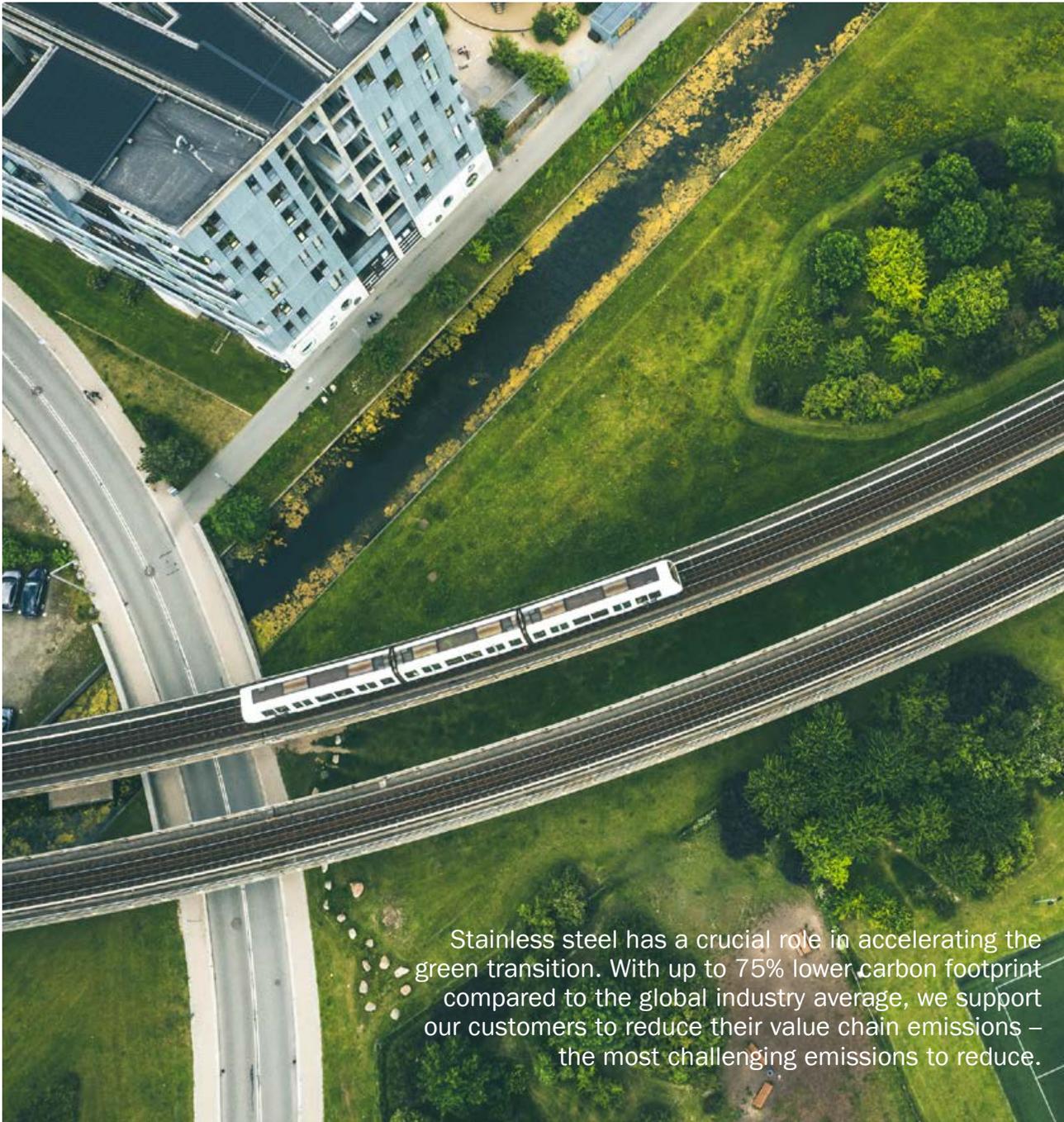


Sustainability review

Climate change is a threat to human well-being and the health of the planet. The science is clear: global warming should be limited to 1.5°C. At Outokumpu, we accelerate the green transition with low-carbon stainless steel and we continue to decarbonize our value chain with our partners towards a world that lasts forever.





Stainless steel has a crucial role in accelerating the green transition. With up to 75% lower carbon footprint compared to the global industry average, we support our customers to reduce their value chain emissions – the most challenging emissions to reduce.

Sustainability strategy

Sustainability is about meeting the needs of the present without compromising the ability of future generations to meet their own needs. Today, we need urgent and bold actions across societies to preserve our planet. Steel plays a pivotal role in the green transition and at Outokumpu, we work to accelerate it every day.

The triple planetary crisis of climate change, nature and biodiversity loss and pollution and waste – induced by people – is pushing nature to breaking point. The global population is expected to grow, leading to urbanization and requiring more energy and – steel.

From the basic structures of society to industry, mobility, and household appliances, the demand for stainless steel will grow. While the steel industry is a major contributor to climate change, accounting for 7–9% of global greenhouse gas emissions, it also plays a pivotal role in accelerating the green transition.

Our vision at Outokumpu is to be the customer's first choice in sustainable stainless steel. We produce stainless steel with up to 75%* lower carbon footprint than the global industry average. All of Outokumpu's stainless steel mills can be considered as significant recycling facilities. We have also set an ambitious climate target to further reduce emissions across our value chain approved by Science Based Targets initiative (SBTi) aligned with the 1.5°C target.

Outokumpu's stainless steel helps to build a more sustainable world, it is 100% recyclable, efficient and long-lasting, and it empowers customers to reduce their own carbon footprint. We were the first in the industry to offer a product-specific carbon footprint, covering emissions from cradle-to-gate, for our products in Europe. Product carbon footprint enables customers to better understand how they are reaching their emission reduction targets.

The cornerstone of Outokumpu's business is to enable growth and innovation through partnerships in sustainable stainless steel. From our latest innovation Outokumpu Circle Green®, with up to 93% lower carbon footprint when compared to the industry average – to Inner Circle, which aims to increase scrap flows across industries – we aim to have a positive impact well beyond the steel industry to drive the green transition forward. We believe that decarbonizing the stainless steel industry is only possible through collaboration.

Sustainability strategy and commitments

Sustainability at Outokumpu consists of three pillars: environmental, social and governance. Outokumpu is also committed to the United Nations' Sustainable Development Goals (find out more on [page 36](#)).

Outokumpu is committed to ambitious climate targets aligned with the SBTi's 1.5°C target. To reach the target, Outokumpu aims to decrease direct (scope 1) and indirect emissions (scope 2) as well as emissions from the supply chain (scope 3) by 42% per tonne of stainless steel by 2030 compared to the 2016 baseline. Outokumpu's long-term target is to achieve carbon neutrality by 2050 in scope 1 and scope 2 emissions. Besides reducing climate impact, Outokumpu's key environmental targets are high recycling material content, energy efficiency and zero environmental incidents.

By 2023, Outokumpu has reduced its emission intensity by 27% from the 2016 baseline, by continuing to implement our sustainability strategy further by increasing the use of recycled materials, low-carbon electricity, energy efficiency, improvements in operations and replacing fossil fuels with renewable alternatives.

Outokumpu made significant steps in 2023 to reduce its scope 3 emissions in the future by strengthening its supply chain sustainability through new partnerships. In addition, Outokumpu took actions to reduce emissions from its own operations by, for example, investing in the carbon neutrality target of the Kemi mine.

Outokumpu's business model is based on circularity and its target is to keep recycling material content over 90%. In 2023, we also conducted a risk analysis on biodiversity. On the basis of the analysis, we are building site-level roadmaps for actions and further evaluating the supply chain impact on nature. During the year, there were 11 environmental incidents in Outokumpu's operations and one at an old mining site. All of Outokumpu's production sites are certified according to ISO 14001.

If all stainless steel were to be replaced by our stainless steel, up to 296 million tonnes of greenhouse gas emissions could be avoided globally. That equals to 737 million passengers' one-way flights across the Atlantic Ocean.*

In terms of social responsibility, human rights are the basis of our business. We respect and protect our people – from Outokumpu's employees to workers in the value chain, customers and local communities.

Outokumpu aims to be among the industry leaders in safety with the vision of zero accidents. We focused on building a strong safety culture by fostering common safety principles, sharing good practices, and learning from past incidents to create increased awareness. From 2022 to 2023, the total recordable incident frequency rate, meaning work-related incidents, fell by 17%.

Our social responsibility targets also include improvement of organizational health, strengthening diversity, equity and inclusion (DEI), and supply chain sustainability. In terms of DEI, we exceeded a diversity target of adding 40 diverse leaders by the end of 2023, compared to the baseline in July 2022: we had already increased the number by 57 at the end of 2023. The overall ambition is to increase the number of diverse leaders by 100 by the end of 2025.

We have also been working on equal pay and on external pay equity certification, which we expect to conclude in early 2024, and we reached our inclusion target: over 60% of group employee respondents agreed on all areas related to inclusion in our People Pulse survey.

* The calculation is based on Outokumpu's carbon footprint compared to the global average of stainless steel: Outokumpu stainless steel CO₂ emissions (2023): 1.52 kg CO₂e per kg of stainless steel. Global average CO₂ emissions (2023): 7 kg CO₂e per kg of stainless steel. (Outokumpu's calculation based on data provided by CRU and worldstainless.)

Highlights in 2023

In 2023, Outokumpu continued to work towards its ambitious climate targets. With the commitment to keep global warming at 1.5°C, we managed to reduce our emissions by 27% from the 2016 baseline. To continue the decarbonization strategy, Outokumpu invested in a pelletizing plant to produce biocoke at our site in Tornio, Finland, to accelerate the reduction of direct emissions by replacing fossil coke with renewable raw materials from biomass. We also took a step towards decarbonization by achieving one third of our target of the Kemi mine becoming the first carbon-neutral mine in the world by 2025.

In addition to reducing emissions in Outokumpu's own operations, we took action to reduce emissions from our supply chain by strengthening the future supply of sustainable raw materials through partnerships with our suppliers in nickel and molybdenum.

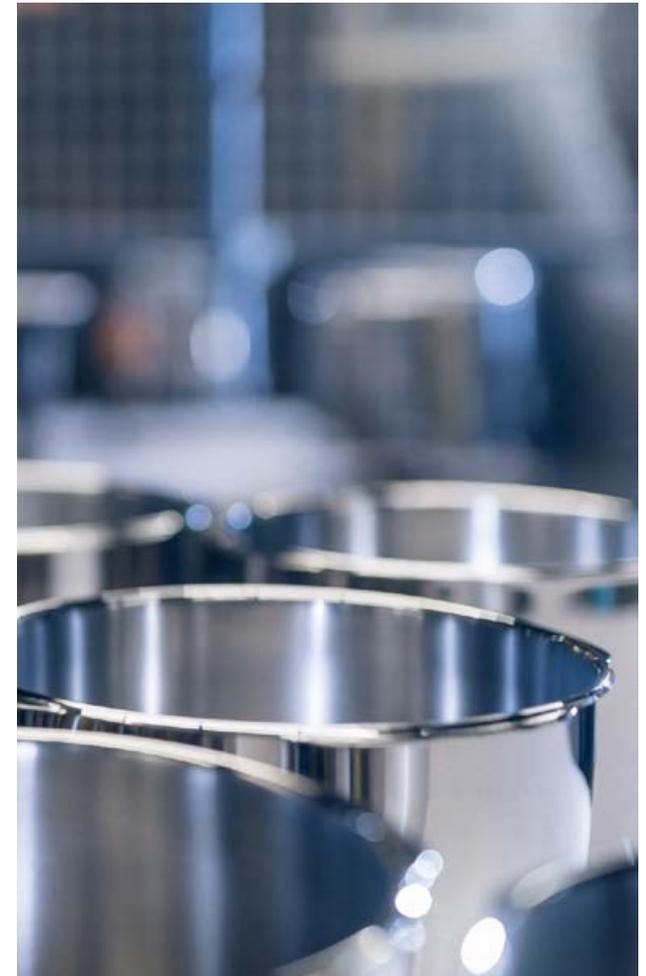
Stainless steel has a pivotal role in accelerating the green transition across industries. To create value for our customers with our low-emission stainless steel, we launched new partnerships during the year with customers from different industries. We joined forces with Siemens, a technology company focused on industry, infrastructure, transport, and healthcare, to reduce carbon emissions in the production of medium-voltage switchgear. The leading manufacturer of premium cookware Fissler, launched a premium cookware made of Circle Green. We also introduced Circle Green to the automotive industry by collaborating with thyssenkrupp Materials Processing Europe, a leading steel and aluminium service centre, and Boysen Group, a premium exhaust system manufacturer. Also Nordic Steel, Norway's leading competence centre in steel, introduced low-carbon stainless steel in Norway. We see a clear demand for low-emission stainless steel across various markets and especially in low-carbon industries such as hydrogen and clean energy sectors.

Collaboration with suppliers and customers is at the core of our sustainability strategy and a great example of that is the Inner Circle initiative launched in 2023. Through the initiative, customers are connected to scrap suppliers to demonstrate a closed loop for low-carbon stainless steel, helping end-customers reach their climate targets.

Our commitment to sustainability received recognition during 2023, and we were acknowledged as a Climate Leader by the Financial Times. To contribute to the public discussion on climate crisis and to demonstrate the pivotal role of stainless steel in green transition, Outokumpu participated in the United Nations Climate Change Conference, COP28 in Dubai at the Finland pavilion.

Outokumpu also received the highest Platinum level recognition for its strong performance in sustainability from EcoVadis, a sustainability rating platform, which ranked Outokumpu among the top 1% of companies assessed. In addition, we finalized audits for the ResponsibleSteel certificate for our business area Europe operating sites. ResponsibleSteel is the world's first global and independent standard for responsibly sourced and produced steel. It provides a tool to develop our sustainability performance through an ambitious and transparent industry-level framework.

In 2023, we supported customers to reduce emissions by 12 million tonnes, corresponding to over 30 million passengers' one-way flights across the Atlantic Ocean.*



The collaboration between Outokumpu and Fissler, a German family-owned premium cookware company, supports the mutual mission of both companies to build things that last – and to show the direction of reducing emissions from the appliance industry.

* The calculation is based on Outokumpu's carbon footprint compared to the global average of stainless steel: Outokumpu stainless steel CO₂ emissions (2023): 1.52 kg CO₂e per kg of stainless steel. Global average CO₂ emissions (2023): 7 kg CO₂e per kg of stainless steel. (Outokumpu's calculation based on data provided by CRU and worldstainless.)

Sustainability highlights in 2023

Climate

Climate leader
 Outokumpu was acknowledged as a Climate Leader by Financial Times as the only stainless steel producer. Outokumpu also received Platinum ranking from EcoVadis, a global sustainability platform, rating Outokumpu among the top 1% of over 100,000 assessed companies.



ResponsibleSteel

Outokumpu finalized the ResponsibleSteel audits for all European manufacturing sites during 2023 and is awaiting certification. ResponsibleSteel assesses companies across the steel industry regarding environmentally and socially responsible production.

Outokumpu at COP28

Outokumpu was invited to join as a partner at the UN Climate Conference (COP28) to take part in discussing the industry's role in the green transition and showcase how sustainable stainless steel plays a pivotal role in the low-carbon economy.

People

Employee engagement index remained high at

77 On a scale from 1 to 100



Increase in diverse leaders

+57 Since 07/2022 baseline, against the target of +40 by the end of 2023.

Emission intensity reduced by 27% from 2016 to 2023



Year	Emission Intensity
16	2.08
21	1.76
22	1.71
23	1.52

Avoided emissions by using our stainless steel

12 million tonnes

corresponding to over 30 million passengers' one-way flights across the Atlantic Ocean.

Our target is to reduce our carbon emissions per tonne of stainless steel by

42% by 2030 compared to the baseline of 2016



1st

ever Ethics and Compliance Week organized

– educating and inspiring employees on responsible and ethical business practices

Improving pay equity



Women's 0.986€ = men's 1€

Circularity & energy

Outokumpu achieved its highest recycled material content ever in 2023:

95%



Circle Green

New partnerships with Siemens, Alfa Laval, and several other customers.

Low-carbon electricity

95% of our electricity mix globally

Work-related accidents decreased from 2016 to 2023

83% TRIFR decreased from 8.7 to 1.5

Our reporting is based on material topics

Outokumpu regularly conducts a materiality analysis to map our stakeholders' expectations and to assess our business impact on sustainability. We updated our materiality analysis in 2021 to further improve our focus on the sustainability topics that are most important for our stakeholders and operations. The analysis also guides our reporting on the relevant topics. During the end of 2023, Outokumpu started to conduct a double materiality analysis in preparation for the Corporate Sustainability Reporting Directive (CSRD), which the company will start reporting on in 2024.

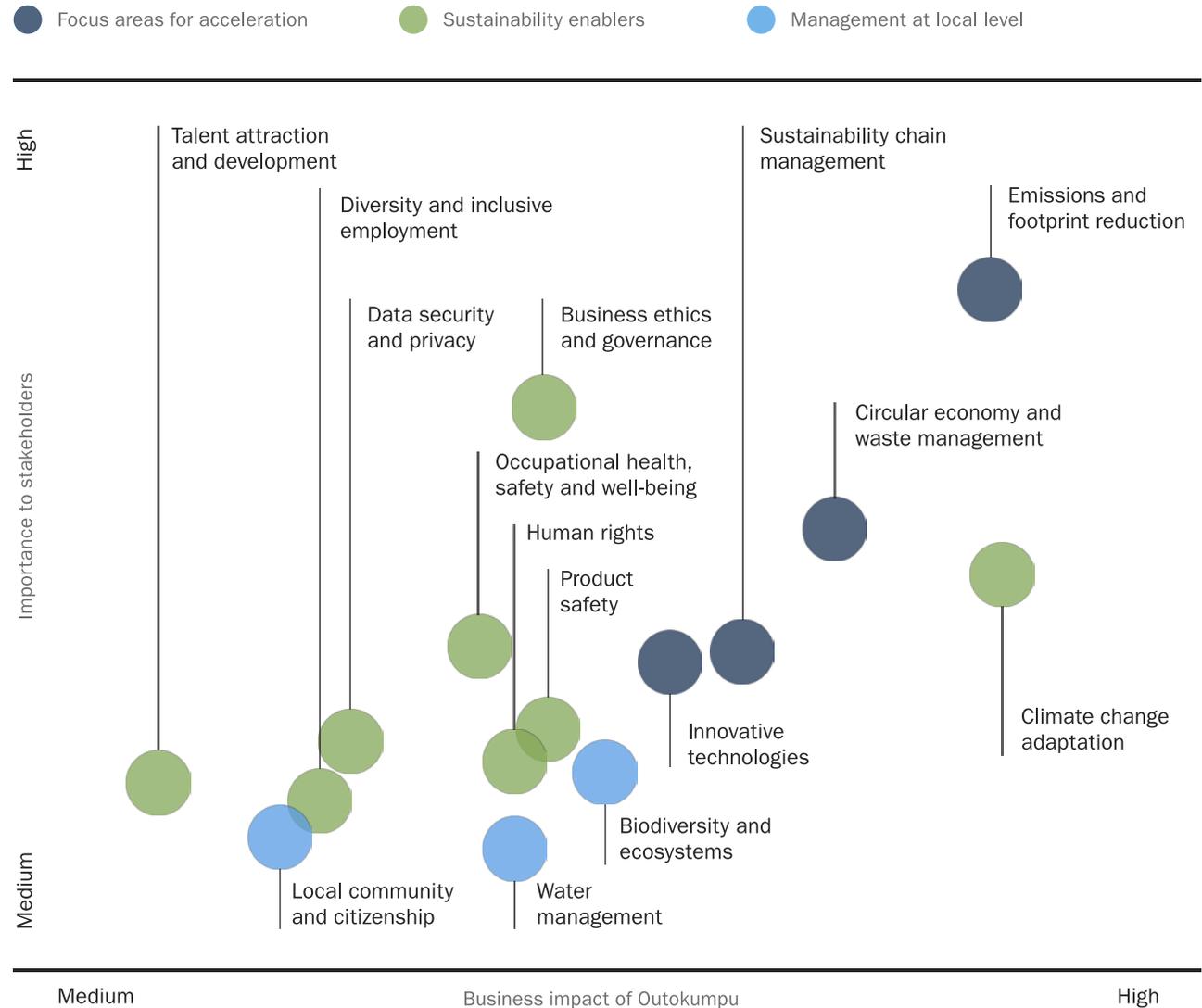
The analysis applies double materiality, which means both the impact of and impact on Outokumpu's business were assessed. As a basis for the materiality analysis, an external advisor conducted an extensive data study of the emerging trends in the steel industry and compared these trends with the material topics of Outokumpu's main peers, customers, and suppliers. This analysis was complemented with an overview of material issues found in global sustainability frameworks. Additionally, interviews with customers, suppliers and other stakeholders, such as investors, employees and non-governmental organizations, were conducted to gain a deeper insight into the relevant stakeholder groups.

Based on the research and internal workshops, a list of the 15 most material topics was compiled. The topics were ranked and prioritized based on the stakeholder rankings and the business impact of Outokumpu on these issues.

Four topics were defined as focus areas for acceleration based on alignment with the business model and high potential for differentiation. Sustainability enablers have been defined to have a lower level of potential for differentiation. The topics defined for management at the local level have value creation potential from execution on the local operating level.

The selection of material topics covers both inside-out topics that are related to corporate strategy as well as outside-in topics that reflect stakeholder concerns.

Materiality matrix



Sustainable Development Goals in our focus

We are a signatory to the United Nations' Global Compact initiative, and we have committed to the UN's Sustainable Development Goals (SDGs). We contribute to several SDGs either through the way we operate or through our products.

Our focus on the SDGs is aligned according to our materiality analysis. Our main focus is on the six goals in the table to the right.

Commitment to global framework and standards

Sustainability is integrated into all our operations, activities, and decision making. The most important policies guiding Outokumpu's sustainability management are the Group's Code of Conduct and the Corporate Responsibility Policy. We expect our business partners and suppliers to follow similar standards. All of our policies are available at outokumpu.com.

All of Outokumpu's production sites are certified according to ISO 9001 quality and ISO 14001 environment management systems, including energy efficiency targets. The functioning of the systems is monitored by both internal and external audits. These management systems are used to implement sustainability issues on the local level. Outokumpu complies with international, national, and local laws and regulations, and respects international agreements concerning human and labor rights, such as the International Bill of Human Rights, the UN Global Compact and the ILO Declaration on Fundamental Principles and Rights at Work. Outokumpu also implements the UN Guiding Principles on Business and Human Rights in its corporate policies.

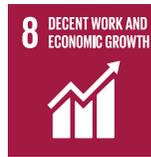
Sustainability is integrated into all our operations, guided by our Code of Conduct and Responsibility Policy. We expect our business partners and suppliers to follow similar standards.

United Nations Global Compact



Goal 7: Affordable and clean energy

Products: Stainless steel is the only long-lasting material for many applications of clean energy, e.g. solar farms and biofuels. **Operations:** We follow sustainable energy supply practices to gain secure and stable energy. **Highlight in 2023:** Share of low-carbon electricity was 95%.



Goal 8: Decent work and economic growth

Products: Stainless steel is a key element in building a modern, efficient and well-being society. **Operations:** We contribute to the community well-being through direct and indirect employment, taxes and other involvement. **Highlight in 2023:** We employed directly over 8,300 employees and progressed well towards a diversity target of adding 100 diverse leaders by the end of 2025 compared to the baseline in July 2022, having added 57. Our Employee engagement index remained high at 77.



Goal 9: Industry, innovation and infrastructure

Products: Due to its excellent properties, stainless steel is a key material in sustainable industrialization and modern infrastructure. **Operations:** We have a long history in developing new steel grades. We work closely with customers to find the most sustainable material solutions. **Highlight in 2023:** Besides enabling new clients and industries to reduce emissions with Circle Green, we launched a new initiative, Inner Circle, to increase scrap flows and circularity.



Goal 12: Responsible consumption and production

Products: Our stainless steel has a high recycled content rate, over 90%. Stainless steel is also the single most recycled material globally. **Operations:** Our business is based on the circular economy. Our mills are among the biggest material recycling facilities in the world. **Highlight in 2023:** Outokumpu achieved its record high recycled material content rate of 95%.



Goal 13: Climate action

Products: Our stainless steel helped our customers' reduce their carbon emissions by 12 million tons in 2023. **Operations:** We have an ambitious climate target aligned with 1.5°C and we are committed to reducing emission intensity across all scopes by 42% by 2030 from the 2016 baseline. **Highlight in 2023:** Outokumpu reduced emission intensity by 27% from the 2016 baseline. We also aim to reach carbon neutrality of the Kemi mine by 2025, and we achieved a third of the target in 2023.



Goal 17: Partnership for goals

Products: We are working together with our customers and partners to decarbonize different industries. **Operations:** We are committed to global sustainability frameworks and to partnering with our whole value chain to drive sustainable development. **Highlight in 2023:** From the automotive industry to cookware, we partnered with Siemens, thyssenkrupp, Boysen Group and Fissler, among others, with products made of Circle Green.

Management of sustainability

Outokumpu's Board of Directors approves Outokumpu's sustainability agenda and targets. On the Group level, sustainability is managed by the Group sustainability team headed by the Vice President, Sustainability, who reports to the Executive Vice President, Sustainability, People and Communications at Outokumpu. 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 and business lines are conducted in a responsible manner and that monitoring, data collection and reporting are duly carried out.

Outokumpu also has an ESG Advisory Council consisting of three external advisors:

- Antoine Allanore, Professor of Metallurgy, Massachusetts Institute of Technology
- Sirpa Juutinen, Independent Sustainability Advisor
- Julia Woodhouse, Board member, member of the Audit Committee, Outokumpu

The council's role is to challenge and comment on the company's sustainability strategy and actions as well as facilitate dialogue between Outokumpu and its stakeholders. In 2023, the council discussed topics such as decarbonization, low-carbon innovations, stakeholder management, social responsibility, ResponsibleSteel certification, and the commercial value of sustainability.



ResponsibleSteel certification process in final stages

ResponsibleSteel is a global certification initiative for the steel industry, to promote responsible sourcing and production of steel. It addresses holistically environmental, social, and governance issues.

Outokumpu applied for the certificate and executed ResponsibleSteel's in-depth auditing process, to enable Outokumpu further create value to its customers by supporting them to choose more sustainably produced steel with a third-party certification. ResponsibleSteel also strengthens the sustainability work at Outokumpu across all areas even further with ambitious approach beyond compliance.

The certification process was extensive, lasting almost two years and including site-specific self-assessments, in-depth on-site audits and interviews with workers and contractors, to name a few. In 2023, Outokumpu finalized all the stage 1 and 2 audits at its manufacturing sites in Europe. Currently, we are waiting for the certification decision, to become the first stainless steel industry company in the Nordics to receive the ResponsibleSteel certificate.

So far, Outokumpu has got excellent feedback on the achievements on decarbonization and ensuring a good and safe place to work, among others. During the process, further actions were identified on how to build on Outokumpu's sustainability ambition – for example on stakeholder engagement, social sustainability as well as biodiversity, and water management, across the value chain. Once the process is finalized, the summary will be public, which we see to increase credibility and transparency of our overall sustainability work both internally and externally.

Making the green transition a reality



Heidi Peltonen, VP, Sustainability at Outokumpu started in her position in 2023. Heidi has dedicated her career to building value with sustainability and partnering with companies to accelerate change across the value chain.

Where is Outokumpu on its sustainability journey?

Outokumpu has set ambitious targets to accelerate decarbonization across the stainless steel value chain, which inspired me to join this innovative company. We have set a target of keeping global warming at 1.5°C. To achieve this target, Outokumpu has put circularity at the heart of our business and accelerated decarbonization across its entire value chain. As part of our three-phase strategy, we are currently integrating sustainability into the core of our business. In the next few years, we will continue to decarbonize our operations, strengthening our sustainable value chain through partnerships, and create value with sustainability for our stakeholders. Our aim is to build a positive impact beyond the steel industry to drive the green transition forward.

Sustainability means more to us than just reducing our climate impact, which is the essence of our strategy. Our people are at the heart of driving innovation to enable a more sustainable future. When it comes to diversity, we aim to have the number of diverse leaders up to 30% in all international management teams by the end of 2025. We have also been developing sustainable supply chain processes in the steel industry together with our suppliers.

Where do you envision Outokumpu to be in future?

Low-carbon stainless steel plays a crucial role in decarbonizing various industries. Renewable energy, hydrogen, electric cars – and even your washing machine at home all depend on stainless steel. The green transition is an opportunity for us, businesses, people, and the planet.

To support our customers even beyond our current product portfolio, we introduced Outokumpu Circle Green®, the world's first stainless steel with up to 93% smaller carbon footprint compared to the global average. Together with our customers, we have been able to offer low-carbon stainless steel products to different industries.

Supply chain emissions represent the majority of companies emissions – usually being the most challenging to reduce. By offering low-carbon solutions, we help other industries reduce emissions in their supply chains. In addition to our low carbon footprint, we want to emphasize our positive impact – how by using our stainless steel our customers reduce their emissions. In 2023, our products reduced our customers' emissions globally by 12 million tons compared to the global average of stainless steel.

Where is sustainability going?

I was once told that sustainability is a journey that continues without a finish line. A few years ago, the discussions around sustainability were more on how to be compliant and how to report the right things; however, today, in addition to that, it is more about how to create value by embedding sustainability into the strategy of a company. This is where I believe Outokumpu has been at the forefront in our industry, and where we can create even more value in the future. At the same time, the world is currently extracting resources faster than they can be renewed and climate change, biodiversity loss and water scarcity are a reality, threatening the well-being of humans and the planet. We have no time to waste - companies should be the ones leading the transition to low-carbon economies.

What continues to drive me, despite the challenges, is seeing the opportunity for companies to transform their business. As COP28 proved with the historical agreement to transition away from fossil fuels, there is still a strong will to keep the 1.5°C target within reach. With new regulation increasing, such as the Corporate Sustainability Reporting Directive with the purpose of re-setting the value creation agenda, sustainability is integrating even more strongly into the core strategy of businesses. For Outokumpu, this means continuously striving to support our customers with solutions that help tackle the biggest crisis of our time.



Climate change and circularity

This decade is critical in terms of climate action. From ambitious climate targets aligned with the 1.5°C ambition, to low-carbon stainless steel as a solution for various industries, Outokumpu accelerates the green transition.

Did you know? Our stainless steel is made of more than 90% recycled materials. It also has up to 75% lower carbon footprint compared to the global industry average.

Decarbonization across the value chain

Climate actions are required across companies' value chains. Outokumpu has a high climate ambition and approved science-based target to keep global warming at 1.5 °C. We are working towards this with a robust strategy, measurable targets, and concrete actions, and we support our customers to further reduce their carbon footprint with up to 75% lower carbon footprint than the industry average.



Our low-carbon products like Circle Green play a crucial role in the green transition of the stainless steel industry.

At Outokumpu, we are committed to mitigating climate change. In 2021, Outokumpu committed to the Science Based Targets Business ambition of keeping global warming at 1.5°C and continues to work towards carbon neutrality by 2050.

By 2030, Outokumpu aims to reduce its direct (scope 1), indirect (scope 2), and supply chain emission intensity (scope 3) by 42% from a 2016 baseline. Emission intensity translates to a tonne of emissions generated by producing a tonne of stainless steel. By 2023, we have reduced our emission intensity by 27% from the 2016 baseline. The key drivers for reduced emissions have been high recycled material content, increased energy efficiency, low-carbon energy, and improvements in our processes.

In 2023, SBTi announced the world's first framework "Steel Science-Based Target-Setting Guidance" for companies in the steel sector, which Outokumpu participated in developing the criteria for. Outokumpu has currently set its SBTi target based on former steel sector guidelines and continues to evaluate the sectoral guideline.

Lowest carbon footprint in the industry

Outokumpu supports customers to reduce their carbon footprint by having up to 75% lower carbon footprint compared to the global industry average. The key enablers for low-emission stainless steel are having its own low-carbon ferrochrome produced in Kemi, high recycled material content and the use of low-carbon electricity.

Outokumpu's latest innovation, Circle Green, has the smallest emission intensity in the world, up to 93% lower carbon footprint than the global average. If all the stainless steel in the world was produced with the same methods used for Circle Green production, it would reduce global carbon emissions from the entire stainless steel value chain by 364 million tons per year. This equals to over 900 million passengers' one-way flights across the Atlantic Ocean from London to New York.

Outokumpu was the first in the industry to offer a product-specific carbon footprint (PCF) for our products in Europe. PCF measures emissions caused by a product from the extraction of raw materials to our gate – from cradle to gate. It enables customers to evaluate their value chain emissions and to minimize their carbon footprint by selective material sourcing, and it helps them reach their climate targets. Making this specific data available means that our customers no longer need to rely on average industry figures for their own carbon footprint calculations. In 2023, PCFs were externally verified besides the last two remaining sites, which are in the process of being validated.

Where do our emissions come from?

Outokumpu's emissions come from production (scope 1), indirectly from the use of electricity (scope 2) and from upstream emissions (scope 3). Due to the very minimal, close to zero, generation of other emissions in the steel industry, we report our emissions as CO₂ emissions.

Our direct emissions come mainly from production, the use of fossil coke, which is used as a reductant in ferrochrome production, LNG (liquified natural gas), and CO gas. Our production is based on electric arc furnaces, which offer the best available technique for stainless steel production. We continuously work to increase the amount of low-emission raw materials, replacing fossil fuels with renewable alternatives and increasing energy efficiency.

Indirect emissions, on the other hand, come from the use of electricity. Switching to low-carbon electricity and improving energy efficiency are the key drivers in reducing further indirect emissions.

Supply chain emissions are, for example, raw materials such as ferroalloys, lime and dolomite, and downstream transportation. Emissions arising from externally used process gas and external services are included in supply chain emissions. A certain number of slabs from the divested melt shops are processed in our operations. This number is seen as own crude steel production in CO₂ emission intensity calculations.

Currently, there are no estimation methods for the complex downstream use emissions of stainless steel available. External case studies indicate CO₂ net savings from steel use in life cycle assessments.

By how much did we reduce our emission intensity?

In 2023, the total specific CO₂ emissions were reduced by 27% compared to the baseline of 2016. The key drivers for reduced emissions were the record high level of recycled

material content, the increased use of low-carbon electricity, and energy efficiency.

During 2022, we launched an ambitious program to improve our energy efficiency by 8% by 2024 from the January-September 2022 level. The strong focus on energy efficiency continued throughout the year, and we are approaching our target of improving our energy efficiency by 8% by the end of 2024.

Our emission intensity from indirect use, electricity, was reduced by about 86% compared to the base year mainly due to use of low-carbon electricity. Electricity emissions are reported as market-based emissions and also published as location-based emissions with the specific emission factors for electricity published by the country statistics.

In 2023, Outokumpu consumed in total 23,296,271 GJ of primary fuels and electricity, a decrease of more than 1,700,000 GJ. The overall energy intensity decreased from 10.5 to 10.4 GJ per tonne crude steel.

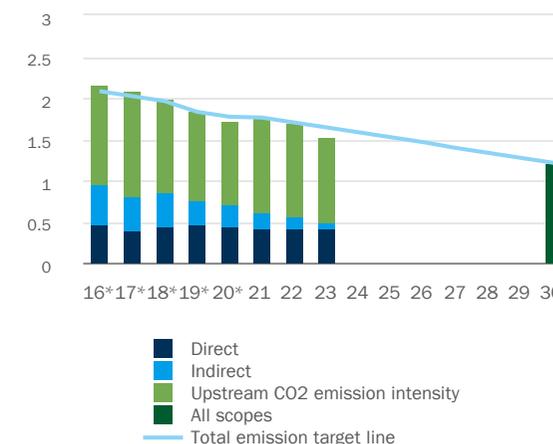
Supply chain emission intensity, originating mainly from the use of primary raw materials, decreased by 14% compared to 2016. The decrease was supported by the high share of recycled material content in our production, 94.6% and by sourcing low emission raw materials.

We are also working with our raw material suppliers to decrease our upstream emissions. We are in the process of integrating CO₂ emissions into purchase decision

making and working on innovations across industries to discover new ways of reducing CO₂ emissions.

See more data on CO₂ emissions in the sustainability data tool on [Outokumpu's website](#).

Outokumpu's CO₂ emission intensity, tonnes of CO₂ per tonne steel



The restructuring resulted in a recalculation of the baseline and in 2% higher emission intensity figures.

* Including discontinued operations

Carbon dioxide emissions

Tonnes	2023	2022	2021	2016*
Direct emissions (scope 1)	1,013,282	1,043,226	1,196,362	1,213,634
Indirect emissions, market based (scope 2)	141,599	368,380	543,567	1,210,872
Indirect emissions, location-based (scope 2)	457,228	459,780	581,521	
Upstream emissions (scope 3 with broader coverage)	2,309,430	2,717,748	3,157,511	3,163,556
Total	3,464,311	4,129,354	4,897,440	5,588,062

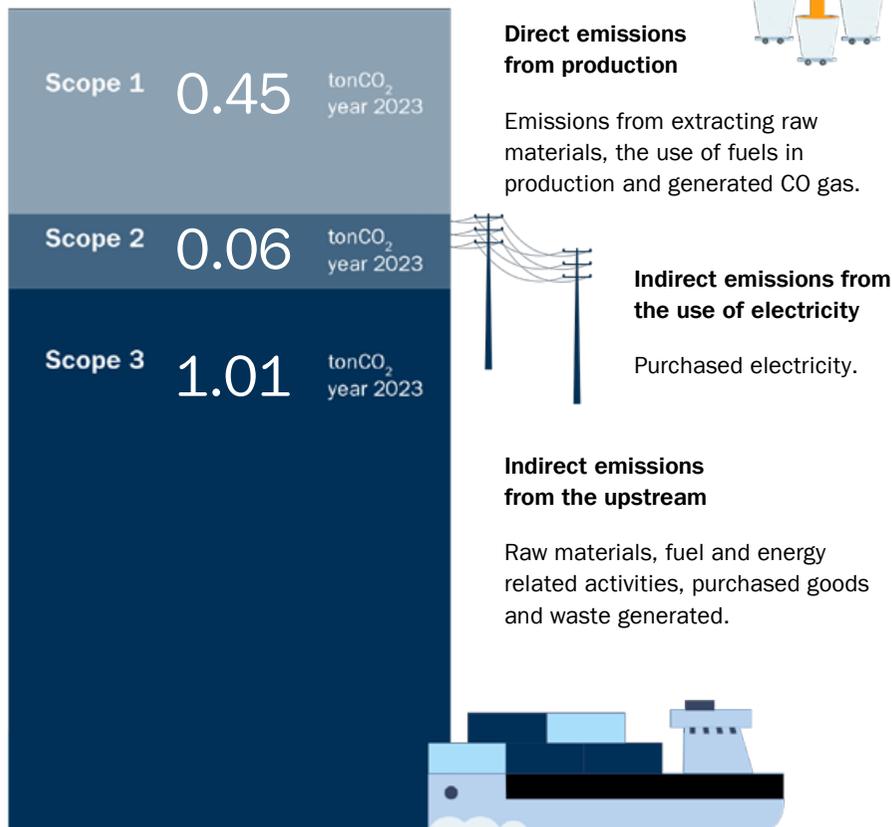
* Base year.

Climate commitment to decarbonize our value chain



Outokumpu's stainless steel has up to 75% lower carbon footprint than the global industry average.

Now



Direct emissions from production

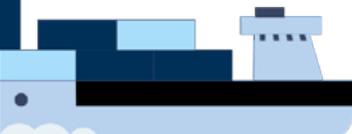
Emissions from extracting raw materials, the use of fuels in production and generated CO gas.

Indirect emissions from the use of electricity

Purchased electricity.

Indirect emissions from the upstream

Raw materials, fuel and energy related activities, purchased goods and waste generated.



During 2023

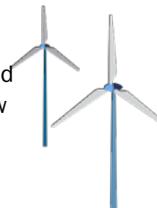
Scope 1–3 emission intensity reduced by

27% compared to the baseline of 2016



Scope 1: Record high recycled material content, increased energy efficiency and use of biocoke to reduce direct emissions.

Scope 2: Improved energy efficiency and increased use of low carbon electricity.



Scope 3: Record high recycled material content, renewable fuels and continued to work towards zero waste.



By 2030

We aim to reduce Scope 1–3 emission intensity by

42% compared to the baseline of 2016



Scope 1: Replace fossil coke with biocoke and switch to renewable fuels.



Scope 2: Continue increasing share of low-carbon energy and improving energy efficiency.



Scope 3: Continue to increase recycled material content and develop low carbon raw materials together with suppliers.



Decarbonizing our own operations

By 2030, Outokumpu aims to reduce its direct, indirect and supply chain emission intensity by 42% per tonne of stainless steel from a 2016 baseline. In 2023, we were more than halfway toward the target with 27% reduced emission intensity. The work towards the mid-term target of 2030 and further to reach carbon neutrality by 2050 continues.

Outokumpu's direct emissions come from fossil coke, fossil fuels and CO₂ gas. The majority of direct CO₂ emissions originate from coke which is used as a reductant in ferrochrome production. For the short-term target, a significant share of fossil coke is to be replaced by biocoke and this would reduce a significant amount of carbon emissions. In the long run, Outokumpu continues to investigate replacing the use of coal-based reductant. In 2023, Outokumpu made an investment decision in a pelletizing plant for biocoke in Tornio, Finland, to accelerate the reduction of direct emissions. This will help to reduce carbon emissions by 82,000 tonnes, which corresponds to the annual emissions of 8,000 Finns.

Reducing emissions from the use of heating fuels, i.e. natural gas, propane, and a small amount of oil is possible either by induction heating or by the use of low-carbon fuels such as biogas. The scenario for the short-term target includes a change to lower emission fuels, such as replacing propane with natural gas where reasonable and plans to use biofuels at some operating sites. The implementation of various digitalization projects is estimated to help increase yield, energy, and material efficiency in our operations which directly impact our carbon emissions.

Further indirect emission reductions will be reached by switching to low-emission electricity and replacing natural and propane gas in heating. The strategy to further reduce indirect emissions from electricity is to expand the low-carbon electricity supply through certificates and increasingly invest in renewable energy projects. In 2023, Outokumpu bought guarantees of origin for 79% of electricity from energy producers. In addition Outokumpu

has access to certificates also through ownership and power purchase (PPA) agreements.

During 2023, Outokumpu founded the EvoEnergy unit to study and explore low-carbon investments, related to our own energy production, carbon capture, and the hydrogen economy.

During 2022, we launched an ambitious program to improve our energy efficiency. Until the end of 2024, Outokumpu now aims to improve its energy efficiency by 8% across the group compared to the January–September 2022 level. Prior to that, Outokumpu's target had been to improve energy efficiency by 0.5% annually.

An additional way to reduce direct emissions in the atmosphere is carbon capture and storage/utilization (CCS/CCU). Slag use in CCU is seen as one of the potential techniques to reduce direct emissions. Flue gas from our own processes could be used in an accelerated carbonation technique and the outcome would be a carbonated slag product replacing cement that can be utilized as construction material.

Magnesium-rich mine tailings can be utilized in CCU by using technology developed by Åbo Akademi University. During 2022–2024, the aim is to pilot the technique and find applications for magnesium-rich residues in carbonation. The project consortium has several industrial partners, institutes, and universities involved and it is funded by Business Finland.

Decarbonizing the value chain

Supply chain emissions account for 67% of our entire emissions. Scope 3 emissions originate from raw materials such as ferronickel, burnt lime, dolomite, as well as other alloying elements. We continuously work together with our suppliers to identify new innovations and opportunities to reduce our supply chain emissions.

Throughout 2023, we established new partnerships to strengthen the supply of sustainable raw materials and reduce emissions from it. For example, we acquired a share in the Canadian company FPX Nickel and signed a



The first of Outokumpu's three new cargo ships became operational in January 2024. They will support us in emission reduction and help us comply with upcoming environmental regulation.

letter of intent with Greenland Resources Inc., a company specialized in low-emission molybdenum, to further strengthen our sustainable supply chain.

During 2023, we managed to keep our recycled material content at an all-time high of 95%. Looking ahead, we aim to increase recycling as steel scrap and recycled metals from any waste management can replace raw material use, although the amount of scrap depends on the availability of suitable scrap. Therefore, we partnered with CRONIMET to further secure the sourcing and retain the supply of high-quality scrap within Northeastern Europe and launched Inner Circle to ensure a sustainable supply chain for steel scrap.

For the short-term target, raw material purchasing takes the carbon footprint of the supplier into account to align the purchasing to suppliers with lower carbon emissions. Both the carbon reduction strategy and actual emission intensity are criteria in our supplier performance evaluation. Only suppliers with a certain level of performance are eligible to become strategic partners for Outokumpu. To ensure that we are reaching our ambitious CO₂ reduction targets, we track and report the CO₂ emissions of our raw material purchases continuously throughout the year, and we engage in trainings and discussions, such as the UNGC Nordic Peer Learning Group on Emissions Reductions Related to Material Sourcing.

Outokumpu's decarbonization roadmap also includes projects to reduce transport emissions. Two projects focus on switching from road transport to electric train transport. At the Kemi mine, Neste MY Renewable Diesel, made from 100% renewable raw materials – such as used cooking oil and animal fat from food industry waste – is used to replace fossil fuels in the machines, trains and alternative power sources, and also at the Tornio mill as well as in the transports between the mine and the mill. The fleets at the Kemi and Tornio operations as well as contractor fleet will completely switch to renewable diesel.

In addition, Outokumpu is acquiring three new cargo vessels from its long-term transport partner, Finnish shipping company Langh Ship to help minimize emissions. Initially, the ships will run on liquefied natural gas, but later that can be directly changed to liquefied biogas without any changes.



Kemi mine to become the first carbon-neutral mine in the world by 2025

Our goal is to make the Kemi mine the world's first carbon-neutral operating mine by 2025. The three key factors in the Kemi mine's carbon neutrality are shifting from fossil fuels to renewables, utilizing low-carbon electricity, and replacing natural and propane gas in heating.

When realized this will mean a reduction of almost 40 million kilos in Outokumpu's greenhouse gas emissions. During 2023, Outokumpu achieved third of this target with the use of renewable fuel which will reduce the Kemi mine's annual greenhouse gas emissions by nearly 11,300 tonnes.

Outokumpu also completed the significant project deepening the Kemi underground mine from 500 meters to 1,000 meters. This will ensure a continuous supply of low-carbon chrome, a key raw material in stainless steel, for decades to come.

Reporting aligned with the TCFD recommendations

Outokumpu acknowledges the recommendations of 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 transitions scenario. Outokumpu has performed a scenario analysis according to scenario well below 2°C and the 1.5°C ambition of the Science Based Targets initiative. More information on the Risks and opportunities and Review by the Board of Directors.

Climate change scenario analysis

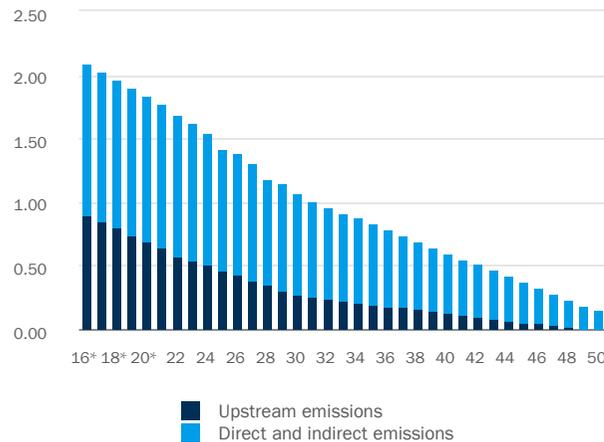
Available scenarios take into account countries' energy and climate-related policy commitments. These provide a baseline scenario against which we assess the additional policy actions and measures needed to achieve the sustainable development scenario (SDS). The SDS sets out the major changes that would be required to reach the main energy-related goals of the United Nations Sustainable Development Agenda, including an early peak and subsequent rapid reduction in emissions, in line with the Paris Agreement, universal access to modern energy by 2030, and a dramatic reduction in energy-related air emissions. The trajectory for emissions in the sustainable development scenario of IEA is consistent with reaching global "net-zero" CO₂ emissions for the energy system as a whole by around 2070. (Source: International Energy Agency or IEA Iron and Steel Technology Roadmap, 2020).

Existing scenarios do not take into account the special features of stainless steel production. Stainless steel is produced mainly from scrap but requires the input of ferroalloys to achieve the right composition. The sliding scale for scrap input which is used in carbon steel scenarios does not apply to stainless steel.

To translate the steel industry scenarios to stainless steel production, it is assumed that the emission intensity of the steel sector is the same as the intensity of the stainless steel production, including scope 3 emissions. The target year for the scenarios is set to 2050 in line with the company's carbon neutrality target. The assumption

Area	Recommended TCFD disclosures	Source of information in reporting
Governance		
Disclose the organization's governance around climate-related risks and opportunities	a) Describe the board's oversight of climate-related risks and opportunities.	Sustainability strategy SR 31–32, FS 131–135
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	Sustainability strategy SR 37, Risks and opportunities AR 19–29, FS 131–135, GC 104–117
Strategy		
Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term.	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
	c) Describe the resilience of the organization's strategy, taking into consideration different climate related scenarios, including a 2°C or lower scenario	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
Risk management		
Disclose how the organization identifies, assesses, and manages climate-related risks.	a) Describe the organization's processes for identifying and assessing climate-related risks.	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
	b) Describe the organization's processes for managing climate-related risks.	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
Metrics & Targets		
Disclose the metrics and targets used to assess and manage relevant climate-related risks and opportunities where such information is material.	a) Disclose the metrics used by the organization to assess climate related risks and opportunities in line with its strategy and risk management process.	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
	b) Disclose scope 1, scope 2, and, if appropriate, scope 3 greenhouse gas (GHG) emissions, and the related risks.	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135
	c) Describe the targets used by the organization to manage climate related risks and opportunities and performance against targets	Decarbonization across the value chain SR 39–46, Risks and opportunities AR 28, FS 131–135

Outokumpu's emissions scenarios, scope 1, 2 & 3, emission intensity



* Including discontinued operations

of the SDS includes the possible CO₂ reduction projects at different maturity grades according to the developed carbon neutral roadmap. It is assumed in the SDS scenario that nickel-containing stainless steel grades are produced mainly by recycling, more heating furnaces are changed to electricity-driven heating and that the biocoke and biofuels projects are further expanded. All projects are to be realized during the journey in addition to the efficiency improvements.

Analyzed scenarios have been estimated under pessimistic, optimistic, and realistic implementation of the projects and technologies for the carbon neutral roadmap to 2050. It is expected that compensation or new carbon capture, sequestration and utilization options for some remaining amount of emissions are needed.

Climate change risks

Outokumpu has assessed physical climate risks and mitigation measures for all sites utilizing risk and control management system for maintaining and sharing the data. None of the physical risks have been identified as a

material risk to our company. Since 2022, Outokumpu has had its long-term incentive plans linked to the company's science-based climate targets.

According to the analysis, the most physical risk is flooding caused by increased extreme weather conditions or storms. Natural and catastrophic hazards could impact deliveries and result in interruptions to operations or facility damage at some sites.

The financial impact of the climate transition risk has been estimated for the target period until 2030. The transition risks to Outokumpu are driven by changes to climate policies, which can have an adverse impact on Outokumpu's operating environment and financial position as an increased price of greenhouse gas emissions and the linked rising electricity price. The transition risk also includes the risk of how decarbonization technologies become viable and effective in the coming years.

The risk of losing customers and market share is assessed and included in the risk management system. Read more about risks in [Risks and opportunities](#).

Opportunities of a low-carbon society

Climate change is one of the three megatrends driving our business. The lifecycle of a stainless steel solution can have a lower climate impact compared to other materials such as carbon steel. As stainless steel is a corrosion resistant and long-lasting material, it stands out in many applications of renewable energy production, such as in high temperature power plants, solar farms, and biofuel plants. This growing market in the transition to a low-carbon society gives Outokumpu the opportunity to increase its revenue.

The continuous increase of material recycling and energy efficiency as well as the shift to use lower emission fuel and electricity have significantly reduced the product's carbon profile. This is driving the competitive advantage of alloyed steel with a low-carbon footprint that customers are increasingly demanding.

Investors are looking to finance sustainable projects or to invest in sustainable companies. The low-carbon profile of Outokumpu's stainless steel enables financial advantages in investments and the transition to a low-carbon society.

Emissions trading and fair competition

86% of Outokumpu's direct CO₂ emissions fall under an emissions trading system (ETS). The share has decreased from 2021 due to discontinued sites. The main risks in the trading phase 2021–2030 of the emissions trading system to Outokumpu involve the pass-through costs of allowances to the electricity price and the protection against carbon leakage by phasing out of free allocations. Free allocations have been decided until 2025.

The European Carbon Border Adjustment (CBAM) measures will phase out the free allocation 2026–2034. Additional uncertainty concerning the reduction of free allocations in the second half of the ongoing period by further decreasing benchmarks and a possible cross-sectoral reduction factor will impact the company's position. Outokumpu forecasts it will have an adequate quantity of the EU emission allowances until the end of this decade, if the projected decarbonization projects are realized.

Allowance prices are expected to further increase especially as the the European Commission's Green Deal requests further greenhouse gas reductions, and the benchmark for free allocation will decrease.

There remains a risk that the carbon leakage avoidance measures in the ETS will not effectively be overtaken by the Carbon Border Adjustment Mechanism. CBAM does not consider the high impact of the scope 2 emissions, nor does it reflect the export of goods from the EU. However, the main impacts of stainless steel raw materials, such as ferronickel, ferrochrome, and ferromanganese are taken into account.

Low-carbon energy and energy efficiency

Our decarbonization strategy is highly focused on energy – both on improving the energy efficiency of our operations and reducing emissions with low-carbon energy.



Our stainless steel is used in many applications that drive the green transition. Energy is also important to us in our production, where we want to use as much low-carbon energy as possible.

Stainless steel operations are energy intensive and our Tornio mill is the biggest single energy user in the Nordics. One of the enablers of our low carbon footprint, recycled steel, needs to be heated to over 1,400°C. The process requires a high amount of electricity as the best available technique for melting recycled steel is to use electric arc furnaces.

Outokumpu is continuously striving to make its production operations more energy and material efficient. Although the melting of recycled steel and the production of stainless steel consume a lot of energy, stainless steel enables energy efficient solutions from a life-cycle perspective by saving energy during its use phase.

Key drivers in energy efficiency improvements

Last year, Outokumpu announced the decision to significantly increase its energy efficiency improvement target and prioritize related investments in the next two years. This year, we continued to implement the ambitious program, with the aim of improving energy efficiency by 8% by the end of 2024 across Outokumpu's operations from the January–September 2022 baseline.

Outokumpu is improving its energy efficiency by:

- minimizing energy losses during material processing,
- optimizing our energy consumption and fully utilizing our energy management system, and
- enhancing overall yield.

The energy efficiency targets have been translated into site-specific targets. Sites will have specific plans and targets for improving energy efficiency and related investments. We continue our efforts in implementing 39 investment initiatives to improve energy efficiency.

Energy efficiency development

Energy efficiency is calculated as a sum of different process steps including ferrochrome. Total energy efficiency was 3.12 MWh/t against the ambitious target of 2.95 MWh/t. During 2023, there was a strong focus on energy efficiency, and we are approaching our target of improving our energy efficiency by 8% by the end of 2024.

During 2023, we implemented approximately 100 projects delivering 215 GWh of energy savings which cover about 35.8% of our commitment of 600 GWh.

Energy used in operations*

Gigawatt hours, GWh	2023	2022	2021
Electricity	3,729	3,973	4,384
Carbon monoxide gas	537	574	678
Natural gas	1,611	1,775	1,990
Propane	462	483	492
Biofuel	7		
Diesel, light and heavy fuel oil and other	125	149	152
Energy	6,471	6,953	7,696
Energy use in GI per tonnes crude steel	10.4	10.5	10.2

* Heating of buildings not included as heating is insignificant compared to process energy. Biofuel use not reported before 2023.

Low-carbon energy

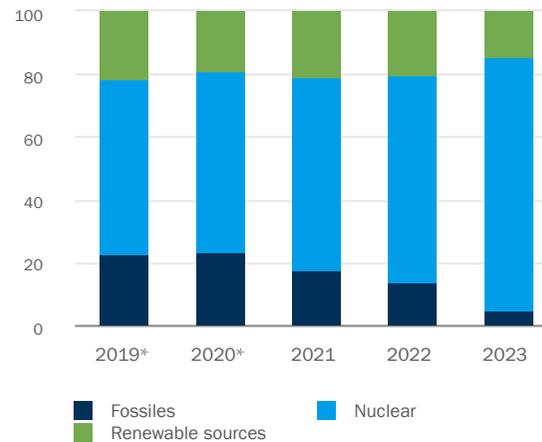
Increasing the share of low-carbon electricity is one of the key elements in Outokumpu’s decarbonization strategy. In 2023, 95% of our electricity sources came from low-carbon (renewable and nuclear) sources. Outokumpu has also signed supply agreements to increase low-carbon energy for wind power and has ownership shares for hydropower as well as combined heat and power. In 2023, Outokumpu also started to evaluate the feasibility of a low-carbon electricity increase through emerging nuclear technology, small modular reactors in Tornio, and founded an EvoEnergy unit to study and explore low-carbon investments, related to our own energy production, carbon capture, and hydrogen economy.

As primary energy sources, we use natural gas, propane, or other fuels, such as diesel. Fossil fuels cover about 80% of our total fuel consumption. Outokumpu does not yet consume any significant amounts of fuel from renewable sources in production processes, but we utilize our own recovered carbon monoxide process gas, which accounts for 20% of our total use of fuel. Outokumpu continues to plan to switch to low-carbon fuels in production to replace natural gas, propane, and other fossil fuels.

Process gases and waste heat are also used to heat buildings on sites. For example, the combined heat and power plant in Tornio, Finland, produces heat for the Tornio site from recovered process gases, and in Dahlerbrück, Germany, we have our own hydropower plant to generate some 10% of the electricity needed in production. Outokumpu is also a shareholder in a wind power park in Tornio.

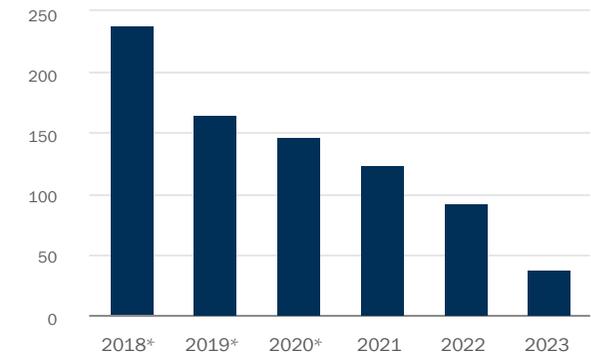
We have centralized energy procurement in order to secure a sufficient energy supply, to ensure predictable, competitive, and stable energy prices, and to optimize the energy portfolio also on low-carbon electricity.

Origin of electricity, %



* Including discontinued operations

Market-based electricity emission factor, kg CO₂eg/MWh



* Including discontinued operations

During 2023, 13% of electricity use came with guarantees of origin from ownership in power production or from power purchase agreements. 79% of electricity came with purchased guarantees of origin.

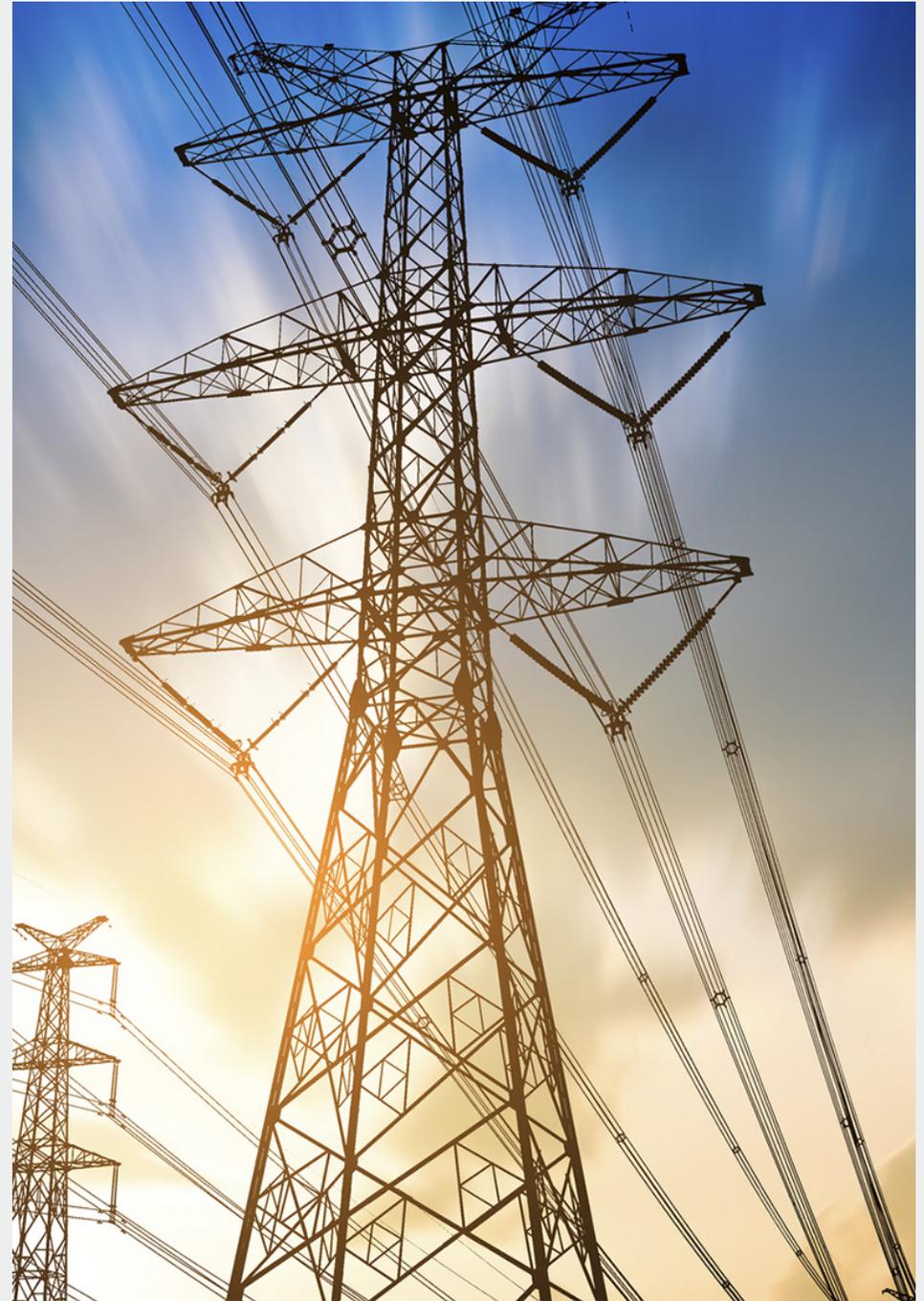
95% of our electricity sources came from low-carbon sources in 2023.

Improving our energy efficiency during 2023

As Finland's biggest single user of electricity with ambitious climate targets, improving energy efficiency is critical to us. In order to tackle the uncertainty and further reduce emissions, Outokumpu has since 2022 had a target to improve energy efficiency by 8% by the end of 2024 across its operations from the January–September 2022 baseline. Achieving this target would correspond to energy savings equivalent to the annual electricity usage of 15,000 households.

During 2023, there was a strong focus on energy efficiency, and we are approaching our target of improving our energy efficiency by 8% by the end of 2024. So far, our actions have resulted in savings of EUR 10 million and a run-rate improvement of 35.8%.

We improved our energy efficiency by optimizing energy consumption, minimizing energy losses during material processing and continually enhancing overall yield. Since the start of the energy efficiency program, Outokumpu has accomplished improvements in recovering and re-utilizing excess heat at its mills and continues to identify additional potential improvements. We continue with the efforts to implement 39 investment initiatives.



Accelerating the circular economy

Outokumpu's business is based on the circular economy: our stainless steel products are made of over 90% recycled material content. Our mills can be considered as significant recycling centers.



In 2023, we recycled a total of 2 126 197 tonnes of metals, equivalent the weight of 291 Eiffel towers.

Accelerating circularity is the key enabler of our low carbon footprint. Increasing the recycled content of stainless steel is the most efficient way for us to reduce the supply chain, scope 3, emissions. By constantly improving and pioneering solutions for the circular economy instead of relying on virgin raw material, we also mitigate biodiversity loss.

Outokumpu has a target to use over 90% recycled material content in its production, and its continuous development is critical for us. Recycled steel from both stainless and carbon steel is our most important raw material. We produce new products out of it, recover and recycle it, and sell by-products from the production process to replace natural resources. All of Outokumpu's stainless steel mills can be considered as significant recycling facilities – only at Outokumpu's Tornio mill do we recycle over one million tons of metals per year.

Record high recycled content rate

Recycled steel from both stainless and carbon steel is our most important raw material. The total input of recycled materials in our steel was 94.6% in 2023 against our target of 92.5%. This includes steel scrap as well as metals that are recovered from our waste streams such as dust and slag. This is our record high rate to date. Counting only the recycled steel, our recycled content was 90.9% in 2023, consisting of pre- and post-consumer scrap in alignment with ISO 14021.

The result was impacted by the good availability of steel scrap. For 2024, we are raising our target of total input of recycled materials from 92.5% to 93%.

Highest recycling material content of 95% in our history drives our emission reduction.

Materials used¹⁾

1,000 tonnes	2023	2022	2021
Alloys	385	448	587
Slag formers	398	418	482
Acids ²⁾	75	33	41
Coal or coke	210	227	272
Biocoke	1	0	0
Other input - gas, electrodes etc. ³⁾	293	236	269
Chromite ore	871	961	1,166
Slab input		52	70

¹⁾ The main materials used in Outokumpu's production are non-renewable, metals or minerals.

²⁾ The 2023 data include 57576 t of recycled acids, not reported in previous years.

³⁾ In 2023 slab input and refractories included in this category.

Recycling in our own processes

One of the enablers of having such a high recycled material content is the recovery and recycling of metals from the production processes, such as from dust and scales. We are continuously looking for the best ways to recycle metals. These side streams are either treated on site or by an external facility for recycling in our melt shops.

In addition to metals, other materials, such as slag formers, acids, and gases, are needed in the production process although they do not become part of the stainless steel products. Some of these input materials are needed to minimize or prevent emissions escaping into the environment. As far as reasonable, these are also recovered and recycled in the process. For instance, the used acids are continuously regenerated for reuse, and the hydrogen from the bright annealing process is recovered in the incineration of the process furnace.

Waste to landfill: zero waste as a long-term target

In our production, all material streams in production are studied carefully to find the means of fully recycling, reusing, or selling them as by-products. As the circular economy is part of our DNA, waste management is our focus and we reuse, recycle, and recover as much material as is reasonable targeting zero waste.

By far the biggest waste streams at Outokumpu are tailings sand from the Kemi mine and the second largest is slag. However, not all produced slags are even categorized as waste as some slags are by-products. In 2023, a new slag

treatment facility started up in Calvert, USA. Due to the start-up late in the year, 86,900 tonnes of slag has been stored during 2023, waiting to be processed in that facility. While included in the generated amount, this volume is not yet allocated to diverted or landfilled.

While waste is recycled whenever possible in our own production, our production still generates landfill waste. Our target for reducing waste going to landfill (other than slag) is a 0.5% reduction per year. In 2023, waste to landfill per tonne of stainless steel increased to 0.65 tonnes from 0.53 tonnes in 2022. This was mainly due to an increase in tailings sand in the mining business. Tailings alone were 0.54 tonnes per tonne of stainless steel. The ultimate target is to have zero waste.

Scales and metals from filter dust or from slag are recycled and acids are regenerated. Other recovered materials like lime, bricks, and some sludges were mostly used in our melt shops to substitute virgin additive materials like slag formers. Oily waste is treated and recovered as energy. Tailing sand is deposited in the pond of the mining area itself. Outokumpu's waste management is described in more detail on [Outokumpu's website](#).

Slag as a by-product

In addition to reducing the total volume of landfill waste from our own operations, we also aim to increase the proportion of materials sold as by-products.

We have developed slag-based products, e.g. for refractory and concrete production and for agricultural purpose. Slag is an essential material in the steel melting process, and it is made from lime or other natural minerals. By-products made of slag mineral reduce the amount of waste generated by steel, save virgin raw materials and lead to lower CO₂ emissions. In 2023, Outokumpu sold or used 0.94 million tonnes of slag as the main by-product of operations.

In 2023, the use rate (including use, recovery, and recycling) of all slag was 87.8 %. The remaining share of slag was sent to landfill. The stored slag is not included in these calculations.

Waste management

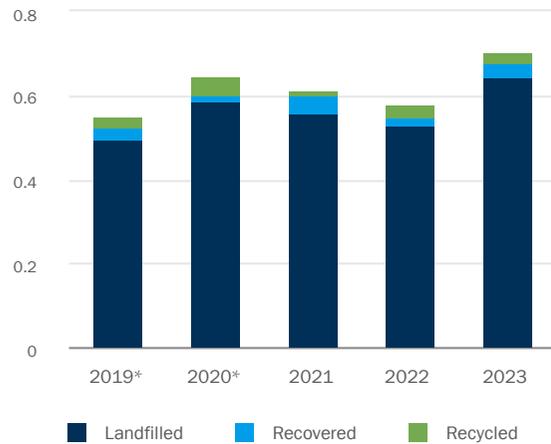
Tonnes	Generated	Diverted from landfill	Landfill
Hazardous waste	142,466	68,370	74,096
Steelmaking dust	71,537	49,832	21,705
Oily sludge	11,011	11,011	
Regeneration & hydroxide sludge	23,111	2,453	20,658
Neutralization sludge	17,760		17,760
Other waste	19,046	5,073	13,973
Non-hazardous waste from stainless steel production	1,553,556	86,881	1,379,771
Scales	12,034	12,034	
Slag ¹⁾	253,323	35,966	130,453
Other waste	83,076	38,881	44,194
Tailing sand (surface impoundment)	1,205,124		1,205,124

¹⁾ The sums do not add up to total generated slag due to the stored slag.

Waste diverted from disposal by recycling

Tonnes	Onsite	Offsite	Total
Hazardous waste			
Preparation for reuse	46		46
Recycling	4,242	9,155	13,396
Other recovery operations	53,422	1,505	54,927
Total	57,710	10,660	68,370
Non-hazardous waste			
Preparation for reuse	1,168	35,432	36,600
Recycling	29,836	7,473	37,309
Other recovery operations	11,968	1,005	12,973
Total	42,971	43,910	86,881
Waste circulation			155,250

Total waste development, tonnes per steel



*including discontinued operations

We are committed to the circular economy with 100% recyclable and resource-efficient stainless steel.



Every piece of scrap matters

Outokumpu launched a new circularity initiative, Outokumpu Inner Circle[®], at the World Circular Economy in Helsinki, Finland, in 2023. The first to join were our supplier partners, **CRONIMET Europe, IMR Recycling, Kuusakoski Recycling, Oryx Stainless Group, Paul Jost, and Stena Recycling AB**. In the next phase, we are inviting our customers to join the initiative and to bring their scrap back into a sustainable closed loop economy.

“With the Inner Circle initiative, we are bringing our customers and scrap suppliers together to ensure an efficient, transparent, and sustainable supply chain for steel scrap. Ultimately, our vision is to create a visible closed loop for steel – a unique example of the circular economy in action,” explains **Max Menzel**, Head of Sustainability & Technical Customer Service at Outokumpu.

In the initiative, Outokumpu’s role is to steer the initiative and create networks between customers and verified scrap suppliers. The scrap suppliers’ role is to ensure a sustainable supply chain by providing scrap from the network’s partners and to distribute the scrap sustainably. Customers who join the program will bring their scrap back into the cycle after processing the material or by the end of the product’s life cycle via the scrap suppliers.

Biodiversity and water management

Biodiversity loss is one of the most severe risks on a global scale, due to biodiversity's vital contribution to human well-being. As businesses rely on natural resources, we must also protect them. By maintaining high recycled material content in our production, we reduce our climate emissions and mitigate biodiversity loss. In addition to the impact of our own operations', we work to minimize the impact of the value chain on biodiversity by, for example, assessing suppliers thoroughly.



While the production of stainless steel does not have a significant effect on its surroundings, we still protect biodiversity in the areas.

Outokumpu uses over 90% recycled material in its production, which reduces carbon emissions and mitigates biodiversity loss. While the production of stainless steel does not occupy or reserve large areas of land or have a significant effect on the biodiversity of the surrounding natural environment, we still need to also rely on natural resources.

Biodiversity

Outokumpu's chrome mine in Kemi, Finland, is an underground mine, without need for land, besides for its old open pit, and without the use of chemicals, and without an impact on climate development. Besides minimizing the use of virgin raw materials, Outokumpu assess its raw material suppliers meticulously, in order to ensure the sustainability of the supply chain. In 2024, we will continue to assess our value chain impact on biodiversity together with our suppliers.

Ferrochrome made out of our own chrome has an estimated 67% lower carbon footprint than the global industry average. In fact, this is our only active mine, with a target of being the first carbon-neutral mine in the world by 2025. In the past, Outokumpu has operated mines both in Finland and elsewhere, and today the old mines are monitored.

In 2023, Outokumpu conducted a study with the purpose of assessing direct biodiversity risks and impacts, based on a systematic and scientific approach. Based on the study, local sites identified an action plan to be implemented during 2024.

Besides the mitigation actions, Outokumpu is engaged in biodiversity initiatives such as building bird hotels at the Kemi mine, establishing insect hotels in Avesta, Sweden and creating a wildflower meadow for bees in Dillenburg, Germany.

While Outokumpu's production sites are not located in sensitive areas, Outokumpu has identified areas of high biodiversity value that are owned by the company or adjacent to our sites. These sites comprise 81% of the total owned land. Find out more about these sites on [our website](#).

Biodiversity

Site	Area in km ²	Percentage
Calvert, US	469.00	19.2%
Dahlerbrück, Germany	0.06	0.3%
Kemi, Finland	916.00	37.4%
Tornio, Finland	6.00	24.5%
Total		81.4%

Recycling water

Water is used in Outokumpu's production process in annealing, pickling, and cooling. The withdrawal of water is metered, and rainwater is estimated by average rainfall and the surface of captured rainwater. It is treated and recycled as much as possible, and only some is discharged to the municipal wastewater system.

All wastewater is treated at the company's own treatment plants or in municipal water treatment systems before it is discharged. The main discharges into water are metals and nitrates. The discharge is measured and supervised by the authorities. In 2023, nitrate emissions were reduced by 54%, mainly as a consequence of the nitrate reduction project in Calvert. Read more about the project on the next page. In addition to the direct nitrate emissions of 764 tonnes, there is additionally 543 tons of nitrate emissions that are not released but go for further treatment in municipal waste water treatment facilities.

Wastewater treatment depends on the contamination of the wastewater. According to the needs, treatments are oil skimming, neutralization, flocculation, and sedimentation to extract metals and, when necessary, a Cr(VI) reduction process. Nitrate is often treated in the municipal water treatment to reduce discharge. In these cases, the steel allocated discharge cannot be monitored. The water impact is managed by municipal treatment operators.

The water used in the production is mainly surface water from rivers and the sea, and often includes rainwater. The impact of water withdrawal is evaluated at sites where river water is used, and where data on the river water are available.

All our production sites have valid environmental permits and impact on water has been assessed either in Environmental Impact Assessments or in discussion with local authorities. For example, regular water impact assessments at our biggest operating site in Tornio and at the mining site in Kemi are available publicly. The most recent assessment from 2021 covers meteorological and hydrological development, factors impacting the sea area, physical and chemical water quality, and fishery impact

and development. The studies show that impact of the stainless and ferrochrome production on the sea area's water quality and the biodiversity changes are minor.

Outokumpu follows up on incidents when target values for emissions are exceeded, even if it does not amount to a permit breach. Target value for emissions can vary from one production site to another depending on local conditions and assessments.

Water withdrawal and discharges

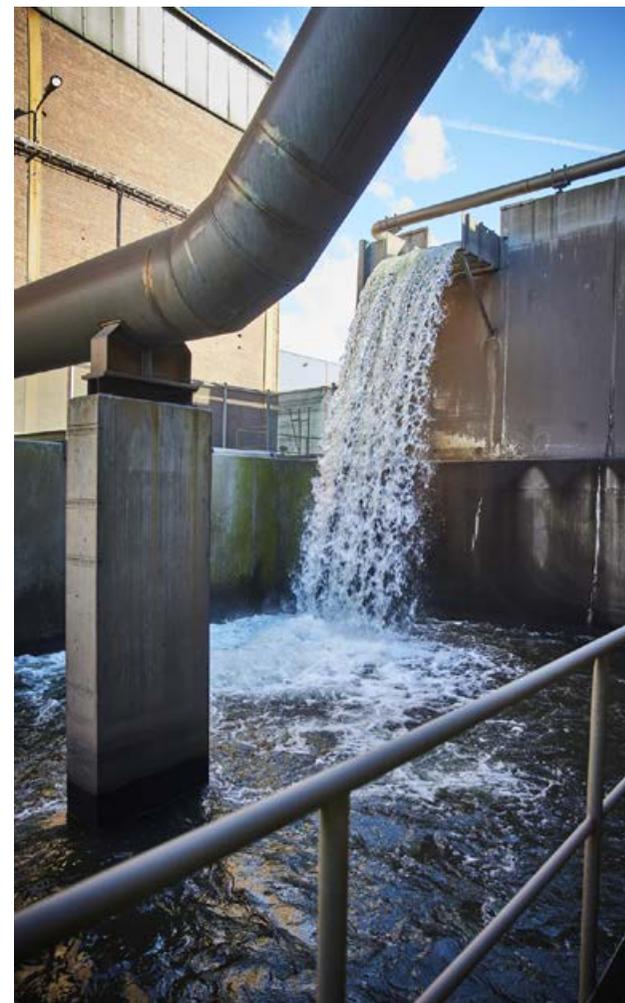
Million m3	2023	2022	2021
Surface water	29.2	29.1	29.2
Seawater	12.8	11.6	13.1
Municipal water	0.4	0.5	0.5
Groundwater	2.8	2.6	2.3
Rainwater	1.3	1.2	1.9
Water withdrawal by source	46.5	45.1	46.9

Water discharges	40.0	32.3	35.0
Cooling water out ¹⁾	20.0	13.7	14.5
Wastewater to municipal treatment	0.9	0.7	0.8
Discharge to surface water	12.7	11.4	12.9
Discharge to sea water	6.3	6.5	6.7

Emissions to water, tonnes

Metal discharges to water, tonnes	29.4	27.9	26.9
Nitrogen in nitrates, tonnes	764	1,648	1,049

¹⁾ In 2023 increase in cooling water out mainly due to improved reporting practice. A production site that has not reported cooling water out before, only withdrawal, is now reporting also on cooling water.



In our operations, we mainly use surface water from rivers and the sea, often including rainwater. All wastewater is treated at the company's own treatment plants or in municipal water treatment systems before it is discharged.

Outokumpu operates a cold rolling mill in San Luis Potosí, Mexico, in a dry, extremely high water stress area according to Aqueduct assessment, where groundwater is a scarce resource for people. The groundwater withdrawal accounts for about 0.21 million m³. Water recycling and treatment at this site are especially ambitious to minimize the groundwater impact, 0.16 million m³ was reused at site. The water discharge was at about 0.09 million m³ to municipal sewer and 0.02 million m³ was used for irrigation. The site has self-committed on specific groundwater use and on high water treatments.

During 2023, Outokumpu also started to define a water stewardship program. The aim is to improve planning and management of water resources in a way that is socially equitable, environmentally sustainable and economically beneficial. Engaging with local stakeholders is one of the key elements of the program development and implementation.



Slag pond
October 17, 2023

Improved water management through reduction project

In Calvert, Alabama, Outokumpu's stainless steel is produced from melting to finishing. The process requires use of water, for example, to cool high-temperature slag. Part of the cooling water used in the mill is pumped from the nearby river, and later discharged back, after being treated in the wastewater treatment plant. However, even though treated, the water contains nitrates that are being generated in the stainless steel manufacturing process, specifically in the pickling lines.

The Calvert team decided to take action on how to reduce nitrates in the water. After receiving an official approval from the state, around 800-meter pipe was built to take the used cooling water containing nitrates from the acid regeneration plant in the mill into a separate pond with a clay liner.

“The project was fully implemented in mid-September. Looking at the annual data from the year 2023, we can see that we reduced nitrates discharged to the river close to 35%. As a result, the actions taken improve the water ecosystem of the river”, tells **Wayne Denton**, Director, Environmental Health Safety and Security at Outokumpu’s mill in Calvert.”

The team in Calvert has implemented a water conservation project before, saving more than 5 million gallons of water annually, since 2022, and they continue to develop environmental projects to conserve the local environment.

Minimizing impacts on the environment

We aim to reduce our impact on the environment by proactively developing our production processes, energy and material efficiency. Outokumpu's growing environmental efficiency is based on long-term efforts and continuous improvement.



During the last years, from 2019 to 2023, we have been able to reduce our environmental incidents significantly, from 24 to 12 per year.

Outokumpu continuously improves how it protects the environment, from reducing carbon emissions to mitigating nature loss. Stainless steel production impacts the environment also through dust emissions, ferrochrome production processes discharging into the air, water used and discharged from production, energy use, and waste generated.

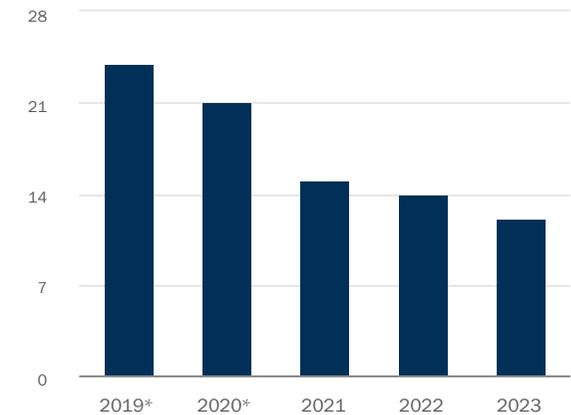
Environmental compliance

Our environmental network closely follows the environmental performance of our operations, their permit status, and legal compliance. The network conducts internal site audits in the production units according to risk screening. Environmental incidents have been reduced continuously.

In 2023, there were three environmental permit breaches at operational sites, none of which related to water emissions, and one at an old mining site. In total, there were 12 environmental incidents, 11 in operations and one at old mining sites. Outokumpu reported each incident to the environmental authorities, and carried out corrective actions immediately or resolved the incidents together with the authorities. No environmental damage was detected, and no fines were declared in 2023.

As our main raw material is recycled steel, we take all possible precautionary measures to check the input material for any unwanted content, such as mercury and radioactive contaminated material. We work together with our suppliers to decrease the share of unwanted materials in our production processes. All input material, the liquid steel and waste gas of the melting process, is controlled regarding radioactive contamination.

Total number of environmental incidents at operational sites



Includes environmental incidents rated as at least medium category incidents and permit breaches. No severe incidents occurred in 2023.

* Including discontinued operations

Dust emissions remained low

Steel melting and rolling processes generate dust and scales that are collected, treated, and, whenever possible, recycled in our own production. For example, raw material metals, such as nickel, are recovered from dust, sludges, and scales in recovery plants. Our dust filtering systems are extremely efficient and remove 99% of the particles.

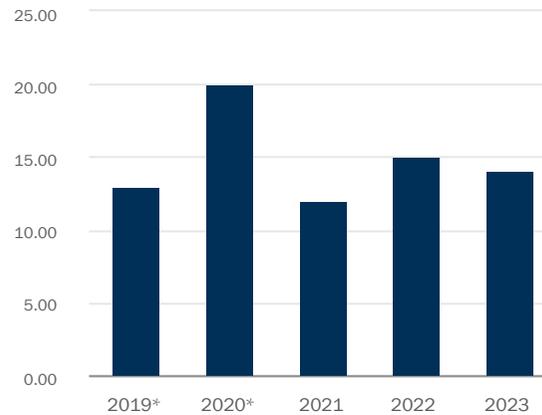
The measured particle emissions from all of our production processes were 182 tonnes in 2023. A large share of the particles, 104 tonnes, were emitted from the ferrochrome production process. However, the emission measurements include high uncertainty, causing a remarkable fluctuation in the results year by year. The level of dust emissions from the melt shops is within the limits of environmental permits and in line with BAT levels. No significant further reduction is expected.

Emissions to air

Tonnes	2023	2022	2021
Dust	182	223	216
Nitrogen oxides	1,535	1,568	1,887
Sulfur oxides	253	220	241

Grams per tonne crude steel	2023	2022	2021
Particle emissions from the melt shops	14.0	15.3	12.2

Steel melt shop particle emissions, grams/t



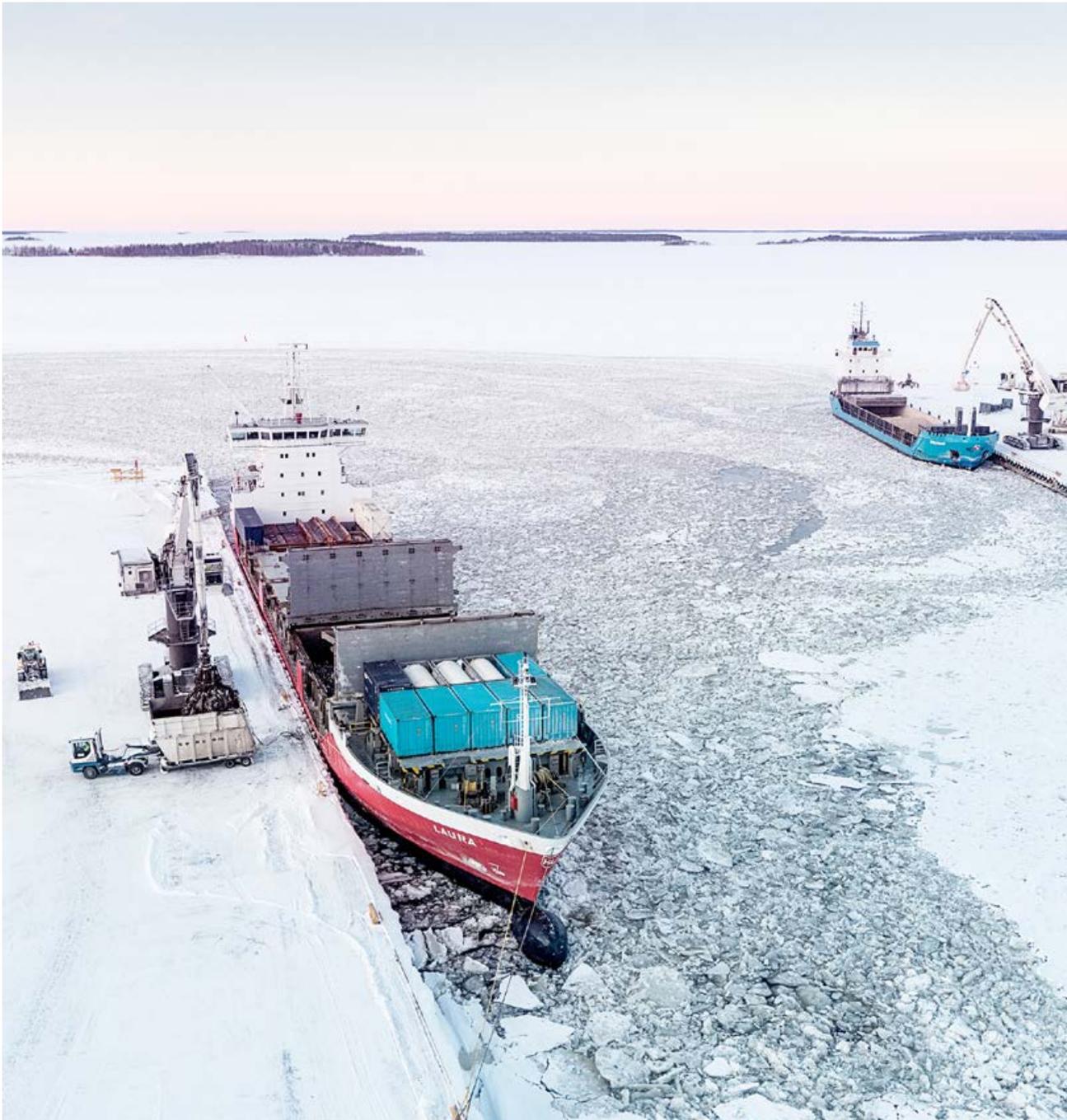
*including discontinued operations

Limited impacts of the mining operations

Outokumpu operates the only chrome mine in the EU, located in Kemi, Finland. We are a member of the Finnish Network for Sustainable Mining, and the Kemi mine is committed to the Finnish sustainability standard for mining. During 2023, Outokumpu also achieved a third of the carbon neutrality target for the Kemi mine by switching to renewable fuels. Outokumpu will continue to work on switching to low-carbon energy, finding alternative solutions to replace natural gas and reducing value chain emissions as close to zero as possible.

The environmental impacts of the mine are very limited due to the nature of the process. The minerals are in oxide form and very stable and chemicals are not used in the process, which is based on gravity separation. The Kemi mine is almost self-sufficient when it comes to water as it recycles water on site and collects rainwater. The underground mine takes drilling water from old open pits (rainwater), and drilling water is also recycled inside the underground mining process. All dewatering from the mine is pumped to the closed circuit of the tailings site and concentrator plant on the surface level.

The Kemi mine discharges 2,522,000 m³ of water from the area, including rainwater. The biggest impact on the environment from the mine is nitrates in the discharge water, which originate from explosives. However, the amount of nitrates is reduced by natural processes in the internal water recycling system of the mine site. Another environmental aspect is chlorites from underground mine water that originates from natural geological formations. The land use of mining is limited to the existing mining area as the mining is underground. Tailing sand is deposited in the tailing ponds of the mine area which will be landscaped as a forest when full.



Sustainable supply chain

Outokumpu is a part of the global supply chain by producing stainless steel for leading brands in demanding industries around the globe.

Together with our suppliers, we accelerate the green transition and eliminate any environmental or social harm, across the stainless steel value chain.

Fostering a sustainable supply chain

Our vision is to be the leader in sustainable procurement by embedding circularity and responsible sourcing of materials, products, and services in the core of all procurement decisions without compromising on quality or financial efficiency.



We want to provide a traceable supply chain and therefore we look beyond our direct suppliers.

Sustainable supply chain management is one of the priorities in our sustainability work at Outokumpu. We support our suppliers towards more sustainable operations and eliminate any environmental or social harm, across the stainless-steel value chain, to foster human rights and accelerate the green transition.

Under the heading of sustainable supply chain management we combine several activities, all with one goal: creating a transparent, monitored and responsible supply chain with partners that we know and that fulfil our high standards – from the trader all the way back to the mine where our raw material is coming from.

In 2023, we focused on improving the supply chain transparency and solidifying processes to evaluate supplier sustainability performance. As a result, our supply chain mapping and data gathering now covers a broader scope, even beyond direct suppliers. In addition, we developed the supply chain risk management processes by utilizing our global risk and control management process and system, and by expanding the country based risk rating to cover all categories.

Supply chain management and policies

To produce and offer sustainable stainless steel for customers, we provide a traceable supply chain and have stringent requirements on our suppliers in place.

Outokumpu's supply chain activities are guided by the United Nations Guiding Principles on Business and Human Rights (UNGP), and the principles are integrated into our our Supplier Code of Conduct, Supplier Requirements, and Human Rights Policy. We are committed to the Modern Slavery Act and take into account the OECD Due Diligence

Guidance for Responsible Supply Chains. Implementing the ResponsibleSteel standards into our operations and supply chain is an ongoing commitment.

All our suppliers must commit and adhere to the following requirements:

- Suppliers need to act in accordance with all applicable laws and regulations.
- All suppliers and subcontractors are expected to comply with our Supplier Code of Conduct or have their own similar Code of Conduct. Outokumpu's Supplier Code of Conduct covers the following key ethical principles: safe and healthy workplace, sustainable future, human rights and dignity, and good corporate citizenship.
- Outokumpu's Supplier Requirements set the minimum criteria regarding sustainability and ethical standards, safety, environmental considerations, quality management, supply and production control, product liability, financial statement, intellectual property rights, confidentiality and security, audits, and business contacts.
- Suppliers need to maintain a quality management system.
- Suppliers need to clearly define, document and share their processes including material traceability.
- Outokumpu's general terms and conditions.

Unified procurement for sustainability excellence

Building upon our commitment to sustainability, in 2023 we have integrated the raw material and general procurement functions into one procurement organization. Raw materials are all ingredients that are in the steel we produce. General procurement covers the purchasing of

goods and services needed for our production activities and everything else we do at Outokumpu.

The unified structure not only optimizes efficiency but positions us to navigate the dynamic global procurement landscape with resilience and foresight. The two areas remain, but the processes will be harmonized.

We want to provide a traceable supply chain and therefore we look beyond our direct supplies. We have continued to extend the documentation of our suppliers beyond tier 1, especially in the raw material area.

Outokumpu has also continued the collection of supplier-specific CO₂ emission values for selected materials for the reporting of scope 3 CO₂ emissions and an improved forecasting tool. New materials have been identified and were included in the collection process in 2023.

We are actively preparing for the European Commission Sustainability Reporting Directive and the Carbon Border Adjustment Mechanism by assessing supply chain data and devising actions to meet these forthcoming expectations.

Supply chain due diligence

Continuous development of supply chain transparency and monitoring is one of the priorities in our sustainability work. Outokumpu applies a risk-based approach across all supplier management stages: from the onboarding of a new supplier to regular evaluations and assessments during the partnership with the supplier.

Country-level risk assessment is one key tool for supplier and supply chain risk mapping. The assessment is based on the supplier's operating countries and country risk indices for trade sanctions, conflicts, state of the law, human rights, and the environment.

Additionally, suppliers are assessed against, for example, available certifications, previous audit results, self-assessments such as EcoVadis, and overall performance scorecard results.

Based on these indicators, suppliers are selected for on-site reviews. Those reviews vary from site visit, to social audit to human rights impact assessment, depending on the identified risk.

Onboarding

A potential supplier is qualified before they can be approved and added to the Outokumpu supplier portfolio. In the qualification process, the potential risks and/or opportunities are identified and evaluated. The identification of risks follows Outokumpu's Know Your Business Partner Instruction and utilizes country-level sustainability and compliance risks indices.

The onboarding process ensures the supplier commits to comply with the Outokumpu Supplier Code of Conduct and

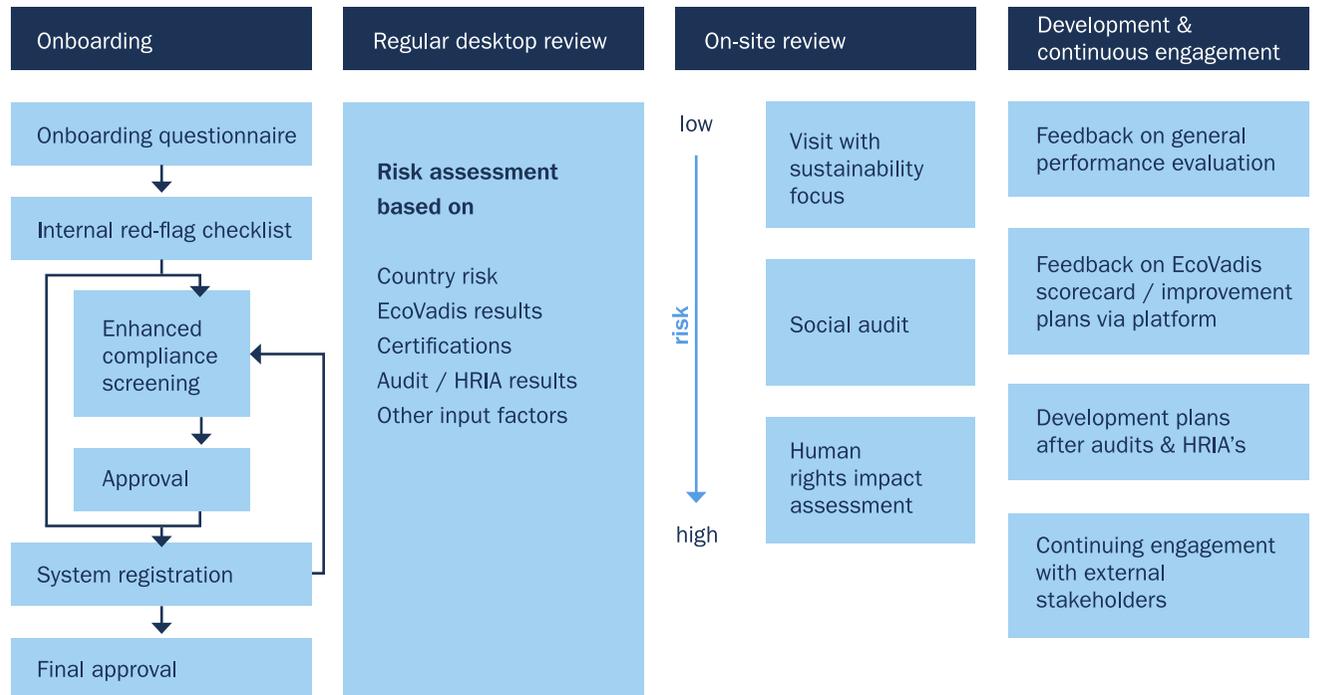
Supplier Requirements and can provide conforming raw materials, products, or services on a consistent basis. All new suppliers go through a compliance screening for sanctions before any business is initiated. Additional financial screening is carried out for selected suppliers.

Monitoring

Outokumpu monitors its suppliers through self-assessments, screenings, and audits. The majority of our suppliers also go through a monthly compliance screening for sanctions.

The EcoVadis platform is used for self-assessments, which focus on the environment, labor and human rights, ethics, and sustainable procurement. Already 45% of raw material suppliers (70% of raw material spend) participate in

Supply chain due diligence



EcoVadis and the invitation of general procurement suppliers has been initiated.

In general procurement, we completed a three-year project on extended self-assessments for key suppliers. Outokumpu's self-assessment questionnaire includes sections on ethics and sustainability, health and safety, environmental management, quality, production and supply control, supply chain and supplier management, and company management. The total number of 141 suppliers was assessed and data completeness was increased from 71% to 96%.

In addition, the overall performance of key suppliers is regularly evaluated and includes sustainability criteria. Only suppliers with a certain level of performance are eligible to become strategic partners of Outokumpu.

Visits, on-site audits, and impact assessments

Suppliers are selected for visits, on-site audits and impact assessments based on their sustainability-risk level.

Social audits are carried out on medium-risk suppliers that have potential human rights impacts arising from the supplier's own operations or its value chain. Human rights impact assessments (HRIAs) are conducted on high-risk suppliers.

Whereas social audits are carried out by Outokumpu itself, impact assessments are always carried out in collaboration with an external expert and usually take longer than a social audit. Also, the scope of an impact assessment goes beyond the supplier's premises and employees and includes external stakeholders as well.

Sustainability aspects (health and safety, environmental, working conditions) are also included in regular EHSQ audits. These audits are carried out both by Outokumpu and a third party.

Based on the visits and audits, identified non-conformities and improvement areas are discussed with the suppliers. Needed actions are agreed and followed up.

In 2023 we completed one social audit and two human rights impact assessments. Additionally, we conducted nine EHSQ audits.

More information about Outokumpu's site visits suppliers can be found on [our website](#).

Supply chain grievances

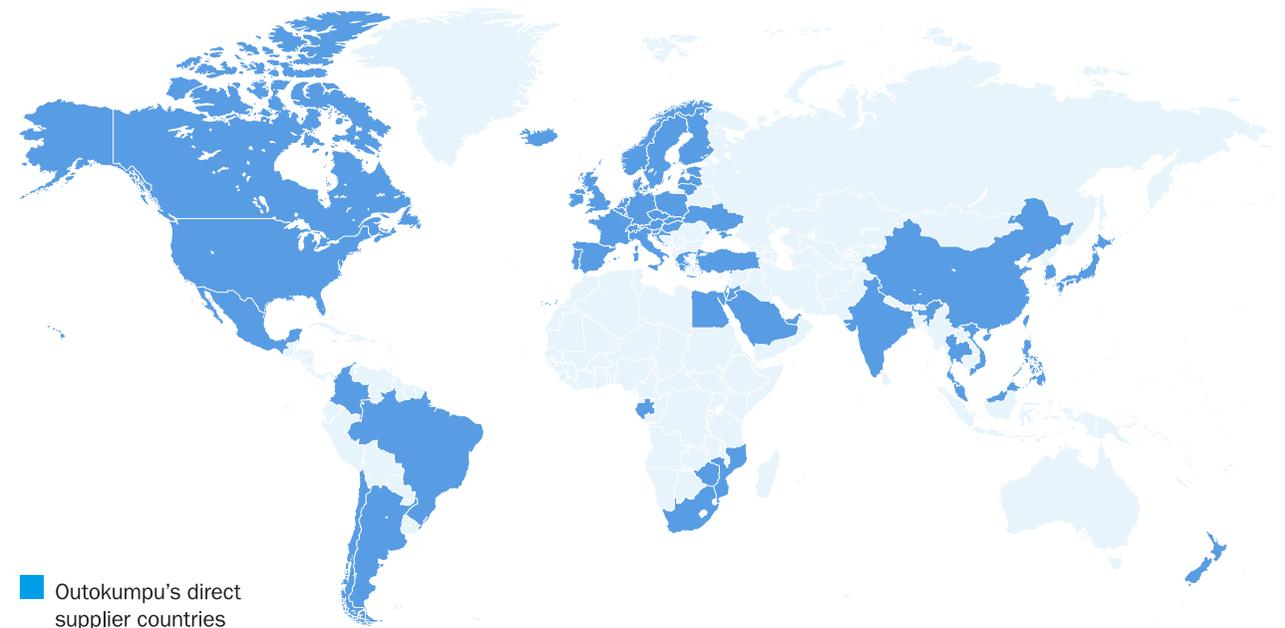
The SpeakUp channel is an externally operated channel for Outokumpu employees and external stakeholders to report misconduct in our suppliers' operations (as well as in Outokumpu's own operations). This can be done confidentially and anonymously, if permitted by local laws and regulations. The supplier sustainability team can also be contacted via e-mail under sustainable.sourcing@outokumpu.com

Allegations against our supplier's sustainability (including human rights and workers' rights) are reported and handled following our supplier-ESG incident management process.

Conflict minerals and cobalt

During 2023, Outokumpu needed minor amounts of tungsten and cobalt for specific products, Forta SDX 100 (EN 1.4501) and Ultra 254 SMO (EN 1.4547) respectively. We follow the OECD Due Diligence Guidance for Responsible Supply Chains of Minerals from Conflict-Affected and High-Risk Areas and have special due diligence procedures in place for these materials. In 2023, the tungsten demand was fulfilled completely from recycled sources and cobalt was sourced from low-risk countries only.

Outokumpu's direct supplier countries



Capacity building

During 2023, we have continued capacity building in the areas of human rights, and the supplier sustainability team has attended advanced training courses. Trainings in various topical subjects have been given to category managers and buyers, such as on sanctions, risk assessment, supplier performance evaluation, and the audit process.

Supplier management key figures 2023

Pieces/%	2023
Total count of suppliers (globally), pc	> 7,400
Local suppliers share of total spend, %	64
Countries where direct suppliers operate, pc	58
Onboarded suppliers, pc	230
Sustainability assessment score, pc	139
Sustainability assessment score, average	59
Spend of sustainability assessed suppliers, %	43
Desktop reviews, pc	141
Audits total, pc	13
Trainings, pc	4
Participation rate, %	90

Plans for 2024

We will continue with the development of our supply chain sustainability management. Our aim is to unify supplier management processes and utilize best practices on supplier onboarding, risk management and performance evaluation.

The EcoVadis platform will be introduced to all supplier categories and all procurement personnel will be trained in the EcoVadis concept, the new onboarding process, and other new ways of working to ensure a harmonized approach in supplier management.

We will continue with the work on supply chain responsibility, executing regular desktop reviews and sustainability audits, and finding solutions to reduce scope

3 CO₂ emissions. The mapping of suppliers beyond tier 1 will be broadened to selected new categories.

We will release and implement the renewed Supplier Code of Conduct in all supplier categories. The long-term goal is to have 100% of targeted suppliers commit to Outokumpu's Supplier Code of Conduct.

We anticipate the continuous evolution of regulations related to supply chain transparency, ethical sourcing, and environmental impact. Our plan involves staying informed of these changes, ensuring compliance with existing laws, and proactively adapting our practices to align with emerging legislation, such as the Corporate Sustainability Reporting Directive (CSRD) and Carbon Border Adjustment Mechanism (CBAM).

Our long-term goal is to have 100% of targeted suppliers commit to Outokumpu's Supplier Code of Conduct.



Ensuring a sustainable supply chain: a chrome supplier in Zimbabwe



The Outokumpu supplier sustainability team monitors suppliers continuously to identify and assess risks related to human rights in order to help safeguard them and improve sustainability of our supply chain.

Outokumpu's Supplier Sustainability Manager Michael Papoutsis joined the team in April 2022 and his designated responsibility areas are our primary metal suppliers (e.g. nickel, chrome, molybdenum, cobalt).

As part of his job, he assesses the sustainability risk associated with suppliers of those materials. We have defined that suppliers located in a high-risk country will be taken into consideration for a human rights impact assessment conducted by a third party, suppliers located in a medium-risk country will be taken into consideration for a social audit and in a low-risk country for a visit with a focus on sustainability.

Why did you go to Zimbabwe?

Zimbabwe is a country rich in chrome and other raw materials, so it is well known in the industry as supplier of chrome ore and ferrochrome and we have sourced raw materials from there. Zimbabwe is also a country facing political instability, extreme poverty, high inflation, and corruption. Therefore, we continued with a deep dive into the raw material supply chain in Zimbabwe and based on our own desktop review of the country and the maturity level of the producers, we concluded that the sustainability risk level was very high.

In accordance with our due diligence rules, we initiated a human rights impact assessment (HRIA) of our suppliers in Zimbabwe. The target was to assess the maturity level of their human rights management processes, to identify the potential human rights impacts of their operations, and to better understand the context of the industry and country.

How was the assessment conducted?

When we identified that we need to conduct an HRIA of the supplier, we engaged our external partner to support us in the preparation and conduct of the assessment. Together with them we started the background research by collecting all available documents from the supplier but also by engaging the supplier in online interviews in order to get a deeper understanding of their maturity level.

The specific topics to investigate more were: workers' working conditions and wages, environmental impacts such as pollution, health & safety, and the chrome supply chain (from the mine to the smelter).

As a next step, we conducted a field trip to Zimbabwe and visited the site, to verify the current condition of activities mentioned before, such as the wages and the working conditions. The verification can be achieved by, for

example, through interviews and having in-depth discussions. In this case, we had various discussions with communities, NGOs, former workers, employees, the management of the operation, the workers council, subcontractors, and so on. Then we analyzed and compared the discussions to the data gathered in order to have a good and comprehensive understanding of the situation.

Based on the discussions and observations, we prepared the assessment report and made recommendations to the suppliers to improve their human rights due diligence practices.

What happens after the assessment?

The assessment always requires a lot of work from our side, as well as from the suppliers side. We have aligned the next steps with the suppliers and will stay in close contact with them in order to follow-up the status of the improvement actions. The aim of the assessment is always the same, to ensure and foster human rights, together with our partners.



Michael Papoutsis, Supplier Sustainability Manager



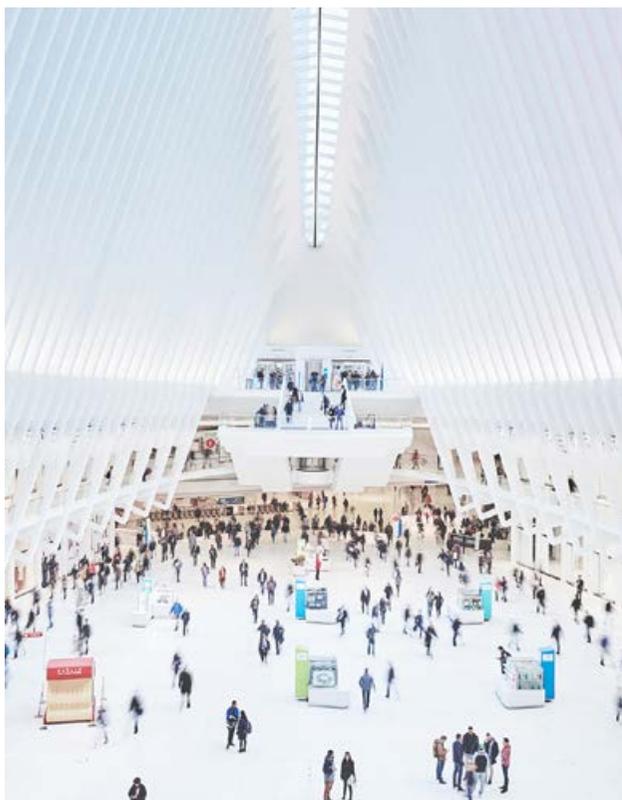
People and society

Respecting, protecting and promoting human rights – from our employees, workers in the value chain, customers to local communities, and other stakeholders – is at the core of Outokumpu.

As an employer, we provide jobs for over 8,000 people and as a corporate citizen, contribute to the economic and social well-being of local communities where we operate and societies around the world.

Human rights as the foundation of our business

As a global company we have direct and indirect impacts on local, national and global communities. We are committed to respecting, protecting and promoting the human rights of everyone who may be affected by our activities or through our business relationships.



We have a strong commitment to respect human rights.

Outokumpu is committed to conducting its business with high integrity and in a safe, sustainable and ethical manner. Human rights and dignity form one of the four pillars of Outokumpu's Ethical Principles. We respect and promote internationally recognized human rights as set out in the key declarations and covenants such as the International Bill of Human Rights, the ILO Declaration on Fundamental Principles and Rights at Work, the Convention on the Rights of the Child, and the Declaration on the Rights of Indigenous Peoples.

We are signatories of the United Nations Global Compact and are committed to the United Nations Guiding Principles on Business and Human Rights (UNGP), and the OECD Guidelines for Multinational Enterprises. We are also members of ResponsibleSteel, which promotes human rights as part of steel industry sustainability through the ResponsibleSteel certification.

Human rights are addressed in several key documents that steer our ways of working, such as Outokumpu's Human Rights Policy, Code of Conduct and Corporate Responsibility Policy. Human rights are also covered in the more detailed documents with the focus on our supply chain sustainability. These include the Supplier Code of Conduct, our Supplier Requirements for Raw Materials and our Supplier Requirements for General Procurement. The aforementioned policies and guidelines are publicly available at our [website](#).

Outokumpu is committed to respecting and protecting the human rights of everyone who may be affected by our

activities or through our business relationships. We expect both our own employees and also our business partners, including suppliers and sub-suppliers, to respect and not infringe upon human rights. As a company with global operations and complex supply chains, the range of possible direct and indirect human rights impacts related to our own employees and business partners is wide. Topics such as health and safety, working conditions, equality, non-discrimination, freedom of association, zero tolerance for forced labor and child labor, indigenous peoples' rights and the right to a safe, clean, healthy and sustainable environment are material to our operations and our value chain.

The CEO has the most senior level of oversight and accountability for human rights in Outokumpu. Responsibilities cascade down via the Executive Vice President for Sustainability, People and Communications, who represents sustainability in Outokumpu's Leadership Team, to the Vice President for Sustainability, who is responsible for the overall sustainability agenda at Outokumpu, and further to the Head of Human Rights at the Group sustainability team. As many of the identified salient human rights risks and impacts are connected to Outokumpu's sourcing activities, the related responsibilities are appointed to the Chief Procurement Officer and further to the Head of Supplier Sustainability at Group Procurement. The Group sustainability and procurement teams work actively together to develop Outokumpu's human rights work in a balanced manner.

Moving forward in 2023

Our dedicated human rights journey began in 2021 when we committed to the United Nations Guiding Principles on Business and Human Rights (UNGP). Consequently, 2022 was a year of implementing the basic elements of the UNGP framework with the focus on establishing a human rights policy, identifying the most salient human risks and building internal capacity on the topic.

A specific focus has been directed at human rights risks and impacts related to our raw material supply chains with a dedicated supplier sustainability team. This is due to the characteristics of the various raw materials we source that are more prone to include human rights issues. Our activities on human rights and other supplier sustainability issues are presented in the section Sustainable Supply Chain on [page 59](#).

During 2023, more emphasis was put on strengthening the human rights work across the organization at Outokumpu. A global Head of Human Rights, Anna Vainikainen, was appointed to the Group sustainability team in July 2023 to lead this task. With human rights and our impacts on people as the foundation, this role interlinks the various dimensions of Outokumpu's social sustainability and brings the related functions closer together.

Moreover, having a comprehensive internal view on the social sustainability management framework with a basis on human rights supports how we respond to the Corporate Sustainability Reporting Directive's (CSRD) requirements on social sustainability. We had close follow-up also on other important regulatory developments on human rights, such as the Corporate Sustainability Due Diligence Directive (SC3D) and prepared for the requirements of the German Supply Chain Due Diligence Act (LkSG) applicable to us as of January 2024.

The next steps on our UNGP implementation journey were strengthened by capacity building as representatives of the Group sustainability and supplier sustainability teams participated in the UN Global Compact Business and Human Rights Accelerator training organized by the UNGC Finland Network.

In addition, the ResponsibleSteel certification process in 2023 provided an excellent external benchmark to evaluate our current progress on human rights issues. The ResponsibleSteel standard includes a specific set of criteria for human rights. Human rights are also included in the standard's other criteria concerning responsible sourcing, labor rights, engagement with local communities and other stakeholders, among others. The scope of certification covers our manufacturing sites in Europe but also the Group functions as well as the related policies and procedures were also evaluated. The audit findings provided us with valuable feedback on developing our human rights work further during 2024. The ResponsibleSteel certification project is explained on [page 37](#).

Engaging stakeholders on human rights

Stakeholder engagement is a prerequisite for the successful management of human rights issues. We maintain a dialogue with our stakeholders to understand better their expectations. Stakeholder views were included also in the double-materiality analysis that was conducted in 2023 according to the Corporate Sustainability Reporting Directive (CSRD). The ResponsibleSteel certification also focused on stakeholder engagement. The audit process combined with a case study (Master's thesis) on this topic provided us with guidance on how to develop our interaction with stakeholders even further.

Raising concerns

At Outokumpu, we encourage everyone inside and outside the company to report to us potential and actual human rights infringements. This also includes situations when we are not directly causing or contributing to them but are linked to the incidents through our operations, products, or services.

Our internal and external stakeholders can raise their possible concerns on human rights issues with Outokumpu in various ways, including through the SpeakUp channel.

SpeakUp is an externally operated channel that enables Outokumpu employees and external stakeholders to report breaches related to human rights or other misconduct.

SpeakUp can be used confidentially and anonymously when permitted by local laws and regulations. SpeakUp is available on [our website](#) in several languages.

The Vice President, Sustainability, the Head of Human Rights and the Head of Supplier Sustainability at Outokumpu can also be contacted directly via e-mail. Their contact details are available on [Outokumpu's webpage](#).

Looking towards 2024

The human rights journey at Outokumpu will continue in 2024 with dedicated actions and ambitions. We will update the human rights risk and impacts analysis with a more in-depth look at our Group functions and manufacturing operations globally. The results will support us in steering the focus and identifying possible gaps in our current approach. We will also continue to integrate human rights better into our risk management systems and other corporate procedures.

In terms of the UNGP implementation, measurable targets with KPIs for our human rights work, additional grievance mechanisms and providing remedy are among the key topics for further development. Furthermore, we will work on the ResponsibleSteel audit findings on human rights and engagement with local communities and other key stakeholders.

Perpetual commitment to human rights work



Anna Vainikainen joined Outokumpu in 2022 to lead the ResponsibleSteel certification project for the European manufacturing sites in Finland, Sweden and Germany and then took lead of human rights at Outokumpu.

How did certification turn into human rights?

ResponsibleSteel covers all relevant sustainability aspects for the steel industry, and a huge input was required to implement the certification process by a wide range of internal substance matter experts on environment, health and safety, human resources, HR, risk management, stakeholder engagement, communications and legal, among others.

For us, the ResponsibleSteel project has provided a systematic way of screening and evaluating our current sustainability practices and identifying key elements to build our sustainability agenda further. We got confirmation that while we are ahead of the industry in many areas, we also gained valuable insights on how to further develop our sustainability from a holistic perspective. The process also supported us in taking further steps in environmental topics beyond decarbonization, especially in biodiversity and water stewardship. And, as so often happens, the project started

to expand, and here also the Corporate Sustainability Reporting Directive had an impact. Consequently, we wanted to ensure that all aspects of sustainability are covered in a balanced manner.

Human rights are intertwined with social responsibility – broadly speaking social sustainability means our impacts on people, both those who directly or indirectly work for Outokumpu or are affected by us otherwise. In other words, everything that is about social responsibility concerns people, and everything that concerns people is linked to human rights. I am very excited about my position, because when we talk about the possibilities of the green and just transition and the need to transform businesses to be more sustainable, the people aspect also needs to be kept onboard.

Why are human rights important?

Social sustainability is a prerequisite for sustainable business: companies consist of people and their skills, companies are an integral part of their local communities with various impacts on economic and social welfare, and their operations may have an impact on the local environment or on the value chain. The way we impact people – our own employees, our contractors and sub-contractors, stakeholders in our supply chain as well as communities – can be very different from one to another. There are always human rights questions linked to our business – they may just vary depending on the location of our operations and the related legislative and societal framework.

Human rights provide an alternative way of looking at our direct and indirect operations and the related impacts on people. It is fair to say that as a company, we have already taken into account a long list of human rights questions – but without necessarily understanding this connection. We have a lot of things already well established, like ensuring a safe place to work, but we have not really considered

these human rights questions before. Diversity, equity, and inclusion are also something that have already been important for us so that everybody can be themselves at work, but it is a different question whether it has been understood as a human rights question. Ethics and compliance have also been our focus area for years – for example there are different ways to speak up and these have been highlighted in the organization over the years. We have also put a lot of focus on human rights questions in our supply chains. But there is always room for improvement.

What happens next?

Our work on human rights continues as this is not a one-off project but an ongoing process. The minimum level of our work is determined by the legislation on human rights, which will increase and become more demanding. Next year, the German Supply Chain Due Diligence Act applies to us with related reporting requirements. We are also preparing for the Corporate Sustainability Due Diligence Directive (CS3D).

We will also continue implementing the UN Guiding Principles by updating our human rights risk and impact assessment to ensure we focus our efforts correctly. Based on the assessment findings, we will review our policies and processes. Special focus will be put on capacity building, providing remedy, and stakeholder engagement.

We have already done a lot on human rights in our raw material supply chains and next we will pay more attention to general procurement in close cooperation with our supplier sustainability team. As our leverage in the supply chains may be limited, it is also important to think about how we could create positive impact through partnerships. In all, we want to focus on those things through which we can have the most impact on people.

Always working safely

Outokumpu is working towards its long-term vision of zero accidents. Everyone at Outokumpu has the right to a safe and healthy working environment. We believe that a continuously strong safety performance correlates with improved quality and operational efficiency.



Our four safety principals guide our work – safety before volumes, safety starts with me, no shortcuts and no repeats.

Outokumpu aims to be the industry leader in safety with the vision of zero accidents and continuously reduces the accident record year on year to achieve this. Since 2016, we were able to reduce the total recordable incident frequency rates (TRIFR) – meaning work-related incidents – by 83%, from 8.7 to 1.5.

From 2022 to 2023, recordable incidents fell by 17%. This has been achieved with strong safety management, strengthened safety culture, and the usage of state-of-the-art technology such as robots, among others.

One of the major highlights in 2023 was Outokumpu's service center in Poland, which in December reached 10 years with zero accidents. Also, the Ferrochrome business area – the Kemi mine and the ferrochrome operations in Tornio – performed outstandingly in terms of safety and did not have a single recordable incident during 2023. Further, by January 1, 2024, the Kemi mine has gone 509 days and the ferrochrome operations in Tornio 469 days without any recordable incidents.

Managing safety proactively every day

Our proactive safety management system, which includes hazard recognitions, Safety Behavior Observations (SBOs) and preventive safety actions (such as Group works), supports us in working toward our safety targets. Those engage our employees and are utilized to flag potential risks and unsafe acts and behaviors before they lead to accidents. Lessons from past incidents are shared with other sites in the monthly Safety Call hosted by the CEO.

Our daily work is guided by common safety principles, standards, guidelines, and our ten Cardinal Safety Rules. Safety audits are performed regularly according to a standardized audit program. Outokumpu's safety network, which comprises every site safety manager and is coordinated by the Group safety function, meets monthly to ensure up-to-date safety topics are communicated effectively and best practices are shared and adopted.

**Working safer year to year:
from 2016 to 2023, work-related
accidents fell by 83%.**

Safety strategy in 2023

We achieved remarkable improvements in our safety performance over the past years, and only in 2023 were able to reach a reduction of 17% in recordable incidents compared to 2022. Nevertheless, we have still incidents, including near misses, which we strongly believe are avoidable to reach our vision of zero incidents. The root causes are mainly errors in our daily behavior and complacency.

In 2023 we executed the strategy developed in 2022 with a long-term target of zero accidents. Our safety strategy and ambition consist mainly of three pillars:

- strengthening our safety culture,
- developing our safety management, and
- utilizing the latest safety technologies.

To support the development of our safety culture, in 2023 we started to focus more intensely on a purpose-driven approach. We researched via our global safety network, which has representatives from each country, what is driving our employees to work safely, and by utilizing that knowledge, developed a customized training program “Act safely with pride and care”, which takes into account also cultural differences. In 2023 we piloted the program in Sweden. The aim is to continue to roll-out the program at different sites, based on the pilot’s findings.

In safety management development, we continued with the well established cross-learning program and launched phase II, which puts the emphasis on collaboration and networking. As a new focus, the program focuses on global group-wide standards related to crane handling, risk management, permitting processes and finally LOTOTO (lock out, tag out, try out) procedures. In addition, Outokumpu initiated the roll out of a harmonized health and safety reporting tool, aimed at enhancing efficiency through digitalization.

As one of the first companies in the steel industry, Outokumpu took pioneering steps in utilizing the state-of-the-art technology, AI, by deploying three AI driven robots in Sweden, Germany, and in 2024 in Finland, to automate some parts of the inspection work in order to improve the safety of employees. Find out more on the next page.

To conclude, the focus areas of the safety strategy improved safety in 2023, namely focus on human factors and culture, the use of state-of-the-art technology, and so on, to ensure the success of our journey towards zero incidents. In 2024, we will continue executing the strategy and, for example, in the cross-learning program the focus in phase III will be on process safety management.

Safety performance

Outokumpu uses total recordable injuries frequency rate (TRIFR) per million working hours of employees and contractors as the main safety performance indicator. Group TRIFR decreased from the previous year and was 1.5 against the target of <1.9, from 1.8 in 2022. Group LTIFR

(lost time injuries per million working hours) was 0.85 against the target of <1.0 from 0.8 in 2022.

The rate of all work-related accidents (total recordable injuries and first-aid treated injuries per million working hours) was 9.4 from (10.1).

The proactive safety action frequency was 12,074 (11,029). This includes reported hazard observations, SBOs, and other preventive safety actions per million working hours.

Work-related injuries by region, accident and employee type

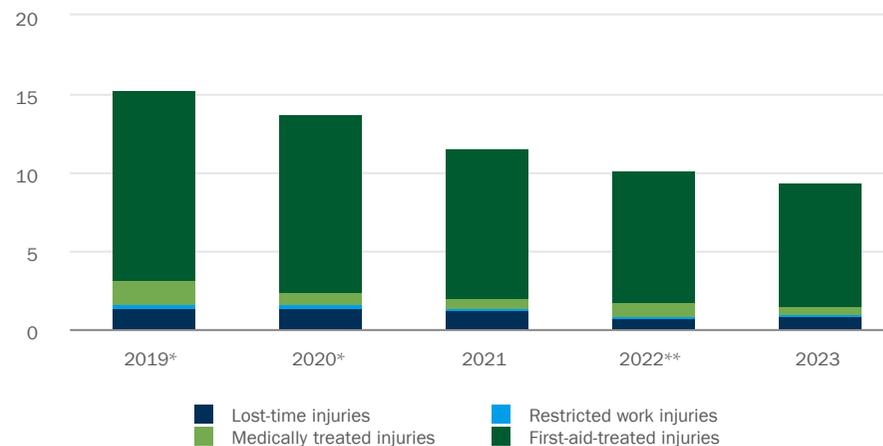
195677	Group	BA Europe	BA Americas	Ba Fe Cr	Employees	Contractors
TRIFR ¹⁾	1.50	1.80	1.20	0.00	1.73	0.80
LTIFR ²⁾	0.85	1.30	0.20	0.00	1.07	0.20
Total recordable injuries ³⁾	30	22	7	0	26	4
Fatalities	0	0	0	0	0	0
Lost time injuries	17	15	1	0	16	1
Restricted work injuries	4	2	2	0	2	2
Medically treated injuries	9	5	4	0	8	1

¹⁾ Total recordable injury frequency includes fatalities, lost time injuries, restricted work injuries and medically treated injuries, per million working hours.

²⁾ Lost time injuries including fatalities and lost time injuries, per million working hours.

³⁾ Include fatalities, lost time injuries, restricted work injuries and medically treated injuries.

Work-related injuries per 1 million working hours



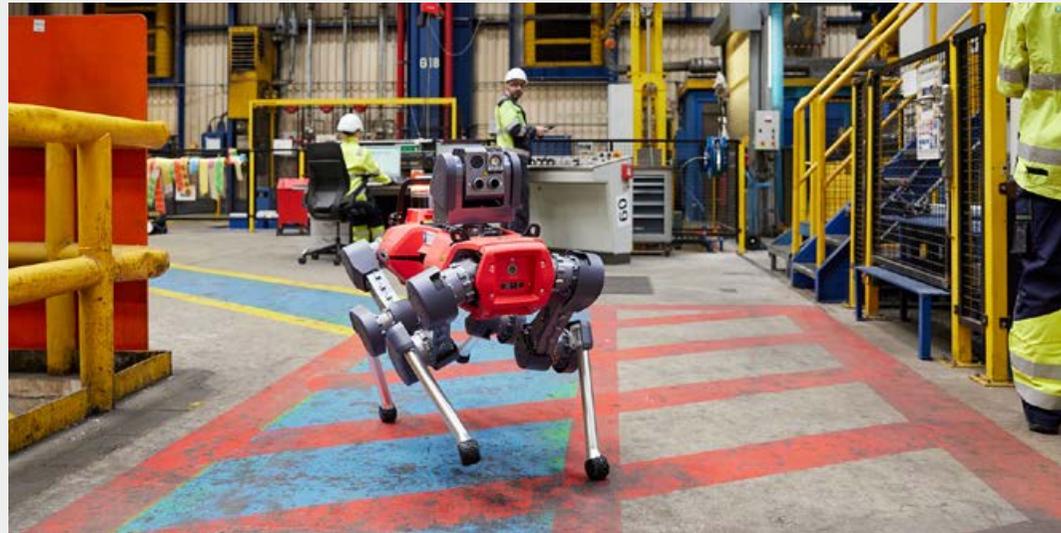
* Including discontinued operations.
** 2022 restated.

The main direct causes of work-related injuries were the use of forbidden or inappropriate work methods, temporary carelessness and defects in machines and the lack of operational procedures.

Health and well-being

Outokumpu encourages its employees to take care of their physical health by offering various exercise benefits and discounts to sports and well-being services. Different health support programs are also available at our sites. In addition, occupational hygiene measurements are carried out at Outokumpu's sites to ensure a healthy working environment.

The number of occupational diseases diagnosed in the Group was 0 (0).



Meet Rosie!

Outokumpu pioneers the deployment of ANYbotics robots in the metal sector. The first ANYmal robot arrived in June at our site in Krefeld, Germany, and our Krefeld employees named the robot Rosie. Later in the year, the pilot was expanded to Tornio and Avesta as well, with a total of three ANYmal robots to be deployed. It is estimated that by transferring inspection tasks to the robot, employees' exposure time to hazardous substances can be reduced by more than 80% and possibly hazardous repairs in maintenance could be reduced by 20%.

"The robots will have many tasks, such as reducing the time employees spend inspecting acid areas and reducing the risk of fires due to overheating of bearings and motors. In addition, the robots can shorten malfunction times since defects can be detected at an early stage through temperature and sound profile measurements before a failure occurs. However, they will not replace human workforce but instead automate some parts of the inspection work. The introduction of the new robots is a further step towards an even safer environment and increased efficiency of routine processes", says **Thorsten Piniek**, VP, Head of Health and Safety.

Total incident frequency
rate decreased

17%

from 2022 to 2023, from 1.8 to
1.5 per million working hours.

Teamwork towards our targets

Thanks to continuously listening to employees and regular pulse surveys, we know for a fact that our people are engaged in their work. Together as a team, we are navigating towards our targets.



Stainless steel is a volatile industry, and to be able to continue creating value, we need to focus on areas under our control. We are on a journey to improve our competitiveness in Europe and have taken prompt actions.

Despite the challenging year in Europe, we made excellent progress in the strategy execution towards our targets, thanks to the dedication of Outokumpu employees.

Supporting the objective of strengthening the core of our business, Outokumpu divested the majority of the Long Products business area at the beginning of 2023. Our melting, rod, and bar operations in Sheffield, UK, bar operations in Richburg, US, and wire rod mill in Fagersta, Sweden, were sold to Marcegaglia. We were pleased that the new owner is a responsible and committed owner with regard to developing the long products business further.

In August, the remaining Long Products operations in Degerfors and Storfors, Sweden, were divested to Cogne Acciai Speciali. Our priority was to find a new responsible owner for these operations as well and luckily we were able to do that. We are extremely grateful to all the personnel of all the divested units for our joint journey as Outokumpu.

Our team members in the Ferrochrome business area reached a great milestone in October when we held the inauguration of the Kemi mine expansion and took the first steps towards our target of the Kemi mine becoming the first carbon-neutral mine by 2025.

Outokumpu is a global leader in advanced materials and we want to further strengthen this position. As a result, we announced in November the intended restructuring measures of our business area Europe operations in Germany. Centralizing the expertise, product portfolio and operations will allow us to reposition the Dillenburg site as the core value creator within our Advanced Materials business line alongside our mills in Sweden.

Making plans that have a negative impact on employees is never easy, even when they are necessary. The restructuring measures in Germany are expected to be realized during 2024 and impacting close to 200 jobs. During the negotiations, we hope to reach a mutual understanding with our employees. We are actively supporting the affected employees to find new opportunities inside or outside the group and working together with the employee representatives to agree on a social plan.

For business area Americas, the market environment remained more favorable in 2023, and we continued to generate solid results. This demonstrates the benefit of having a geopolitically diversified business. Our Americas team has been working hard on the strategic plans, including the ongoing feasibility study announced in August to investigate options to expand our operations in Calvert, Alabama.

Global actions to reach our ambitious diversity, equity and inclusion targets

At Outokumpu, we are committed to fostering a working culture where everyone feels welcome and safe regardless of their backgrounds. We believe that a healthy diversity of employees from different backgrounds and cultures is essential for us to continue being successful in the future.

Our ambition for our personnel and leadership is to represent the diverse societies we operate in. To achieve this goal, Outokumpu has established targets and a comprehensive roadmap to strengthen diversity, equity, and inclusion (DE&I) throughout the company.

Outokumpu's DE&I targets towards 2025, defined in 2022 and approved by the Board of Directors, include:

Diversity targets: Increase diversity in leadership

- Add 100 diverse managers by the end of 2025
- Minimum of 30% of diverse leaders in all international management teams by the end of 2025

Equity targets: Ensure equal access to opportunities

- Correct any biases in recruitment and promotion processes by the end of 2022
- Full equality on compensation (verified by an external certification)

Inclusion targets: Strengthen a culture where everyone feels welcome

- Enforcing the culture of zero tolerance for inappropriate behavior
- 60% agreement score on all areas of inclusion and across all diverse employee groups

The results of our annual company-wide pulse survey on inclusion and fairness, conducted in May–June 2023, confirm that we are steadily progressing towards our goals.

We already see improvement in belonging, inclusion and respectful treatment. Especially fair treatment was rated significantly better in the 2023 pulse survey than in the previous year.

Additionally, the overall survey results show that we have received a 60% agreement score in all areas of inclusion and that men and women perceive their working environment, and how they are treated, in the same way.

The following sections show how diversity, equity and inclusion are embedded in our human resources actions and development, and how we are working towards our targets.



Team dialogues contribute to a welcoming working culture

The core of the journey towards our diversity, equity and inclusion targets is to strengthen the inclusive working culture. Team dialogue is a concept created based on Outokumpu guidelines and frameworks – Code of Conduct, ways of working and diversity, equity and inclusion initiatives – on how to behave.

Team dialogue training is designed primarily for operators, technicians and their managers. The training consists of small group discussions about a welcoming and safe working environment: what is it, why is it important and how everyone can contribute to creating one.

Team dialogue sessions were launched gradually during 2023. The concept has been piloted at sites in Tornio, Finland, Krefeld and Dillenburg, Germany and Calvert, US and the feedback has been positive:

“This is both educational and fun; I think all teams will benefit from this.”

“Important topic and very engaging, thought-provoking exercises.”

“I believe this will be a good tool to show employees that managers do care and want to help out in creating a better working environment.”

In 2023, already 27% of team members in operations took part in a team dialogue session. Sessions are mandatory for all employees in operations to be completed by July 2024.

Emphasizing diversity in our short-term incentive plans

We made some modifications to our short-term incentive (STI) plan for 2023 compared to the previous year. Safety target rules were clarified and the adjusted EBITDA targets were changed to adjusted EBIT targets. We also went back to yearly financial targets.

We also introduced a new target: diversity. We at Outokumpu believe that diversity, equity, and inclusion are essential for us to continue being successful in the future. Diverse teams bring in new ideas that promote innovation and deeper customer and market understanding.

The diversity target was introduced for all STI plan participants at senior management level, including Outokumpu Leadership Team members.

The target was to add 40 diverse leaders to Outokumpu by the end of 2023 compared to the baseline of July 2022, in line with the overall ambition of increasing the number of diverse leaders by 100 by the end of 2025. At the end of 2023, an increase of 57 diverse leaders was already achieved.

A diverse leader is defined as a manager (i.e. an employee with a minimum of one direct report) who is female and/or belongs to an ethnic minority and/or whose nationality differs from their working country.

In 2024, the current short-term incentive plan will become a senior management plan, called Group STI, applicable only for senior management. The plan will, to a large extent, continue to be driven by the Group results.

Additionally, a new incentive plan called business STI will be introduced. Participants will have a closer reach to the KPIs included in the plan, with the introduction of function and business targets instead of adjusted EBIT on a group level. The business STI will also replace the sales incentive plan (SIP).



Focusing on employee engagement at production sites

In a globally operating company like Outokumpu, it is not always easy to reach out to the team members and ensure awareness on important local and global topics. Therefore, a special emphasis was given to communications at the production sites, enhancing employee engagement across the organization.

With interviews and an online survey carried out at four production sites, we could identify information profiles with varying demographics, channel and language preferences and activeness in information search. The identified profiles help us understand the preferences of different groups and serve to improve our information sharing methods and internal communications.

To support equal opportunities and access to internal information, a mobile phone pilot was arranged among operators at the Tornio mill and the Kemi mine. Some 200 operators were involved in the pilot enabling easy and secure mobile access to commonly used company applications. Mobile reachability offers great opportunities for technical development supporting work satisfaction and production efficiency.

Project teams have made proposals for 2024 for the next steps to enhance employee awareness and engagement.

Charting the course for equity and workplace fairness

In 2023, we continued our commitment to creating and sustaining a fair and equal workplace.

During the first quarter of 2023, our first pay equity analysis was successfully rolled out, with the results used as crucial inputs in the subsequent salary review process.

In the second half of 2023, we started work on a pay equity certification process with Fair Pay Workplace, which we expect to conclude in early 2024. This certification will serve as tangible evidence of our dedication to fostering an environment where everyone is treated equally and are provided with the opportunity to thrive.

Job architecture is the cornerstone of fair compensation practices. Our continuous efforts have facilitated the alignment of job roles, creating a harmonized structure ensuring our employees are fairly compensated based on their responsibilities, experience, and contributions. This approach improves clarity in job classifications and sets the stage for transparent and equal compensation.

We made a strategic shift deploying cutting-edge statistical tools to analyze compensation data, align job architectures, establish standardized job codes, and foster an environment that embraces equity.

In 2024, we are looking into tools and training options to manage unconscious bias in decision-making to further strengthen an inclusive and fair working environment.

Building capabilities

The training and coaching of our employees to continuously develop has always been a priority for us at Outokumpu. During 2023, we continued this work, so as to enable the best execution of our business goals.

In addition to on-the-job learning, a total of 81,294 training hours were delivered during 2023, the average employee spending 8.19 hours in training during the year. The top learning categories involving the majority of our employees included safety, compliance, leadership, and inclusion.

We rolled-out our mandatory ethics and compliance related e-learning. This year the target population was administrative employees, which include all white collar employees and blue collar managers in operations that were active as of December 31, 2023. The topics included Code of Conduct (98% participation rate) and Data Protection (99%). In addition, Spend management training was completed by 76% of white collar employees.

To support Outokumpu's vision of being our customers' first choice in sustainable stainless steel, we need to be excellent in everything we do. The Manufacturing Excellence team produced a training video series especially for operations and first line managers to increase their awareness of basic manufacturing excellence topics. To make the most of this new learning format, our target is to give all employees the opportunity to access the training during the working hours. Thanks to the commitment of the heads of operations and senior management, we are well on our way to achieving this target.

During 2024, we will continue investigating new approaches in learning, enabling our subject matter experts to train the organization even more effectively.

Empowering our team members and leaders

The best ideas often come from unexpected places, and that is why we are committed to providing a working culture that encourages creativity and experimentation.

We are particularly proud of the innovative ideas shared by the Outokumpu team members, such as those related to energy efficiency improvements or recycled and lighter packaging solutions. These initiatives are crucial and help us reduce both emissions and costs.

To harness AI to drive business value, we established in 2023 our own Digital Innovations Hub, where any Outokumpu employee can share AI-driven innovation ideas. By embracing AI, we position ourselves to adapt, innovate, and meet the changing needs and expectations of our customers. The steering group places particular emphasis on ideas that strongly align with our company's strategic

objectives: sustainability, growth from productivity, customer-focused steering and use of generative AI. During the first months, we received over 50 ideas, a few of them already leading to proof-of-concepts or pilots.

The global roll-out of Outokumpu's Leadership Pipeline training, started in 2019, was finalized in 2023. We have reached a sustainable level of over 70% of trained leaders at Outokumpu. We continue to maintain the program and provide yearly training sessions for new leaders.

Recognizing that team building is an important leadership task, we continued to support our leaders and teams with our in-house Team Excellence training concept. The internal facilitator pool offered altogether 34 Team Excellence workshops during the year to support the development of high-performing teams.

A 360° assessment pilot took place in business area Europe, to support our leaders' self-awareness and development. We believe that reflecting is as important as acting for our leaders to grow, and the aim for the future is to provide tools to assess and develop leadership in a fair and consistent way.

Leadership training modules

	Number of completions in 2023	Average feedback (1-5)
Leading Others	85	4.7
Leading Leaders	41	4.2
License to Lead, for operational leaders	83	4.2
License to Lead Light, for team coordinators in operations	59	4.4

To further explore the future options to support our leaders globally, we piloted the Lunch & Learn concept in the Americas business area, providing quarterly get-togethers around diverse leadership topics. Regular touch-points also allow the new leaders to familiarize themselves with the Leadership Pipeline model.

To support emerging leadership potential in the company, we have been building a pre-leadership program to be launched early 2024.

Continuous listening to employees with pulse surveys

We have enabled our employees to provide feedback on their engagement with our company goals with regular pulse surveys. The surveys are conducted with our external partner Glint.

The Outokumpu Engagement index remained at an excellent level compared to the external benchmark being at 77, on a scale of 1–100. The response rates were at good level and provide us with representative and reliable results.

The Engagement index consists of two questions that are the main drivers for engagement: “How happy are you at Outokumpu?” and “Would you recommend Outokumpu as a great place to work?” In May, we asked questions around fairness and inclusion and the September pulse survey focused on professional growth and development.

Our strengths in 2023 company-wide pulse surveys

	Score vs. external benchmark	Response rate
People Pulse in May		67
Engagement index	77 (+3)	
I am treated fairly at work	79 (+2)	
People Pulse in September		68
Engagement index	76 (+2)	
How happy you are working at Outokumpu	78 (+4)	



Learning by playing

Digitalization and artificial intelligence (AI) are changing the world we operate in. Our digitalization game – Story of the Broken Crystal Ball – was launched in March 2023. While playing, one will learn about the interesting world of digitalization, AI and robotics, and have fun with the team. Each quarter, the team with the highest score is rewarded. Already over 100 teams of 2–3 people have tried this new learning experience. Feedback has been very positive, and players have felt inspired by the challenging tasks and new ways of learning. Go ChromeKings, DreamTeam60 and other players!

During our Ethics & Compliance Week in September, we engaged Outokumpu colleagues in various ethics and compliance themes. One fun way to learn and to test one’s knowledge was the E&C bingo. Our team members took actively part in the conversations and the game, learning at the same time how we play by the ethics and compliance rules.

As part of the global Cyber Security Awareness Month celebrated in October, we introduced Outokumpu’s own Capture the Flag cyber security game. Anyone can play the digital game without being tech-savvy or from IT. The goal of the game is to raise cyber awareness among our team members pointing out that seemingly small things matter when outfighting the cyber villains. We were delighted to see how our employees with various backgrounds took the challenge and managed to pass the game. Cyber security culture is built in communities – together we make Outokumpu cyber secure.

Besides the two company-wide pulse surveys in 2023, we implemented employee lifecycle pulse surveys for newcomers and leavers to support an equal and good employee experience at Outokumpu.

The onboarding index, based on 30- and 90-days onboarding surveys, was 79. This tells us that we are on the same level as the external benchmark. Our strength in the onboarding process is team support, with an average index of 91. In the exit pulse survey, we achieved an index of 77 to the question: "I would consider working again for Outokumpu if the situation was right", which was above the external benchmark (+4).

Also, several targeted on-demand pulse surveys took place to support our businesses and functions in important topics. For example, an annual mental health pulse survey was launched at our site in Calvert, U.S.

We are planning to roll out two company-wide surveys again in 2024. First, we will repeat the health and safety pulse to support the development of our safety culture.

Bridging Outokumpu business goals and individual targets

Our performance management approach is an on-going, year-round partnership between managers and employees. It helps both parties to understand their main tasks, as well as how they contribute to Outokumpu's strategy implementation and business targets. This approach is built into our annual My Performance Commitment (MPC) process.

The MPC process allows employees to understand their role and input into the company's strategy implementation, supports our focus on building a high-performing company culture and ways of working. The overall completion rate of the MPC process, finalized at the beginning of 2023, was 71%. The participation rate has improved steadily during the past years, and we are taking further actions to highlight the importance and benefit of the discussions to improve participation among operational employees.

Already in 2022, we introduced the continuous dialogue model as part of the MPC process. The continuous dialogue cycle lasts throughout the year, starting from the set-up of the employee targets, ending at the annual performance evaluation when the year changes. Continuous dialogue aims at ensuring ongoing interaction between our managers and employees: follow-up and adjustment of targets and performance, continuous feedback, employee development and discussion of general topics like working environment, collaboration and well-being, and the employee's career aspirations.

Calibration sessions across the management teams are facilitated by our HR business partners. Those help us align understanding of our top performers or colleagues in need of more support and development in the future. The HR business partners are also there to support managers in evaluating employee performance and behaviors in a fair and transparent manner.

In 2023, we continued raising employees' and managers' awareness of the importance of the MPC process by sharing tips and best practices. Surveys of managers and employees were conducted in March to get feedback on how the renewed MPC process has been perceived and how we can improve our practices to make sure that we deliver on our promises. A series of manager workshops was arranged to point out the importance of regular and meaningful conversations with the team members, and the importance of feedback for the team but also for own managerial work.

We have an ambition to improve the MPC process further in 2024 – from past-looking into a more forward-looking approach, putting more emphasis on employee skills and competence development, career aspirations and possibilities in the company. Managers have an important role to play in setting the right targets, so that everyone can do their share in reaching our common company goals.

Outokumpu ways of working

 <p>We operate safely. Always.</p>	<p>We work safely, comply with our cardinal safety rules, assess potential risks and take appropriate actions to mitigate them.</p>
 <p>We leverage the power of one Outokumpu.</p>	<p>We work together, share and combine our knowledge, across functions and regions to create best value for our customers.</p>
 <p>We deliver.</p>	<p>We live up to our promises with clear roles and clear accountabilities. We have a passion for continuous improvement.</p>
 <p>We grow people and value diversity.</p>	<p>We foster diversity and create work environment that allows all team members to contribute and develop.</p>
 <p>We act sustainably.</p>	<p>We are driven by creating sustainable impact, environmentally, socially and economically.</p>
 <p>We are a trusted partner.</p>	<p>We are a reliable and trusted partner towards all our stakeholders, our customers, employees, investors and the communities we operate in.</p>

Close collaboration with the employee representatives

To ensure good cooperation and understanding of our different employee groups, we are committed to informing and consulting our employees and their representatives.

The Outokumpu Personnel Forum is an important information channel between our personnel and management in our European operations. The Forum is based on the European Works Council Directive. In May 2023, the Forum was arranged in Vilnius, Lithuania.

The Personnel Forum appoints the Group Working Committee, which is responsible for the operative cooperation between the management and employees. During the year, the committee convened face-to-face twice and also twice virtually.

Outokumpu's working hours, minimum notice periods, vacation times, wages, overtime compensation and other working conditions are consistent with the applicable local laws. Outokumpu maintains a consistent policy of freedom of association. All Outokumpu employees are free to join trade unions according to the local rules and regulations. In 2023, 79% of the Group's employees were covered by collective agreements (2022: 78%). In total, 4,210 days in 2023 were lost due to strikes (2022: 29).



Bonding with local communities

We are always looking for ways to do more around diversity, equity and inclusion. The first Team Member Networking Groups (TNGs) were formed in our Americas business area in 2021 to create space for minority (African Americans, women, Latino/Hispanic) team members to share ideas with peers who have similar values. TNGs are considered safe spaces for all team members to be seen, heard and valued.

Since the launch of the TNGs, team members have embraced a multitude of activities and initiatives that have not only celebrated the rich tapestry of cultures and backgrounds within our company, but have also reinforced our commitment to supporting worthy local community initiatives.

In 2023, Americas' Full Spectrum TNG took on the challenge of reaching out to the next generation of talent. During an annual football game, the TNG created a fun and inviting atmosphere for college students to engage with Outokumpu staff. The group was able to share our company culture and values as well as provide a platform for students and community members to learn about future career opportunities.

Every year in October the world goes pink in support of raising awareness for breast cancer. The Mexican Wonder Women and Iron Maidens TNGs both did their part to promote early detection and support research as well as unite our sites around a cause that can affect many of us in one way or another. The Calvert team participated in the American Cancer Society's Making Strides Against Breast Cancer Walk by proudly wearing pink Outokumpu shirts to show their support.

Our people by region, incl. temporary employees

	2023	2022	2021
Finland	2,532	2,415	2,394
Germany	2,041	2,018	2,043
Sweden	1,529	1,542	1,566
The United Kingdom	105	105	93
Other Europe	684	677	750
Europe	6,891	6,757	6,846
The United States	972	963	947
Mexico	829	815	804
South America	8	8	80
Americas	1,809	1,786	1,831
Asia/ Rest of the world	50	48	50
Group total	8,750	8,591	8,727

Employee group, gender and contracts

Employee group	People	%
Blue collar	5,411	62%
White collar	3,339	38%
Gender		
Male	7,137	82%
Female	1,613	18%
Contract		
Temporary	381	4%
Permanent, full-time	7,389	84%
Permanent, part-time	980	11%

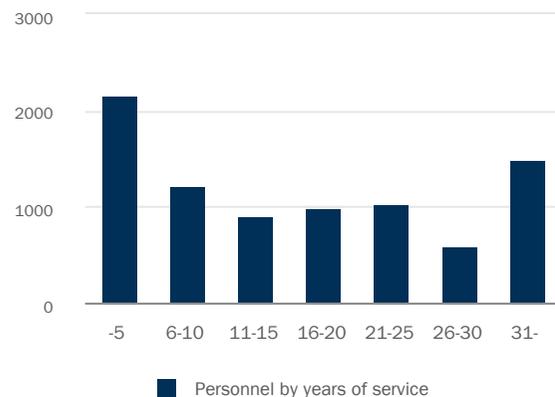
Males and females by employment type

Employee group	Male	Female
Temporary	259	122
Permanent	6,878	1,491
Permanent, full-time	5,990	1,399
Permanent, part-time	888	92

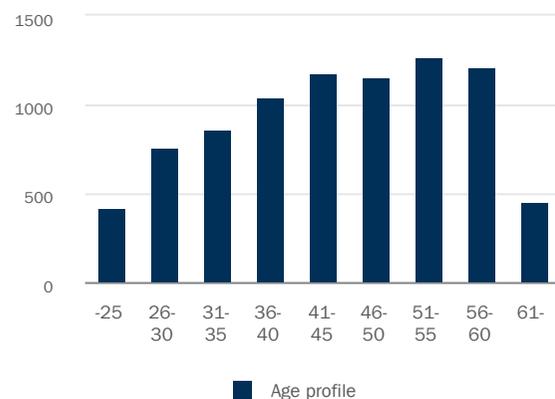
Hires and leavers by region, age group and gender

Number of permanent employees	Total	%	Hires	%	Leavers	%	Voluntary leavers	%	Total turnover	%	Hiring rate %	Leaving rate %	Voluntary leaving rate %	Average turnover rate %
Group	8,369		381		482		226		863		4.6%	5.8%	2.7%	5.2%
Region														
Europe	6,536	78%	265	70%	364	76%	174	77%	629	73%	4.1%	5.6%	2.7%	4.8%
America	1,785	21%	113	30%	114	24%	49	22%	227	26%	6.3%	6.4%	2.7%	6.4%
Asia/rest of the world	48	1%	3	1%	4	1%	3	1%	7	1%	6.3%	8.3%	6.3%	7.3%
Age groups														
<30 years old	1,001	12%	125	33%	62	13%	43	19%	187	22%	12.5%	6.2%	4.3%	9.3%
30–50 years old	4,427	53%	220	58%	242	50%	150	66%	462	54%	5.0%	5.5%	3.4%	5.2%
>50 years old	2,941	35%	36	9%	178	37%	33	15%	214	25%	1.2%	6.1%	1.1%	3.6%
Gender														
Male	6,878	82%	248	65%	379	79%	165	73%	627	73%	3.6%	5.5%	2.4%	4.6%
Female	1,491	18%	133	35%	103	21%	61	27%	236	27%	8.9%	6.9%	4.1%	7.9%

Personnel by years of service, permanent employees



Personnel age profile, permanent employees



Regions by employee group, region and gender

Number of employees	Total		Thereof blue collar		There of white collar		Thereof male		Thereof female	
		%		%		%		%		%
Group	8,750		5,411		3,339		7,137		1,613	
Europe	6,891	78.8%	4,350	80.4%	2,541	76.1%	5,593	78.4%	1,298	80.5%
Finland	2,532	28.9%	1,584	29.3%	948	28.4%	2,066	28.9%	466	28.9%
Germany	2,041	23.3%	1,415	26.2%	626	18.7%	1,816	25.4%	225	13.9%
Sweden	1,529	17.5%	1,067	19.7%	462	13.8%	1,224	17.2%	305	18.9%
The UK	105	1.2%	43	0.8%	62	1.9%	86	1.2%	19	1.2%
Other Europe	684	7.8%	241	4.5%	443	13.3%	401	5.6%	283	17.5%
Americas	1,809	20.7%	1,056	19.5%	753	22.6%	1,519	21.3%	290	18.0%
The United States	972	11.1%	614	11.3%	358	10.7%	815	11.4%	157	9.7%
Mexico	829	9.5%	442	8.2%	387	11.6%	698	9.8%	131	8.1%
Other Americas	8	0.1%	—	—%	8	0.2%	6	0.1%	2	0.1%
Asia/rest of the world	50	0.6%	5	0.1%	45	1.3%	25	0.4%	25	1.5%
Asia/Oceania	47	0.5%	5	0.1%	42	1.3%	24	0.3%	23	1.4%
Other countries	3	—%	—	—%	3	0.1%	1	—%	2	0.1%

Active collaboration with stakeholders

With several operation sites, we impact a variety of stakeholders around the world. Fostering transparent and active dialogue with stakeholders to understand their views and expectations is an essential factor for the acceptability of our operations and success.



Outokumpu joined COP28 in Dubai in December 2023 with Finnish climate leaders and engaged in current climate crisis discussions.

Outokumpu wants to be a reliable and trusted partner towards our stakeholders: customers, employees, investors, suppliers, and the communities we operate in, and maintains an active dialogue with its stakeholders to understand what their expectations and views are regarding Outokumpu.

We conduct a regular materiality analysis to keep up-to-date with the expectations of our stakeholders. The latest double materiality analysis will be finalized at the beginning of 2024. In 2023, we also participated in the Reputation & Trust survey in Finland to examine the general public's view on our reputation. Our overall reputation is moderate, and it has stayed the same for the past five years.

During the past year, Outokumpu also engaged in dialogue with various stakeholders in Europe, when taking part in the ResponsibleSteel certification process. As part of the process, stakeholder dialogues were carried out locally at each site in Europe, consisting of, for example, workers and various local community representatives in the areas where we operate. Outokumpu is now in the process of receiving the certificates for its European production sites.

Read more about [our suppliers](#) and [our employees](#).

Customers

In the stainless steel market, Outokumpu is known for the high quality and sustainability of our products, comprehensive product portfolio, and technical expertise. Our customers represent several industries, which means that we have a strong and balanced customer base spread across the globe and a range of industries. Our customers use our stainless steel to construct buildings and

infrastructure, produce energy, and manufacture appliances and cars, for example.

We work to solve the challenges our customers face and work together with them to find new application areas where stainless steel can be used. Our innovations date back to the time when stainless steel was first invented.

Today, our customers are more and more interested in lowering the carbon footprint of their products, in environmental aspects, and in their entire value chain. Outokumpu is leading the change towards sustainable stainless steel manufacturing globally, and has ambitious climate targets approved by the Science Based Target initiative. In terms of products, Outokumpu stainless steel has up to 75% lower carbon footprint, to help customers to reach their climate targets. We offer a product-specific carbon footprint for our products in Europe, to enable customers to evaluate their value chain emissions. Our latest innovation, Outokumpu Circle Green®, launched in 2022, marks our biggest achievement in this pursuit to date, with up to 93% lower carbon footprint compared to the industry average and a potential to transform industries. In 2023, we introduced it to different industries and partnered with, for example, Siemens and Fissler.

During the year we also introduced a new customer portal Connect, piloting it for the existing customers of our previous web shops. The target was to improve our customer experience and satisfaction as well as give customers more transparency about material availability in our European service centers. The portal helps us automate order booking and there are different self-services that relieve our experts to work on advising our customers.

We collect feedback from our customers as a part of the sales process. They are mostly satisfied or very satisfied with their business relationship with us. In their opinion, our strengths are quickly reacting to requests, understanding customer needs and being easy to reach. One improvement area continues to be our delivery performance.

Outokumpu takes several measures to ensure the safe use of our products. We offer safety information sheets for stainless steel in the EU and material safety data sheets in the U.S. For ferrochrome, we instruct our customers on safe use. We also comply with relevant product requirements such as REACH, RoHS and ELV, and we strictly control that there is no contamination of radioactive material in our steel. No health and safety incidents caused by our products were reported to us in 2023.

Communities

Outokumpu's production sites are often located in relatively small towns where we are a significant member of those communities and, in many cases, one of the few big private-sector employers in the area. Many of our production sites have long and interesting histories: some of our sites in Finland, Germany and Sweden have been producing metal products for decades or even centuries. We recognize that our decisions might have a major impact on communities, our personnel and local suppliers and service providers.

Our sites engage regularly with local community representatives, especially on the topics of employment, the environment, energy, or sponsoring. We also maintain continuous cooperation with local schools and universities, NGOs, our neighbors and other companies.

Ongoing permit processes are one important topic that is discussed with local stakeholders. Based on these discussions with the neighboring communities and with authorities, no significant negative impacts on local communities have been identified.



Informing local residents on small modular reactors

Outokumpu is investigating the opportunity to cut carbon dioxide emissions from its steel production with emerging small modular reactor (SMR) technology. We are in the forefront of decarbonizing the steel industry, and investigating the opportunities to utilize developing technologies in the energy offering is a natural step for us in decreasing our carbon dioxide emissions.

Pre-research related to the small modular reactor is ongoing, and it will include investigating any possible technical solutions and financial profitability as well as environmental impacts. Any possible investment decisions will take place at a later date.

A possible location for the SMR would be the area surrounding the Tornio plant, so in 2023 we invited our neighboring communities in Tornio, Finland and Haparanda, Sweden to hear about the project. Our Head of SMR project **Kristiina Tiilas** and Head of Energy Strategy **Tony Lindström** described the project.

There were also questions, and we discussed with the residents about the small modular reactors as a technique, the possible location of the small modular reactor, our pre-research including environmental impacts, the possibility to produce also heat for example for district heating as well as on the time schedule of the project.

In 2023, we continued to invite the families of our team members to family day events at our sites, which were again very well received, allowing the families of our team members to see our operations for themselves. We also organize open-door events also for our neighbors at our production sites as well as other stakeholders: in 2023, we arranged an inauguration at our Kemi mine to celebrate its expansion and to highlight its target of becoming the first carbon-neutral mine in the world by 2025. Our ferrochrome has 67% lower carbon footprint than the industry average, which in part has an impact on our stainless steel having the smallest carbon footprint in the market.

Before focusing on stainless steel, Outokumpu operated mines in Finland and elsewhere. The decision to focus on stainless was taken some twenty years ago, and our Kemi mine is currently the only mine we operate: it is an integral part of our stainless steel production. In 2023, Outokumpu continued to monitor and visit its old mine sites in Finland, both those where Outokumpu still has obligations and those where they have ended. In Finland, work continued for instance at the mines in Orivesi, working with the current owner to empty one pit of waste, and Enonkoski. In Enonkoski, we investigated the current situation to know it thoroughly enough for us to be able to apply for an environmental permit for complementary restoration measures in the area. Outokumpu has environmental permits at a few old mines. In 2023, there was one minor environmental permit breach in Kotalahti where leachate water is treated in a limestone-based treatment system and biological ponds: the annual average of iron concentration in leachate water released did not meet the environmental permits' requirements. The incident is reported as part of Outokumpu's environmental incidents in Minimizing environmental impacts.

[Information on old mines](#)

[List of Outokumpu's operating sites](#)

Non-governmental organizations

Non-governmental organizations (NGOs) are an important stakeholder group for Outokumpu: they provide us with external views on expectations and views towards big

companies like ours and our impact on nature and society. For example, regarding climate change, the dialogue has helped both sides to understand its urgency and related actions and policies. Other recurring topics are ongoing permit processes and other environmental issues. We are grateful to NGOs as they highlight any issues in our operating environment.

Since a Finnish NGO, Finnwatch, assessed critically our supply chain sustainability monitoring and purchasing, we have continued a dialogue with them, and Finnwatch has thanked Outokumpu for the actions taken, such as human rights impact assessment and committing to the UN Guiding Principles on Business and Human Rights. Based on for instance on their feedback, we have continued to work on the transparency of our supply chain. In 2023, we further strengthened the monitoring of our suppliers with the help of media monitoring and continued to implement our recent Supplier Code of Conduct and human rights policy in our supply chain.

[Read more on our supply chain](#)

Associations, memberships and public affairs

Outokumpu is a member of many international organizations and associations, such as the International Chamber of Commerce (ICC), the European Steel Association (Eurofer), the International Chromium Development Association (ICDA), EUROALLIAGES and EUROSILAG. We are actively involved in and support the work of these associations. For example, we provide relevant information to decision-makers and experts for the development of the business environment and legislation.

Outokumpu also participates in the work of trade organizations and is a member of industrial federations and associations in Finland, France, Germany, Italy, the Netherlands, Sweden, the UK, the US and Australia. These organizations advance industry views and contribute to national development. Outokumpu is also a member of the Sustainable Mining network in Finland and committed to the Finnish Sustainable Mining standard, based on the Canadian initiative Towards Sustainable Mining.

Taxes by country*

Million euros	2023	2022	2021
Finland	32	0	0
Sweden	0	0	0
Germany	30	1	1
Other Europe	4	2	1
The United States	6	3	2
Mexico	11	6	3
Asia and Oceania	0	1	1
Other countries	0	3	0
Group total	84	15	7

*Due net loss in certain years, paid taxes are reported cash based instead of booked taxes.

We conduct our public affairs through industry associations like Eurofer towards governing bodies and regulators. Outokumpu participates in different working groups in these associations, where the aim is to provide expertise to help decision-makers. In these forums, members share best practices and obtain benchmark data relating to, for example, the environment, R&D, product life cycles, product and chemical safety, and occupational safety. Members also contribute their own data for use in the industry reports, such as the ICDA's safety and sustainability reporting.

In 2023, Outokumpu's membership fees and other contributions to the associations amounted to EUR 954,000.

Sponsoring and support

In sponsorships, Outokumpu prioritizes connections to stainless steel, sustainability, talent, and education. Local sponsorship follows the same guidelines. Locally, we sponsor for instance significant local projects, sports associations, and artworks by donating stainless steel. Outokumpu does not take part in or otherwise support political activities, whether they are local, national, or international.

Outokumpu also makes discretionary donations for the common good as a responsible corporate citizen. These

donations are approved by the Leadership Team or by the Board of Directors. In 2023, Outokumpu's shareholders approved the Board of Directors' proposal for a donation of EUR 500,000 to continue supporting relief efforts in Ukraine and the neighboring countries.

Outokumpu supports research related to its field of industry and maintains close cooperation with educational institutes. We offer apprenticeships to local colleges and offer student placements also in the form of one-year programs. We also introduce our operations to schoolchildren and local students.

Outokumpu has also been among the founders of a number of technological, research and educational funds. These funds support and promote university-level research and teaching and business opportunities. Examples include the Technology Industries of Finland Centennial Foundation and the Fund for the Association of Finnish Steel and Metal Producers.

In 2023, Outokumpu spent some EUR 615,000 in sponsorships.

Investors and shareholders

Outokumpu's share is a so-called people's share in Finland, with households and private investors owning approximately a quarter of its outstanding shares. The largest shareholder is Solidium Oy, the Finnish-state owned investment company, which owned 15.5% of the outstanding shares at year-end. The share of international institutions' ownership slightly decreased during the year and reached a level of 28.2% at the end of 2023.

Outokumpu has a strong focus on shareholder returns and according to its dividend policy, aims to distribute a stable and growing dividend to be paid annually. In 2023, we distributed a total of EUR 152 million as dividends for year 2022. The dividend consisted of a base dividend of EUR 0.25 per share and an extra dividend of EUR 0.10 per share for the exceptionally good result of the financial year. The base dividend amount of EUR 0.25 was the basis for future dividend distributions in accordance with the policy.

In 2023, we also completed the first share buyback program in our history. The program started already in November 2022 and under the program, we repurchased a total of 19,836,205 of our own shares and used a total of EUR 100 million for the share repurchases. Part of these repurchases occurred already in 2022. In November 2023, we launched another share buyback program, with a maximum of 11 million shares. During 2023, we repurchased a total of 13,903,534 of our own shares with EUR 70 million. 2,642,455 shares were repurchased under the new 2023 share buyback program and 11,261,079 under the 2022 program that ended on March 24, 2023. On December 31, 2023, Outokumpu held 25,683,745 treasury shares. Through the share buyback programs, Outokumpu seeks to mitigate and manage the dilutive impact of the company's outstanding convertible bonds.

Outokumpu continued its regular and active communication with investors and analysts throughout the year. Key topics in 2023 were Outokumpu's strategic considerations, capital allocation, shareholder returns, weaker market environment, stainless steel price development, energy market, cost inflation, sustainability, and decarbonization.

During the year, Outokumpu participated in seven conferences or roadshows, and, in addition to IR activities, management met investors in 44 one-on-one or small group meetings. On top of that, we arranged four breakfast seminars for Finnish institutional investors after every quarterly result and four pre-silent conference calls, which were hosted by CFO Pia Aaltonen-Forsell and were open to everyone to participate.

After a break of few years, the Annual General Meeting 2023 was held physically at the Dipoli congress center in Espoo, Finland, in March 2023. Around 300 participants attended the meeting, and altogether more than 900 shareholders participated either by attending or voting in advance. Before the Annual General Meeting, we also arranged an event, where CEO Heikki Malinen and CFO Pia Aaltonen-Forsell were interviewed about current topics and there was also a possibility to directly ask questions.

Principal shareholders on December 29, 2023

	Shares	%
Solidium Oy	70,793,208	15.5
Varma Mutual Pension Insurance Company	21,938,403	4.8
Ilmarinen Mutual Pension Insurance Company	14,707,361	3.22
The Social Insurance Institution of Finland	8,388,652	1.84
State Pension Fund	7,500,000	1.64
Elo Mutual Pension Insurance Company	6,698,000	1.47
Mandatum Life	5,319,768	1.16
OP Life Assurance Company Ltd.	4,007,283	0.88
Nordea Life Assurance Finland Ltd.	3,266,360	0.71
Equity Fund Evli Europe	2,109,482	0.46
Nordea Pro Finland Fund	1,940,720	0.42
Etola Erkki Olavi	1,900,000	0.42
Danske Invest Finnish Equity Fund	1,633,667	0.36
Sinituote Oy	1,588,560	0.35
Helander Hannu-Jukka	1,559,000	0.34
OP-Finland Small Firms Fund	1,369,229	0.3
Säästöpankki Kotimaa - Equity Fund	1,291,975	0.28
Laakkonen Mikko Kalervo	1,256,000	0.27
Seligson & Co Equity Fund	1,112,368	0.24
Insurance Company Fennia Life	1,014,889	0.22
	159,394,925	34.88
Nominee accounts held by custodian banks	128,795,988	28.19
Treasury Shares	25,683,745	5.62
Other Shareholders	142,999,790	31.31
Total	456,874,448	100

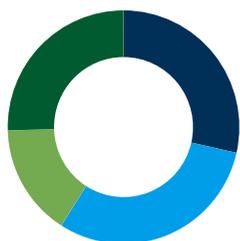
In the Reputation & Trust among investors -survey, arranged by Finnish company T-Media, Outokumpu improved its ranking significantly, by more than 20 places. Improving from 57th place to 35th, Outokumpu was one of the companies with the best improvement.

In 2023, Outokumpu's share price was EUR 5.90 at its highest and EUR 3.60 at its lowest (2022: EUR 6.48 at its highest and EUR 3.51 at its lowest). The share price closed at 4.48 at the end of year 2023, and decreased by 5% from the closing price of EUR 4.73 at the end of 2022. The market capitalization was EUR 2,048 million at the end of the year, compared to the level of EUR 2,161 million at the end of 2022.

During 2023, the average daily trading volume in Outokumpu shares on Nasdaq Helsinki was 1,5 million shares. 386 million Outokumpu shares were traded in total on Nasdaq Helsinki during the year (2022: 720 million shares).

Outokumpu's shares are listed on the Nasdaq Helsinki Large Cap list under the trading code OUT1V and incorporated into the Finnish book-entry securities system. Outokumpu's shares are also traded on various alternative platforms.

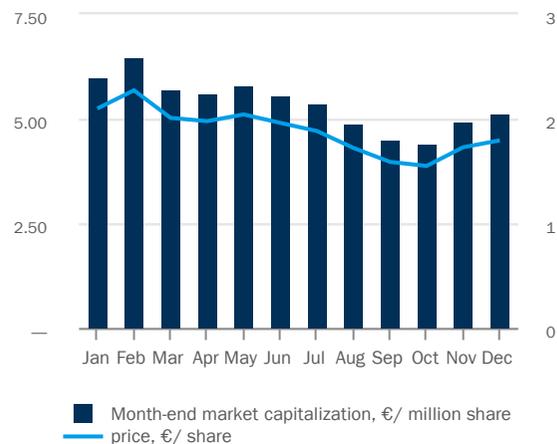
Shareholders by group on December 29, 2023



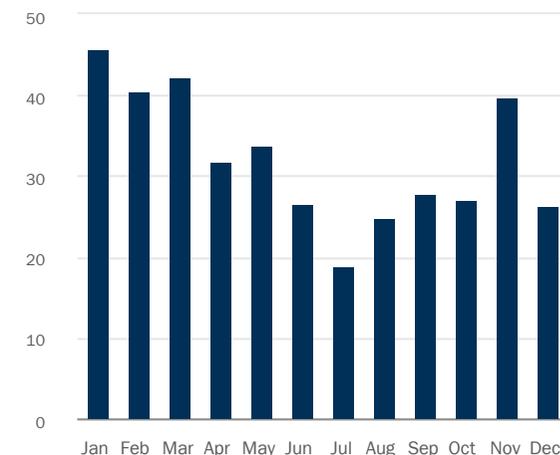
- Nominee registered and non-Finnish holders 28.56%
- Finnish institutions, companies and foundations 30.49%
- Solidium Oy 15.5%
- Households 25.45%

Solidium Oy is wholly owned by the Finnish state Source: Innovatics

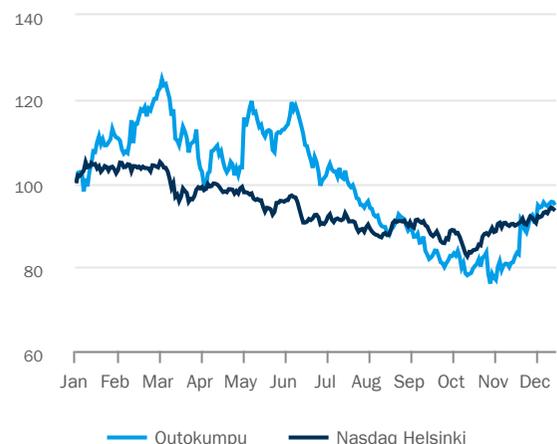
Market capitalization and share price development



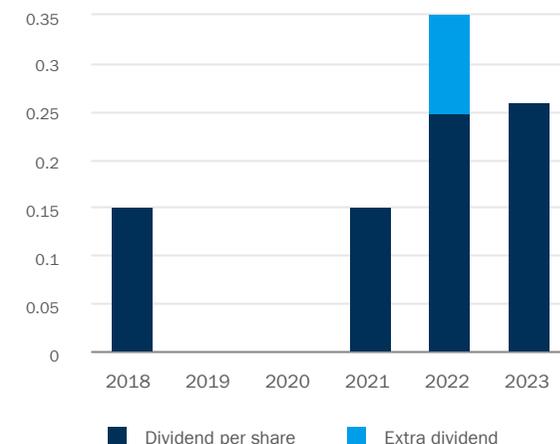
Monthly trading volume, million shares



Outokumpu share price development in 2023



Dividend/share, €



For 2023, dividend is a proposal by the Board of Directors. In 2022, the dividend included a one-time extra of EUR 0.10 per share for the exceptionally good result of the account period.

Conducting business with high integrity

Every employee at Outokumpu has a role in making ethical choices that help to build a world that lasts forever. The group-wide ethics and compliance program steers the sustainable and ethical decision-making and compliant business practices at Outokumpu. The first ever Ethics and Compliance Week highlighted the importance of conducting business with high integrity to all employees globally.



Outokumpu continuously raises awareness about ethics and compliance (E&C) topics to ensure fair play. During the E&C Week, employees discussed key questions such as: What do ethics and integrity mean to you? What is the role of responsible and ethical business practices as part of our sustainability journey?

Ethical business – how do we ensure fair play?

The Outokumpu Ethics and Compliance (E&C) Week was organized for the first time in September 2023 with success. The purpose of the week was to raise awareness and provide information about important E&C themes to all Outokumpu employees globally to enable everyone to do the right thing and conduct business fairly and in a responsible and ethical manner. The E&C Week consisted of many engaging activities and meaningful discussions. As part of the E&C Week, employees were encouraged to take part in the keynote speech, other presentations and discussions and various E&C events organized locally at Outokumpu's sites.

Being a trusted business partner

Trade sanctions compliance was one of the key themes presented during the E&C Week due to its importance and topical nature. Outokumpu is committed to complying with all applicable sanctions regulations, and we expect our suppliers, sub-suppliers and other business partners to also act as trusted partners and comply with these requirements as well. Within the trade compliance area, Outokumpu applies a Know Your Business Partner program, following which business partners are identified and monitored based on risk. Sanctions monitoring is part of this process. Outokumpu is also constantly monitoring and is committed to complying with applicable export and import restrictions. Furthermore, our employees are regularly trained in the adherence to sanctions regulations.

Due to the Russian invasion of Ukraine, we continued to concentrate on trade sanctions compliance as a priority work also during 2023 to ensure that all applicable sanctions regulations are complied with. In addition to the enhanced third-party screening activities, as well as adapting and complying with new sanctions regulations and conducting trainings for the employees within the trade sanctions area, Outokumpu's Know Your Business Partner-related processes and documentation were reviewed and updated, also taking into consideration the possible risks related to the circumvention of sanctions.

Launch of a new legal and compliance podcast

A new legal and compliance podcast was launched during the E&C Week. The purpose of this internal podcast is to share information about various E&C topics with Outokumpu employees in an easily digestible way, helping employees to comply with Outokumpu's internal policies and to make ethical decisions as part of their daily activities at Outokumpu – it is up to all of us to do the right thing!

The theme for the first podcast was competition law compliance and especially compliance with the rules regarding information exchange. Outokumpu is committed to complying with applicable competition laws and regulations and is continuously investing significant efforts in this area, including further developing various competition law compliance risk mitigation tools and giving trainings on this important topic.

Emphasis on the anti-corruption program

Outokumpu has a strict zero tolerance policy for any form of corruption and bribery. For this purpose, Outokumpu has an anti-corruption program in place as part of the group-wide E&C Program. The purpose of the program is to help to mitigate risks related to corruption and bribery and it contains various elements, such as a detailed internal guidance document, the Anti-Corruption Instruction. We also have a specific instruction in place for the use of intermediaries and consultants. There is also an anti-corruption e-learning as well as other forms of trainings available on corruption and bribery risks. During 2023, the different elements of the anti-corruption program were under review and assessment. In general, E&C risks are assessed as part of the Group risk management framework. In addition, we are continuously developing internal controls over identified risk areas, including anti-corruption.

Demystifying internal investigations

We encourage everyone to report their concerns and speak up. When concerns are reported they will be treated with strict confidence and assessed and reviewed in accordance with our internal investigations procedure. At Outokumpu it is our global policy not to tolerate any retaliation of individuals raising concerns in good faith.

As part of the E&C Week activities, we reminded employees about the ways to raise and report concerns at Outokumpu, including through Outokumpu's SpeakUp channel. It is an externally hosted channel where concerns can be reported confidentially and anonymously, to the extent allowed by applicable laws and regulations. In addition, a presentation about our internal investigations procedure was given to the employees in cooperation between Internal Audit and the Group E&C team as part of the E&C Week, in order to further increase the transparency in how internal investigations are conducted.

Focus on engaging trainings and communications as part of the E&C Visibility Tour

All Outokumpu employees are responsible for conducting business with high integrity. Outokumpu's Group E&C team

conducts trainings and shares information on a regular basis on various E&C topics to help ensure that our employees globally know how to apply E&C rules and ethical principles in their daily decision-making. At Outokumpu, E&C related trainings are given both through mandatory e-learnings as well as face-to-face trainings, webinars and discussions.

As part of the effective implementation of Outokumpu's E&C Program, the Group E&C team continued the E&C Visibility Tour and conducted face-to-face trainings and met teams online to raise awareness on topical E&C matters, such as anti-corruption, data privacy, competition law compliance and trade sanctions in 2023. In addition, 98% of administrative employees completed the Code of Conduct e-learning and 99% of administrative employees completed the Data Protection e-learning in 2023. In addition to the data protection-related e-learning and other data privacy training sessions organized to the employees, the further development of Outokumpu's global data protection program continued. We are also in the process of renewing all E&C related e-learnings and the plan is to launch those e-learnings in 2024.

**Our ethical choices
build a world that
lasts forever.**





About reporting

Outokumpu's sustainability reporting is prepared with reference to the GRI Standards.

In sustainability reporting, we report on the material developments of continuing sites and changes in 2023. Sustainability information is also available on our website.

Scope of the report

Outokumpu has published its sustainability review as part of the Annual Report 2023. Sustainability information is also available at www.outokumpu.com/sustainability.



Outokumpu Oyj reports on the material developments of continuing sites and changes in 2023 as part of the Annual Report. The reported data includes all continuing sites. Additional information is published on the company's [website](http://www.outokumpu.com). The Annual Report 2023, including Sustainability Review, was published in March 2024.

Outokumpu's report has been prepared with reference to the GRI Standards 2021. The materiality assessment from 2021 and continuous communication with stakeholders were the basis for the decision on material topics and relevant disclosures.

The independent practitioner's assurance report on the limited assurance conclusion is available on [page 96](#) in the Sustainability Review. The Financial Statements 2023 have been audited, and the auditor's report is available after the Financial statements.

Measurement and estimation methods

Economic responsibility

Most figures relating to economic responsibility presented in this report are based on the consolidated financial statements issued by the Outokumpu Group and collected through Outokumpu's internal consolidation system. Financial data has been prepared in accordance with International Financial Reporting Standards (IFRS). Outokumpu's accounting principles for the Group's consolidated financial statements are available in the related note to the consolidated financial statements.

All financial 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. Using the GRI

guidelines as a basis, economic responsibility figures have been calculated as follows:

Direct economic value generated

Direct economic value generated includes all revenues received by Outokumpu during the financial year. The sources of revenue include sales invoiced to customers, net of discounts and indirect taxes, revenues reported as other operating income (including gains from the disposal of Group assets), and revenues reported as financial income, mainly dividend and interest income.

Economic value distributed

Operating costs include the cost of goods and services purchased by Outokumpu during the financial year. Employee benefit expenses include wages and salaries, termination benefits, social security expenses, pension and other post-employment and long-term employee benefits, expenses from share-based payments and other personnel expenses. Taxes paid to the government include income taxes paid (cash-flow based). Payments to providers of capital include interest costs on debt and other financial expenses during the financial year. Capitalized interest is deducted from this figure. The dividend payout is included in the payments to providers of capital according to the proposal by Outokumpu's Board of Directors.

Community investments consist of donations to and investments in beneficiaries external to the company.

Local suppliers

In this report, vendors are defined as local if they are located in the same country as the Outokumpu location. Significant locations for suppliers are defined as sites with production processes and our finishing line and logistic hub in the Netherlands,

Environmental responsibility

All energy and environmental information is based on the operational control. Outokumpu's climate change target is based on science and approved by the Science Based Target initiative. The target includes CO₂ intensity of direct and indirect emissions of electricity and upstream emissions. Emissions are consolidated on production control.

The green house gas measuring and reporting is following the GHG Protocol Corporate Standard and Value Chain Standards. Site falling under the European emission trading system (EU ETS) report the direct emission according to the verified EU ETS requirements.

CO₂ emissions of electricity are calculated and monitored by the emissions factor of Outokumpu's electricity mix of 38 kg CO₂/MWh (2022: 93 kg CO₂/MWh), given by the electricity supplier for the used electricity and calculated as weighted average. It includes 100% of electricity use in EU market which is coming with guarantees of origin from ownerships in power production, and the purchase of RECs in the US. In addition, the location-based electricity emissions are disclosed. They are calculated by the published country- specific emissions factors of the electricity generation of 2021 or 2022 if available.

CO₂ emissions outside the company (scope 3), except electricity, are covered by more than 95%. The main impact comes from purchased goods, mainly alloys. Also emissions from business travel and waste generated are reported, at least partly, as well as downstream transportation of products. The emissions are calculated as follows:

- For alloys: by emissions factors of the life-cycle assessments of relevant associations. Emission factor

of ferronickel was calculated with 40% from supplier specific emissions and 60% of LCA e-factor published in 2021. Emissions of sold ferrochrome are not allocated to the stainless steel production of the company.

- E-factor for lime and dolomite are calculated with 71% from supplier specific emissions. For used gases, electrodes and coke: by emissions factors of ISO 14404.
- For upstream emissions of light fuel oil: by emissions factors of WorldSteel Association.
- For internal and product transport: by typical distances and type of transport with the well-to-wheel emissions according to the EEA report 2/2022 of the European Environmental Agency for the European transport and with the published e-factors of US EPA for US transport.
- For business travel: for the cars, trains and flights by CO₂ reports of the service provider.

Upstream transport was assessed on data of environmental product declaration of 2020, to be at about 3% of the scope 3 emissions but excluded from scope 3 emissions.

When calculating the CO₂ intensity, the total volume of own crude steel production and purchased crude steel was used as divider since that corresponds to total processed and sold products. For other environmental indicators like water and waste only Outokumpu's own steel production was taken into account.

The recycled content according to ISO 14021 (recycled steel content) is calculated as the sum of pre- and post-consumer scrap related to crude steel production. Additionally, we report on the recycled material content including all recycled metals from treated own waste streams entering the melt shop.

Energy efficiency is defined as the sum of specific fuel and electricity energy of all processes calculated as energy consumption compared to the product output of that process. It covers all company productions: ferrochrome with 15%, melt shop, hot rolling and cold rolling processes. Used heat values and the consumption of energy are taken from supplier's invoices.

Water withdrawal is measured for groundwater surface and sea water, taken from municipal suppliers and estimated for rainwater amount. Waste generation details on company's typical waste categories of hazardous and non-hazardous are reported as dry tonnes and classified according to national legislation. In 2023, waste is reported as generated, diverted from landfill and landfilled. The offsite and onsite recycling and recovery are reported. Waste treated goes to energy recovery and is counted as diverted from landfill.

Slag use rate is calculated as the total amount of slag that is used compared to the generated slag. Stored slag is not considered in this calculation. Slag that is classified as a by-product is included in the slag use rate, but not in the waste management tables, since it has not been a waste.

Customers' CO₂ savings are calculated with the difference of world's stainless steel footprint of 7 tonnes CO₂ per tonne crude steel with 40% scrap recycling and 30% of nickel pig iron production and Outokumpu's footprint of 1.70 tonnes CO₂ per tonne steel and company's production.

Social responsibility

Health and safety figures

Health and safety figures reflect the scope of Outokumpu's operations as they were in 2023.

Safety indicators (accidents and preventive safety actions) are expressed per million hours worked (frequency). Safety indicators include Outokumpu employees, persons employed by a third party (contractor) or visitor accidents and preventive safety actions. A workplace accident is the direct result of a work-related activity and it has taken place during working hours at the workplace.

Accident types

- Lost time injury (LTI) is an accident that caused at least one day of sick leave (excluding the day of the injury or accident), as the World Steel Association defines it. One day of sick leave means that the injured person has not been able to return to work on their next scheduled period of working or any future working day if caused by

an outcome of the original accident. Lost-day rate is defined as more than one calendar day absence from the day after the accident per million working hours.

- Restricted work injury (RWI) does not cause the individual to be absent, but results in that person being restricted in their capabilities so that they are unable to undertake their normal duties.
- Medically treated injury (MTI) has to be treated by a medical professional (doctor or nurse).
- First aid treated injury (FTI), where the injury did not require medical care and was treated by a person themselves or by first aid trained colleague.
- Total recordable injury (TRI) includes fatalities, LTIs, RWIs and MTIs, but FTIs are excluded.
- All workplace accidents include total recordable injuries (TRI) and first aid treated injuries (FTI)

Proactive safety actions

Hazards refer to events, situations or actions that could have led to an accident, but where no injury occurred. Safety behavior observations (SBOs) are safety-based discussions between an observer and the person being observed. Other preventive safety action includes proactive measures.

Employee benefit expenses

Employee benefit expenses include wages and salaries, termination benefits, social security expenses, pension and other post-employment and long-term employee benefits, expenses from share-based payments and other personnel expenses.

Administrative employees

Administrative employees include all white collar employees and managers of operators that were active as of December 31, 2023.

Training days per employee

The number of days spent by an employee in training when each training day is counted as lasting eight hours.

A bonus is an additional payment for good performance. These figures are reported without social costs or fringe benefits.

Personnel figures

Rates are calculated using the total employee numbers at the end of the reporting period. The calculations follow the requirements of GRI Standards. The following calculation has been applied e.g.

Hiring rate = $\text{New Hires} / \text{total number of permanent employees by year-end}$

Average turnover rate = $(\text{Leavers} + \text{New Hires}) / (\text{total number of permanent employees by year-end} \times 2)$

Days lost due to strikes

The number of days lost due to strikes is calculated by multiplying the number of Outokumpu employees who have been on strike by the number of scheduled working days lost. The day on which a strike starts is included.

Safety indicators include our employees, contractors and visitors.



Statement of use Outokumpu Oyj has reported with reference to the GRI Standards 2021 for the period from 01.01.2023 to 31.12.2023.

GRI 1 used GRI 1: Foundation 2021

Applicable GRI Sector Standard No applicable GRI Sector Standard

GRI standard	Disclosure	Omission	Location in Annual report 2023	Assured
General disclosures				
GRI 2: General Disclosures				
2-1	Organizational details		Corporate Governance Statement CG 99-117, back cover	
2-2	Entities included in the organization's sustainability reporting		Scope of the report SR 88	
2-3	Reporting period, frequency and contact point		Scope of the report SR 88, back cover	
2-4	Restatements of information		Scope of the report SR 88	
2-5	External assurance		Scope of the report SR 87-90, Independent practitioner's limited assurance report SR 96-97	
2-6	Activities, value chain and other business relationships		This is Outokumpu AR 4-5, Our impact AR 11, Stainless steel market AR 12-16	
2-7	Employees	Breakdown by gender and region not reported	People and society SR 64-79	x
2-9	Governance structure and composition		Corporate Governance Statement CG 99-117	
2-10	Nomination and selection of the highest governance body		Corporate Governance Statement CG 99, 107	
2-11	Chair of the highest governance body		Corporate Governance Statement CG 100	
2-12	Role of the highest governance body in overseeing the management of impacts		Corporate Governance Statement CG 104-106	
2-13	Delegation of responsibility for managing impacts		Corporate Governance Statement CG 104-106	
2-14	Role of the highest governance body in sustainability reporting		Corporate Governance Statement CG 104-106, Review by the Board of Directors FS 131-135	
2-16	Communication of critical concerns		Corporate Governance Statement CG 114-117	
2-19	Remuneration policies		Remuneration statement CG 118-122	
2-22	Statement on sustainable development strategy		Review by the Board of Directors FS 131-135	
2-25	Processes to remediate negative impacts		Human rights as the foundation of our business SR 65-66, Conducting business with high integrity SR 85-86	
2-26	Mechanisms for seeking advice and raising concerns		Human rights as the foundation of our business SR 65-66, Conducting business with high integrity SR 85-86	
2-27	Compliance with laws and regulations	No significant instances of non-compliances have occurred in 2023	Human rights as the foundation of our business SR 65-66, Conducting business with high integrity SR 85-86, Review by the Board of Directors FS 99-117	x
2-28	Membership associations		Active collaboration with stakeholders SR 82	
2-29	Approach to stakeholder engagement		Active collaboration with stakeholder SR 80-84	
2-30	Collective bargaining agreements		Teamwork towards our targets SR 71-77	x

Material topics

GRI 3: Material topics				
3-1	Process to determine material topics		Sustainability strategy SR 31-35	
3-2	List of material topics		Sustainability strategy SR 35	
GRI 201: Economic performance				
201-1	Direct economic value generated and distributed		This is Outokumpu, Our year 2023 AR 4-5, Our impact AR 11, Active collaboration with stakeholders SR 80-84	x
201-2	Financial implications and other risks and opportunities due to climate change		Decarbonization across the value chain SR 40-46, Review by the Board of Directors FS 131-135, Risks and opportunities AR 20, 28	x
GRI 203: Indirect economic impacts				
203-2	Significant indirect economic impacts		Active collaboration with stakeholders SR 80-84, Strength and resilience AR 7, Our impact AR 11	x
GRI 204: Procurement practices				
204-1	Proportion of spending on local suppliers		Fostering a sustainable supply chain SR 59-62	x
GRI 205: Anti-corruption				
205-2	Communication and training about anti-corruption policies and procedures	98% of administrative employees trained. Training by region or on governance bodies not reported	Conducting business with high integrity SR 85-86	x
GRI 206: Anti-competitive behavior				
206-1	Legal actions for anti-competitive behavior, anti-trust, and monopoly practices	No legal actions pending or completed during 2023	Conducting business with high integrity SR 85-86, Review by the Board of Directors FS 124-140	x
GRI 207: Tax				
207-2	Tax governance, control, and risk management		Corporate Governance Statement CG 105	
207-4	Country-by-country reporting		Active collaboration with stakeholders SR 80-84	
GRI 301: Materials				
301-1	Materials used by weight or volume		Accelerating the circular economy SR 50-52	x
301-2	Recycled input materials used		Accelerating the circular economy SR 50-52	
301-3	Reclaimed products and their packaging materials		Active collaboration with stakeholders SR 80-81	
GRI 302: Energy				
302-1	Energy consumption within the organization		Low-carbon energy and energy efficiency SR 47-49	x
302-3	Energy intensity		Low-carbon energy and energy efficiency SR 47-49	x
302-4	Reduction of energy consumption		Low-carbon energy and energy efficiency SR 47-49	
GRI 303: Water and effluents				
303-1	Interactions with water as a shared resource		Biodiversity and water management SR 53-55	x
303-2	Management of water discharge-related impacts		Biodiversity and water management SR 53-55	x
303-3	Water withdrawal	Information on dissolved solids is not available	Biodiversity and water management SR 53-55	x
303-4	Water discharge	Information on dissolved solids is not available	Biodiversity and water management SR 53-55	x
303-5	Water consumption		Biodiversity and water management SR 53-55	

GRI 304: Biodiversity

304-1	Operational sites owned, leased, managed in, or adjacent to, protected areas and areas of high biodiversity value outside protected areas		Biodiversity and water management SR 53-55	
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GRI 305: Emissions

305-1	Direct (Scope 1) GHG emissions		Decarbonizing across the value chain SR 40-46	x
305-2	Energy indirect (Scope 2) GHG emissions		Decarbonizing across the value chain SR 40-46	x
305-3	Other indirect (Scope 33) GHG emissions		Decarbonizing across the value chain SR 40-46	x
305-4	GHG emissions intensity		Decarbonizing across the value chain SR 40-46	x
305-7	Nitrogen oxides (NOx), sulfur oxides (SOx), and other significant air emissions		Minimizing impacts on the environment SR 56-57	x

GRI 306: Waste

306-1	Waste generation and significant waste related impacts		Accelerating the circular economy SR 50-52	
306-3	Waste generated		Accelerating the circular economy SR 50-52	x
306-4	Waste diverted from disposal		Accelerating the circular economy SR 50-52	x
306-5	Waste directed to disposal	Only total waste to landfill reported	Accelerating the circular economy SR 50-52	x

GRI 308: Supplier environmental assessment

308-1	New suppliers that were screened using environmental criteria		Fostering a sustainable supply chain SR 59-63	
308-2	Negative environmental impacts in the supply chain and actions taken		Fostering a sustainable supply chain SR 59-63	

GRI 401: Employment

401-1	New employee hires and employee turnover		Team work towards our targets SR 78	x
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GRI 403: Occupational health and safety

403-1	Occupational health and safety managementsystem		Always working safely SR 68-70	
403-2	Hazard indentification, risk assessment, and incident investigation		Always working safely SR 68-70	
403-4	Worker participation, consultation, and communication on occupational health and safety		Always working safely SR 68-70	
403-5	Worker training on occupational health and safety		Always working safely SR 68-70	
403-8	Workers covered by an occupational health and safety management system		Always working safely SR 68-70	
403-9	Work related injuries	Number of hours worked not reported	Always working safely SR 68-70	x

GRI 404: Training and education

404-2	Programs for upgrading employee skills and transition assistance programs		Team work towards our targets SR 71-79	
404-3	Percentage of employees receiving regular performance and career development reviews		Team work towards our targets SR 71-79. Details of gender and employee category not available.	

GRI 405: Diversity and equal opportunity

405-1	Diversity of governance bodies and employees	Information on governance bodies by age groups is not reported. BoD not reported by age group as not reasonable.	Review by the Board of Directors FS 134-135, Teamwork towards our targets SR 71-79	x
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GRI 406: Non-discrimination

406-1	Incidents of discrimination and corrective actions taken		Corporate Governance statement CG 114-117	
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GRI 407: Freedom of association and collective bargaining

407-1	Operations and suppliers in which the right to freedom of association and collective bargaining may be at risk		Fostering a sustainable supply chain SR 59-62, no risk within own operations	
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GRI 408: Child labor

408-1	Operations and suppliers at significant risk of incident of child labour		Fostering a sustainable supply chain SR 59-62, no risk within own operations	
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GRI 409: Forced or compulsory labor

409-1	Operations and suppliers at significant risk of forced and compulsory labor		Fostering a sustainable supply chain SR 59-62, no risk within own operations	
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GRI 411: Rights of indigenous people

411-1	Incidents of violation involving rights of indigenous people		Fostering a sustainable supply chain SR 59-62, no risk within own operations	
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GRI 413: Local communities

413-2	Operations with significant actual and potential negative impacts on local communities		Minimizing impacts on the environment SR 56–57, Active collaboration with stakeholders SR 80-84	x
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GRI 414: Supplier social assessment

414-1	New suppliers that were screened using social criteria		Fostering a sustainable supply chain SR 59-63	
414-2	Negative social impacts in the supply chain and actions taken		Fostering a sustainable supply chain SR 59-63	

GRI 415: Public policy

415-1	Political contributions		Outokumpu does not make any donations to political parties or groups, see Code of Conduct https://www.outokumpu.com/en/sustainability/sustainability-downloads , Active collaboration with stakeholders SR 80-82	x
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Company's own indicators

Resource efficiency	Recycled material content and recycled (steel) content acc. Iso 14021		Accelerating the circular economy SR 50-52	x
Energy	Energy efficiency		Low-carbon energy and energy efficiency SR 47-49	x
Climate change	Science Based Target		Decarbonization across the value chain SR 40-46	x
By-products	Slag use rate		Accelerating the circular economy SR 50-52, 2023 in figures AR 5	x

ResponsibleSteel content index*

ResponsibleSteel Principle (International Standard Version 2.0)

1. Corporate Leadership	Sustainability strategy SR 31-38
2. Social, Environmental and Governance Management Systems	Sustainability strategy SR 31-38 Fostering a sustainable supply chain SR 58-63 Teamwork towards our targets SR 71-79 Conducting business with high integrity SR 85-86
3. Responsible Sourcing of Input Materials	Fostering a sustainable supply chain SR 58-63
4. Decommissioning and Closure	Not applicable due to no confirmed plans to decommission or close sites
5. Occupational Health and Safety	Always working safely SR 68-70
6. Labour Rights	Teamwork towards our targets SR 71-79
7. Human Rights	Fostering a sustainable supply chain SR 58-63 Human rights as the foundation of our business SR 65-67
8. Stakeholder Engagement and Communication	Active collaboration with stakeholders SR 80-84
9. Local Communities	Active collaboration with stakeholders SR 80-84
10. Climate change and greenhouse gas emissions	Decarbonization across the value chain SR 40-52, Low-carbon energy and energy efficiency 47-49
11. Noise, Emissions, Effluents and Waste	Accelerating the circular economy SR 50-52 Minimizing impacts on the environment SR 56-57
12. Water Stewardship	Biodiversity and water management SR 53-55
13. Biodiversity	Biodiversity and water management SR 53-55

* Outokumpu has not yet been certified by the ResponsibleSteel initiative but this table indicates which part of the Sustainability Review 2023 contains information on Outokumpu's sustainability work related to the ResponsibleSteel Principles and respective requirements.

Independent practitioner's limited assurance report

To the Management of Outokumpu Oyj

We have been engaged by the Management of Outokumpu Oyj (hereinafter also the "Company") to perform a limited assurance engagement on Selected sustainability information for the reporting period from 1 January 2023 to 31 December 2023, disclosed in Outokumpu Oyj's Annual Report 2023 available on the Company's website (hereinafter the Selected sustainability information).

Selected sustainability information

The selected sustainability information within the scope of assurance covers:

- Indicators as set out in GRI Standards of the Global Reporting Initiative –standards and Company's internal reporting instructions as identified in the GRI content index in the Company's Sustainability Review 2023.
- EU taxonomy reporting as disclosed in Outokumpu Oyj's Board of Directors' report of Outokumpu Oyj's Annual Report 2023.

Management's responsibility

The Management of Outokumpu Oyj is responsible for preparing the Selected sustainability information in accordance with the Reporting criteria as set out in Outokumpu Oyj's reporting instructions described in Outokumpu Oyj's Sustainability Review 2023, the GRI Standards of the Global Reporting Initiative, Regulation (EU) 2020/852 and supplementing Delegated Acts (collectively reporting criteria). The Management of Outokumpu Oyj is also responsible for such internal control as the management determines is necessary to enable the preparation of the Selected sustainability information that is free from material misstatement, whether due to fraud or error.

Practitioner's independence and quality management

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.

PricewaterhouseCoopers Oy applies International Standard on Quality Management (ISQM) 1, which requires the firm to design, implement and operate a system of quality management including policies or procedures regarding compliance with ethical requirements, professional standards and applicable legal and regulatory requirements.

Practitioner's responsibility

Our responsibility is to express a limited assurance conclusion on the Selected sustainability information based on the procedures we have performed and the evidence we have obtained. We conducted our limited 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", and, in respect of greenhouse gas emissions, International Standard on Assurance Engagements (ISAE) 3410 "Assurance Engagements on Greenhouse Gas Statements". These standards require that we plan and perform the engagement to obtain limited assurance about whether the Selected sustainability information is free from material misstatement.

In a limited assurance engagement, the evidence-gathering procedures are more limited than for a reasonable assurance engagement, and therefore less assurance is obtained than in a reasonable assurance engagement. An assurance engagement involves performing procedures to obtain evidence about the amounts and other information in the Selected sustainability information. The procedures selected depend on the practitioner's judgment, including an assessment of the risks of material misstatement of the Selected sustainability information.

Our work consisted of, amongst others, the following procedures:

- Interviewing senior management of the Company.
- Conducting site visits in Finland and United States of America.
- Interviewing employees responsible for collecting and reporting the Selected information at the Group level.
- Assessing how Group employees apply the reporting instructions and procedures of the Company.
- Testing the accuracy and completeness of the information from original documents and systems on a sample basis.
- Testing of the EU Taxonomy related disclosures.
- Testing the consolidation of information and performing recalculations on a sample basis.
- Considering the disclosure and presentation of the Selected sustainability information.

Limited assurance conclusion

Based on the procedures we have performed and the evidence we have obtained, nothing has come to our attention that causes us to believe that Outokumpu Oyj's Selected sustainability information for the reporting period ended 31 December 2023 is not properly prepared, in all material respects, in accordance with the Reporting criteria.

When reading our limited assurance report, the inherent limitations to the accuracy and completeness of sustainability information should be taken into consideration.

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

Helsinki 28 February 2024

PricewaterhouseCoopers Oy

Tiina Puukkoniemi

Partner, Authorised Public Accountant (KHT)

Sustainability Reporting & Assurance

Janne Rajalahti

Partner, Authorised Public Accountant (KHT)

Audit Partner