–43	–45

Management judgements

Management judgement and estimates relate mainly to incremental borrowing rates of the Group companies, the probabilities of utilizing extension options in lease contracts and lease terms applied for contracts that are valid until further notice, which impact the reported amounts of lease liabilities and right-of-use assets.

The incremental borrowing rates are defined as part of the process to determine interest rates for intra-group lending, in which Outokumpu defines synthetic ratings for the subsidiaries. The incremental borrowing rate takes into account the currency, the maturity of the lease liability, the credit risk of the lessee based on the synthetic rating, and country risk.

The contracts with extension options are reviewed regularly to evaluate the probability of utilization based on information available.

Contracts that are valid until further notice represent only a small amount of Group's lease contracts, as most contracts have a fixed term. The lease terms for the contracts that are valid until further notice are either defined based on the Group's mid-term planning cycle of 3 years or treated as short-term depending of the type of the asset.

The Group applies materiality in defining low-value items for lease accounting purposes.

Accounting principles

Lease liabilities measured at the present value of future lease payments are recognized to the statement of financial position. In determining the present value of the lease liabilities, the fixed and index/rate-based lease payments are discounted with the interest rate implicit to the lease when available, or with the incremental borrowing rate of the company.

Lease payments are divided into interest expense and repayment of the lease liability. Lease contracts may include options to extend the contract term or purchase the leased asset at the end of the lease term. An option is considered in determining the lease liability when it is highly probable that the option will be used.

Right-of-use assets recognized to the statement of financial position are measured at the amount of lease liability and lease payments made in advance, less accumulated depreciation and impairments. Right-of-use assets are depreciated on a straight-line basis over the lease term, or over the expected useful life of the asset in case the asset will transfer to Outokumpu at the end of the lease term or it is highly probable that a purchase option will be used.

Lease liabilities are presented in non-current and current debt and right-of-use assets are presented in property, plant and equipment in consolidated statement of financial position.

Lease liabilities or right-of-use assets relating to short-term leases, leases of low value items, or intangible assets are not recognized to statement of financial position. Instead, related payments, as well as variable lease payments, are recognized as expense to the profit or loss.

Sale and lease-back

So-called sale and lease-back transactions by the Group in 2019 or later (i.e. in accordance with IFRS 16) do not typically meet the IFRS 15 criteria of a sale, as Outokumpu typically retains the control of the asset. Consequently, they do not meet the criteria of sale and lease-back, either. The asset remains in Outokumpu's property, plant and equipment at cost less accumulated depreciation and impairments. The proceeds of the transaction are recognized as other loans under non-current or current debt.

Sale and lease-back transactions carried out prior to 2019 have been treated according to the accounting principles prevailing at the time.

Group as a lessor

Rental income received from property, plant and equipment leased out by the Group under operating leases is recognized on a straight-line basis over the lease term. Rental income is presented as other operating income.

4.3 Goodwill impairment test

Goodwill and operating capital by operating segment

	Goodwill		Operating capital	
€ million	**2021**	2020	**2021**	2020
Europe	**342**	343	**1,724**	1,573
Americas	**–**	–	**879**	801
Ferrochrome	**114**	114	**823**	766
Long Products	**9**	9	**157**	133
Other operations and intra-group items	**–**	–	**–60**	13
	465	466	**3,523**	3,286

Assumptions by operating segment

	Europe	Americas	Ferro-chrome	Long Products
2021				
Weighted average costs of capital (WACC), pre-tax, %	**8.3**	**10.4**	**8.4**	**9.3**
Terminal growth rate, %	0.5	1.0	0.5	0.5
2020				
Weighted average costs of capital (WACC), pre-tax, %	8.2	10.1	8.1	9.1
Terminal growth rate, %	0.5	1.0	0.5	0.5

Test results and sensitivities by operating segment

2021	Europe	Americas	Ferro-chrome	Long Products
Headroom, € million	1,124	248	226	82
After-tax WACC increase leading to impairment, %-points	5.0	2.3	1.9	5.2
EBITDA decrease leading to impairment, %	27	15	15	27
Terminal growth rate of zero leading to impairment	No	No	No	No

Headroom is the amount by which the recoverable amount determined based on the value-in-use analysis exceeds the segment's operating capital amount.

Goodwill impairment testing

Goodwill impairment testing is carried out on operating segment level, as they correspond to the Group's cash-generating units (CGUs) and the goodwill allocation level.

The recoverable amounts of the cash-generating units are based on value-in-use calculations that are prepared using discounted cash flow projections. These projections are based on the Group's strategy approved by the management, and include cash flow forecasts for 2022–2027 after which the terminal value is calculated.

The carrying amount to which the recoverable amount is compared, is the operating capital of the segment, defined in the Alternative performance measures section of the Review by the Board of Directors.

As a result of the impairment test to Group's cash-generating units, no goodwill impairment losses were recognized in 2021 nor 2020.

Management judgements

Key assumptions of the value-in-use calculations include the discount rate, the terminal value growth rate, the average global growth in end-use consumption of stainless steel and base price development. Assumptions also include estimates on delivery volume and capital expenditure development, and cost savings related to on-going strategy-implementation related initiatives.

As the recovery of the global economy from the COVID-19 pandemic is still on going, the estimates also include assumptions relating to the timing and pace of the recovery, and eventual stabilization of the economy and stainless steel demand.

Cash flow forecasts are discounted using the weighted average pre-tax cost of capital (WACC) as defined for Outokumpu. The components of WACC are risk-free yield rate, Outokumpu credit margin, market risk premium, equity beta, and the Group target capital structure.

Management believes in general that the assumptions used in the value-in-use calculations are conservative based on current economic circumstances. Growth rates assumed for stainless steel deliveries are generally lower than independent analysts' view on long-term market development.

Accounting principles

Goodwill is allocated to and tested for impairment on operating segment level, which correspond to the Group's cash-generating units (CGUs), and the lowest level goodwill is monitored. Impairment test is carried out on annual basis, or more frequently when there is evidence of potential goodwill impairment.

In goodwill impairment testing, the recoverable amounts are based on value in use determined by discounted future net cash flows expected to be generated by the cash-generating unit. The discount rate used is a pre-tax rate that reflects the current market view on the time value of money and the CGU-specific risks.

An impairment loss is the amount by which the carrying amount of the segment's assets exceeds its recoverable amount. Impairment losses are recognized first on goodwill and after that on other intangible and tangible assets. In the consolidated statement of income impairments are presented in other operating expenses. Impairment losses related to goodwill cannot be subsequently reversed.

4.4 Inventories

€ million	2021	2020
Raw materials and consumables	**524**	387
Work in progress	**875**	419
Finished goods and merchandise	**485**	369
Advance payments	**8**	2
	1,892	1,177

Net realizable value write-downs of EUR 3 million were recognized in the profit or loss during 2021 (2020: reversal of write-downs of EUR 15 million).

In 2021, Outokumpu continued to apply cash flow hedge accounting for three selected nickel hedging programs. More details on commodity price risk and hedge accounting are presented in notes 5.3 and 5.4.

Management judgements

Management judgement and estimates are applied in net realizable value (NRV) and inventory obsolescence analysis.

NRV calculation requires estimates on sales prices for products to be sold in the future to the extent the prices are not known, which can be a significant part of the future prices. Due to fluctuations in nickel and other alloy prices, which are the most important commodity price risks for Outokumpu, the realized prices can deviate significantly from the estimates used in NRV calculations.

The alloy surcharge clause as well as daily fixed pricing of stainless steel reduce the risk arising from the time difference between raw material purchase and product delivery. However, the risk is still significant because the delivery cycle in production is longer than the alloy surcharge mechanism expects and the daily fixed pricing can also deviate from this cycle depending on the timing of the delivery.

Inventory obsolescence for stainless steel products is estimated based on internal guidelines of slow-moving inventory.

Accounting principles

Inventories are stated at the lower of cost and net realizable value. These are defined with different methodologies depending on the type of inventory.

The cost of raw materials is determined as monthly weighted average of the actual raw material cost. The cost of self-produced finished goods and work in progress comprises of raw materials, direct labor, other direct costs and related production and procurement overheads. Cost of purchased products includes all purchasing costs including direct transportation, handling and other costs.

NRV is calculated as the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs attributable to the sale. Obsolete stainless steel products are valued at scrap value. Spare parts are carried as inventory and their cost is recognized in profit or loss as consumed.

Major spare parts are recognized in property, plant and equipment when they are expected to be used over more than one year.

4.5 Trade and other receivables and payables

Trade and other receivables

€ million	2021	2020
Non-current		
Non-current receivables and accruals	**5**	1
Current		
Trade receivables	**597**	384
VAT receivable	**68**	44
Income tax receivable	**21**	23
Escrow deposits	**15**	–
Prepaid insurance expenses	**10**	10
Other accruals	**66**	35
Other receivables	**9**	41
	786	537
Loss allowance on trade receivables		
On Jan 1	**5**	7
Reduction in loss allowance	**0**	–1
On Dec 31	**5**	5
Age analysis of trade receivables		
Not overdue	**549**	362
Past due 1–30 days	**33**	17
Past due 31–60 days	**8**	3
More than 60 days	**8**	2
	597	384

Factored trade receivables

Outokumpu uses factoring to finance its working capital. Under these arrangements, Outokumpu has on December 31, 2021 derecognized trade receivables totaling EUR 420 million (2020: EUR 269 million), which represents fair value of the assets. Net proceeds received amounted to EUR 412 million (2020: EUR 263 million). The underlying assets have maturity of less than one year.

The maximum amount of loss related to derecognized assets is estimated to be EUR 12 million (2020: EUR 10 million). This estimate is based on insurance policies and contractual arrangements between factoring companies and Outokumpu. The analysis does not include impact of any operational risk related to Outokumpu's contractual responsibilities.

Trade and other payables

€ million	2021	2020
Non-current		
VAT payable	**–**	18
Accruals	**23**	27
	23	45
Current		
Trade payables	**1,802**	1,225
Accrued employee-related expenses	**109**	73
Accrued interest expenses	**6**	11
VAT payable	**119**	86
Withholding tax and social security liabilities	**21**	21
Advance payments received	**27**	7
Other accruals	**76**	55
Other payables	**7**	22
	2,166	1,500

Non-current and current VAT payables on December 31, 2021 include EUR 18 million of VAT payments that were deferred for two years in Finland in 2020 as part of the state COVID-19 relief program (Dec 31, 2020: EUR 61 million).

Liabilities related to customer contracts

On December 31, 2021, accrued volume discounts related to customer contracts amounted to EUR 45 million (Dec 31, 2020: EUR 34 million). These are reported as other current accruals.

The liabilities related to the unperformed transportation service were not material on December 31, 2021, and these liabilities as well as advance payments received are expected to be recognized as revenue over the following three months.

Risk information

Credit risk

Outokumpu's sales are covered by approved credit limits or secured payment terms. Most of the outstanding trade receivables have been secured by trade credit insurances, which typically cover some 92% of the insured amount. Part of the credit risk related to trade receivables is managed with letters of credit, advance payments and guarantees.

On December 31, 2021, the maximum exposure to credit risk of trade receivables was EUR 597 million (2020: EUR 384 million). The portion of unsecured receivables during 2021 has been approximately 7–9% of all trade receivables. During 2021, credit limits have remained available from the insurer and there is no significant change in the insurance cover. Outokumpu has frequently monitored credit risk and the overdue situation and continued its close co-operation with the insurers. Outokumpu uses factoring, which transfers most risks and rewards to the buyer of the receivables. At the end of the year 2021, most of the receivables were generated by a large number of customers and there were only few risk concentrations.

Country risk

Exposure to country risk is monitored and reduced by having credit insurance that provides cover against political risk on external trade receivables. At year-end, main country related exposures included for example Argentina, due to Outokumpu's local and cross-border business activities in the country.

Accounting principles

Trade and other receivables and payables include financial assets or liabilities measured at amortized cost. After initial recognition, they are measured at amortized cost by using the effective interest rate method. Trade and other receivables are valued less accumulated impairments.

Factored trade receivables

Factored trade receivables have been derecognized from the statement of financial position when the related risks and rewards of ownership have materially been transferred to the counterparty of the factoring transaction.

Expected credit losses

Outokumpu applies simplified model in assessing and recognizing loss allowance for expected credit losses on trade receivables. The calculation model is based on overdue statistics and counterparty-specific credit ratings linked with loss probabilities for each rating. Loss allowances are recognized in selling and marketing expenses in the consolidated statement of income.

Liabilities related to customer contracts

Liabilities related to customer contracts include accrued volume discounts, advance payments received and liabilities related to transportation service not yet performed. Accrued volume discounts have been recognized as reductions in revenue during the financial year.

4.6 Provisions

2021 € million	Environmental provisions	Restructuring provisions	Other provisions	Total
Provisions on Jan 1, 2021	48	62	5	115
Translation differences	0	0	1	1
Increases in provisions	20	2	21	42
Utilized during the financial year	0	–46	–1	–47
Unused amounts reversed	–10	–8	–1	–19
Reclassifications	–	–3	1	–1
Provisions on Dec 31, 2021	**57**	**8**	**26**	**91**

2020 € million	Environmental provisions	Restructuring provisions	Other provisions	Total
Provisions on Jan 1, 2020	48	56	5	110
Increases in provisions	3	50	2	54
Utilized during the financial year	–2	–43	–1	–45
Unused amounts reversed	–1	–1	–1	–4
Provisions on Dec 31, 2020	48	62	5	115

€ million	**2021**	2020
Non-current provisions	**63**	84
Current provisions	**29**	31
	91	115

Environmental provisions

In 2021, Outokumpu recognized an increase in environmental provisions of EUR 10 million relating to the aftercare of closed mines in Finland.

The majority of the environmental provisions are for closing costs of production facilities and landfill areas, removal of problem waste and landscaping in facilities in Finland, the UK, and Germany and aftercare of closed mines in Finland. The outflow of economic benefits related to environmental provisions is expected to take place mainly over a period of more than 10 years. Due to the nature of these provisions, there are uncertainties regarding both the amount and the timing of the outflow of economic benefits.

Restructuring provisions

Restructuring provisions relate mainly to the redundancies in selected countries as a result of employee negotiations in 2020 to generate cost savings. The cash outflows related to these provisions took predominantly place in 2021.

Other provisions

Other provisions comprise for example provisions for litigations, product and other claims and are mainly current in nature. In 2021, the increase in other provisions is mainly related to litigation provisions.

Management judgements

Provisions are based on management's best estimates at the end of the reporting period.

Regarding environmental provisions, the management judgements and estimates relate mainly to the timing and the scope of the activities to be carried out as well as the cost of such activities in the future. Environmental expenditure related to dismantling an entire production facility and restoring the area are generally estimated when decision on a site closure is made.

As actual outflows can differ from estimates due to changes in law, regulations, public expectations, technology, prices and conditions, and can take place in many years in the future, the provisions are regularly reviewed to take such changes into account.

Regarding restructuring provisions, the judgements and estimates mainly relate to the amounts of termination benefits to employees.

Accounting principles

A provision is recognized when Outokumpu has a present legal or constructive obligation as a result of a past event, and it is probable that an outflow of economic benefits will be required to settle the obligation and the amount can be reliably estimated. Provisions relate mainly to environmental liabilities, restructuring plans, onerous contracts and litigations. Non-current provisions are discounted to present value at the end of the reporting period using risk-free discount rates.

Environmental expenditure arising from restoring the conditions caused by past operations are recognized as expenses when they are incurred. Environmental provision is recognized when the Group has an obligation to decommission or remove a facility or equipment, rehabilitate environmental damage, or landscape and restore an area. The recognition of environmental provisions is based on current interpretation of the effective environmental laws and regulations related to the Group.

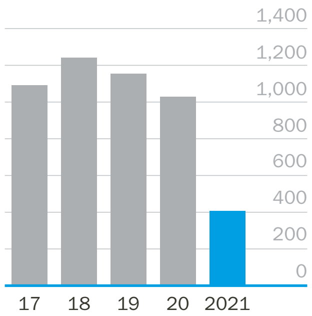
When environmental expenditure will arise from future asset retirement obligations, an item of property, plant and equipment corresponding to the amount of the provision is recognized, and the cost will be depreciated over the asset's useful life. Subsequent adjustments to the provision are deducted from or added to the cost of the corresponding asset in a symmetrical manner.

A restructuring provision is recognized when a detailed restructuring plan has been prepared and its implementation has been started or the main parts of the plan have been communicated to those, who are impacted by the plan. Restructuring provision mainly comprise of employee termination benefits.

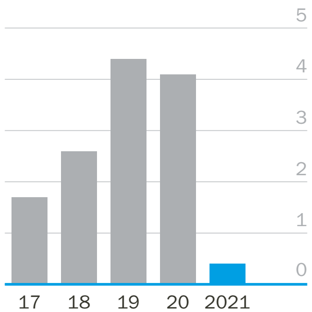
Any potential compensation from a third party is not included in the amount of the provision but recognized as a separate asset when it is virtually certain that the compensation will be received.

5. Capital structure and financial risk management

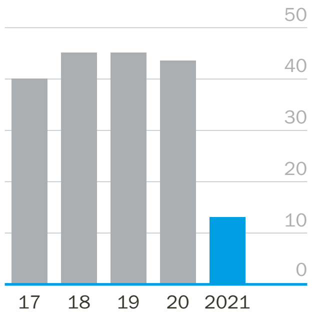
Net debt, € million



Net debt to adjusted EBITDA



Debt-to-equity ratio, %



Outokumpu took decisive steps in de-leveraging in 2021 and improved its credit rating from B3 to Ba3. Strong financial performance together with the directed share issue resulted in a significant reduction in net debt and improvement in key ratios. Prepayment of loans, the voluntary redemption of the 2024 bond as well as improvements in the interest margins led to a sizeable reduction in finance costs.

Capital structure

€ million	2021	2020
Total equity	**3,120**	2,360
Total debt	**709**	1,404
Total capitalization	**3,828**	3,764
Net debt	**408**	1,028

The capital structure is regularly monitored by management through the company's leverage ratio. The debt-to-equity ratio and net debt to adjusted EBITDA improved considerably during 2021 as a result of the good development in profitability driven by the successful strategy implementation and favorable market conditions. In addition, strong cash flow allowed debt reduction and had a positive impact on the Group's net debt.

The main objective of capital management is to secure the ability to operate on a going concern basis to enhance value to shareholders and to optimize the cost of capital. Outokumpu seeks to maintain access to loan and capital markets at all times and to preserve sufficient liquidity. The Board of Directors reviews the Group's capital structure on a regular basis. Capital structure and debt capacity are taken into account e.g. in investment, dividend and debt decisions.

Equity is managed through dividend policy, share buybacks and issuances of equity or equity-linked securities. In 2021, Outokumpu strengthened its balance sheet by launching a directed equity issue with gross proceeds of EUR 209 million targeted to a selected group of institutional investors.

Tools to manage debt include raising new debt in various forms, establishing financing facilities, prepaying and cancelling loans, notes and other financing facilities in order to optimize the maturity structure of the debt portfolio and to minimize finance costs.

In 2021, Outokumpu extended the maturity of its main financing facilities and also prepaid a considerable amount of its outstanding debt.

In 2021, the Moody's corporate family rating for Outokumpu improved from B3 to Ba3 with a stable outlook.

5.1 Net debt and capital management

The main focus in 2021 on debt management was to fulfill the strategic target of de-risking the company by deleveraging the balance sheet in order to create shareholder value. The strong cashflow together with the proceeds from the directed equity issue in May 2021 enabled the company to decrease its net debt to a level of EUR 408 million at the year-end 2021. In addition to redeeming the 2024 Notes, a major part of the sustainability linked term loan was prepaid. Furthermore, the amount of commercial papers issued was reduced significantly.

In April, Outokumpu utilized the first extension option of the SEK 1,000 million secured revolving credit facility, which is guaranteed by the Swedish Export Credit Agency EKN, and the facility was extended until end of May 2023. In May, Outokumpu carried out a directed share issue with gross proceeds of EUR 209 million and entered into a new EUR 24 million pension loan with a 5-year maturity. In June, Outokumpu agreed with its lenders to extend the maturities of the EUR 120 million sustainability linked term loan and EUR 532 million of its EUR 574 million (EUR 42 million matures in May 2022) syndicated revolving credit facility until the end of May 2024. In December, Outokumpu entered into a EUR 100 million secured revolving working capital facility with Finnvera Oyj. The 4-year facility, which is is guaranteed by the European Guarantee Fund is expected to be available for drawdown during the first quarter of 2022. Furthermore, the EUR 120 million Kemi mine facility is fully drawn.

The revolving credit facility totaling EUR 574 million and the sustainability linked term loan, the amount of which was reduced to EUR 50 million in December, are both secured by a comprehensive security package, which includes pledges on real estate in Tornio and Calvert, pledges of the shares in certain material subsidiaries and guarantees issued by many material subsidiaries. Outokumpu and its secured lenders have signed an intercreditor agreement in 2014, when the security package was originally created. The SEK 1,000 million revolving credit facility and the EUR 100 million revolving working capital facility from Finnvera Oyj are secured by pledges on real estate in Sweden and Germany respectively.

Net debt

€ million	2021	2020
Non-current		
Bonds	**–**	249
Convertible bonds	**112**	108
Loans from financial institutions	**163**	414
Pension loans	**154**	199
Lease liabilities	**157**	174
Other loans	**12**	8
	597	1,153
Current		
Loans from financial institutions	**7**	2
Pension loans	**13**	–
Lease liabilities	**32**	18
Commercial papers	**58**	231
Other loans	**1**	–
	112	251
Cash and cash equivalents		
Cash at bank and in hand	**295**	374
Short-term bank deposits and cash equivalents	**5**	2
	300	376
Net debt	**408**	1,028

The average effective interest rate of cash and cash equivalents at the end of 2021 was 0% (Dec 31, 2020: 0%).

Net debt development

€ million	2021	2020
Net cash flow from operating activities	**597**	322
Net cash flow from investing activities	**–149**	–175
Cash flow before financing activities	**448**	147
Directed share issue	**205**	–
Convertible bond equity portion	**–**	17
Cash flow impact on net debt	**653**	164
Net debt on Jan 1	**1,028**	1,155
Cash flow impact on net debt	**–653**	–164
Change in net debt, non-cash	**34**	37
Net debt on Dec 31	**408**	1,028

Changes in non-current and current debt

2021 € million	Non-current debt	Current portion of non-current debt	Non-current lease liabilities	Current portion of lease liabilities	Current debt	Total
On Jan 1	979	0	174	18	232	1,404
Financing cash flows	–523	–1	–	–32	–174	–730
Transfer to current debt	–22	22	–46	46	–	–
Other non-cash movements	6	–	29	–	–	35
On Dec 31	440	21	157	32	58	709

2020 € million	Non-current debt	Current portion of non-current debt	Non-current lease liabilities	Current portion of lease liabilities	Current debt	Total
On Jan 1	877	295	176	30	103	1,480
Financing cash flows	117	–296	–	–33	130	–82
Transfer to current debt	0	0	–21	21	–	–
Other non-cash movements	–14	2	19	–	0	6
On Dec 31	979	0	174	18	232	1,404

Other non-cash movements in debt consist mainly of effective interest including accrued arrangement fees. Other non-cash movements in lease liabilities consist of new lease agreements and changes in terms of existing agreements. The reconciliation of cash effective and non-cash movements in cash and cash equivalents is presented in the consolidated statement of cash flows.

Bonds

		Outstanding amount	
€ million	Interest rate, %	**2021**	2020
2018 fixed rate bond maturing on June 18, 2024	4.125	–	250

The bonds maturing in June 2024 were voluntarily redeemed by Outokumpu in December 2021.

Convertible bonds

		Outstanding amount	
€ million	Interest rate, %	**2021**	2020
2020 fixed rate bond maturing on July 9, 2025	5.000	**125**	125

The convertible bonds maturing in July 2025 can be converted into maximum of 38,191,261 ordinary shares in Outokumpu representing 8.4% of the outstanding shares at year end. The conversion period commenced on August 19, 2020 and will end on June 25, 2025. The current conversion price is set at EUR 3.273 per ordinary share. The conversion price is subject to adjustments for any dividend in cash or in kind as well as customary anti-dilution adjustments, pursuant to the terms and conditions of the bonds. On December 31, 2021, remaining part of the equity component of the convertible bond amounted to EUR 12 million (Dec 31, 2020: EUR 16 million).

Risk information

Liquidity and refinancing risk

Outokumpu raises most of its funding centrally and in co-ordination by the Treasury. The Group seeks to reduce its liquidity and refinancing risk by having sufficient amount of cash and committed long-term credit lines available and by maintaining a balanced debt maturity profile with diversified sources of funding. Efficient daily cash and liquidity management and the use of instruments such as commercial papers and currency swaps, also reduce the liquidity risk.

Finance and liquidity plans are prepared and reviewed regularly with a focus on forecasted cash flows, projected funding requirements, planned funding transactions and financial covenant headroom. The adequacy of liquidity reserves, the amounts of scheduled annual repayments of non-current debt compared to EBITDA as well as forecasted gearing and leverage ratios are key measures being considered.

Outokumpu is exposed to changes in credit margins as the development of the leverage ratio has an impact on the interest margin definition in some of the Group's loan agreements and as such on its interest and other financial expenses.

Accounting principles

Bonds, loans from financial institutions, pension and other loans are recognized at the settlement date and measured initially at fair value net of direct transaction costs. Subsequently they are carried at amortized cost using the effective interest rate method.

Transaction costs are amortized over the maturity of the borrowing using the effective interest rate method. A financial liability (or part of the liability) is derecognized when the liability ceases to exist, that is, when the obligation identified in a contract has been fulfilled or cancelled or is no longer effective.

The fair value of non-current debt is determined based on quoted prices for listed instruments. For loans the fair value is determined using the discounted cash flow method based on yields at the reporting date. The fair values of non-current debt are presented in note 5.5.

Fees related to revolving credit facilities are amortized over the expected facility term.

Convertible bonds

Convertible bonds are compound instruments with components of the bonds classified separately as financial liabilities and equity in accordance with the substance of the arrangement.

The liability component is recognized initially at fair value of a similar liability. The equity component is recognized initially at the difference between the fair values of the full bond and the liability component. Transaction costs are allocated to the components in proportion to their initial carrying amounts. The fair value includes the value of conversion rights.

Subsequently the liability component is measured at amortized cost with the effective interest method. At conversion or on expiry the equity component is reclassified within equity.

Lease liabilities

Accounting principles related to lease liabilities are presented in note 4.2.

Contractual cash flows

	2021						2020					
€ million	2022	2023	2024	2025	2026	2027–	2021	2022	2023	2024	2025	2026–
Bonds	–	–	–	–	–	–	–	–	–	250	–	–
Convertible bonds	–	–	–	125	–	–	–	–	–	–	125	–
Loans from financial institutions	7	14	64	14	14	56	2	5	340	10	10	51
Pension loans	13	31	29	23	19	53	–	13	43	37	31	76
Other loans	1	1	1	1	1	7	0	0	0	0	0	6
Commercial papers	58	–	–	–	–	–	231	–	–	–	–	–
Interest payments on debt and facility charges	25	21	16	10	4	8	56	50	36	20	10	22
Lease liabilities	32	18	16	14	14	97	18	17	15	15	14	113
Interest payments on lease liabilities	10	9	8	7	6	137	11	11	10	9	8	145
Trade and other payables	1,811	–	–	–	–	–	1,246	–	–	–	–	–
	1,957	**94**	**134**	**194**	**59**	**358**	1,564	96	444	341	198	413

Contractual cash flows related to derivative instruments are presented in note 5.4.

Credit facilities

		2021			2020		
€ million	Maturity	Total	Utilized	Available	Total	Utilized	Available
Committed revolving credit facility	May 2021	–	–	–	76	–	76
	May 2022	42	–	42	42	–	42
	May 2024	532	–	532	532	–	532
Committed Kemi mine investment facility	Sept 2030 [1)]	–	–	–	120	86	34
Committed SEK 1,000 million revolving credit facility	May 2023	98	–	98	100	–	100
Committed facilities total		**672**	–	**672**	870	86	784
Uncommitted Finnish commercial paper program	N/A	800	58	742	800	231	569

[1)] Facility raised in full in December 2021

Cash and cash equivalents

Cash and cash equivalents comprise cash in hand, deposits held at call with banks and other highly liquid investments with original maturities of three months or less. These are readily convertible to a known amount of cash with a low risk of any changes in the value. Bank overdrafts are reported as current debt.

5.2 Equity

Shares and related movements in equity

€ million	Number of shares, 1,000	Share capital	Premium fund	Invested unrestricted equity reserve	Treasury shares	Total
On Jan 1, 2020	411,775	311	714	2,103	–33	3,095
Shares delivered from the share-based payment programs	227	–	–	–	2	2
On Dec 31, 2020	412,002	311	714	2,103	–31	3,097
Shares delivered from the share-based payment programs	70	–	–	–	1	1
Directed share issue	40,500	–	–	205	–	205
On Dec 31, 2021	**452,572**	**311**	**714**	**2,308**	**–30**	**3,303**
Treasury shares	4,302					
Total number of shares on Dec 31, 2021	**456,874**					

Directed share issue

Based on the authorization granted by the Annual General Meeting 2021, Outokumpu issued 40,500,000 new shares directed to institutional investors on May 10, 2021, in deviation from the pre-emptive subscription right of the shareholders. The main purpose of the share issue was to accelerate Outokumpu's de-leveraging by using the proceeds to reduce gross debt.

The subscription price of the new shares was EUR 5.15 per share, corresponding to a discount of approximately 5.7% to the closing price of the Company's share on May 10, 2021. The gross proceeds of EUR 209 million were recorded in their entirety to the invested unrestricted equity reserve of Outokumpu Oyj. In the consolidated financial statements, the net proceeds are presented net of transaction costs, the net proceeds amounting to EUR 205 million.

Dividend policy and distributable funds

According to Outokumpu's dividend policy, the dividend pay-out ratio throughout a business cycle shall be in a range of 30–50% of the Group's net result.

On December 31, 2021, the distributable funds of the parent company totaled EUR 2,560 million of which retained earnings were EUR 228 million. The Board of Directors proposes to the Annual General Meeting in 2022 to pay a dividend of EUR 0.15 per share for the financial year 2021, a total of EUR 68 million. No dividend was paid for 2020.

Accounting principles

Shares and share capital

According to the Articles of Association, Outokumpu has one single class of shares and all shares have equal voting rights at General meetings. The shares do not have a nominal value.

Premium fund

Premium fund includes proceeds from share subscription and other contribution based on the old Finnish Limited Liability Companies Act for the part the contributions exceeded the account equivalent value allocated to share capital.

Other restricted reserves

Other restricted reserves include amounts transferred from the distributable equity under the Articles of Association or by a decision of the General Meeting of Shareholders, and other items based on the local regulations of the Group companies.

Invested unrestricted equity reserve

Invested unrestricted equity reserve includes the net proceeds from the rights issues in 2012 and 2014 and the directed share issue in 2021.

Fair value reserves

Fair value reserves include movements in the fair values of equity securities and hedge accounted derivative instruments.

Retained earnings

Retained earnings include remeasurements of defined benefit plans, treasury shares, cumulative translation differences and other retained earnings and losses.

Treasury shares

When the parent company or its subsidiaries purchase the company's own shares, the consideration paid, including any attributable transaction costs, net of taxes, is deducted from the parent company's equity as treasury shares until the shares are cancelled. When such shares are subsequently sold or reissued, any consideration received is recognized directly in equity.

Dividends

The dividend proposed by the Board of Directors is not deducted from distributable equity until approved by the Annual General Meeting of Shareholders. For the time period between the approval and the payment, the dividend to be paid is presented in current trade and other payables.

5.3 Financial risk management and insurances

The main objectives of financial risk management are to reduce earnings volatility and to secure sufficient liquidity to avoid financial distress. Other objectives include the reduction of cash flow volatility and the maintenance of the debt-to-equity and leverage ratios within set targets. The main objectives of insurance management are to provide mitigation against catastrophe risks and to reduce earnings variation.

The Board of Directors has approved the risk management policy, which defines responsibilities, the process and other main principles of risk management. The Board of Directors oversees risk management on a regular basis and the Chief Financial Officer (CFO) is responsible for the implementation and development of financial risk management. The CFO leads relevant steering groups, such as the Risk Management Steering Group for enterprise risk management, the Financial Risk Steering Group for financial risk management and the Energy Risk Steering Group for energy risk management.

Financial risks consist of market, country, credit, liquidity and refinancing risks. Outokumpu subsidiaries hedge their currency and commodity price risk with Outokumpu Oyj, which does most of the Group's foreign exchange and commodity derivative contracts with banks and other financial institutions. The Treasury function ("Treasury") is responsible for managing foreign exchange, metal, interest rate, liquidity and refinancing as well as emission allowance price risk. Credit controlling has been mainly centralized to Global Business Services, and Treasury coordinates credit risk management. Customer credit risk is presented in note 4.5. The CFO office together with the relevant business areas are responsible for managing the electricity and fuel price risks.

Treasury sources all global insurances. The most important insurance lines are property damage and business interruption (PDBI), liability, marine cargo and credit risk. The captive insurance company Visenta Försäkringsaktiebolag is contributing global insurances by mainly participating in property damage and business interruption (PDBI) insurance line.

Exposure to financial risks is identified in connection with the Group's risk management process. This approach aims to ensure that any emerging risks are identified early and that significant risks are described, quantified, managed and communicated appropriately.

Risk information

Market risk

Outokumpu's main market risks are foreign exchange risk, interest rate risk, security price risk as well as commodity price risk, namely in metals, energy and emission allowances. The price changes in the before mentioned risks may have a significant impact on the Group's earnings (net result), cash flow and capital structure. Due to the cyclical stainless steel business, Outokumpu's exposure to market risks may change significantly from one period to another. Consequently, its derivatives' positions to mitigate its market risks change due to the cyclical business environment. Note 5.4 details the fair values and nominal amounts of derivative instruments while the sensitivity of financial instruments to market risks is described in the below table.

The strategy for market risk management is based on identifying, evaluating and mitigating relevant risks in committed business transactions and balance sheet items for each of the market risk categories. Forecasted items are included in the underlying risk position in interest rate, energy price and emission allowance price risk. The use of derivatives to mitigate market risks may cause timing differences between derivative gains or losses and the earnings impact of the underlying exposure. In order to reduce such timing differences in earnings, hedge accounting has been applied selectively as part of the metal and foreign exchange hedging activities. Most of the derivatives are short-term, however interest rate hedges typically have a maturity in excess of one year.

Foreign exchange rate risk

Outokumpu is exposed to foreign exchange risk as its business and operations are global. The risk arises from changes in exchange rates and may have effects on earnings, cash flow and balance sheet. The exposure consists mainly of raw material procurement, sales of stainless steel and ferrochrome production in foreign currencies. Also the location of Outokumpu's global operations expose the Group to foreign exchange rate risk. Outokumpu group companies are exposed to foreign exchange rate risk arising from net cash flows in other than the functional currency.

Sensitivity of financial instruments to market risks

	Dec 31, 2021		Dec 31, 2020	
€ million	In profit or loss	In other comprehensive income	In profit or loss	In other comprehensive income
+/–10% change in EUR/USD exchange rate	+7/–8	–	+3/–4	–
+/–10% change in EUR/SEK exchange rate	–6/+7	–	–2/+3	–
+/–10% change in nickel price in USD	–3/+3	–10/+10	+0/–0	+5/–5
+/–1% parallel shift in interest rates	–3/+4	–	–9/+10	–

The sensitivity analyses apply to financial assets and liabilities only. Other assets and liabilities, including defined benefit pension plan assets and liabilities, as well as off-balance sheet items such as sales and purchase orders, are not in the scope of these analyses. The calculations are net of tax. During the year the volatility for nickel price has been in the range of 24–31%. With +/–30% change in dollar denominated price, the effect in profit or loss is about EUR –8/+8 million and in other comprehensive income EUR –29/+29 million for nickel derivatives.

Foreign exchange positions of EUR-based companies

	Dec 31, 2021				Dec 31, 2020			
€ million	SEK	USD	GBP	Other	SEK	USD	GBP	Other
Trade receivables and payables	38	–458	14	18	–6	–257	11	7
Loans and bank accounts [1]	269	–167	52	13	440	50	0	6
Derivatives	–302	553	–106	–82	–438	179	–30	–27
Net position	**6**	**–72**	**–40**	**–51**	–4	–28	–19	–14

Foreign exchange positions of SEK-based companies

	Dec 31, 2021				Dec 31, 2020			
€ million	EUR	USD	GBP	Other	EUR	USD	GBP	Other
Trade receivables and payables	15	20	0	-4	67	–23	2	5
Loans and bank accounts [1]	13	7	1	7	9	9	1	1
Derivatives	–120	–47	–21	–12	–122	–1	–12	–12
Net position	**–92**	**–21**	**–20**	**–9**	–46	–15	–10	–5

[1] Includes cash and cash equivalents, loan receivables and debt.

Currency distribution and re-pricing of outstanding net debt

€ million Currency	Dec 31, 2021 Net debt [1]	Derivatives [2]	Average rate, % [1]	Duration, year [3]	Rate sensitivity [4]
EUR	582	–120	5.4	5.2	1.5
SEK	–23	262	–0.1	0.1	2.4
USD	–85	–191	0.0	0.0	–2.8
Others	–66	47	0.6	–0.3	–0.2
	408	**–2**			**1.0**

€ million Currency	Dec 31, 2020 Net debt [1]	Derivatives [2]	Average rate, % [1]	Duration, year [3]	Rate sensitivity [4]
EUR	1,204	–450	5.1	3.9	3.4
SEK	–26	436	0.0	0.1	4.1
USD	–94	18	0.0	–0.0	–0.8
Others	–56	3	0.3	–0.0	–0.5
	1,028	7			6.2

[1] Includes cash and cash equivalents and debt.

[2] Net derivative liabilities include nominal value of interest rate and currency forwards earmarked to net debt. Currency forwards are not included in average rate calculation.

[3] Duration calculation includes both net debt and derivatives.

[4] The effect of one percentage point increase in interest rates to financial expenses over the following year.

The foreign exchange exposure consists of risks associated with foreign currency cash flows (transaction risk), translation risk and economic risk, such as the change in competitiveness resulting from changes in foreign exchange rates. The transaction risk arises from committed and forecasted transactions and payments in currencies other than the functional currency of the entity and from changes in fair value of foreign currency denominated items recognized on the balance sheet. The fair value risk consists of foreign currency denominated accounts receivables, accounts payables, debt, cash, loan receivables and the currency position from commodity derivatives.

Foreign exchange transaction risk relates to firm commitments, e.g. price fixed sales and purchase orders. The fair value risks are hedged in principle in full in major currencies. However, continuing an exception to the hedging policy approved in 2019, the main operating entity in Sweden hedged its fixed price sales orders to a limited extent, and did not hedge its fixed price purchase orders. Forecasted and probable cash flows are not typically hedged but can be hedged selectively. Cash flow hedge accounting was selectively applied to committed sales orderbook hedges during 2021. The impact on the hedge accounting program to the Group's profit or loss was immaterial.

Outokumpu's largest foreign exchange transaction risk exposures are in US dollars, Swedish krona and British pound. A major part of the Group's sales is in euros and US dollars and thus the local currency denominated production costs in Sweden and the UK cause foreign exchange risk. The main US dollar cash flow risk origins from sales in the ferrochrome operations as chromium is priced in US dollars. Another significant US dollar cash flow risk is included in sales margins due to the dollar-linked stainless scrap purchase discounts. Internal Swedish krona denominated financing causes significant fair value foreign exchange rate risk, which is hedged with forward contracts and, if possible, with matching of external debt. The Group's fair value foreign exchange position is presented in a more detailed level in the table on the left side.

Translation risk consists of current net investment in foreign entities and future foreign currency denominated profits and losses which eventually will have an impact on Group's net earnings and balance sheet through consolidation. Outokumpu's net earnings and net investment translation risk is mainly in US dollars, Swedish kronas and British pounds. The equity translation risk is not typically hedged, although according to the financial risk policy this risk can be hedged selectively. In 2021, there were no hedges of net earnings or net investment exposures. However, the effective portion of gains (EUR 17 million, net of tax) on earlier financial years' net investment hedges is recognized in equity.

Interest rate risk

Changes in interest rates expose Outokumpu to interest rate risk with effects on Group's net interest expense (i.e. cash flow risk) and value of assets and liabilities (i.e. fair value risk) arising from changes in interest rates. The objective of the Group's interest rate risk management is to have a significant share of net debt effectively with a short-term interest rate as a reference rate. This approach is applied to mitigate the risk of adverse business conditions against net interest expenses as low interest rates are typically associated with such business conditions. Also this approach may help to reduce the average interest rate of debt. Approximately 39% (2020: 47%) of the Group's debt has an interest period of less than one year and the average interest rate of non-current debt on December 31, 2021 was 4.7% (Dec 31, 2020: 4.9%).

The interest rate risk exposure is composed of the Group's net debt including all interest-bearing assets and liabilities as well as derivatives that hedge these items. Interest rate derivatives, such as interest rate swaps, are used to adjust the share of net debt effectively repricing in different maturity buckets to limits defined in the Group's financial risk policy. This cash flow risk exposure excludes lease liabilities.

Euro, Swedish krona and US dollar have a substantial contribution to the Group's interest rate risk exposure. The interest rate risk exposure in Swedish krona and US dollar primarily originates from cash balances and foreign exchange derivatives. The interest rate position is presented in more detail in the table on the previous page.

Metal price risk

Commodity risk refers to the risk on Outokumpu earnings, cash flow and balance sheet arising from commodity prices, such as metals, energy and emission allowances.

The Group's most significant exposures in metals price risk arise from chromium and nickel, while other alloy metals with metal price risk include for example iron and molybdenum. Outokumpu is exposed to metal price risk for example through purchase of raw materials as well as sale of stainless steel end products where the price of alloy metals is based on market prices. The timing difference in such commercial purchase and sale transactions as well as inventory position expose the Group to metal price risk alongside the Group's capability to pass on price changes in raw materials to end-product prices. Market prices are based on prices determined in regulated markets, such as the London Metal Exchange (LME). Also, derivatives contracts to mitigate metal price risk are based on for example LME prices. Chromium does not have an established financial derivatives market and consequently is not included in the scope of the financial risk policy.

In addition to hedging with financial derivatives, the metal price risk is also mitigated through other measures such as pricing decisions. A significant part of the Group's stainless steel sales contracts include an alloy surcharge clause, with the aim of reducing the risk arising from the timing difference between alloy metal purchase and stainless steel pricing and delivery. The share of Group sales contracts including an alloy surcharge clause increased in 2021 compared to the previous year. Outokumpu's underlying metal position (in following alloy metals: nickel, iron and molybdenum) consists of price fixed purchase orders, inventories of alloy metal containing materials and price fixed sales orders. According to the financial risk policy, the nickel price risk, excluding the risk related to the base stock, must be hedged in full. Price risk positions in iron and molybdenum can be hedged selectively. Financial derivatives mainly in nickel are used to manage impacts of metal price changes on earnings, whereas efficient working capital management helps to reduce cash flow variations caused by metal price. Outokumpu has continued to apply cash flow hedge accounting programs on nickel hedging in order to reduce the timing differences between derivative gains or losses and the earnings impact of the underlying exposure. The hedge accounting covers a meaningful part of the Group's nickel derivatives hedges.

Energy and emission allowance price risk

Energy and consumables represent some 10–15% of Outokumpu's costs. In 2021, global electricity and gas prices increased mainly due to the economic recovery. In Central Europe, the main driver was the low level of gas inventories towards the winter period as gas is used also for electricity production. In Nordics, the hydro balance was on a lower level than in previous years supporting further development of electricity prices. Energy and fuel markets had an impact on higher emission allowance prices.

Outokumpu manages energy price risk centrally and mitigates the risks by following the Energy Procurement policy. Energy price risk is hedged with long-term agreements, fixed price supply contracts and partial ownerships in power utilities. The Energy Risk Steering Group monitors and manages the hedging level for each operating country. In 2021, Outokumpu signed a 10-year power supply agreement for renewable wind power. The size of the contract covers almost entirely the electricity consumption of Outokumpu's Kemi mine. According to the agreement, deliveries will begin in the summer of 2023.

Outokumpu is exposed to changes in emission allowance prices as the Group's main production sites in Europe are participating in the EU Emissions Trading Scheme (EU ETS) while the production site in the United Kingdom is participating in the UK Emissions Trading Scheme (UK ETS). The EU ETS and the UK ETS markets are separate and emission allowances are not transferable nor convertible. All Outokumpu sites met the compliance requirements on time regarding EU ETS Phase III. The Group's emission allowances positions are composed of realized and forecasted emissions netted against confirmed and forecasted emission allowances granted by the authorities. The prices of fuels and power as well as decisions on the EU and UK ETS have a significant impact on the price of emission allowances. The current trading phase of the EU ETS refers to the period 2021–2030. Outokumpu forecasts to have adequate amount of EU emission allowances until the end of this decade. However, e.g. future decisions on EU ETS including the Carbon Border Adjustment Mechanism (CBAM), may have a significant impact on this forecast.

Security price risk

Outokumpu has equity investments and fixed income securities. On December 31, 2021, the largest investments were in OSTP Holding Oy (investment in associated company of EUR 26 million) and Voimaosakeyhtiö SF. For more information on the investment in Voimaosakeyhtiö SF refer to note 5.6.

The captive insurance company Visenta Försäkringsaktiebolag has investments totaling EUR 28 million in highly rated and liquid fixed income securities as well as in fixed income and equity funds in order to optimize return for assets and to manage the risk prudently.

Country and counterparty credit risk

Treasury monitors credit risk related to financial institutions. Outokumpu seeks to reduce these risks by limiting the counterparties to banks and other financial institutions with good credit standing. For derivative transactions, Outokumpu prefers to have the ISDA framework agreements in place.

Exposure to country risk is monitored and mitigated by having a credit insurance that provides cover against political risk on external account receivables. Other country related exposures included for example Argentina due to Outokumpu's local and cross-border business activities there.

Insurances

The Group's business activities are capital intensive and key production processes are tightly integrated and therefore interdependent from one another. Property damage and business interruption insurance, covering e.g. fires, machinery breakdowns and natural catastrophes, is the Group's most important insurance line and significant portion of insurance premiums relate to this cover. Business operations may cause significant liability risks related e.g. to people, environment or Outokumpu's products. Outokumpu aims to mitigate the liability risk by relevant risk management measures and by having reasonable insurances in place. Other significant insurance lines include e.g. marine cargo and credit insurances.

There were no events leading to a significant insurance claims during the reporting period. The flooding of the river Volme in Germany caused damages to property and business interruption in Outokumpu's site in Dahlerbrück. However, the losses remained limited and the incident did not lead into a major claim event under the insurance program. In Kemi mine, Finland, the incident related to a broken lift guide rope was communicated to insurers and the corresponding claim process is ongoing with losses expected to remain limited.

Outokumpu's captive insurance company, Visenta Försäkringsaktiebolag (Visenta), is registered in Sweden and can operate as a direct insurer and reinsurer. Visenta has to comply with capital adequacy requirements set by the financial supervisory authority in Sweden and European Insurance and Occupational Pensions Authority (EIOPA). During the reporting period Visenta was profitable and well capitalized to meet externally imposed requirements, which are based on e.g. the Solvency II framework. There were no significant changes in the company's assets during the year. On December 31 the assets amounted to EUR 44 million.

Visenta continued its participation in Outokumpu's property and business interruption insurance and also continued to provide surety to cover certain potential environmental liabilities in connection with the operations in Kemi and Tornio. The business interruption and property damage incident in Dahlerbrück, Germany was reported to Visenta and it might lead into claim compensation. However, potential compensation is not estimated to be material.

Outokumpu continued its systematic fire safety and loss prevention surveys, focusing on execution of the mitigating actions. As a result of easing of travel restrictions, the audits were continued on site starting the end of third quarter and continued throughout fourth quarter with further audits scheduled for 2022. In addition, marine cargo risk audit program was re-launched with audits taking place in the fourth quarter and with further audits scheduled for first half of 2022.

5.4 Derivative instruments

	2021			2020	**2021**	2020
€ million	Positive fair value	Negative fair value	Net fair value	Net fair value	Nominal amounts	Nominal amounts
Currency and interest rate derivatives						
Currency forwards	12	–11	**1**	–12	**2,510**	1,273
Interest rate swaps	–	–2	**–2**	6	**125**	325
					Tonnes	Tonnes
Metal derivatives						
Forward nickel contracts, hedge accounted	9	–17	**–8**	–4	**27,636**	26,417
Forward nickel contracts	10	–11	**–2**	1	**21,343**	19,132
Forward scrap contracts	0	0	**0**	–	**20,000**	–
Total derivatives	31	–42	**–11**	–8		
Less long-term derivatives						
Interest rate swaps	–	–2	**–2**	6		
Short-term derivatives	31	–40	**–9**	–15		

Contractual cash flows

2021 € million	2022	2023	2024	2025
Currency derivatives				
Outflows	2,511	–	–	–
Inflows	–2,510	–	–	–
Interest derivatives	0	0	0	0
	1	**0**	**0**	**0**

2020 € million	2021	2022	2023	2024
Currency derivatives				
Outflows	1,267	–	–	–
Inflows	–1,279	–	–	–
Interest derivatives	–2	–2	–2	–1
	–14	–2	–2	–1

Hedge accounted cash flow hedges (nickel derivatives)

	2021	2020
Fair value of nickel derivatives, € million	**–8**	–4
Nominal amount of nickel derivatives, tonnes	**27,636**	26,417
Hedge ratio	**1:1**	1:1
Fair value reserve in other comprehensive income, € million	**–7**	–4
Reclassified to sales in profit or loss, € million	**–27**	–2
Reclassified to cost of sales in profit or loss, € million	**29**	7
Recognized in inventory, € million	**–4**	–4

The nickel hedge accounting programs implemented for the business area Americas and the business area Europe cover a meaningful part of the Group's sales and purchase contracts. Forwards, which correspond to the pricing model of underlying, are used as derivative instrument. Only the spot component of nickel derivatives is under hedge accounting, forward element is recognized in profit or loss. The ineffectiveness is tested regularly. Management estimates that possible ineffectiveness can arise related to credit risk or timing of transactions, but these are estimated to be immaterial.

Master netting agreements and similar arrangements

€ million	2021	2020
Derivative assets		
Gross amounts of recognized financial assets in the statement of financial position	**31**	24
Related financial instruments that are not offset	**28**	15
	3	8
Derivative liabilities		
Gross amounts of recognized financial liabilities in the statement of financial position	**42**	32
Related financial instruments that are not offset	**28**	15
	14	17

Outokumpu enters into derivative transactions with most counterparties under ISDA agreements. In general, the amounts owed by each counterparty on a single day in respect of all transactions outstanding in the same currency are aggregated into a single net amount that is payable by one party to the other. In certain circumstances, e.g. when a credit event such as a default occurs, all outstanding transactions under the agreement are terminated. The termination value is assessed and only a single amount is payable in settlement of all transactions. ISDA agreements do not meet the criteria for offsetting the balances in the statement of financial position, but the right to offset is enforceable only on the occurrence of future credit events. The following table sets out the carrying amounts of recognized financial instruments that are subject to the agreements described above.

Accounting principles

Derivatives are initially recognized at fair value on the trade date, when the Group enters into a derivative contract, and are subsequently measured at fair value.

The presentation of the gains or losses arising from the fair value measurement depends on the purpose of the derivative. The gains or losses arising from fair value changes of effective hedge-accounted derivative contracts are presented in profit or loss congruent with the hedged item. Changes in fair value of derivative contracts, where hedge accounting is not applied, are recognized in EBIT in other operating income and expenses. Changes in fair value of derivatives designated for financing activities are presented within financial income and expenses.

The fair value measurement is based on quoted market prices and rates as well as on discounted cash flows at the end of the reporting period. Fair values of derivatives can in certain cases be based on valuations of external counterparties.

Hedge accounting

Outokumpu applies cash flow hedge accounting on certain nickel derivatives. For each hedging arrangement the relationship between the hedging instrument and the hedged item, the objectives of risk management and the strategy of the hedging arrangement are documented.

The effectiveness of the hedge relationship is documented and assessed when hedging is started and at least in the end of each reporting period. Hedge effectiveness is calculated and assessed between the changes in the fair value or cash flows of the hedged item attributable to the hedged risk and the changes in the fair value or cash flows of the hedging instrument to ensure that these impacts offset one another. Hedge accounting is discontinued if the requirements of hedge accounting are no longer met.

Fair value changes of derivatives designated to hedge forecasted cash flows are recognized in other comprehensive income and presented within the fair value reserve in equity to the extent that the hedge is effective. Such fair value changes accumulated in equity are reclassified in profit or loss, and presented in sales or cost of sales in the period when the hedge accounted cash flows affect the profit or loss. In the certain hedge accounted transaction, the realized gains or losses of the nickel derivatives are first reclassified from fair value reserves in equity to the inventory for a certain period and finally recognized in profit or loss. The fair value changes related to the ineffective portion of the hedging instrument are recognized immediately in profit or loss.

5.5 Financial assets and liabilities

Carrying values and fair values of financial assets and liabilities by measurement category

2021 € million	Measured at Amortized cost	Fair value through other comprehensive income	Fair value through profit or loss	Carrying amount	Fair value	Fair value hierarchy level
Non-current financial assets						
Equity investments	–	24	–	24	24	3
Trade and other receivables	4	–	–	4		
Current financial assets						
Other investments	–	–	28	28	28	1
Trade and other receivables	597	–	–	597		
Hedge accounted derivatives	–	–	9	9	9	2
Derivatives held for trading	–	–	22	22	22	2
Cash and cash equivalents	300	–	–	300		
	902	24	60	985		
Non-current financial liabilities						
Non-current debt	597	–	–	597	730	2
Derivatives held for trading	–	–	2	2	2	2
Current financial liabilities						
Current debt	112	–	–	112	112	2
Trade and other payables	1,811	–	–	1,811		
Hedge accounted derivatives	–	–	17	17	17	2
Derivatives held for trading	–	–	23	23	23	2
	2,520	–	42	2,562		

There were no transfers between levels 1, 2 and 3 during the years. A major part of equity investments at fair value through other comprehensive income at hierarchy level 3 relates to investments in unlisted energy producing companies. The movement in the carrying amounts of these investments presented in note 5.6 represents also the reconciliation of level 3 changes.

2020 € million	Measured at: Amortized cost	Measured at: Fair value through other comprehensive income	Measured at: Fair value through profit or loss	Carrying amount	Fair value	Fair value hierarchy level
Non-current financial assets						
Equity investments	–	48	–	48	48	3
Trade and other receivables	1	–	–	1		
Derivatives held for trading	–	–	6	6	6	2
Current financial assets						
Other investments	–	–	26	26	26	1
Trade and other receivables	385	–	–	385		
Hedge accounted derivatives	–	–	8	8	8	2
Derivatives held for trading	–	–	10	10	10	2
Cash and cash equivalents	376	–	–	376		
	762	48	50	860		
Non-current financial liabilities						
Non-current debt	1,153	–	–	1,153	1,208	2
Current financial liabilities						
Current debt	251	–	–	251	251	2
Trade and other payables	1,246	–	–	1,246		
Hedge accounted derivatives	–	–	11	11	11	2
Derivatives held for trading	–	–	21	21	21	2
	2,650	–	32	2,682		

Accounting principles

The Group's financial assets and liabilities are classified as items at fair value through profit or loss, items at fair value through other comprehensive income and items at amortized cost. The classification is based on Group's business model for financial assets and liabilities, and their contractual cash flow characteristics.

If a financial asset is not measured at fair value through profit or loss, significant transaction costs are included in the initial carrying amount of the asset. Financial assets are derecognized when the Group loses the rights to receive the contractual cash flows on the financial asset or it transfers substantially all the risks and rewards of ownership outside the Group. Accounting principles related to transaction costs and de-recognition of borrowings are presented in note 5.1.

Financial assets and liabilities measured at amortized cost

Financial assets measured at amortized cost include trade and other receivables and cash and cash equivalents. These assets are measured initially at fair value. After initial recognition, they are measured at amortized cost by using the effective interest rate method less accumulated impairments. The accounting principles related to factored receivables and expected credit losses are presented in note 4.5.

Financial liabilities measured at amortized cost include the borrowing and trade and other payables. See note 5.1 for further accounting and fair valuation principles for borrowings and note 4.5 for accounting principles for trade and other payables.

Financial assets at fair value through other comprehensive income

Financial assets at fair value through other comprehensive income include equity investments in listed and unlisted companies. Accounting principles are presented in note 5.6.

Financial assets and liabilities at fair value through profit or loss

Financial assets and liabilities at fair value through profit or loss include derivative instruments. Financial assets at fair value through profit or loss include also investments in debt instrument or money market funds held for trading purposes and intended to be sold within a short period of time. In some cases, also equity investments can be classified in this category.

These financial assets and liabilities are recognized at the trade date at fair value and subsequently remeasured at fair value at the end of each reporting period. The fair value measurement is based on quoted rates and market prices as well as on appropriate valuation methodologies and models.

Realized and unrealized gains and losses arising from changes in fair values of non-derivative financial assets are recognized in market price gains and losses under financial income and expenses in the reporting period in which they are incurred. Accounting principles related to derivatives are described in more detail in note 5.4.

Measurement of fair values

Number of accounting policies and disclosures require the measurement of fair values. Financial assets and liabilities measured at fair value are classified to fair value hierarchy levels based on the source information and inputs used in the fair valuation. In level one, fair values are based on public quotations for identical instruments. In level two, fair values are based on market rates and prices and discounted future cash flows. For assets and liabilities in level three, there is no reliable market source available and thus the fair value measurement is not based on observable market data. Therefore, the measurement methods are chosen taking into account the information available for the measurement and the characteristics of the measured item.

5.6 Equity investments at fair value through other comprehensive income

€ million	2021	2020
Carrying value on Jan 1	**48**	31
Additions	**19**	13
Fair value changes	**–44**	4
Carrying value on Dec 31	**24**	48

Fair value reserve in equity

€ million	2021	2020
Fair value on Dec 31	**24**	48
Fair value at acquisition	**113**	93
Fair value reserve	**–89**	–45

Equity investments at fair value through other comprehensive income include unlisted strategic holdings mainly in energy companies in which Outokumpu does not have control, joint control or significant influence.

These energy companies produce energy to their shareholders on a cost-price basis (Mankala principle) which is a widely used business model among the Finnish energy companies. Under the Mankala principle, shareholders are entitled to receive energy in proportion to the ownership, and each shareholder is severally responsible for its respective share of the costs of the energy company as set out in the articles of association.

Fennovoima

Investments include a holding in Voimaosakeyhtiö SF at fair value of EUR 0 million on December 31, 2021 (Dec 31, 2020: EUR 27 million). The investment provides Outokumpu with approximately 14% indirect stake in the Fennovoima Oy nuclear power plant project. Outokumpu has representation both in Voimaosakeyhtiö SF (two Board members) and in Fennovoima (one advisory Board member as a Chairman of the Finance Committee). The holding gives Outokumpu access to estimated 170 MW power capacity when the project is completed. During year 2021, Outokumpu invested EUR 19 million to Voimaosakeyhtiö SF, and by the end of 2021, Outokumpu had invested in total EUR 112 million (Dec 31, 2020: EUR 92 million) in the shares of Voimaosakeyhtiö SF.

The decrease in fair value in 2021 is mainly driven by estimated increase in the Fennovoima project risk.

Management judgements

Valuation model of energy companies is based on discounted cash flow model. The main parameters are the market and forecasted long-term electricity prices, discount rate, inflation rate, the estimated amount of electricity to be received and estimated production costs.

Additional parameters for Voimaosakeyhtiö SF valuation include e.g. the expected purchase price of electricity under the Mankala principle, cost of debt in Fennovoima Oy, expected project completion date and the overall project risk. The fair value of Voimaosakeyhtiö SF shares is highly sensitive to the valuation parameters and especially to long-term price of electricity, Fennovoima's capacity utilization rate, discount rates for cash flows and the terminal value, inflation rate, project completion date and the overall project risk.

Long-term prices for electricity have been estimated by the management, and are assumed to be at a higher level compared to medium-term historical averages. The long time period to complete the Fennovoima project and to operate the plant affect the reliability of such estimate, and reasonable changes in the electricity price estimate or in other valuation parameters can significantly impact the fair value of the investment. The overall project risk is considered by including a separate project risk factor in the cash flow discount rate. In general, the project risk is considered high with the estimated completion earliest in 2029, and the range of potential fair values is wide.

Accounting principles

Equity investments at fair value through other comprehensive income consists of investments which are not held for trading, and which the Group has irrevocably elected at initial recognition to recognize in this category. These are mainly strategic investments, so this classification is considered relevant.

The investments and divestments are recognized at the trade date. They are included in non-current assets unless there is intention to dispose of the investment within 12 months from the reporting date.

The investments are measured at fair value, and fair value changes are recognized through other comprehensive income and presented net of tax in fair value reserve in equity. The valuation is based on quoted rates and market prices at the end of the reporting period, as well as on appropriate valuation techniques, such as cash flow discounting. Observable market data is used in the valuation when available but also on entity-specific management estimates are applied.

Dividends are recognized in profit or loss. When equity investment is disposed, the accumulated fair value changes are reclassified from fair value reserve to retained earnings.

5.7 Commitments and contingent liabilities

€ million	2021	2020
Mortgages and pledges on Dec 31		
Mortgages	**3,208**	3,203
Other pledges	**13**	13
Guarantees on Dec 31		
On behalf of subsidiaries for commercial and other commitments	**27**	29
On behalf of associated companies for financing	**–**	2
Other commitments for financing on Dec 31	**9**	10

Mortgages relate mainly to securing the Group's financing. A major part of Outokumpu's borrowings are secured by mortgage over the real property of the Group's main production plants. Mortgages include also the business mortgage note to secure a loan for the Kemi mine expansion project.

Outokumpu is liable for its associated company Manga LNG Oy's certain liabilities amounting to EUR 21 million at the end of 2021 (2020: EUR 24 million). In the above table, this liability is reported as other pledges (Outokumpu's shares in Manga LNG Oy), as guarantees on behalf of associated companies, and the part exceeding the share pledge and guarantee as other commitments for financing.

Outokumpu Oyj is, in relation to its shareholding in Etelä-Pohjanmaan Voima Oy, liable for the costs, commitments and liabilities relating to electricity provided by Tornion Voima Oy. These liabilities are reported under other commitments for financing.

Outokumpu has a long-term energy supply contract that includes a minimum purchase quantity. There is uncertainty whether the company will be able to utilize this minimum purchase quantity in full by the end of 2029 or whether there will be additional cost to the company from this contract.

Investment commitments

Outokumpu's share of the Fennovoima investment is about EUR 250 million of which EUR 112 million has been paid by the end of the reporting period. The remaining commitment is expected to be paid during the preparation and construction phases of the project before the estimated completion earliest in 2029 with capital expenditure expected to be some EUR 20 million annually in the coming years.

The Group's other off-balance sheet investment commitments totaled EUR 32 million on December 31, 2021 (Dec 31, 2020: EUR 51 million).

Accounting principles

Unrecognized commitments are disclosed when the Group has an obligation or a pledge to assume a financial liability at a future date.

A contingent liability is a possible obligation that arises from past events and the existence of which will be confirmed by uncertain future events that are not wholly within the control of the entity. Obligations that are not considered probable or where the amounts cannot be reliably measured are also considered as contingent liabilities. Contingent liabilities are not recognized in the statement of financial position but disclosed as off-balance sheet commitments.

6. Other notes

This notes section covers the notes related to the Group structure, as well as other notes that do not directly fall under any of the previous notes sections.

6.1 Disputes and litigations

Claim in Spain related to the divested copper companies

Outokumpu divested all of its copper business in 2003–2008. One of the divested companies, domiciled in Spain, later faced bankruptcy. The administrator of the bankruptcy estate filed a claim against Outokumpu Oyj and two other non-Outokumpu companies for recovery of payments made by the bankrupt company in connection with the divestment. In 2014, the court of first instance in Spain accepted the claim of EUR 20 million brought against Outokumpu and the two other companies. In 2018, the Court of Appeal ruled the case in favor of Outokumpu. Finally, in March 2021, the Spanish Supreme Court ruled the case in favor of Outokumpu and released the company from all claims and liabilities. All legal cases against Outokumpu related to the recovery have now been closed.

Dispute over payment of wages in the US

A class of plaintiffs, consisting of 152 former and 126 current Outokumpu Calvert mill employees, has brough suit against Outokumpu in U.S. federal court with allegations of failure to pay full wages for regular work and overtime work they performed. In November 2021, the court entered a default judgment against Outokumpu with respect to liability as a sanction for alleged misconduct during the discovery phase of the legal proceeding. The process to finally determine the damages is pending in the court. Outokumpu does not consider the potential financial impact of the case material for the Group as a whole.

6.2 Related parties

Outokumpu's related parties include the key management of the company and their close family members, subsidiaries, associated companies and Solidium Oy. Key management includes Leadership Team members and members of the Board of Directors, and their remuneration is presented in note 3.2. The principal subsidiaries and associated companies are listed later in this notes section.

Solidium Oy, a limited company fully owned by the State of Finland, owned 15.5% of Outokumpu on December 31, 2021. Solidium's mission is to strengthen and stabilize Finnish ownership in nationally important companies and increase the value of its holdings in the long run.

Transactions with related partied are carried out at arms-length principles.

Transactions and balances with related companies

€ million	2021	2020
Sales and other operating income	**97**	69
Purchases	**–51**	–37
Dividend income	**7**	–
Trade and other receivables	**36**	21
Trade and other payables	**4**	3

6.3 Subsidiaries

December 31, 2021		Country	Group holding, %
Europe			
Outokumpu AS		Norway	100
Outokumpu B.V.		The Netherlands	100
Outokumpu Distribution France S.A.S.		France	100
Outokumpu Distribution Hungary Kft.		Hungary	100
Outokumpu Distribution Polska Sp. z o.o.		Poland	100
Outokumpu Europe Oy	*)	Finland	100
Outokumpu Ges.m.b.H.		Austria	100
Outokumpu India Private Limited		India	100
Outokumpu Management (Shanghai) Co., Ltd	*)	China	100
Outokumpu Middle East FZCO		United Arab Emirates	100
Outokumpu Nirosta GmbH		Germany	100
Outokumpu N.V.		Belgium	100
Outokumpu Prefab AB		Sweden	100
Outokumpu Press Plate AB		Sweden	100
Outokumpu PSC Benelux B.V.		The Netherlands	100
Outokumpu PSC Finland Oy		Finland	100
Outokumpu (Pty) Ltd		South Africa	100
Outokumpu S.A.		Spain	100
Outokumpu (S.E.A.) Pte. Ltd		Singapore	100
Outokumpu Shipping Oy		Finland	100
Outokumpu S.r.l.		Italy	100
Outokumpu Stainless AB		Sweden	100
Outokumpu Stainless B.V.		The Netherlands	100
Outokumpu Stainless Oy		Finland	100
Outokumpu Stainless Pty. Ltd		Australia	100
Outokumpu Stainless Steel (China) Co., Ltd		China	100
Outokumpu Tornio Infrastructure Oy		Finland	100

December 31, 2021		Country	Group holding, %
Americas			
Outokumpu Brasil Comércio de Metais Ltda		Brazil	100
Outokumpu Fortinox S.A.		Argentina	100
Outokumpu Mexinox Distribution S.A. de C.V.		Mexico	100
Outokumpu Mexinox S.A. de C.V.		Mexico	100
Outokumpu Stainless USA, LLC		The US	100
ThyssenKrupp Mexinox CreateIT, S.A. de C.V.		Mexico	100
Ferrochrome			
Outokumpu Chrome Oy	*)	Finland	100
Long Products			
Fagersta Stainless AB		Sweden	100
Outokumpu Stainless Bar, LLC		The US	100
Outokumpu Stainless Ltd		The UK	100
Other operations			
Outokumpu Americas, Inc.		The US	100
Outokumpu Distribution Benelux B.V.		The Netherlands	100
Outokumpu Holding Germany GmbH	*)	Germany	100
Outokumpu Holding Nederland B.V.	*)	The Netherlands	100
Outokumpu Mining Oy		Finland	100
Outokumpu Stainless Holding GmbH		Germany	100
Outokumpu Stainless UAB		Lithuania	100
Québec Inc.		Canada	100
Viscaria AB	*)	Sweden	100
Visenta Försäkrings AB		Sweden	100

In addition, Outokumpu has branch offices in South Korea, Taiwan, Thailand, The UK and Vietnam.

This list does not include all holding companies or all dormant companies.

*) Shares and stock held by the parent company

6.4 Associated companies

	Industry	Domicile	Ownership, %
Manga LNG Oy	Energy	Finland	45
OSTP Holding Oy	Metals processing	Finland	49
Rapid Power Oy	Energy	Finland	33

Summarized financial information on associated companies

€ million	2021	2020
Carrying value of investments in associated companies	**43**	38
Group's share of total comprehensive income	**15**	2

Based on the impact on the Group's consolidated financial statements, the investments in associated companies are considered immaterial.

Accounting principles

Companies where Outokumpu generally holds voting rights of 20–50% or in which Outokumpu otherwise has significant influence, but not control, are included in the consolidated financial statements as associated companies, and they are accounted for using the equity method from the date significant influence was obtained until it ceases.

The Group's share of the associated company's net result for the period is separately disclosed below EBIT in the consolidated statement of income. Outokumpu's share of changes recognized in the associated company's other comprehensive income is recognized in the Group's other comprehensive income.

If Outokumpu's share of the associated company's losses exceeds the carrying amount of the investment, the investment is recognized at zero value in the statement of financial position and recognition of further losses is discontinued, except to the extent that the Group has incurred obligations in respect of the associated company. The interest in an associated company comprises the carrying amount of the investment under the equity method together with any long-term interest that, in substance, forms a part of the net investment in the associated company.

6.5 New IFRS standards

Adoption of new and amended IFRS standards

Outokumpu has not yet applied the following new and amended standards and interpretations, but adopts them as of the effective date or, if the date is other than the first day of the financial year, from the beginning of the subsequent financial year. These new and amended standards or other not yet effective amendments and interpretations are not expected to have a material impact on Outokumpu's consolidated financial statements.

- **IFRS 17 Insurance contracts** (effective for financial years beginning on or after January 1, 2023): The standard requires a current measurement model for insurance liability with re-measured estimates at each reporting date. The standard can impact the financial reporting of Outokumpu's captive insurance company Visenta Försäkrings AB. However, the company is not material to Outokumpu as a whole, and the impacts are not expected to be material for the Group.
- **Amendments to IAS 1 Presentation of financial statements – Classification of Liabilities as Current or Non-current*** (effective for financial years beginning on or after January 1, 2023): The amendments clarify that liabilities are classified as either current or non-current, depending on the rights that exist at the end of the reporting period, and that classification is unaffected by the expectations of the entity or events after the reporting date. The amendments also clarify what IAS 1 means when it refers to the settlement of a liability.
- **Amendments to IAS 1 Presentation of financial statements, IFRS Practice Statement 2 and IAS 8 Accounting Policies, Changes in Accounting Estimates and Errors – Disclosure of Accounting Policies and Definition of Accounting Estimates*** (effective for financial years beginning on or after January 1, 2023): The amendments distinguish changes in accounting estimates from changes in accounting policies and aim to improve accounting policy disclosures.
- **Amendments to IAS 12 Income taxes – Deferred Tax related to Assets and Liabilities arising from single transaction*** (effective for financial years beginning on or after January 1, 2023): The amendment clarifies the application of the recognition exemption of deferred taxes on a single transaction.
- **Amendments to IAS 16 Property, Plant and Equipment – Proceeds before intended use** (effective for financial years beginning on or after January 1, 2022): The amendment prohibits the deduction of any proceeds from selling produced items from the cost of a property, plant and equipment item while preparing the asset for its intended use. It also clarifies that testing the functioning of an asset refers to technical and physical performance of the asset, not financial performance.
- **Amendments to IAS 37 Provisions, Contingent Liabilities and Contingent Assets – Onerous Contracts** (effective for financial years beginning on or after January 1, 2022): The amendment clarifies that the direct costs of fulfilling a contract include both the incremental costs of fulfilling the contract and an allocation of other costs directly related to fulfilling contracts. Before recognizing a separate provision for an onerous contract, the entity recognizes any impairment loss occurred on assets used in fulfilling the contract.

*Not yet endorsed by the EU.

Parent company financial statements

Income statement of the parent company

€ million	2021	2020
Sales	**783**	664
Cost of sales	**–716**	–565
Gross margin	**67**	99
Other operating income	**27**	0
Selling and marketing expenses	**–2**	–10
Administrative expenses	**–103**	–110
Other operating expenses	**–13**	–8
EBIT	**–24**	–29
Financial income and expenses	**–100**	–58
Result before appropriations and taxes	**–124**	–87
Appropriations		
Group contribution	**164**	111
Income taxes	**0**	–
Result for the financial year	**40**	24

According to the Finnish accounting standards (FAS), the parent company financial statements are presented in addition to the Group financial statements. The parent company's financial statements have been prepared in accordance with Finnish accounting standards. The parent company Outokumpu Oyj's income statement and balance sheet items are mainly internal and are eliminated on the group level except for the external financing and treasury items which are mainly centralized to the parent company.

Balance sheet of the parent company

€ million	2021	2020
ASSETS		
Non-current assets		
Intangible assets	**103**	130
Property, plant and equipment	**2**	2
Financial assets		
Shares in Group companies	**3,685**	3,713
Loan receivables from Group companies	**658**	771
Shares in associated companies	**13**	15
Other shares and holdings	**1**	60
Other financial assets	**3**	6
	4,360	4,565
Total non-current assets	**4,465**	4,698
Current assets		
Current receivables		
Loans receivable	**294**	221
Trade receivables	**94**	67
Prepaid expenses and accrued income	**22**	23
Other receivables	**242**	160
	652	470
Cash and cash equivalents	**257**	332
Total current assets	**909**	801
TOTAL ASSETS	**5,374**	5,500

€ million	2021	2020
EQUITY AND LIABILITIES		
Shareholders' equity		
Share capital	**311**	311
Premium fund	**720**	720
Invested unrestricted equity reserve	**2,332**	2,123
Retained earnings	**188**	164
Result for the financial year	**40**	24
	3,592	3,343
Untaxed reserves		
Accumulated depreciation difference	**1**	1
Liabilities		
Non-current liabilities		
Bonds	**–**	250
Convertible bonds	**125**	125
Loans from financial institutions	**50**	330
Pension loans	**154**	143
Other non-current loans	**2**	1
	330	849
Current liabilities		
Group bank account liabilities	**898**	787
Other current loans	**212**	263
Pension loans	**13**	–
Trade payables	**236**	177
Accrued expenses and prepaid income	**16**	15
Other current liabilities	**76**	65
	1,451	1,307
Total liabilities	**1,781**	2,156
TOTAL EQUITY AND LIABILITIES	**5,374**	5,500

Cash flow statement of the parent company

€ million	2021	2020
Cash flow from operating activities		
Result for the financial year	**40**	24
Adjustments for		
Depreciation and amortization	**14**	12
Impairments	**91**	33
Gain/loss on sale of intangible assets, and property, plant and equipment	**–18**	0
Interest income	**–37**	–38
Dividend income	**–2**	–
Interest expense	**34**	46
Change in provisions	**–1**	1
Exchange gains and losses	**6**	2
Group contributions	**–164**	–111
Other non-cash adjustments	**–8**	8
	–84	–47
Change in working capital		
Change in trade and other receivables	**–30**	0
Change in trade and other payables	**66**	–27
	36	–27
Dividends received	**2**	–
Interest received	**37**	39
Interest paid	**–37**	–45
	2	–6
Net cash from operating activities	**–6**	–55

€ million	2021	2020
Cash flow from investing activities		
Investments in subsidiaries and other shares and holdings	**–19**	–13
Purchases of intangible assets	**–14**	–19
Proceeds from disposal of subsidiaries	**28**	108
Proceeds from disposal of other shares and holdings	**2**	–
Proceeds from sale of intangible assets	**30**	2
Change in other long-term receivables	**105**	21
Net cash from investing activities	**132**	99
Cash flow before financing activities	**126**	44
Cash flow from financing activities		
Directed share issue	**209**	–
Borrowings of non-current debt	**24**	444
Repayments of non-current debt	**–530**	–664
Change in current debt	**50**	85
Cash flow from group contribution	**111**	53
Other financing cash flow	**–64**	97
Net cash from financing activities	**–201**	16
Net change in cash and cash equivalents	**–75**	60
Net change in cash and cash equivalents in the balance sheet	**–75**	60

Statement of changes in equity of the parent company

€ million	Share capital	Premium fund	Invested unrestricted equity reserve	Retained earnings	Total equity
Equity on Jan 1, 2020	311	720	2,123	164	3,319
Result for the financial year	–	–	–	24	24
Equity on Dec 31, 2020	311	720	2,123	188	3,343
Result for the financial year	–	–	–	40	40
Directed share issue	–	–	209	–	209
Equity on Dec 31, 2021	**311**	**720**	**2,332**	**228**	**3,592**

Distributable funds on Dec 31

€ million	2021	2020
Retained earnings	**188**	164
Result for the financial year	**40**	24
Invested unrestricted equity reserve	**2,332**	2,123
Distributable funds on Dec 31	**2,560**	2,312

Commitments and contingent liabilities of the parent company

€ million	2021	2020
Other pledges on Dec 31	**13**	13
Guarantees on Dec 31		
On behalf of subsidiaries		
For financing	**427**	327
For other commitments	**27**	28
On behalf of associated companies		
For financing	–	2
Other commitments for financing on Dec 31	**9**	10

A major part of Outokumpu's borrowings are secured by mortgage over the real property of Group's main production plants.

Outokumpu is liable for its associated company Manga LNG Oy's certain liabilities amounting to EUR 21 million at the end of 2021 (2020: EUR 24 million). In the table, this liability is reported as other pledges (Outokumpu's shares in Manga LNG Oy), as guarantees on behalf of associated companies, and the part exceeding the share pledge and guarantee as other commitments for financing.

Outokumpu Oyj is, in relation to its shareholding in Etelä-Pohjanmaan Voima Oy, liable for the costs, commitments and liabillites relating electricity provided by Tornion Voima Oy. These liabilities are reported as other commitments for financing.

Outokumpu's share of the Fennovoima investment is about EUR 250 million of which EUR 112 million has been paid by the end of the reporting period. The remaining commitment is expected to be paid during the preparation and construction phases of the project before the estimated completion earliest in 2029 with capital expenditure expected to be some EUR 20 million annually in the coming years.

In 2021, Outokumpu Oyj recognized an impairment of EUR 79 million (2020: EUR 33 million) to its shareholding in Voimaosakeyhtiö SF providing ownership to Fennovoima Oy. In the income statement, the impairment is recognized in financial income and expenses. The impairment did not impact Outokumpu Group's consolidated statement of income under IFRS as the shareholding is valued at fair value and the changes in fair value are booked to equity through other comprehensive income.

Auditor's Report (Translation of the Finnish Original)

To the Annual General Meeting of
Outokumpu Oyj

Report on the Audit of the Financial Statements

Opinion

In our opinion

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

Our opinion is consistent with the additional report to the Audit Committee.

What we have audited

We have audited the financial statements of Outokumpu Oyj (business identity code 0215254-2) for the year ended 31 December 2021. The financial statements comprise:

- the consolidated statement of income, consolidated statement of comprehensive income, consolidated statement of financial position, consolidated statement of cash flows, consolidated statement of changes in equity and notes to the consolidated financial statements, including accounting principles for the consolidated financial statements
- the parent company's income statement, balance sheet, cash flow statement and notes to the parent company financial statements.

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

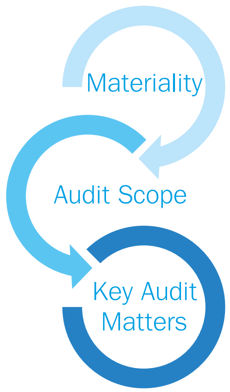
Independence

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

To the best of our knowledge and belief, the non-audit services that we have provided to the parent company and to the group companies are in accordance with the applicable law and regulations in Finland and we have not provided non-audit services that are prohibited under Article 5(1) of Regulation (EU) No 537/2014. The non-audit services that we have provided are disclosed in note 2.3 to the Financial Statements.

Our Audit Approach

Overview



- Overall group materiality: € 35 million (2020: € 35 million)

- The audit scope includes all significant companies, covering the vast majority of sales, assets and liabilities.

- Valuation of goodwill
- Valuation of Property, Plant and Equipment
- Valuation of inventories
- System environment and internal controls
- Valuation of subsidiary shares in the parent company's financial statements

As part of designing our audit, we determined materiality and assessed the risks of material misstatement in the financial statements. In particular, we considered where management made subjective judgements; for example, in respect of significant accounting estimates that involved making assumptions and considering future events that are inherently uncertain.

Materiality

The scope of our audit was influenced by our application of materiality. An audit is designed to obtain reasonable assurance whether the financial statements are free from material misstatement. Misstatements may arise due to fraud or error. They are considered material if individually or in aggregate, they could reasonably be expected to influence the economic decisions of users taken on the basis of the financial statements.

Based on our professional judgement, we determined certain quantitative thresholds for materiality, including the overall group materiality for the consolidated financial statements as set out in the table on the next page. These, together with qualitative considerations, helped us to determine the scope of our audit and the nature, timing and extent of our audit procedures and to evaluate the effect of misstatements on the financial statements as a whole.

Overall group materiality	€ 35 million (2020: € 35 million)
How we determined it	0.5% of sales 2021
Rationale for the materiality benchmark applied	We chose sales as the benchmark because, in our view, it is a stable and an important benchmark in the group's current situation, against which the performance of the group is measured by users of the financial statements. As the group's profitability has not been stable, sales is also a generally accepted benchmark. We chose 0.5% which is within the range of acceptable quantitative materiality thresholds in auditing standards.

How we tailored our group audit scope

We tailored the scope of our audit, taking into account the structure of the Outokumpu group, the accounting processes and controls, and the industry in which the group operates. The group audit scope was focused on the manufacturing companies in Finland, Sweden, Germany, USA, Mexico, the UK and Italy. We obtained, through our audit procedures at the aforementioned companies, combined with additional procedures at the group level, sufficient and appropriate evidence regarding the financial information of the group as a whole to provide a basis for our opinion on the consolidated financial statements.

Key Audit Matters

Key audit matters are those matters that, in our professional judgment, were of most significance in our audit of the financial statements of the current period. These matters were addressed in the context of our audit of the financial statements as a whole, and in forming our opinion thereon, and we do not provide a separate opinion on these matters.

As in all of our audits, we also addressed the risk of management override of internal controls, including among other matters consideration of whether there was evidence of bias that represented a risk of material misstatement due to fraud.

Key audit matter in the audit of the group	How our audit addressed the key audit matter
Valuation of goodwill Refer to notes 4.1 and 4.3 in the consolidated financial statements. As at 31 December 2021 the group's goodwill balance amounted to € 465 million. Goodwill is tested at least annually, irrespective of whether there is any indication of impairment. In goodwill impairment testing, the recoverable amounts are based on value in use determined by discounted future net cash flows expected to be generated by the cash-generating unit. Key assumptions of the value-in-use calculations include the discount rate, the terminal value growth rate, the average global growth in end-use consumption of stainless steel and base price development. Valuation of goodwill is a key audit matter due to the size of the goodwill balance and the high level of management judgement involved in the estimation process.	Our audit of goodwill valuation focused on management's judgement and estimates used. We assessed the appropriateness of these through the following procedures: • We tested the methodology applied in the value in use calculation by comparing it to the requirements of IAS 36, Impairment of Assets, and we tested the mathematical accuracy of the calculations. • We evaluated the process by which the future cash flow forecasts were drawn up, including comparing them to medium term strategic plans and forecasts approved by the Board and testing the key underlying assumptions. • We considered whether the sensitivity analysis performed by management around key drivers of the cash flow forecast was appropriate by considering the likelihood of the movements of these key assumptions. • We compared the current year actual results to those included as estimates in the prior year impairment model to corroborate the reliability of management's estimates. • The discount rates applied within the model were assessed by PwC business valuation specialists, including comparison to economic and industry forecasts as appropriate. We also considered the appropriateness of the related disclosures provided in notes 4.1 and 4.3 in the group financial statements.

Key audit matter in the audit of the group	How our audit addressed the key audit matter
Valuation of Property, Plant and Equipment Refer to note 4.1 in the consolidated financial statements. As at 31 December 2021 the group's Property, Plant and Equipment (PPE) amounted to € 2,573 million, which is 40% of the total assets and 82% of the total equity. The group's business is very capital intensive and there is a risk that the carrying value of the Property, Plant and Equipment is overstated. The carrying value of Property, Plant and Equipment is tested as part of the group impairment testing based on the discounted cash flow model. Valuation of Property, Plant and Equipment is a key audit matter due to the size of the balance and the high level of management judgement involved in the estimation process.	We assessed the appropriateness of the group's method and management's judgement and estimates in the impairment calculations for Property, Plant and Equipment. Our audit work also included testing the operating effectiveness of controls in place to ensure the existence and appropriate valuation of Property, Plant and Equipment. Such controls include e.g. the authorization of additions, disposals and scrapings, and the reconciliation of fixed assets registers to the accounting records. In addition, we performed substantive audit procedures including testing of assets acquired in the year and depreciation of the fixed assets mainly through analytical audit procedures.

Key audit matter in the audit of the group	How our audit addressed the key audit matter
Valuation of Inventories Refer to note 4.4 in the consolidated financial statements. As at 31 December 2021 the group's inventories amounted to € 1,892 million. Inventories are stated at the lower of cost and net realizable value (NRV). Net realizable value is the estimated selling price in the ordinary course of business, less the estimated costs of completion and the estimated costs attributable to the sale. The most important commodity price risk for Outokumpu is caused by fluctuation in nickel and other alloy prices. The alloy surcharge clause as well as daily fixed pricing of stainless steel reduce the risk arising from the time difference between raw material purchase and product delivery. However, the risk is still relevant because the delivery cycle in production is longer than the alloy surcharge mechanism expects and the daily fixed pricing can also deviate from this cycle depending on the timing of the delivery. As the prices for all products to be sold in the future are not known, a significant part of the future prices are estimated according to management's best knowledge in net realizable value (NRV) calculations. Due to fluctuations in nickel and other alloy prices, the realized prices can deviate significantly from the estimates used in NRV calculations. Due to the high level of management judgment and the significant carrying amounts and risks relating to valuation, this is one of the key audit matters.	Our audit work included testing controls in place to ensure proper valuation and existence of inventories. In addition, our audit procedures included, among other things, the following: • We performed tests over the prices of raw materials and verified items in the product costing of work in progress. • We performed tests over the NRV calculations and the assumptions used. • We assessed the adequacy of the obsolescence provision and the management judgement used. • We participated in the physical inventory counting and performed independent test counts to validate the existence of assets and accuracy of the counting performed.

Key audit matter in the audit of the group	How our audit addressed the key audit matter
System environment and internal controls The group has a fragmented system environment. The fragmented system environment introduces risks related to system access, change management and data transfers between the different systems, and we have accordingly designated this as a key audit matter. The group is also implementing a new global IT system, which was taken into use in one new country in 2021. This introduces risks related to temporary increased complexity as well as the processes and data in the new system.	Our response to the risks related to the fragmented system environment included both testing of IT controls and tests of details. We tested the group's controls around access and change management related to the key IT systems. We also tested the group's controls around system interfaces and the transfer of data between systems. We noted certain weaknesses related to access controls to certain key systems. We reported those control weaknesses to the management and performed tests of details to reduce the related risks of material misstatement to an acceptably low level. We tested the group's controls related to the new IT system implementation. We also tested the completeness and accuracy of data migrations relevant for financial reporting.

Key audit matter in the audit of the parent company	How our audit addressed the key audit matter
Valuation of subsidiary shares in the parent company's financial statements As at 31 December 2021 the value of Outokumpu Oyj's subsidiary shares amounted to € 3,685 million in the parent company's financial statements prepared in accordance with Finnish GAAP. The valuation of subsidiary shares is tested as part of the group impairment testing based on the discounted cash flow model. The valuation of subsidiary shares is a key audit matter due to the significant carrying amounts involved and the high level of management judgement involved.	We assessed the appropriateness of the method and management's judgement and estimates in the calculations through the following procedures: • We evaluated the process by which the future cash flow forecasts were drawn up, including comparing them to medium term strategic plans and forecasts approved by the Board and testing the key underlying assumptions. • We considered whether the sensitivity analysis performed by management around key drivers of the cash flow forecast was appropriate by considering the likelihood of the movements of these key assumptions. • We compared the current year actual results included in the prior year impairment model to corroborate the reliability of management's estimates. • The discount rates applied within the model were assessed by PwC business valuation specialist, including comparison to economic and industry forecasts as appropriate.

There are no significant risks of material misstatement referred to in Article 10(2c) of Regulation (EU) No 537/2014 with respect to the consolidated financial statements or the parent company financial statements.

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

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

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

Auditor's Responsibilities for the Audit of the Financial Statements

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

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

- Identify and assess the risks of material misstatement of the financial statements, whether due to fraud or error, design and perform audit procedures responsive to those risks, and obtain audit evidence that is sufficient and appropriate to provide a basis for our opinion. The risk of not detecting a material misstatement resulting from fraud is higher than for one resulting from error, as fraud may involve collusion, forgery, intentional omissions, misrepresentations, or the override of internal control.
- Obtain an understanding of internal control relevant to the audit in order to design audit procedures that are appropriate in the circumstances, but not for the purpose of expressing an opinion on the effectiveness of the parent company's or the group's internal control.
- Evaluate the appropriateness of accounting policies used and the reasonableness of accounting estimates and related disclosures made by management.
- Conclude on the appropriateness of the Board of Directors' and the Managing Director's use of the going concern basis of accounting and based on the audit evidence obtained, whether a material uncertainty exists related to events or conditions that may cast significant doubt on the parent company's or the group's ability to continue as a going concern. If we conclude that a material uncertainty exists, we are required to draw attention in our auditor's report to the related disclosures in the financial statements or, if such disclosures are inadequate, to modify our opinion. Our conclusions are based on the audit evidence obtained up to the date of our auditor's report. However, future events or conditions may cause the parent company or the group to cease to continue as a going concern.
- Evaluate the overall presentation, structure and content of the financial statements, including the disclosures, and whether the financial statements represent the underlying transactions and events so that the financial statements give a true and fair view.
- Obtain sufficient appropriate audit evidence regarding the financial information of the entities or business activities within the group to express an opinion on the consolidated financial statements. We are responsible for the direction, supervision and performance of the group audit. We remain solely responsible for our audit opinion.

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

We also provide those charged with governance with a statement that we have complied with relevant ethical requirements regarding independence, and to communicate with them all relationships and other matters that may reasonably be thought to bear on our independence, and where applicable, related safeguards.

From the matters communicated with those charged with governance, we determine those matters that were of most significance in the audit of the financial statements of the current period and are therefore the key audit matters. We describe these matters in our auditor's report unless law or regulation precludes public disclosure about the matter or when, in extremely rare circumstances, we determine that a matter should not be communicated in our report because the adverse consequences of doing so would reasonably be expected to outweigh the public interest benefits of such communication.

Other Reporting Requirements

Appointment

We were first appointed as auditors by the annual general meeting on 21 March 2017. Our appointment represents a total period of uninterrupted engagement of 5 years.

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 and the information included in the Annual Report, but does not include the financial statements and our auditor's report thereon. We have obtained the report of the Board of Directors prior to the date of this auditor's report and the Annual Report is expected to be made available to us after that date.

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 identified above 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. With respect to the report of the Board of Directors, 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
- 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 on the other information that we obtained prior to the date of this auditor's report, we conclude that there is a material misstatement of this other information, we are required to report that fact. We have nothing to report in this regard.

Other statements based on the decision by the Annual General Meeting

The proposal by the Board of Directors regarding the treatment of distributable funds is in compliance with the Limited Liability Companies Act. We support that the Board of Directors of the parent company and the President and CEO be discharged from liability for the financial period audited by us.

Helsinki 8 February 2022

PricewaterhouseCoopers Oy
Authorised Public Accountants

Janne Rajalahti
Authorised Public Accountant (KHT)

Independent Auditor's Reasonable Assurance Report on Outokumpu Oyj's ESEF Financial Statements

(Translation of the Finnish original)

To the Management of Outokumpu Oyj

We have been engaged by the Management of Outokumpu Oyj (business identity code 0215254-2) (hereinafter also "the Company") to perform a reasonable assurance engagement on the Company's consolidated IFRS financial statements for the financial year 1.1.–31.12.2021 in European Single Electronic Format ("ESEF financial statements"), version Outokumpu-2021-12-31-fi.zip.

Management's Responsibility for the ESEF Financial Statements

The Management of Outokumpu Oyj is responsible for preparing the ESEF financial statements so that they comply with the requirements as specified in the Commission Delegated Regulation (EU) 2019/815 of 17 December 2018 ("ESEF requirements"). This responsibility includes the design, implementation and maintenance of internal control relevant to the preparation of ESEF financial statements that are free from material noncompliance with the ESEF requirements, whether due to fraud or error.

Our Independence and Quality Control

We have complied with the independence and other ethical requirements of the International Code of Ethics for Professional Accountants (including International Independence Standards) issued by the International Ethics Standards Board for Accountants (IESBA Code), which is founded on fundamental principles of integrity, objectivity, professional competence and due care, confidentiality and professional behavior.

Our firm applies International Standard on Quality Control 1 and accordingly maintains a comprehensive system of quality control including documented policies and procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Our Responsibility

Our responsibility is to express an opinion on the ESEF financial statements based on the procedures we have performed and the evidence we have obtained.

We conducted our reasonable assurance engagement in accordance with the International Standard on Assurance Engagements (ISAE) 3000 (Revised) Assurance Engagements Other than Audits or Reviews of Historical Financial Information. That standard requires that we plan and perform this engagement to obtain reasonable assurance about whether the ESEF financial statements are free from material noncompliance with the ESEF requirements.

A reasonable assurance engagement in accordance with ISAE 3000 (Revised) involves performing procedures to obtain evidence about the ESEF financial statements compliance with the ESEF requirements. The procedures selected depend on the auditor's judgment, including the assessment of the risks of material noncompliance of the ESEF financial statements with the ESEF requirements, whether due to fraud or error. In making those risk assessments, we considered internal control relevant to the Company's preparation of the ESEF financial statements.

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

Opinion

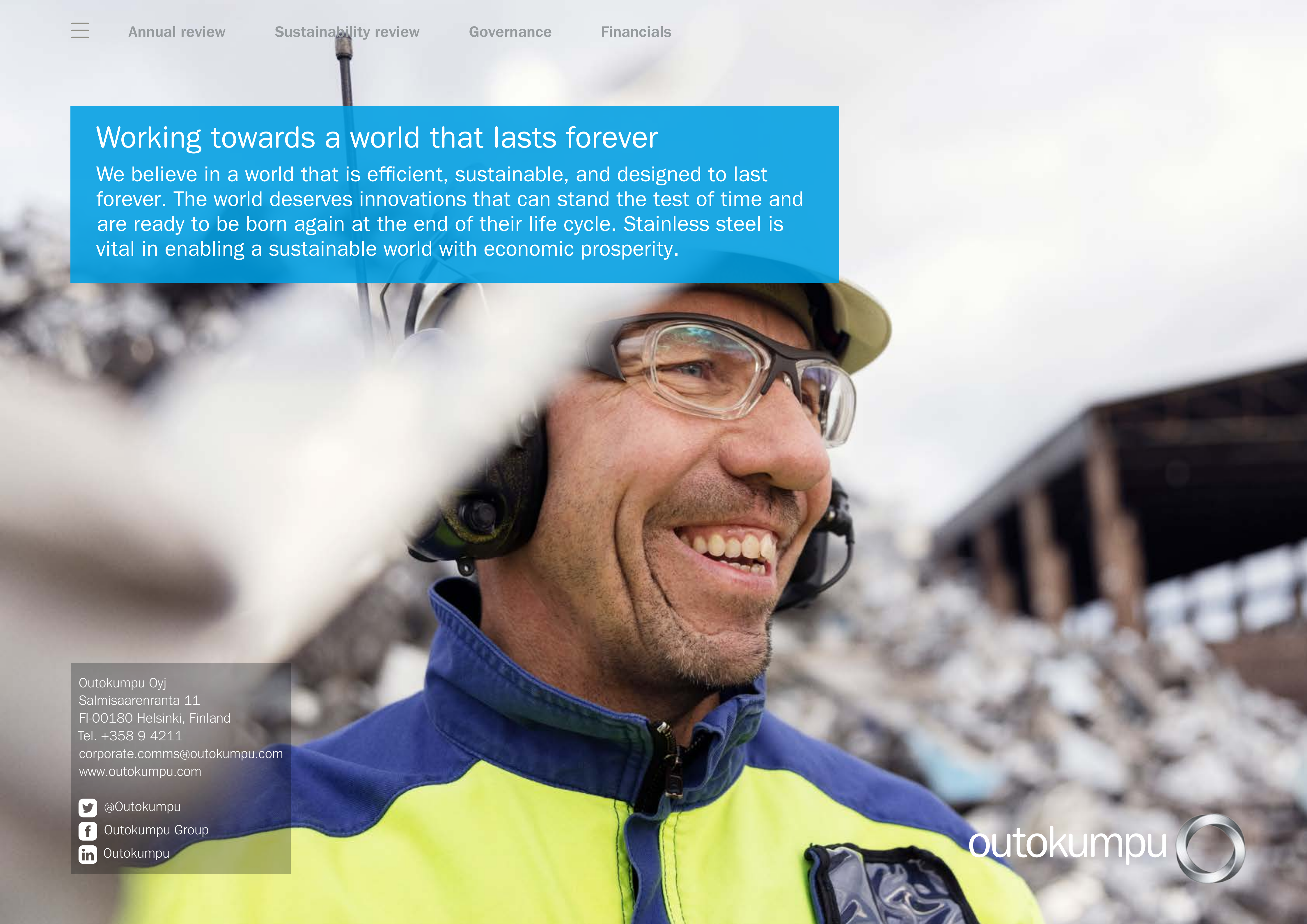
In our opinion, Outokumpu Oyj's ESEF financial statements for the financial year ended 31.12.2021 comply, in all material respects, with the ESEF requirements.

Our reasonable assurance report has been prepared in accordance with the terms of our engagement. We do not accept, or assume responsibility to anyone else, except for Outokumpu Oyj for our work, for this report, or for the opinion that we have formed.

Helsinki, 4 March 2022

PricewaterhouseCoopers Oy
Authorised Public Accountants

Janne Rajalahti
Authorised Public Accountant (KHT)



Working towards a world that lasts forever

We believe in a world that is efficient, sustainable, and designed to last forever. The world deserves innovations that can stand the test of time and are ready to be born again at the end of their life cycle. Stainless steel is vital in enabling a sustainable world with economic prosperity.

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