

# SUSTAINABILITY

Strategy and framework

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Climate strategy

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Sustainable supply and recycling

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Case: Partnership in solar energy

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Sustainable operations

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Sustainable customers and sectors

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Case: Arconic Architectural

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## Contributing to a circular and sustainable economy

By managing its business in a sustainable way, Gränges strengthens its long-term competitiveness and creates financial and operational value for the company and its stakeholders.

### A light-weight and circular material

Aluminium plays an important role in the transition towards a circular and sustainable economy. The material is for example used to produce lightweight vehicles, energy-efficient buildings, and resource-efficient packaging. Lightweighting is an important feature in today's global climate and resource challenge. With lighter products, emissions and energy usage can be reduced. Recyclability is another key feature of aluminium. Since it takes up to 95 per cent less energy to recycle aluminium than to produce primary aluminium, there are also large climate gains to be achieved.

### Sustainable aluminium solutions

Gränges has a strong position to make a difference through its commitment to sustainability. The company works actively to reduce the climate impact along the aluminium value chain, to increase circularity through collaboration and partnerships upstream and downstream, and to promote responsible business practices among the company's business partners.

Gränges has an ambition to develop industry-leading aluminium solutions that can help its customers and end-users become more sustainable. In 2022, Gränges announced the launch of the product brand Gränges Endure, which will help customers decarbonize and guide them towards Gränges' most sustainable solutions.

### Ambitious 2025 sustainability targets

To drive the development of sustainable solutions, Gränges in 2018 adopted ambitious sustainability targets for 2025. Since then, the company has delivered good progress on many of the company's sustainability priorities. For example, the climate impact has been reduced by 22 per cent and the recycling volumes have tripled compared to a baseline 2017 driven by successful recycling activities in the company.

To demonstrate Gränges' strong commitment to and focus on reaching the targets, the company has issued a Sustainability-Linked Bond linking the financing cost to the achievement of its climate and recycling targets.

### Upgraded strategy and new long-term targets

To stay ahead of customers' requirements and policy changes, Gränges in 2022 upgraded its sustainability strategy to better support the Navigate strategy. In conjunction with the Capital Markets Day in June, Gränges announced a new ambitious climate neutrality target by 2040 and that the company had joined the Science Based Targets initiative (SBTi). Gränges also announced its raised circularity ambition which is to tenfold its recycling volumes versus the 2017 baseline.

The sustainable growth strategy will be executed by investing in three areas: sustainable supply and recycling, sustainable operations, and sustainable customers and sectors. In conjunction with the upgraded strategy, Gränges also performed a new materiality assessment to align the new strategy with stakeholders' expectations and the company's largest sustainability impacts.

### Sustainability commitments and initiatives

Gränges is a signatory to the UN Global Compact and undertakes to fulfil the principles relating to human rights, labour, environment, and anti-corruption. The principles also form the foundation of the company's Code of Conduct and Supplier Code of Conduct. Gränges is also committed to helping fulfil the 2030 Agenda and Sustainable Development Goals (SDGs). The company also participates in various industry initiatives to ensure that aluminium is mined, produced, and used sustainably.

### NEW MATERIALITY ASSESSMENT

In 2022, Gränges conducted a new materiality assessment based on a comprehensive stakeholder dialogue. The purpose of the assessment was to ensure that the company continues to focus on those sustainability topics that have the greatest impact and are the most important among key stakeholders. The results confirmed in large that Gränges' current strategy is still relevant. Read more about the results from the materiality assessment on pages 127–128.



## Sustainability framework and targets

Gränges' group-wide sustainability framework covers 14 sustainability topics, that are deemed to have the highest impact and are assessed by stakeholders to be most important for the company to address.

SUSTAINABLE SUPPLY AND RECYCLING	SUSTAINABLE OPERATIONS	SUSTAINABLE CUSTOMERS AND SECTORS
<b>MATERIAL TOPICS</b>		
<ul style="list-style-type: none"> <li>Emissions and climate impact (scope 3)</li> <li>Recycling</li> <li>Responsible sourcing</li> <li>Sustainable energy</li> <li>Sustainable materials</li> </ul>	<ul style="list-style-type: none"> <li>Emissions and climate impact (scope 1+2)</li> <li>Energy intensity</li> <li>Waste</li> <li>Water</li> <li>Workplace safety</li> </ul>	<ul style="list-style-type: none"> <li>Business ethics</li> <li>Career and leadership</li> <li>Diversity and inclusion</li> <li>Employee wellbeing</li> <li>Emissions and climate impact (scope 3)</li> <li>Sustainable innovation</li> </ul>
<b>SUSTAINABILITY TARGETS TO 2025</b>		
<ul style="list-style-type: none"> <li>≥ 30 per cent carbon emissions intensity reduction from sourced metal inputs (scope 3)<sup>1)</sup></li> <li>≥ 30 per cent of total sourced metal inputs to be recycled aluminium</li> <li>100 per cent of significant suppliers<sup>2)</sup> to be committed to Gränges' Supplier Code of Conduct or equivalent standard</li> <li>≥ 20 per cent renewable energy</li> </ul>	<ul style="list-style-type: none"> <li>≥ 25 per cent carbon emissions intensity reduction from own operations and purchased energy (scope 1+2)<sup>1)</sup></li> <li>-17 per cent energy intensity<sup>1)</sup></li> <li>All Gränges' production sites to have implemented a local water management plan</li> <li>≤ 3.0 Total Recordable Rate</li> <li>≤ 50 Severity Rate</li> </ul>	<ul style="list-style-type: none"> <li>100 per cent of employees to be trained annually in Gränges' Code of Conduct</li> <li>100 per cent of white-collar employees to be trained annually in anti-corruption</li> <li>100 per cent of employees to have annual performance and development discussion</li> <li>≥ 30 per cent of senior management to be women</li> <li>≥ 85 Employee engagement index</li> <li>100 per cent of Gränges' products to have third-party verified sustainability information available</li> </ul>
<ul style="list-style-type: none"> <li>All sites to have achieved ASI sustainability certifications<sup>3)</sup></li> </ul>		

Note: Links to relevant Sustainable Development Goals can be found on page 130.

1) Versus baseline 2017. Gränges follows the Greenhouse Gas Protocol Standards to calculate its climate impact.

2) All metal suppliers and other suppliers with a purchase value above SEK 5 million or equivalent in local currency.

3) Certifications in accordance with the Aluminium Stewardship Initiative (ASI) Performance Standard and Chain of Custody Standard.

# Reducing the climate impact

Gränges works actively to reduce the climate impact along the value chain and across the life-cycles of its products. This means a full life-cycle focus from the extraction of bauxite until the products' end-of-life.

### A life-cycle perspective

Gränges is committed to combatting climate change and reducing the climate impact from its business and along the value chain. Gränges' main drivers to achieve this are increased recycling, renewable energy, and low-carbon primary aluminium. In 2022, 91 per cent of Gränges' total climate impact originated from sourced metal inputs (scope 3) and 9 per cent from own operations and purchased energy (scope 1+2).

### Ambitious climate targets

Gränges' climate targets cover the full value chain (scope 1+2+3). By 2025, Gränges aims to reduce the climate impact from own operations and purchased energy (scope 1+2) by at least 25 per cent, and from sourced metal inputs (scope 3) by at least 30 per cent versus baseline 2017. By 2040, the company aims to be climate neutral. This implies that emissions need to be reduced by approximately 60 per cent by 2030 compared with baseline 2017.

### Committing to SBTi

In conjunction with the launch of the new climate neutrality target, Gränges also committed to setting a net-zero and near-term science-based targets through the Science Based Targets initiative (SBTi). In 2022, Gränges focused on conducting a full greenhouse gas inventory to prepare for and align with the SBTi reporting criteria. At the same time, Gränges' local business units prepared regional targets and decarbonization pathways.

### Strong climate performance

During the last five years, Gränges has made strong progress towards its climate targets. Total carbon emissions intensity has been reduced by 5 per cent in 2022 compared to 2021, which equals a 22 per cent reduction versus baseline 2017. The main reason for the positive progress is a reduction of scope 3 emis-

sions driven by a higher share of recycled aluminium. The carbon emissions intensity from own operations and purchased energy (scope 1+2) amounted to 0.82 tonnes CO<sub>2</sub>e/tonne (0.88) and from sourced metal inputs (scope 3) to 8.1 tonnes CO<sub>2</sub>e/tonne (8.4).

### Partnerships and collaboration

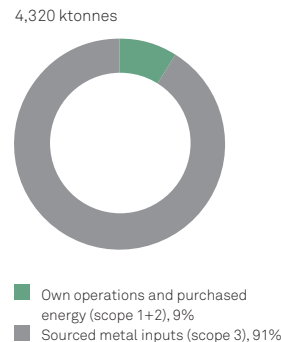
Since the largest environmental impacts originate up and downstream in Gränges' value chain, it is important for the company to collaborate with suppliers, customers, and other business partners to reduce the climate impact. Supplier collaborations include sourcing of recycled aluminium, low-carbon primary aluminium and energy from renewable sources. Design and development of sustainable aluminium solutions as well as recycling are other important areas to develop together with customers. All facilities also have dialogue with customers on closed-loop partnerships.

## PERFORMANCE SUMMARY

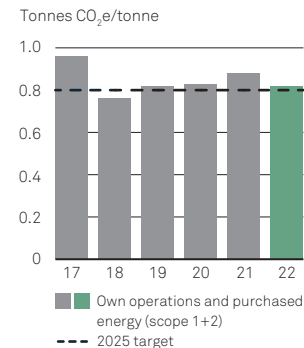
Key performance indicator	2025 target	2022 (2021) performance
Carbon emissions intensity from own operations and purchased energy (scope 1+2), % reduction vs. 2017	-25	-14 (-8)
Carbon emissions intensity from sourced metal inputs (scope 3), % reduction vs. 2017	-30	-23 (-20)

**Comment:** In 2022, the carbon intensity was reduced by 14 per cent for scope 1+2 and 23 per cent for scope 3 versus baseline 2017. The reduction in scope 1+2 intensity was driven by increased use of renewable electricity in the Konin facility. The reduction in scope 3 intensity was driven by a higher share of sourced recycled aluminium in Gränges Americas and the facility in Shanghai.

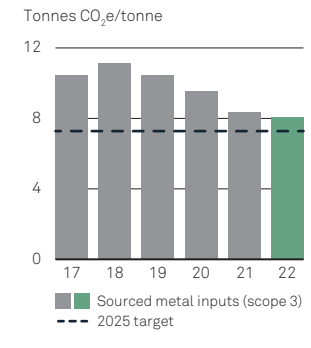
TOTAL CARBON FOOTPRINT, 2022



CARBON EMISSIONS INTENSITY, SCOPE 1+2<sup>1)</sup>



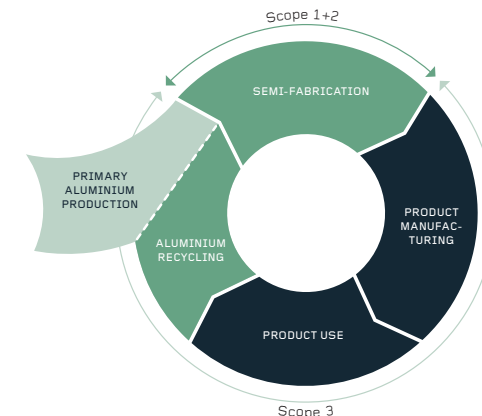
CARBON EMISSIONS INTENSITY, SCOPE 3<sup>1)</sup>



1) Baseline 2017 has been recalculated to include Konin. 2018–2020 exclude Konin and Gränges Powder Metallurgy.

## Climate impact along the value chain

Gränges strives to be a positive contributor to the circular economy and is committed to improving the overall footprint of the aluminium value chain.



	SUPPLY CHAIN		GRÄNGES' OPERATIONS		CUSTOMERS AND END-USERS	
	PRIMARY ALUMINIUM PRODUCTION	ALUMINIUM RECYCLING	SEMI-FABRICATION	PRODUCT MANUFACTURING	PRODUCT USE	
<b>Description in brief</b>	Extraction, refining and smelting of primary aluminium.	Collecting, sorting, and recycling of aluminium.	Remelting and casting, rolling, and slitting.	Manufacturing of products containing Gränges' materials, e.g. vehicles, buildings, and packaging.	Using products containing Gränges' materials.	
<b>Climate impact</b>	Mainly from the energy-intensive electrolytic smelting process. Smaller impacts also from the extraction and refining processes.	Mainly from processing and transporting of recycled materials. By using recycled aluminium, Gränges can save up to 95 per cent of the energy and climate impact that would have been needed in primary aluminium production.	Mainly from fuels and electricity used in Gränges' operations.	Mainly from customers' product manufacturing when materials sourced from Gränges are processed.	Mainly from using products containing Gränges' materials. Aluminium's lightweighting properties can lead to substantial fuel and carbon emissions savings compared to other materials.	
<b>Gränges' priorities</b>	<ul style="list-style-type: none"> <li>Actively choose input material and supplier based on climate performance and reduction targets and activities.</li> <li>Collaborate with suppliers to expand sourcing of primary aluminium produced using renewable energy.</li> <li>Promote responsible sourcing and increased supply chain traceability through dialogue with commodity traders.</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with customers and recycling companies to expand sourcing of recycled aluminium.</li> <li>Design and innovate alloys, processes and applications which allow for a higher share of recycled aluminium and which are efficiently dismantled, collected, sorted, and recycled after products end-of-life.</li> </ul>	<ul style="list-style-type: none"> <li>Increase energy efficiency and the use of renewable energy in own operations.</li> <li>Increase resource efficiency and remelting of recycled aluminium in own operations.</li> </ul>	<ul style="list-style-type: none"> <li>Collaborate with customers to design and develop sustainable aluminium products and solutions, including alloys that are resource efficient in the product manufacturing and use phase, and which are recyclable at the end-of-life.</li> </ul>		
<b>GHG Protocol category and subcategories</b>	Scope 3 • Purchased goods and services.	Scope 3 • Purchased goods and services. • End-of-life treatment of sold products.	Scope 1+2	Scope 3 • Processing of sold products.	Scope 3 • Use of sold products.	

# Sustainable supply and recycling

## Sustainable materials and energy

Increasing sourcing and usage of sustainable materials and energy are vital for Gränges to reduce the climate impact from scope 3, and the company already shows good progress in these areas.

### Increased recycling drives decarbonization

Using recycled aluminium can save up to 95 per cent of the energy needed to produce primary aluminium. Gränges sources pre-consumer used materials from customers and recycling companies and post-consumer used materials from recycling companies. The company also recirculates processed aluminium from its own operations.

In 2022, Gränges launched a new directional target to tenfold the recycled volumes by 2030 versus 2017. To achieve this ambition Gränges will invest in process and technology innovation to increase recycling capabilities, in strategic partnerships with customers to build closed-loop collaboration and in supplier partnerships with recycling companies and traders to secure recycled aluminium.

### Key recycling challenges and actions

The conditions and availability of recycled aluminium differ geographically and the feasibility to increase usage depends on the type of production as well as local availability. Since aluminium is often used as a long-lasting material in buildings and vehicles with long lifespans, the availability of recycled aluminium can be a significant constraint. It can also be a challenge to recycle aluminium as it is often used in combination with other materials, and an efficient process requires good sorting, separating, and re-melting technologies.

Gränges has several ways of dealing with the challenges. In 2022, all regions increased their recycling capabilities through different activities. Examples include the Shanghai

facility who developed digital modelling to improve the clad scrap recycling rate. Gränges Konin cooperated with external partners to increase the volume of contaminated scrap sourced and investigate modification of chemical composition to increase recycling capabilities.

### Sustainable primary aluminium supply

Expanding the use of low-carbon primary aluminium reduces Gränges' climate impact from sourced metal inputs, especially in regions where the primary aluminium production is largely dependent on fossil energy sources. The availability of low-carbon primary aluminium produced using renewable energy varies to a large extent depending on geography and renewable energy supply.

Gränges discusses with slab suppliers encouraging them to increase the share of sourced recycled aluminium in their products.

32.7%

sourced recycled aluminium in 2022, above 2025 target

### PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance
Sourced recycled aluminium, %	≥30	32.7 (28.5)
Renewable energy, %	≥20	16 (15)

**Comment:** In 2022, the share of sourced recycled aluminium increased to 32.7, per cent, above the 2025 target. This was a result of expanded sourcing mainly in Gränges Americas and in the Shanghai facility. The share of renewable energy increased to 16 per cent driven by increased use of renewable electricity in Konin.



**Sustainable energy supply**

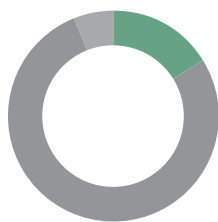
Using renewable energy is key to reduce the company’s climate impact from own operations. Gränges has a target to increase the usage of renewable energy in its own operations to at least 20 per cent by 2025. In 2022, the total share of renewable energy was 16 per cent (15).

The opportunities to source renewable energy vary across Gränges’ production facilities. Finspång sources 100 per cent specified electricity from hydro power. In Gränges Americas, Shanghai and Konin, electricity is sourced from regulated markets with a high share of non-renewable sources in the energy mix.

All regions are actively investigating how to increase the usage of renewable energy. In 2022, Gränges Americas signed a 10-year contract with the electricity company Entergy Arkansas subscribing to approximately 25 per cent of its capacity for the Gränges’ Newport site from renewable energy sources. The facility in Konin sourced approximately 20 per cent of its electricity from renewable sources during the year.

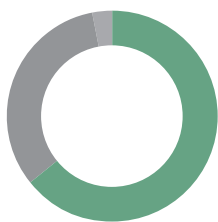
The site in Finspång investigates the possibility to install solar panel systems at the facility and Shanghai plans to start installation of solar panels in 2023.

**SOURCED ENERGY MIX, 2022**



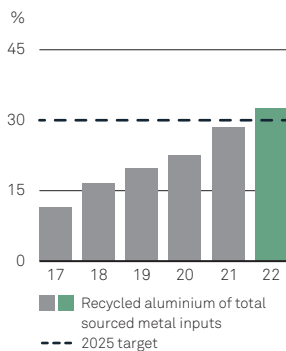
Renewable energy, 16%  
Non-renewable energy, 77%  
Nuclear energy, 6%

**SOURCED METAL INPUTS, 2022**



Primary aluminium (ingots + slabs), 65%  
Recycled aluminium, 33%  
Alloying elements, 3%

**SOURCED RECYCLED ALUMINIUM, 2017–2022**



Recycled aluminium of total sourced metal inputs  
2025 target

**SOURCED RECYCLED ALUMINIUM PER CATEGORY, 2022**



Pre-consumer used materials, 71%  
Post-consumer used materials, 29%



## Responsible sourcing

Gränges is committed to promoting responsible and sustainable practices in the company's supply chain and incorporating sustainability criteria into its sourcing agreements and partnerships.

### Promoting responsible sourcing practices

With a supplier base of 3,900 suppliers globally, Gränges has an indirect impact on both environmental and social aspects through its suppliers. Therefore, it is essential for the company to engage with its suppliers and together improve sustainability performance and mitigate sustainability risks in the supply chain. Sourcing activities are mainly managed by the local procurement organization and the supplier base is generally geographically close to the respective markets.

Gränges is committed to operating in accordance with responsible, ethical and sound business principles and expects its suppliers to maintain similarly high sustainability standards. The company has implemented a responsible sourcing programme to enforce sustainability practices in the supply chain, see page 40. In short, the process covers clear supplier sustainability requirements, a robust risk screening tool, desktop sustainability assessments as well as active follow-up and engagement. Gränges has a target that 100 per cent of significant suppliers have committed to the Supplier Code of Conduct by 2025. In 2022, 97 per cent had signed it.

### ASI certifications to ensure responsible sourcing practices

To promote responsible production, sourcing, and stewardship of aluminium across the aluminium industry, Gränges has been a member of Aluminium Stewardship Initiative (ASI) since 2019. ASI is a global non-profit organization which defines standards for sustainability performance and chain-of-custody in the aluminium value chain. In 2022, Gränges' facilities in Americas and the corporate office in Franklin were certified against both the Performance Standard and the Chain of Custody Standard. This means that five of Gränges' production sites are now certified against both standards.

### Standing up for human rights

Gränges respects the human rights of all individuals that may be affected by the company's operations. Risks related to human rights are greatest in the company's supply chain where human rights violations are mainly related to indigenous rights in the extraction, mining and smelting activities. Extractive activities also carry a risk of forced and child labour, although there are few reports of this in aluminium mining.

Gränges has clear expectations on suppliers to mitigate human rights risks, stipulated in the company's Supplier Code of Conduct. Performance is followed-up as part of Gränges responsible sourcing process.

5  
SITES

certified against  
ASI Performance  
Standard and  
Chain of Custody  
Standard

## PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance
Supplier Code of Conduct commitment, % of purchase value	100	97 (98)
ASI certifications, number of sites <sup>1)</sup>	All	5 (2)

1) Number of sites with ASI Performance Standard and Chain of Custody Standard.

**Comment:** In 2022, Supplier Code of Conduct commitment reached 97 per cent (98). Gränges Americas achieved dual ASI certifications covering three production facilities and the corporate office in the US. In total five sites are now certified against both standards.

## A GLOBAL SUPPLY CHAIN

In 2022, the company had approximately 3,900 number of suppliers of which 278 were defined as significant. 85 per cent of the purchase value from significant suppliers was direct materials (primary aluminium ingots, slabs, recycled aluminium and alloying elements) whereas indirect materials and services accounted for 15 per cent. In total, 70 per cent of the direct materials was sourced from commodity traders. The supplier base is generally geographically close to the respective markets.



## GRÄNGES' RESPONSIBLE SOURCING PROGRAMME

In line with Gränges' Responsible Sourcing Policy, all sites are to operate a local responsible sourcing programme covering its significant suppliers. The programme is used as a platform to enforce sustainable practices, ensure continuous improvements, develop collaboration, and build lasting relationships with suppliers.

### GLOBAL SUPPLIER SUSTAINABILITY REQUIREMENTS

Significant suppliers are requested to sign Gränges' Supplier Code of Conduct based on the ten principles of the UN Global Compact. The policy includes basic sustainability requirements on suppliers including human rights, labour rights, business ethics and environmental performance.

### SUSTAINABILITY RISK SCREENING

Significant suppliers are annually screened in a desktop tool for potential environmental, social and corruption risks based on the purchasing category and country of origin. The aim is to identify and mitigate sustainability risks in the supply chain.

### SUSTAINABILITY DESKTOP ASSESSMENT

Suppliers categorized as medium or high-potential risk suppliers are required to complete a desktop sustainability assessment, currently managed by EcoVadis. The questionnaire aim to grade suppliers' performance within all sustainability areas and has an evidence-based approach.

### FOLLOW-UP AND ENGAGEMENT

Results from the desktop assessments are integrated into local supplier review procedures, e.g. supplier scorecards as well as supplier discussions and on-site visits, as applicable locally.

### DEVIATION MANAGEMENT

Gränges uses an internal escalation process to decide on appropriate actions in cases where a supplier declines to participate in any of the previous mentioned steps or receive a low score in the EcoVadis assessment. All sites have a local escalation team and routine in place and deviations can lead up to blocked purchase orders and business termination.

97%

significant suppliers are committed to Gränges' Supplier Code of Conduct





## Solar energy helps Gränges' customers reaching their climate goals

External partnerships are important in Gränges' strategy for sustainable growth. One key area is the investment in new supplier collaborations within solar energy.

In the US, Gränges recently signed a 10-year contract with the electricity company Entergy Arkansas on solar energy for Gränges' production site in Newport, Arkansas. Under the contract, Gränges subscribes to approximately 25 per cent of its capacity for the Newport site. The availability will continue to increase each year with more solar electricity coming online.

"Our customers are looking for solutions that help them reduce their climate impact. They have their own sustainability and climate goals and are looking to us for help to meet those goals. Increasing our renewable electricity is a strategic priority for us, since it contributes to a more sustainable future for our customers and ourselves", says Rosa Laxamana, VP Sustainability Gränges Americas.

Investing in renewable energy reduces Gränges' carbon footprint (scope 1+2) and is an important part of the company's decarbonization journey. Gränges has a goal to increase the usage of renewable energy in its own operations to at least 20 per cent by 2025. In 2022, the total share of renewable energy amounted to 16 per cent.

All regions are actively investigating how to increase the usage of renewable energy and have ongoing discussions with external partners to further increase sourcing.

In Gränges Europe, the operation in Finspång, Sweden sources 100 per cent of its electricity from hydro power, and in Konin, Poland 23 per cent derives from hydro power. The facility in Shanghai purchases 100 percent of its electricity from renewable sources as from January 2023 and will commence installation of solar panels on the roof-top of its production plant in 2023.



Increasing our renewable electricity is a strategic priority for us, since it contributes to a more sustainable future for our customers and ourselves.

Rosa Laxamana,  
VP Sustainability Gränges Americas

# Sustainable operations

## Resource efficiency

Gränges is committed to strengthening its operational efficiency, and enforcing continuous improvements to increase energy efficiency, reduce emissions to air and water and minimize waste.

### Increasing energy intensity

Gränges consumes energy mainly in its production processes related to remelting and casting. The main energy sources used are natural gas, electricity and liquified petroleum gas. To reduce both costs and the climate impact from own operations (scope 1+2), Gränges works actively to increase energy efficiency, for example by considering the best available technology for refurbishments and new investments. Other improvement measures are primarily linked to improved metal yield, thermal processes, and recovery of waste heat.

As a result of Gränges' increased focus on remelting recycled aluminium, the energy usage and consequently also operational (scope 1+2) emissions often increase compared to remelting primary aluminium ingots. The reduction in emissions from sourced metal inputs (scope 3) however more than offsets this negative impact, and the combined result is positive.

### Managing local water conditions

Gränges uses water mainly for cooling purposes, such as cooling production equipment and preventing overheating and production disruptions. Since the company's production sites are located in areas with various water stress and risks, Gränges manages water-related aspects based on local circumstances. Gränges annually reviews the water risk of all production sites with input from the World Resources Institute's Aqueduct Water Risk Atlas.

The company aims to implement local water management plans in all its locations which include local targets and activities to address water-related impacts. In 2022, three of Gränges' facilities had a local water management plan in place.

### Minimizing waste and hazardous materials

Gränges manages waste practices locally and in line with national law and regulations. All sites have a local waste handling procedure in place, and work actively to reduce material consumption. This is done through process optimization and recycling, where scrap generated in production is reused to the largest extent possible.

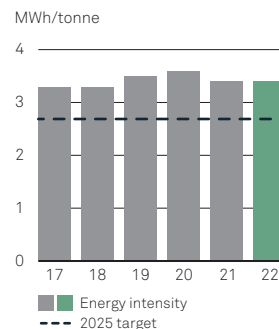
Gränges has an ambition to recycle and reuse waste in production where possible and reduce hazardous substances generation. Hazardous materials include aluminium dross and oil used to cool down the mill and lubricate the interface between the rolls and the material. The facility in Finspång recovers aluminium from dross on site through a dross press machine. Gränges Americas has invested in a woodchipper to recycle wood pallets instead of sending waste to landfill.

### PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance
Energy intensity, % reduction vs. 2017	-17	3 (5)
Water management plans, number of sites	All	3 (3)

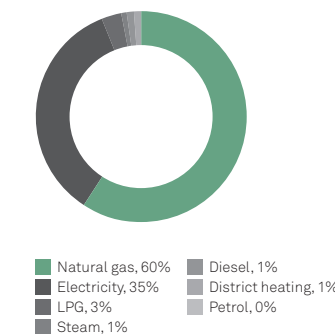
**Comment:** In 2022, energy intensity decreased by one per cent to 3.41 MWh/tonne (3.45) mainly due to ongoing operational improvements in all regions and increased re-roll purchase in Gränges Americas.

ENERGY INTENSITY, 2017-2022

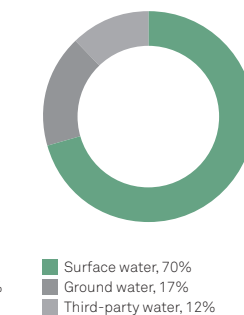


Note: 2018-2020 exclude Konin and Gränges Powder Metallurgy. Baseline 2017 recalculated to include Konin.

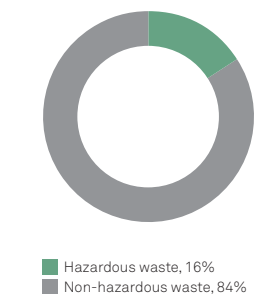
ENERGY USE BY TYPE, 2022



WATER WITHDRAWAL BY SOURCE, 2022



WASTE BY TYPE, 2022



## Workplace safety

Gränges is committed to providing a workplace that protects health and foster wellbeing for all.

### A safety first culture

Workplace safety is one of the highest strategic priorities for Gränges. In all its activities, the company attempts to continuously improve the working environment as well as the health and safety awareness and behaviour among employees.

A 5S system is implemented in all production facilities to ensure a clean, orderly and safe work environment with the objective to proactively and quickly remove safety hazards and to drive safe behaviours. Safety hazards are continually monitored, and all sites are actively deploying the critical 6 hazard categories; fall protection, molten metal, mobile equipment, confined spaces, and machine guarding – lockout and tagout and fire prevention. To assess the risk of injuries, job safety analysis involving identifying hazards associated with repetitive and non-repetitive work tasks is carried out. Actions are coordinated and prioritized by management and local safety representatives.

### Using a systematic approach

All sites operate an occupational health and management system (OHS) and Gränges plans to certify all production facilities in accordance with ISO 45001. The OHS system covers all individuals who are directly or indirectly related to Gränges' operations, e.g. employees and independent contractors and consultants who work onsite or offsite on behalf of Gränges.

Gränges' production facilities drive structured employee engagement programmes with measurable and relevant leading indicators, including a walk-observe-communicate (WOC) programme where employees and management observe activities and discuss risk behaviour and improvements. The facility in Shanghai formally initiated WOC during the year with many leaders participating in the activity.

Incidents and accidents are registered and classified with actual and potential consequences by employees in local incident reporting systems. Safety performance is reviewed by management weekly and monthly, and site-specific safety targets are set as part of the business planning cycle.

### Mandatory safety training

Gränges works actively to improve health and safety awareness and skills and provides regular health checks and training for all workers and managers. Comprehensive safety training is carried out for all workers and managers at least once a year. New employees are always trained before they start their position in Gränges. Regular trainings are conducted with respect to machine safety, personal protective equipment, fire safety, first aid, and emergency response. In addition, specific safety training is provided for production employees, including aspects such as hand and finger injury prevention. All safety trainings are mandatory.

### Safety activities in 2022

Gränges Americas launched an improvement plan focusing on high-risk programmes and safety leadership and culture. The region completed work on fire production, forklift/pedestrian safety and crane safety that have resulted in significant improvement in technical controls and employee performance. Gränges Europe created a Safety Core Team with safety managers and experts. A common EHS vision for 2025 was defined including roadmaps to achieve specific objectives. The facility in Shanghai focused on improving reporting of injury free events to increase employee engagement and number of reports. Falls, slips, and trips incidents improved as a result.

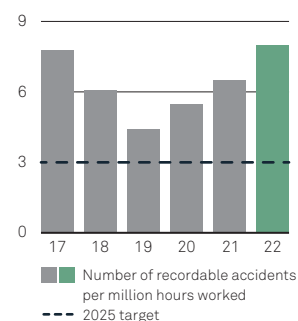
### PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance
Total Recordable Rate <sup>1)</sup>	≤3.0	8.0 (6.5)
Severity Rate <sup>2)</sup>	≤50	56 (139)

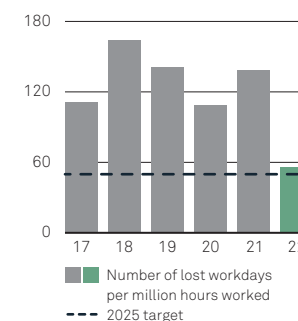
1) Number of recordable accidents per million hours worked.  
2) Number of lost workdays per million hours worked.

**Comment:** In 2022, the Total Recordable Rate ended at 8.0. The increase was mainly due to an increased number of recordable accidents in Gränges Americas as a result of an increased focus to improve reporting on all injuries. Severity Rate was significantly improved and decreased to 56.

TOTAL RECORDABLE RATE, 2017–2022



SEVERITY RATE, 2017–2022



Note: 2017–2020 exclude Gränges Powder Metallurgy and the facility in Konin.

## Sustainable workforce

Gränges is committed to ensuring that employees are motivated and engaged by being an open and inclusive employer.

### Promoting responsible workplace practices

Gränges believes that its people and company culture are key to past and future success. Gränges strives to provide a workplace where employees can realize their full potential and contribute to developing a high-performing organization.

Gränges' corporate culture and core values – committed, action oriented, innovative, and accessible – guide employees in their daily actions and lay the foundation for conducting business responsibly, ethically, and open-minded. The company is committed to being an open and inclusive employer, with zero tolerance of discrimination, which leverages employees' different perspectives, experiences, and ideas. A multifaceted workforce also reflects the international market in which Gränges operates. Important diversity aspects for Gränges include gender equality as well as ethnic diversity, where the latter aspect is mainly applicable for Gränges Americas. Diversity and inclusion matters are managed mainly on a local level, but group-wide principles lay the foundation for prioritized activities.

### Building a sustainable workforce

Gränges strives to offer good working conditions and interesting career opportunities to attract, develop and retain competent and talented people. The goal is to become the employer of choice and the aim will be to engage the whole team to set activities and offer the best development possible.

In 2022, several activities were initiated. An extended structure of global talent review and people plans were launched. Such plans cover both the individual and team perspective, with a stronger management accountability. Gränges also initiated a senior leadership programme with emphasis on each region's local needs.

Moreover, several local initiatives were taken to improve Gränges' attractiveness to become the local employer of choice. Gränges' operations in Finspång worked actively to meet the new workplace requirements from potential employees and held several targeted labour market days and study visits at the facility. Gränges Americas reviewed its incentive programme to hourly employees and provided extensive training to improve retention rate.

### Investing in talent and leadership

To keep employees engaged and motivated, Gränges runs a structured performance management process including training and competence development. All employees should also have an individual development plan to ensure continuous competence development, talent management, and succession planning.

Gränges strongly encourages employees at all levels to participate in job-related training and development activities to enhance skills and grow as professionals. The company conducts competence development and leadership trainings in line with regional needs and works actively to provide career and leadership opportunities for employees.

In 2022, the facility in Finspång implemented a leadership programme for first-line managers focusing on how to improve team building, provide constructive feedback and support the team members' professional growth. Gränges Americas will initiate a similar leadership training in 2023 as well as a four week on-boarding process and training for all new hires. Gränges' facility in Konin encourage employees to participate in trainings and raise ideas to improve working conditions at the facility through a mobile app. Due to the impact of COVID-19, the Shanghai facility conducted less in-house training but used a mobile platform to conduct annual trainings.

### PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance
Performance and development discussion, % of employees	100	73 (67)
Employee engagement index <sup>1)</sup> , 0–100	≥85	77 (-)

1) The employee survey is conducted every two years and was not conducted in 2021.

**Comment:** In 2022, 73 per cent of all employees had an annual performance and development discussion. The increase was mainly driven by the facility in Konin implementing performance reviews for white-collar employees during the year. Employee engagement index result stayed at the same level as the last conducted analysis in 2020.



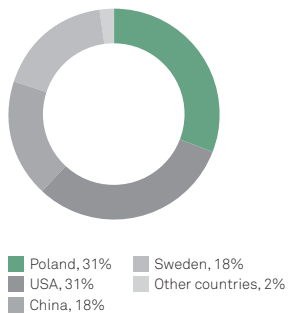
Gränges also recognizes individual and team performance through its Sustainable Growth Awards which are linked to the respective areas in the business strategy.

**Employee health and wellbeing**

Having engaged and healthy employees is a prerequisite for an innovative, competitive, and productive organization. Gränges follows up on employees' general motivation and wellbeing via the annual performance and development discussion. The company also conducts employee surveys every two years to track status. In 2022, the Employee Engagement index reached 77 compared with 78 in 2020. The company uses the result from the employee survey to set local action plans.

Gränges offers occupational health services on and off site, for example flexible work options, first-aid care, wellness grants and regular health checks. The company also offers non-occupational support such as dietary advice, stress reduction and mental health. Gränges maintains the confidentiality of all personal health-related information and keeps medical information in compliance with local legislation. During 2022, the facility in Shanghai implemented special arrangements for the COVID-19 lockdown period for employees including entertainment, exercising and family care activities.

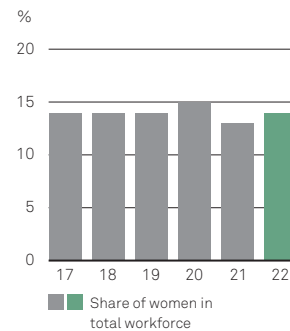
**AVERAGE NUMBER OF EMPLOYEES PER COUNTRY, 2022**



**WOMEN IN SENIOR MANAGEMENT, 2022**



**WOMEN IN TOTAL WORKFORCE, 2017–2022<sup>1)</sup>**



1) 2017–2020 exclude Konin and Gränges Powder Metallurgy.



## Ensuring business ethics

Gränges is committed to conducting business with high integrity and being an ethically sound partner in all its relations.

### Responsible business practices

Gränges is committed to conducting its business with high integrity in an ethical and responsible way, and to being a trusted and reliable partner in all its relations and in the local communities where it operates.

Gränges has zero tolerance for unethical or unlawful behaviour such as bribery, corruption, or unfair competition. To ensure compliance with international business standards and legislation, and to safeguard the company from economical or reputational damage, Gränges will always act rapidly and forcefully on discovering any unethical behaviour.

### Business ethics principles

Gränges' Global Code of Conduct outlines the company's ethical principles which are based on international standards on human rights, labour conditions, the environment, and anti-corruption, including the UN Global Compact and its ten principles. The Code of Conduct is available in local languages and applies to all employees and board members, temporary staff, intermediaries, agents, or others acting on behalf of Gränges.

Gränges' principles and efforts to prevent bribery and other types of corruption are summarized in the global Anti-Corruption Policy. Gränges also requires that significant suppliers commit to principles about prohibition of corruption, bribery, and improper benefits as outlined in the company's Supplier Code of Conduct.

### Monitoring the compliance

To ensure effective implementation of the Code of Conduct and Anti-Corruption Policy, Gränges conducts annual trainings which covers all employees, the Board of Directors as well as contracted workers.

In addition, Gränges regularly conducts internal audits of its local businesses. The internal audit programme includes criteria to ensure awareness of the policies and Whistleblower function, that relevant parties have conducted the policy trainings and verifies that the Supplier Code of Conduct has been implemented and signed by suppliers. In 2022, one internal audit was conducted in Gränges Americas.

If needed, Gränges also engages a third-party to conduct due diligence on business ethics. No due diligence was performed in 2022.

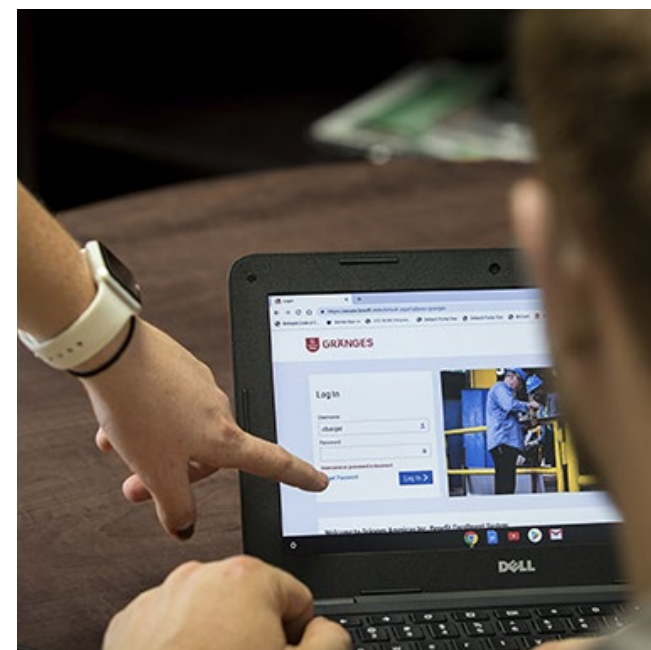
### Whistleblower function to detect irregularities

Gränges has an externally managed Whistleblower function that aims to detect irregularities that may seriously harm Gränges' business or employees. The function can be accessed via the company's webpage, intranet or by telephone. Employees and business partners can provide information anonymously without the fear of retaliation. In 2022, there were 3 cases (2) reported through the Whistleblower function. No confirmed incidents of corruption were detected, and no business contracts were breached or not renewed due to corruption.

### PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance
Code of Conduct training, % of employees	100	100 (100)
Anti-corruption training, % of white-collar employees	100	100 (100)

**Comment:** In 2022, 100 per cent of all employees conducted the group-wide Code of Conduct training and 100 per cent of all white-collar employees conducted the anti-corruption training.



# Sustainable customers and sectors

Gränges works to take a frontline position in markets where stricter sustainability performance requirements are set on products.

### Designing sustainable and circular solutions

Gränges works to leverage the advantages of aluminium by designing and manufacturing products and solutions which can improve customers' operational performance as well as the sustainability performance of their products. Lightweight aluminium can deliver significant energy and climate savings in the use phase, often entirely offsetting the initial energy consumption required to produce the metal.

Gränges has an ambition to design sustainable aluminium solutions that maximise the use of recycled materials and that can be efficiently dismantled, collected, sorted, and recycled downstream the value chain and after products' end -of-life.

### Product sustainability credentials

To enable customers to understand, evaluate and compare Gränges' products from a sustainability perspective, the company works to provide clear sustainability information and labelling, starting with the products' carbon footprint. Understanding products' individual carbon footprint also help Gränges to build a solid fact base for innovation and performance improvements, with the aim to further increase sustainability and circularity benefits.

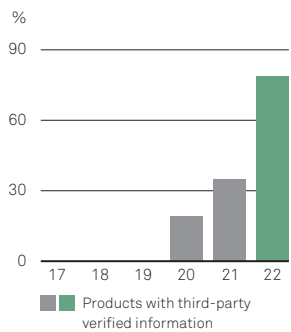
In 2022, 79 per cent of Gränges' products had a third-party verified product carbon footprint available. A detailed carbon footprint report outlining the methodology are available on Gränges' website.

### PERFORMANCE SUMMARY

Key performance indicator	2025 target	2022 (2021) performance <sup>1)</sup>
Products with third-party verified sustainability information available, %	100	79 (35)

**Comment:** In 2022, 79 per cent of Gränges' products had verified sustainability information available (35). Local product carbon footprint tools and certificates are now in use at Gränges facilities in Finspång, Shanghai, Huntingdon, and Salisbury.

### PRODUCTS WITH SUSTAINABILITY INFORMATION, 2017–2022





### Launching Gränges Endure

In 2022, Gränges launched a product brand for sustainable and circular solutions, Gränges Endure. The brand makes it easier for customers to select sustainable aluminium products and solutions of the highest quality at the lowest sustainability impact. Gränges Endure products have a third-party verified carbon footprint of maximum 4.0 tonnes CO<sub>2</sub>e/tonne, measured from extraction of bauxite to the delivery of Gränges' products to customers (cradle-to-gate). The products are also verified by a third party to be responsibly sourced and produced.

### Customer collaboration and partnerships

In the sustainable growth strategy, a key priority is to partner with customers both in terms of designing and developing sustainable and circular solutions but also in establishing closed-loop business models. Gränges runs several customer collaborations within the heat exchanger, HVAC, and battery markets with the aim to jointly develop sustainable alloys in line with customers' material characteristics requirements.

Gränges also collaborates with customers to take back recycled aluminium from customers' manufacturing process and re-melt it into new products. This has a positive impact on reducing the climate impact from sourced metal inputs (scope 3). One example is the facility in Konin that has created closed-loop recycling systems with customers whereby post-produced scrap is returned to Gränges. Remelting of the contaminated scrap is carried out in specific designed twin-chambers melting furnaces and the molten aluminium is re-used in production of closure-stock material.

### Investing in sustainable sectors

As part of Gränges' strategy, the company is investing in sustainable markets to ensure that the company is part of the transition towards a sustainable economy. Examples include the electric vehicle market, where Gränges is targeting the battery cathode foil and casing markets. Battery manufacturers are interested in Gränges' global production footprint and capabilities, its sustainable solutions, as well as its strong aluminium alloy and process know-how.



# Sustainability notes

## About Gränges' sustainability report

The sustainability information in this report relates to the financial year 2022 and covers all fully owned operations of the Group at the start of 2022. Refer to page 118 for a list of group companies. The facility in Konin and Gränges Powder Metallurgy are excluded in data prior to 2021 since the companies were fully acquired in 2020. The statutory sustainability report according to the Swedish Annual Accounts Act has been issued by Gränges' Board of Directors, read more on page 64.

The sustainability information has been prepared in accordance with GRI Standards for the period January 1 to December 31 2022 and the company supports UN Global Compact. Environmental data related to carbon emissions intensity and share of sourced recycled aluminium have been externally assured by the company's auditors EY. The rest of the report and its content have not been externally assured. Refer to page 148 for assurance report. GRI's guidance on the reporting principles, has been used to define the content of the report.

Gränges has updated the definition of Senior Management during the year as a result of a new structure of the LTI-program. Hence, information on women among senior management presented on page 134 has been restated in line with the new definition.

Gränges has published a sustainability report each year since 2015. This report is published 16 March and the company intends to continue to publish a report annually.

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## Sustainability governance

Gränges' Group Management, which includes the SVP Sustainability, ensures that Gränges' global sustainability strategy, long-term targets and policies are aligned with the company's vision and strategy. Group Management also reviews and monitors regional performance against sustainability targets, as well as makes decisions related to global sustainability priorities.

Gränges' CEO regularly presents global sustainability performance to the Board of Directors, who reviews and monitors performance against the company's targets. The Board of Directors is the body which approves the company's global sustainability strategy, long-term targets, and policies, and adopts the annual sustainability report.

The Group Sustainability department, headed by the SVP Sustainability, is responsible for leading the development and execution of Gränges' global sustainability strategy and long-term targets as well as issuing sustainability-related policies. Other responsibilities include regular communication and reporting on Gränges' sustainability performance and progress to internal and external stakeholders as well as coordinating a continuous stakeholder dialogue.

The SVP Sustainability also leads a cross-regional sustainability team in which all regional sustainability leads are represented. The team is responsible for leading Gränges' global sustainability efforts, as well as developing global sustainability plans. Ensuring best practice sharing across the organization is also a key objective for the team.

The regional Presidents are responsible for developing and executing local sustainability plans and targets, aligned with the global strategy and the local needs. A systematic follow-up of all regions' sustainability efforts is done through regional semi-annual sustainability boards, which are chaired by SVP Sustainability and represented by the CEO.

## Stakeholder dialogue

Gränges seeks to establish long-term and transparent dialogues with its stakeholders. Stakeholder inclusiveness is a priority for Gränges, and the company regularly engages key stakeholder groups in structured dialogues regarding sustainability topics, reporting content and other expectations.

In 2022, Gränges conducted a new comprehensive stakeholder dialogue and materiality assessment. In line with new CSRD (Corporate Sustainability Reporting Directive) reporting requirements, Gränges has followed the principle of double materiality in which sustainability topics have been assessed based on their internal and external impacts. The following definitions have been used:

1. Impact on business value (internal impact): The impact a sustainability topic has on Gränges' financial performance and the company's ability to create economic value for investors and shareholders.

2. Impact on society and the environment (external impact): The impact Gränges has or could have on society and the environment because of the company's activities or business relationships.

Using the definitions above, Gränges sent out two online engagement surveys to evaluate the impact and relative importance of various sustainability topics. The first survey was shared with Gränges' global leadership team and the second survey with Gränges' five main stakeholder groups: customers, employees, investors, suppliers, and the local community. In total, 407 stakeholders responded to the surveys. A number of deep-diving interviews were also conducted during the autumn of 2022 in order to add more details to the survey results.

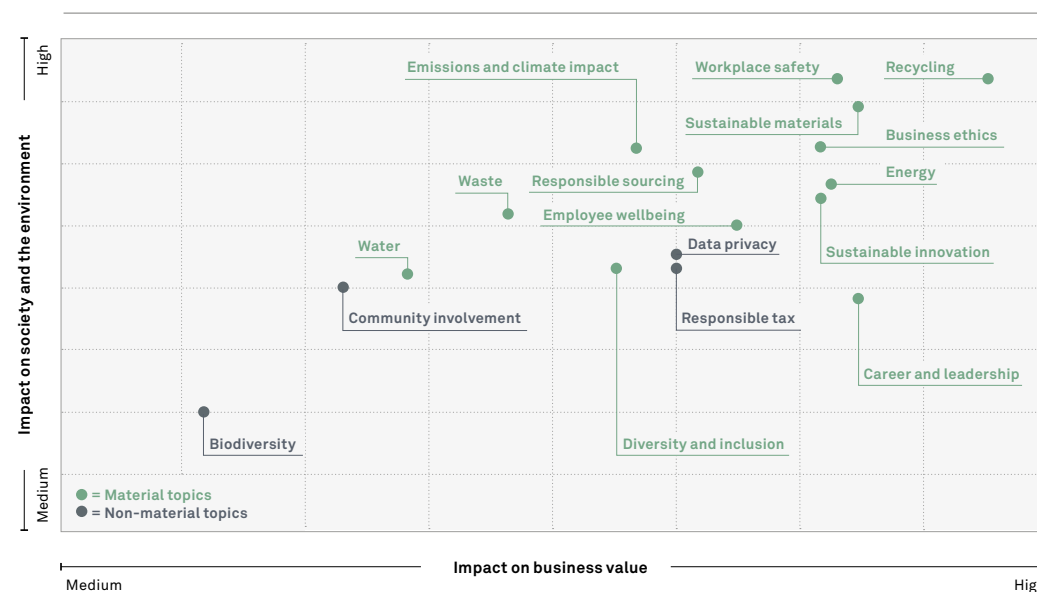
Stakeholder group	Dialogue forum	Key sustainability topics for stakeholders	Page
<b>Customers</b>	<ul style="list-style-type: none"> <li>• Customer survey</li> <li>• Fairs, seminars</li> <li>• Ongoing dialogue</li> <li>• Questionnaires from customers</li> <li>• Stakeholder surveys and in-depth interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Business ethics</li> <li>• Sustainable materials</li> <li>• Responsible sourcing</li> <li>• Workplace safety</li> </ul>	46,143 37,136 39–40,137 43,140
<b>Employees</b>	<ul style="list-style-type: none"> <li>• Annual performance reviews</li> <li>• Employee surveys every two years</li> <li>• Internal trainings</li> <li>• Intranet communication</li> <li>• Stakeholder surveys and in-depth interviews</li> <li>• Workplace meetings</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace safety</li> <li>• Employee wellbeing</li> <li>• Career and leadership</li> <li>• Business ethics</li> <li>• Recycling</li> </ul>	43,140 44–45,142 44–45,141 46,143 37,136
<b>Investors</b>	<ul style="list-style-type: none"> <li>• Annual General Meeting</li> <li>• Annual and quarterly reports</li> <li>• Capital markets days</li> <li>• Quarterly conference calls</li> <li>• Investor and analyst seminars and meetings</li> <li>• Press releases</li> <li>• Stakeholder surveys and in-depth interviews</li> <li>• Sustainability questionnaires from ESG data providers</li> <li>• Gränges' website</li> </ul>	<ul style="list-style-type: none"> <li>• Responsible sourcing</li> <li>• Recycling</li> <li>• Sustainable materials</li> <li>• Workplace safety</li> </ul>	39–40,137 37,136 34,136 34,140
<b>Society</b>	<ul style="list-style-type: none"> <li>• Collaboration with universities and schools</li> <li>• Interns and student dissertations</li> <li>• Local cooperation, ongoing dialogue</li> <li>• Participation in networks and working groups</li> <li>• Stakeholder surveys and in-depth interviews</li> </ul>	<ul style="list-style-type: none"> <li>• Career and leadership</li> <li>• Workplace safety</li> <li>• Sustainable materials</li> <li>• Waste</li> <li>• Recycling</li> </ul>	44–45,141 43,140 37,136 42,139 37,136
<b>Suppliers</b>	<ul style="list-style-type: none"> <li>• Ongoing dialogue</li> <li>• Stakeholder surveys and in-depth interviews</li> <li>• Supplier assessments</li> <li>• Supplier Code of Conduct</li> </ul>	<ul style="list-style-type: none"> <li>• Workplace safety</li> <li>• Business ethics</li> <li>• Responsible sourcing</li> <li>• Sustainable materials</li> </ul>	43,140 46,143 39–40,137 37,136

## Gränges' materiality analysis

In 2022, Gränges conducted a renewed materiality analysis in line with CSRD and the principle of double materiality. The assessment process followed the following steps. First, Gränges' identified a list of relevant sustainability topics for the company based on peer benchmark, industry standards and upcoming reporting regulation. The list was shortened to 22 topics. Thereafter stakeholders were asked to rate each topic based on impact and relative importance. To prioritize and identify material topics, internal validation workshops were held. The results largely confirm the assessment done in 2017, which indicates that the existing strategy is still relevant. Four topics included in the survey were assessed to be less material: Biodiversity, Community involvement, Data privacy, and Responsible tax. These topics will be managed regionally depending on local conditions and stakeholder expectations. The company further decided to split the topic energy into two topics: sustainable energy and energy intensity.

The findings are presented in Gränges materiality matrix and form the basis for defining Gränges' focus areas for sustainability and 2030 goals.

GRÄNGES' MATERIALITY MATRIX



### Gränges' material topics and their boundaries

Sustainability pillar	Material topics	Corresponding GRI Standards topic	Impact occurs in/at Gränges'			Page
			Suppliers	Operations	Customers	
<b>Sustainable supply and recycling</b>	Emissions and climate impact (scope 3)	Emissions	x		x	35–36,135
	Sustainable energy	Energy	x	x		38,137
	Sustainable materials	Materials	x	x		37,136
	Recycling	Materials	x	x	x	37,136
	Responsible sourcing	Supplier Environmental assessment Supplier Social assessment	x			39–40,137
<b>Sustainable operations</b>	Emissions and climate impact (scope 1+2)	Emissions		x		35–35,135
	Energy intensity	Energy		x		42,138
	Waste	Waste		x		42,139
	Water	Water		x		42,139
	Workplace safety	Occupational Health and Safety		x		43,140
	Business ethics	Anti-corruption	x	x	x	46,143
	Career and leadership	Training and education		x		44–45,141
	Diversity and inclusion	Diversity and equal opportunity		x		44–45,142
	Employee wellbeing	Occupational Health and Safety		x		44–45,142
<b>Sustainable customers and sectors</b>	Emissions and climate impact (scope 3)	Emissions			x	35–36,142
	Sustainable innovation	–		x	x	47–48,143

## External reporting and evaluation

Gränges' sustainability performance and management are continuously assessed by customers, sustainability and ESG analysts as well as other stakeholders. This serves as an important element of the ongoing stakeholder dialogue and is in line with the company's ambition to provide stakeholders with a credible basis for their evaluation of Gränges. Below are some examples of external sustainability evaluation and recognition.

**Aluminium Stewardship Initiative (ASI):** Gränges has achieved certifications against the ASI Performance Standard and Chain of Custody Standard for the Franklin corporate office as well as five production facilities: Finspång, Shanghai, Newport, Salisbury and Huntingdon. These certifications demonstrate that Gränges' offerings are responsibly and sustainably sourced and produced.

**EcoVadis:** For the second consecutive year, Gränges was awarded a Platinum rating from EcoVadis which places Gränges among the leading 1 per cent of companies assessed globally in the industry 'Manufacture of basic precious and other non-ferrous metals'.

**CDP:** Gränges continued to respond to CDP's Climate change questionnaire and achieved a B score.

**MSCI:** Gränges received an AA rating in the MSCI ESG Ratings assessment 2022.<sup>1)</sup> MSCI ESG Research provides MSCI ESG Ratings

on global public and a few private companies on a scale of AAA (highest rating) to CCC (lowest rating), according to exposure to industry specific ESG risks and the ability to manage those risks relative to peers.

**Sustainalytics:** Gränges achieved an overall risk rating of 21.1 (Medium) in Sustainalytics' ESG Risk Rating Report 2022.<sup>2)</sup> This placed the company as the number 3 among 36 aluminium companies and number 5 among 212 metal companies.

1) The use by Gränges of any MSCI ESG research llc or its affiliates ("MSCI") data, and the use of MSCI logos, trademarks, service marks or index names herein, do not constitute a sponsorship, endorsement, recommendation, or promotion of Gränges by MSCI. MSCI services and data are the property of MSCI or its information providers, and are provided 'as-is' and without warranty. MSCI names and logos are trademarks or service marks of MSCI.

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## External initiatives and memberships

Gränges supports international standards on human rights, labour conditions, the environment and anti-corruption, the UN Global Compact, UN Universal Declaration of Human Rights and the OECD Guidelines for Multinational Corporations. Gränges also helps to fulfil the 2030 Agenda and the Sustainable Development Goals (SDGs), read more on page 130.

Gränges participates in the following industry initiatives: Aluminium Association, Aluminium Stewardship Initiative, Big Science Sweden, China Nonferrous Metals Industry Association, Confederation of Swedish Enterprise, European Aluminium, European Aluminium Foil Association, Polish Aluminium Association, Global Aluminium Foil Roller Initiative, Nonferrous metals Society of Shanghai, Shanghai Aluminium Trade Association, Scandinavian Automotive Supplier Association, and Svenskt Aluminium.

Gränges' operation in Finspång is also a member of the local associations Näringslivsrådet, Vision East Sweden, and Östsvenska Handelskammaren, as there is a strategic interest at local level related to areas such as recruitment, infrastructure and influence in important political topics.

# Sustainable development goals

Gränges helps to fulfil the 2030 Agenda and Sustainable Development Goals (SDGs). In the table below, those SDGs that have been identified as most relevant for Gränges' business and where the company has its largest contributions and impacts, are outlined.

UN SDG number and applicable targets	UN SDG name	Gränges' contributions to the UN SDGs	Gränges' material topics
 3.8 3.9	<b>Good health and well-being</b>	<ul style="list-style-type: none"> <li>Gränges works to attract and safeguard competent employees and ensure proper working conditions, including access to essential health care services and medicines.</li> <li>Gränges strives to minimize employee exposure to chemicals, and performs chemical risk assessments using a precautionary principle, to ensure employees use alternatives that are as safe and environmentally sound as possible.</li> </ul>	<ul style="list-style-type: none"> <li>Employee wellbeing</li> </ul>
 4.4	<b>Quality education</b>	<ul style="list-style-type: none"> <li>Gränges works to attract and retain a skilled workforce and works closely with universities etc. to give students access to the corporate environment.</li> <li>Gränges works to develop competencies that enhance both individual and organizational performance. As part of the annual performance and development discussion, each employee and their direct manager decide on individual training and development.</li> </ul>	<ul style="list-style-type: none"> <li>Career and leadership</li> </ul>
 5.1 5.5	<b>Gender equality</b>	<ul style="list-style-type: none"> <li>Gränges works to promote equal opportunities, diversity and gender equality.</li> <li>Gränges' operations in Finspång annually performs a gender-related disparity pay analysis to find any non-objective gaps.</li> <li>Gränges works to promote an open and non-discriminatory workplace in its supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>Diversity and inclusion</li> </ul>
 6.3 6.4 6.5	<b>Clean water and sanitation</b>	<ul style="list-style-type: none"> <li>Gränges works to reduce emissions to both air and water. The company has set a 2025 target to implement local water management plans based on local water conditions (quality, quantity and governance) at all production sites. Such plans should include local targets and actions to address water-related impacts, including water efficiency improvement.</li> <li>Gränges works to put in place mechanisms to identify water risks throughout the global supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>Responsible sourcing</li> <li>Water management</li> </ul>
 7.2 7.3	<b>Affordable and clean energy</b>	<ul style="list-style-type: none"> <li>Gränges has initiated efforts to increase the share of renewable energy in its operations and to promote the topic in its supply chain, as this is a way to reduce the supply chain carbon footprint. The company has a target to increase renewable energy to at least 20 per cent to 2025.</li> <li>Gränges works to improve energy intensity and has a target to reduce energy intensity by 17 per cent to 2025 compared with 2017.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable energy</li> <li>Energy intensity</li> </ul>
 8.4 8.5 8.7 8.8	<b>Decent work and economic growth</b>	<ul style="list-style-type: none"> <li>Gränges works to improve resource efficiency in its operations through energy and materials efficiency, reduce and reuse waste as well as increased use of recycled aluminium.</li> <li>Gränges works to ensure full employment and decent work with equal pay, and to ensure a working environment that promotes high safety standards.</li> <li>Gränges works to put in place mechanisms to identify social risks throughout the global supply chain, including human rights (forced labour, child labour etc.) and working conditions.</li> </ul>	<ul style="list-style-type: none"> <li>Career and leadership</li> <li>Diversity and inclusion</li> <li>Workplace safety</li> <li>Responsible sourcing</li> <li>Sustainable materials</li> <li>Waste management</li> </ul>
 9.4	<b>Industry, innovation and infrastructure</b>	<ul style="list-style-type: none"> <li>Gränges works to develop sustainable products and solutions. The company works to leverage the advantages of aluminium by designing and manufacturing products and solutions which can improve customers' operational efficiency as well as the sustainable performance of their products.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable innovation</li> </ul>

UN SDG number and applicable targets	UN SDG name	Gränges' contributions to the UN SDGs	Gränges' material topics
 10.3	<b>Reduced inequalities</b>	<ul style="list-style-type: none"> <li>Gränges works to ensure equal opportunities and to eliminate discrimination among its workforce. This is followed up by for example employee surveys every second year.</li> <li>Gränges works to promote an open and non-discriminatory workplace in its supply chain.</li> </ul>	<ul style="list-style-type: none"> <li>Diversity and inclusion</li> <li>Responsible sourcing</li> </ul>
 11.6	<b>Sustainable cities and communities</b>	<ul style="list-style-type: none"> <li>Gränges works to leverage the sustainability properties of aluminium (lightweight, recyclable etc.) and develops HVAC solutions that contribute to energy efficient and sustainable buildings.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable innovation</li> </ul>
 12.2 12.4 12.5 12.6	<b>Responsible consumption and production</b>	<ul style="list-style-type: none"> <li>Gränges works to improve material efficiency and recycling rates and to minimize harmful emissions and waste. The company performs chemical substance hazard analysis and substitutes chemicals to reduce exposure to personnel.</li> <li>Gränges integrates sustainability information into its reporting cycle and publishes an annual sustainability report.</li> <li>Gränges works to ensure sustainable procurement practices and traceable practices in the supply chain. The company works to promote and improve product life-cycle sustainability performance.</li> <li>Gränges works to develop innovative products that can reduce energy needs in usage.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable innovation</li> <li>Responsible sourcing</li> <li>Recycling</li> <li>Sustainable materials</li> <li>Waste management</li> </ul>
 13.1 13.3	<b>Climate action</b>	<ul style="list-style-type: none"> <li>Gränges works to counteract climate change throughout the value chain. With regards to its own operations, Gränges works to improve energy efficiency and to increase use of renewable energy.</li> <li>Gränges develops sustainable products aimed at improving customers' and end-users' energy efficiency.</li> <li>Gränges works to understand the climate risks and build resilience into the company's operations and supply chain.</li> <li>Gränges has set a 2025 target to reduce carbon emissions intensity from own operations and purchased energy (scope 1+2) by at least 25 per cent versus 2017 and to reduce carbon emissions intensity from sourced metal inputs (scope 3) by at least 30 per cent.</li> </ul>	<ul style="list-style-type: none"> <li>Sustainable innovation</li> <li>Emissions and climate impact</li> <li>Sustainable energy</li> <li>Energy intensity</li> <li>Responsible sourcing</li> </ul>
 16.5	<b>Peace, justice and strong institutions</b>	<ul style="list-style-type: none"> <li>Gränges has zero tolerance for bribery and other types of corruption in its operations, and has set a 2025 target that white-collar employees are to be trained each year.</li> </ul>	<ul style="list-style-type: none"> <li>Business ethics</li> </ul>
 17.16	<b>Partnerships for the goals</b>	<ul style="list-style-type: none"> <li>Gränges has been a signatory of the UN Global Compact since 2016, and collaborates with industry associations and local community networks to support and enhance the partnership for sustainable development.</li> <li>Gränges works to promote and improve the sustainability performance (life-cycle perspective) of aluminium through value chain collaboration. One example is Gränges' participation in Aluminium Stewardship Initiative (ASI).</li> </ul>	<ul style="list-style-type: none"> <li>Responsible sourcing</li> </ul>

## Sustainability-Linked Bond

On 23 September 2021, Gränges successfully issued a five-year SEK 600 million senior unsecured Sustainability-Linked Bond under the company's MTN programme. The bond is due in 2026 and has a coupon of three months Stibor + 1.20 per cent. Gränges has tied the Sustainability-Linked Bond to the achievement of three defined sustainability performance targets (SPTs), which all play a central role in Gränges' sustainability strategy.

- SPT 1: Reduce carbon emissions intensity from own operations and purchased energy (scope 1+2) by 25 per cent by 2025 compared to 2017.
- SPT 2: Reduce carbon emissions intensity from sourced metal inputs (scope 3) by 30 per cent by 2025 compared to 2017.
- SPT 3: Increase the share of recycled aluminium to at least 30 per cent of total sourced metal inputs by 2025.

Target	KPI	2022	2021	2020	2017
<b>SPT 1</b>	Total carbon emissions intensity from own operations and purchased energy (scope 1+2), tonnes CO <sub>2</sub> e/tonne	0.82	0.88	0.83	0.81
<b>SPT 2</b>	Total carbon emissions intensity from sourced metal inputs (scope 3), tonnes CO <sub>2</sub> e/tonne	8.1	8.4	9.6	11.9
<b>SPT 3</b>	Share of recycled aluminium of total sourced metal inputs, %	32.7	28.5	22.5	11.5

Total carbon emissions intensity from own operations and purchased energy (scope 1+2) amounted to 0.82 tonnes CO<sub>2</sub>e/tonne in 2022. Gränges has now reduced carbon intensity (scope 1+2) by 14 per cent compared to baseline 2017.<sup>1)</sup>

Total carbon emissions intensity from sourced metal inputs (scope 3) amounted to 8.1 tonnes CO<sub>2</sub>e/tonne in 2022. Gränges has now reduced carbon intensity (scope 3) by 23 per cent compared to baseline 2017.<sup>1)</sup>

The share of sourced recycled aluminium increased by 4.2 percentage points and reached 32.7 per cent (28.5) in 2022.

<sup>1)</sup> Baseline 2017 has been recalculated to include Konin. Updated numbers for baseline 2017 are 0.96 for SPT1 and 10.5 for SPT2. The table above shows reported figures, where 2017–2020 exclude Konin and Gränges Powder Metallurgy.

## EU Taxonomy

The EU taxonomy is a classification system for environmentally sustainable economic activities. It establishes four overarching conditions that an economic activity must meet in order to qualify as environmentally sustainable. These criteria are:

- Contributes substantially to at least one of six environmental objectives (article 10–16)
- Does not significantly harm any of the environmental objectives (article 17)
- Complies with the minimum social safeguards (Article 18)
- Complies with technical screening criteria that have been established by the commission (articles 10–15)

In 2021, Gränges conducted an analysis together with an external advisor to identify eligible economic activities for the currently adopted environmental objectives climate change mitigation and climate change adaptation. The company identified Manufacturing of secondary aluminium to be an eligible activity. In 2022, Gränges further analyzed the alignment of this activity to the environmental objectives listed in the taxonomy. The disclosure below is based on our current understanding of the guidelines and may be amended in the future to align with the maturity of the guidance and developing reporting practices. Gränges is investing in the battery segment and foresees that this will be an eligible activity in the future.

### Definitions

#### Turnover:

Gränges has calculated the proportion of taxonomy aligned economic activities as share of sourced recycled aluminium in relation to net sales of goods.

#### Capex:

Capex has been calculated as share of sourced recycled aluminium in relation to capital expenditures related to manufacturing.

#### Opex:

Gränges has calculated the proportion of taxonomy aligned economic activities as share of sourced recycled aluminium in relation to operating expenses related to manufacturing.

### Manufacturing of secondary aluminium

The manufacture of secondary aluminium is an eligible activity according to the EU taxonomy. Gränges conducts this activity by purchasing aluminium scrap from third parties and recycles this into new products. Gränges also has several closed and open loop collaborations, in which recycled aluminium from customers' manufacturing process is brought back to Gränges and re-melted into new products. All manufacturing of secondary aluminium is defined by the taxonomy as making a substantial contribution to climate change mitigation.

### Analysis of Do No Significant Harm (DNSH)

To calculate the proportion of taxonomy aligned economic activities and related turnover, Capex and Opex, Gränges has used the share of sourced recycled aluminium as a proxy. Because manufacture of secondary aluminium is seen as making a substantial contribution to climate change mitigation, the majority of the DNSH -analysis aimed at ensuring no significant harm to the other five objectives. During the analysis it was established that Gränges is well aligned with the regulations and guiding standards referenced in the technical criteria. Gränges has also been diligent in conducting risk and impact assessments that meet the criteria of the Taxonomy.

### Minimum safeguards

Gränges' activities are carried out in compliance with the minimum safeguards set out in the regulation related to international minimum rights and standards as being defined by the OECD Guidelines for Multi-national Enterprises, the UN Guiding Principles on Business and Human Rights, including the declaration on Fundamental Principles and Rights at Work of the International Labour Organisation (ILO), the eight fundamental conventions of the ILO and the International Bill of Human Rights. The analysis refers to the Code of Conduct of Gränges, that stipulates the responsibilities of how to act and how to conduct business responsibly. Gränges believe that fair working conditions enable its employees to realize their full potential. Gränges also requires its suppliers to operate in accordance with responsible, ethical, and sound business principles and in compliance with all applicable laws and regulations. That means to always compete in a fair manner and respect and support internationally proclaimed human rights.

## Proportion of Turnover

Economic activity	NACE code	Absolute turnover MSEK	Proportion of turnover %	Substantial contribution criteria						DNSH Criteria "Does Not Significantly Harm"							Taxonomy aligned proportion of turnover Year 2022 %	Taxonomy aligned proportion of turnover Year 2021 %	Category (enabling activity) E	Category (transitional activity) T
				Climate change mitigation %	Climate change adaptation %	Water and marine resources %	Circular economy %	Pollution %	Biodiversity and eco-systems %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and eco-systems Y/N	Minimum safeguards Y/N				
<b>A. TAXONOMY ELIGIBLE ACTIVITIES</b>																				
<b>A.1 Environmentally sustainable activities (taxonomy aligned)</b>																				
3.8 Manufacture of Aluminium	C24.42 C24.53	8,147	33.3%	100%							Y	Y	Y	N/A	Y	Y	Y	33.3%		T
<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)</b>																				
3.8 Manufacture of Aluminium	C24.42 C24.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total A.1+A.2</b>		8,147	33.3%															33.3%		
<b>B. TAXONOMY NON-ELIGIBLE ACTIVITIES</b>																				
Turnover of Taxonomy-non-eligible activities (B)		16,345	66.7%																	
<b>Total A+B</b>		24,492	100.0%																	

## Proportion of Capex

Economic activity	NACE code	Absolute CapEx MSEK	Proportion of CapEx %	Substantial contribution criteria						DNSH Criteria "Does Not Significantly Harm"							Taxonomy aligned proportion of CapEx Year 2022 %	Taxonomy aligned proportion of CapEx Year 2021 %	Category (enabling activity) E	Category (transitional activity) T
				Climate change mitigation %	Climate change adaptation %	Water and marine resources %	Circular economy %	Pollution %	Biodiversity and eco-systems %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and eco-systems Y/N	Minimum safeguards Y/N				
<b>A. TAXONOMY ELIGIBLE ACTIVITIES</b>																				
<b>A.1 Environmentally sustainable activities (taxonomy aligned)</b>																				
3.8 Manufacture of Aluminium	C24.42 C24.53	394	38.4%	100%							Y	Y	Y	N/A	Y	Y	Y	38.4%		T
<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)</b>																				
3.8 Manufacture of Aluminium	C24.42 C24.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total A.1+A.2</b>		394	38.4%															38.4%		
<b>B. TAXONOMY NON-ELIGIBLE ACTIVITIES</b>																				
Turnover of Taxonomy-non-eligible activities (B)		632	61.6%																	
<b>Total A+B</b>		1,026	100.0%																	



## Proportion of Opex

Economic activity	NACE code	Absolute OpEx MSEK	Proportion of OpEx %	Substantial contribution criteria							DNSH Criteria "Does Not Significantly Harm"							Taxonomy aligned proportion of OpEx Year 2022 %	Taxonomy aligned proportion of OpEx year 2021 %	Category (enabling activity) E	Category (transitional activity) T
				Climate change mitigation %	Climate change adaptation %	Water and marine resources %	Circular economy %	Pollution %	Biodiversity and eco-systems %	Climate change mitigation Y/N	Climate change adaptation Y/N	Water and marine resources Y/N	Circular economy Y/N	Pollution Y/N	Biodiversity and eco-systems Y/N	Minimum safeguards Y/N					
<b>A. TAXONOMY ELIGIBLE ACTIVITIES</b>																					
<b>A.1 Environmentally sustainable activities (taxonomy aligned)</b>																					
3.8 Manufacture of Aluminium	C24.42 C24.53	239	33.8%	100%							Y	Y	Y	N/A	Y	Y	Y	33.8%			T
<b>A.2 Taxonomy-eligible but not environmentally sustainable activities (not Taxonomy-aligned)</b>																					
3.8 Manufacture of Aluminium	C24.42 C24.53	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-	-
<b>Total A.1+A.2</b>		239	33.8%															33.8%			
<b>B. TAXONOMY NON-ELIGIBLE ACTIVITIES</b>																					
Turnover of Taxonomy-non-eligible activities (B)		469	66.2%																		
<b>Total A+B</b>		708	100.0%																		

## Sustainability performance summary

	Target 2025	2022	2021	2020	2019	2018	2017	Note
<b>Sustainable supply and recycling</b>								
Recycled aluminium of total sourced metal inputs, %	≥30	32.7	28.5	22.5	19.8	16.7	11.5	2
Volumes of recycled aluminium, ktonnes	–	168.9	150.4	81.4	72.9	70.4	46.7	2
Renewable energy, %	≥20	16	15	13	8	9	9	3
Carbon emissions intensity from sourced metal inputs (scope 3), % reduction vs 2017	≥30 <sup>5)</sup>	–23	–20	–20	–12	–6	–	1
Significant suppliers <sup>1)</sup> , number	–	278	240	140	158	143	116	4
Significant suppliers committed to Gränges' Supplier Code of Conduct or equivalent standard, % of purchase value	100	97	98	97	99	98	–	4
Significant suppliers with a third-party verified sustainability assessment, number	–	45	33	25	–	–	–	4
On-site supplier audits, number	–	16	24	5	7	10	–	4
ASI Performance Standard/Chain of Custody certification, number of sites	All	5/5	2/2	1/0	0/0	0/0	0/0	–
<b>Sustainable operations</b>								
<i>Resource efficiency</i>								
Total energy use, GWh	–	1,658	1,703	1,220	1,216	1,231	1,237	5
Energy intensity, % reduction vs 2017	–17 <sup>5)</sup>	3	5	10	7	–1	–	5
Carbon emissions intensity from own operations and purchased energy (scope 1+2), % reduction vs 2017	≥25 <sup>5)</sup>	–14	–8	3	1	–6	–	1
Water withdrawal, thousand m <sup>3</sup>	–	4,092	4,176	2,864	3,203	3,468	3,346	6
Local water management plans, number of sites	All	3	3	2	0	0	0	6
Total amount of waste, ktonnes	–	30.6	–	–	–	–	–	7
<i>Workplace safety</i>								
Recordable workplace accidents, number	–	43	35	20	17	23	28	8
Lost workday cases, number	–	19	22	11	10	14	14	8
Fatalities, number	–	1	0	0	0	0	0	8
Total Recordable Rate, number of recordable accidents per million hours worked	≤3.0	8.0	6.5	5.5	4.4	6.1	7.8	8
Severity Rate, number of lost workdays per million hours worked	≤50	56	139	109	142	165	112	8

	Target 2025	2022	2021	2020	2019	2018	2017	Note
<b>Sustainable workforce</b>								
Employees on average <sup>2)</sup> , number	–	2,694	2,648	1,647	1,797	1,699	1,568	–
Employees at year end <sup>3)</sup> , number	–	2,729	2,712	1,774	1,782	1,803	1,637	9
Employees with permanent contract, %	–	97	96	98	97	95	–	9
Employees with temporary contract, %	–	3	4	2	3	5	–	9
Full-time employees, %	–	99	100	100	100	100	–	9
Part-time employees, %	–	1	0	0	0	0	–	9
White-collar employees, %	–	27	26	30	31	30	31	9
Blue-collar employees, %	–	73	74	70	69	70	69	9
Employees receiving annual performance and development discussion, %	100	73	67	100	100	99	–	10
Women in Board of Directors/ Group Management <sup>3)</sup> , %	–	29/17	43/20	43/14	43/13	43/13	50/13	11
Women among senior management <sup>3)4)</sup> , %	≥30	29	29	21	–	–	–	11
Women in total workforce <sup>3)</sup> , %	–	14	13	15	14	14	14	11
Employee engagement index, 0–100	≥85	77	–	78	–	77	–	12
Sick-leave <sup>2)</sup> , %	–	3.5	3.7	2.0	1.6	1.6	2.0	12
Employee turnover <sup>2)</sup> , %	–	17.7	18.7	16.0	11.8	9.1	7.4	12
Employees covered by collective bargaining agreements, %	–	76	78	68	68	70	70	–
<b>Business ethics</b>								
Employees trained in Gränges' Code of Conduct, %	100	100	100	100	99	99	–	13
Employees trained in anti-corruption, % white collar	100	100	100	100	100	–	–	13
Incidents related to corruption, number	–	0	0	0	0	0	0	13
<b>Sustainable customers and sectors</b>								
Products with third-party verified sustainability information available, %	100	79	35	19	–	–	–	14

Note: 2017–2020 exclude Konin and Gränges Powder Metallurgy.

1) All metal suppliers (suppliers of primary ingots, purchased slabs, recycled aluminium, alloying elements) as well as other suppliers which have an annual purchase value above SEK 5 million or an equivalent amount in local currencies.

2) Expressed as full-time positions.

3) Expressed as headcount on December 31.

4) Employee members of Gränges Global Leadership team. Data restated as a result of updated definition.

5) Versus baseline 2017, recalculated to include the Konin facility.

# Notes

## 1 Emissions and climate impact

### Total emissions of greenhouse gases

ktonnes CO <sub>2</sub> e	Scope 1			Scope 2			Scope 3			Scope 1+2+3		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
<b>Gränges Eurasia</b>	<b>71.8</b>	<b>72.2</b>	<b>33.2</b>	<b>122.2</b>	<b>158.9</b>	<b>45.1</b>	<b>2,730</b>	<b>2,780</b>	<b>1,980</b>	<b>2,920</b>	<b>3,010</b>	<b>2,060</b>
Finspång	11.9	11.9	9.1	0.4	0.5	0.3	460	410	340	480	420	350
Konin	34.4	33.3	–	75.2	107.4	–	420	430	–	530	570	–
Shanghai	25.4	27.0	24.1	46.5	50.8	44.8	1,840	1,930	1,640	1,910	2,000	1,700
<b>Gränges Americas</b>	<b>143.3</b>	<b>148.3</b>	<b>135.2</b>	<b>61.4</b>	<b>54.9</b>	<b>65.0</b>	<b>1,200</b>	<b>1,390</b>	<b>1,250</b>	<b>1,400</b>	<b>1,590</b>	<b>1,450</b>
<b>Gränges total</b>	<b>215.1</b>	<b>220.6</b>	<b>168.4</b>	<b>183.6</b>	<b>213.8</b>	<b>110.1</b>	<b>3,930</b>	<b>4,170</b>	<b>3,230</b>	<b>4,320</b>	<b>4,600</b>	<b>3,510</b>

### Carbon emissions intensity

Tonnes CO <sub>2</sub> e/tonne	Scope 1			Scope 2			Scope 3			Scope 1+2+3		
	2022	2021	2020	2022	2021	2020	2022	2021	2020	2022	2021	2020
<b>Gränges Eurasia</b>	<b>0.27</b>	<b>0.27</b>	<b>0.23</b>	<b>0.47</b>	<b>0.59</b>	<b>0.32</b>	<b>10.5</b>	<b>10.4</b>	<b>14.0</b>	<b>11.2</b>	<b>11.2</b>	<b>14.6</b>
Finspång	0.14	0.14	0.14	0.00	0.01	0.01	5.5	4.9	5.4	5.6	5.0	5.5
Konin	0.40	0.36	–	0.87	1.15	–	4.9	4.6	–	6.2	6.1	–
Shanghai	0.28	0.30	0.31	0.52	0.57	0.58	20.5	21.4	21.2	21.3	22.3	22.0
<b>Gränges Americas</b>	<b>0.64</b>	<b>0.65</b>	<b>0.69</b>	<b>0.27</b>	<b>0.24</b>	<b>0.33</b>	<b>5.3</b>	<b>6.1</b>	<b>6.4</b>	<b>6.2</b>	<b>7.0</b>	<b>7.4</b>
<b>Gränges total</b>	<b>0.44</b>	<b>0.45</b>	<b>0.50</b>	<b>0.38</b>	<b>0.43</b>	<b>0.33</b>	<b>8.1</b>	<b>8.4</b>	<b>9.6</b>	<b>8.9</b>	<b>9.3</b>	<b>10.4</b>
Development vs baseline 2017, %	5	6	–	–29	–19	–	–23	–20	–	–22	–19	–

Note: Development versus baseline 2017, recalculated to include the facility in Konin. Development between 2020 versus baseline is not applicable due to comparability.

### Emissions by category scope 3

ktonnes CO <sub>2</sub> e	2022	2021	2020
Purchased goods and services	3,780	4,020	3,120
Fuel and energy related activities	80	80	60
Transportation incl. business travel	70	70	50
<b>Gränges total</b>	<b>3,930</b>	<b>4,170</b>	<b>3,230</b>

### Other emissions to air

Tonnes	Nitrogen oxides (NO <sub>x</sub> )			Sulphur dioxide (SO <sub>2</sub> )			Particulate matter (PM)		
	2022	2021	2020	2022	2021	2020	2022	2021	2020
<b>Gränges Eurasia</b>	<b>43.6</b>	<b>46.2</b>	<b>31.0</b>	<b>5.3</b>	<b>5.5</b>	<b>2.5</b>	<b>4.1</b>	<b>4.5</b>	<b>3.1</b>
Finspång	11.1	11.6	8.5	0.1	0.1	0.0	0.1	0.2	0.1
Konin	8.7	8.8	–	2.7	2.8	–	1.1	1.1	–
Shanghai	23.9	25.3	22.6	2.6	2.7	2.4	2.9	3.3	3.0
<b>Gränges Americas</b>	<b>108.4</b>	<b>112.9</b>	<b>102.5</b>	<b>0.7</b>	<b>0.7</b>	<b>0.6</b>	<b>8.4</b>	<b>8.7</b>	<b>7.9</b>
<b>Gränges total</b>	<b>152.1</b>	<b>159.0</b>	<b>133.6</b>	<b>6.0</b>	<b>6.2</b>	<b>3.1</b>	<b>12.5</b>	<b>13.3</b>	<b>11.0</b>

**Comment:** In 2022, total carbon emissions intensity (scope 1+2+3) decreased by 5 per cent to 8.9 tonnes CO<sub>2</sub>e/tonne (9.3). The absolute emissions were reduced by 6 per cent to 4,320 ktonnes (4,600), equal to 4,390 ktonnes CO<sub>2</sub>e using a location-based approach.

Carbon emissions intensity from own operations and purchased energy (scope 1+2) was 0.82 tonnes CO<sub>2</sub>e/tonne (0.88) in 2022, reduced by 7 per cent versus 2021. The results were mainly driven by increased use of renewable electricity in the Konin facility.

Carbon emissions intensity from sourced metal inputs (scope 3) decreased by 4 per cent to 8.1 tonnes CO<sub>2</sub>e/tonne (8.4). The reduction was mainly driven by increased recycling replacing primary aluminium in Gränges Americas and the facility in Shanghai. Shanghai also purchased low-carbon primary aluminium in 2022 having a positive effect on scope 3 emissions.

Emissions of particulate matter, nitrogen oxides and sulphur dioxide decreased in all production facilities compared to 2021 due to reduced consumption of natural gas.

**Reporting principles and definitions:** Data is reported with a market-based approach. Data is reported at regional level monthly and consolidated quarterly and annually at group level using common definitions and principles. Data for Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include the Konin facility and Gränges Powder Metallurgy.

*Greenhouse gas emissions* are presented as carbon dioxide equivalents. In accordance with the GHG Protocol, the definitions of the respective scopes are the following.

*Scope 1* is defined as direct emissions from Gränges' operations, which include production facilities, office buildings and company owned vehicles. Emissions are calculated based on fuel consumption and emission factors.

*Scope 2* is defined as energy indirect emissions from the generation of purchased electricity, heat and steam consumed by Gränges, in production facilities and office buildings. Emissions are calculated using specific data from Gränges' electricity, heat and steam suppliers.

*Scope 3* is defined as other indirect emissions. These include emissions from extraction, production and processing of main purchased materials, fuel and energy related activities (not included in scope 1 or scope 2), upstream and downstream goods transportation as well as business travel. Fuel and energy related activities include production of fuels used in Gränges' operations and in generation of purchased

## CONT. NOTE 1

energy. Emissions from producing primary aluminium, purchased slabs and recycled aluminium are based on regional industry averages or supplier data. Emissions from producing fuels are based on regional industry data and emissions from transportation and business travel are based on specific data from Gränges' transport routes.

*Carbon emissions intensity* is defined as total emissions of greenhouse gases [tonnes CO<sub>2</sub>e] divided by the total packed products [tonnes].

*Other emissions to air* of particulate matter, nitrogen oxides, and sulphur dioxide are calculated either based on fuel consumption using local emission factors or based on continual measurements. Emissions of oil and VOC are not reported as methods and data collection procedures are currently being harmonized across the organization.

**Regulations:** Gränges observes all applicable local and international laws and regulations for environmental impact. Emission limits in Europe are based on requirements from the Industry Emissions Directive (IED). Gränges' production site in Konin is included in EU emissions trading system, EU ETS. Finspång is not included as the site is below the threshold of rated thermal input. In Shanghai, emission limits are linked to Regulations of Shanghai Municipality on the Prevention and Control of Atmospheric Pollution, and in the US the National Ambient Air Quality Standards (NA AQS) provides the relevant legal framework. Local authorities continually monitor compliance to ensure that emissions are within limits. Emissions regulated by legislation include nitrogen oxides, sulphur dioxide and particulate matter. In some regions volatile organic compounds (VOC) and oil emissions are also regulated.

**Policies:** The governing policy is Gränges' EHS Policy, which is reviewed annually and applies to all employees working at Gränges. All production sites are certified in accordance with the environmental management standard ISO 14001, where the Newport site achieved certification in January 2022. Emissions are monitored and managed as part of daily operations. Compliance is a prerequisite for Gränges' continued license to operate.

**2025 target:** Gränges' target is that carbon emissions intensity from own operations and purchased energy (scope 1+2) is reduced by at least 25 per cent versus baseline 2017 and carbon emissions intensity from sourced metal inputs (scope 3) is reduced by at least 30 per cent versus baseline 2017.

**2040 target:** Gränges aims to reach net-zero emissions by 2040. The company joined the Science Based Targets initiative in 2022, and committed to set science-based targets. The company is preparing for target validation with the ambition to have near-term and net-zero targets approved in 2023.

## 2 Sustainable materials

### Volume of sourced metal inputs

ktonnes	2022	2021	2020
Primary aluminium	333.7	363.9	272.7
Recycled aluminium	168.9	150.4	81.4
Alloys	14.6	14.3	7.5
<b>Gränges total</b>	<b>517.2</b>	<b>528.7</b>	<b>361.7</b>

### Volume of sourced recycled aluminium

ktonnes	2022	2021	2020
<b>Gränges Eurasia</b>	<b>57.9</b>	<b>58.7</b>	<b>11.2</b>
Finspång	10.3	10.2	7.6
Konin	37.5	43.9	–
Shanghai	10.1	4.7	3.6
<b>Gränges Americas</b>	<b>111.1</b>	<b>91.7</b>	<b>70.3</b>
<b>Gränges total</b>	<b>168.9</b>	<b>150.4</b>	<b>81.4</b>

### Share of sourced recycled aluminium

Recycled aluminium of total sourced metal inputs, %	2022	2021	2020
<b>Gränges Eurasia</b>	<b>20.2</b>	<b>20.0</b>	<b>6.9</b>
Finspång	11.7	11.3	11.1
Konin	39.7	43.0	–
Shanghai	9.7	4.7	3.8
<b>Gränges Americas</b>	<b>48.3</b>	<b>39.0</b>	<b>35.2</b>
<b>Gränges total</b>	<b>32.7</b>	<b>28.5</b>	<b>22.5</b>

**Comment:** In 2022, the share of sourced recycled aluminium reached 32.7 per cent (28.5), up by 4.2 percentage points. The increase was driven by increased sourcing of recycled aluminium through commodity traders as well as through recycling companies and customers in Gränges Americas and in the facility in Shanghai. The great effort to increase share of sourced recycled aluminium has resulted in Gränges reaching its 2025 target three years ahead of target.

In 2022, 15 per cent (21) of Gränges' sourced primary aluminium was defined as low-carbon in accordance with suppliers' specified and third-party verified carbon footprint certificates. The facilities in Shanghai and Finspång purchased low-carbon primary aluminium during the year. For Gränges Group the share of low-carbon primary aluminium decreased as a result of Finspång's initiative to phase out primary ingots from Russia as a result of the war in Ukraine.

**Reporting principles and definitions:** Data is reported at regional level and consolidated annually at group level using common definitions and principles. Data for Gränges Powder Metallurgy is included in the data for Eurasia. Numbers for 2020 do not include the Konin facility and Gränges Powder Metallurgy.

*Share of sourced recycled aluminium* is defined as sourced recycled aluminium used as input materials [tonnes] divided by total sourced metal input materials [tonnes].

*Share of low-carbon primary aluminium* is defined as low-carbon primary aluminium used (tonnes) divided by total sourced metal input materials (tonnes). Data on low-carbon primary aluminium must be based on supplier specific data including valid CO<sub>2</sub> certificates.

**Policies:** The governing policy is Gränges' EHS Policy, which is reviewed annually and applies to all employees working at Gränges.

**2025 Target:** Gränges' target is that at least 30 per cent of total sourced metal inputs is recycled aluminium.

**2030 Target:** Gränges has set a new ambitious direction to tenfold the recycled volumes by 2030 versus 2017.

### 3 Sustainable energy

#### Share of renewable energy

%	2022	2021	2020
<b>Gränges Eurasia</b>	<b>34</b>	<b>29</b>	<b>39</b>
Finspång	74	74	74
Konin	23	13	–
Shanghai	12	12	12
<b>Gränges Americas</b>	<b>3</b>	<b>3</b>	<b>3</b>
<b>Gränges total</b>	<b>16</b>	<b>15</b>	<b>13</b>

**Comment:** In 2022, the share of renewable energy increased by 2 percentage points and reached 16.5 per cent (14.6). The increase was mainly driven by the facility in Konin using renewable electricity during the year. Finspång sources specified electricity from 100 per cent hydro power since 2020 and Konin sourced 23 per cent renewable electricity from hydro power in 2022.

**Reporting principles and definitions:** Data is reported at regional level and consolidated annually at group level using common definitions and principles. Data for Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy.

*Renewable energy sources* are defined as wind, solar, hydro, geothermal, tidal and biomass. The share of renewable energy is calculated as renewable energy sourced including recovered energy [MWh] divided by the total energy used [MWh] using total energy use per source and the supplier-specific mix for delivered electricity, district heating and steam.

**Policies:** The governing policy is Gränges' EHS Policy, which is reviewed annually and applies to all employees working at Gränges.

**2025 target:** Gränges' target is that the share of renewable energy (electricity, heat, steam, fuels) is at least 20 per cent compared with baseline 2017.

### 4 Responsible sourcing

#### Significant suppliers

Significant suppliers, number	2022	2021	2020
<b>Gränges Eurasia</b>	<b>190</b>	<b>143</b>	<b>55</b>
Finspång	41	42	32
Konin	101	67	–
Shanghai	34	21	13
<b>Gränges Americas</b>	<b>88</b>	<b>97</b>	<b>85</b>
<b>Gränges total</b>	<b>278</b>	<b>240</b>	<b>140</b>

#### Supplier Code of Conduct commitments

Significant suppliers committed to Gränges' Supplier Code of Conduct or equivalent standard, % purchase value	2022	2021	2020
<b>Gränges Eurasia</b>	<b>100</b>	<b>97</b>	<b>94</b>
Finspång	100	100	93
Konin	100	97	–
Shanghai	100	97	97
<b>Gränges Americas</b>	<b>93</b>	<b>99</b>	<b>100</b>
<b>Gränges total</b>	<b>97</b>	<b>98</b>	<b>97</b>

#### Supplier audits

Audits conducted among significant suppliers, number	2022	2021	2020
<b>Gränges Eurasia</b>	<b>15</b>	<b>23</b>	<b>4</b>
Finspång	6	5	0
Konin	0	7	–
Shanghai	9	11	4
<b>Gränges Americas</b>	<b>1</b>	<b>1</b>	<b>1</b>
<b>Gränges total</b>	<b>16</b>	<b>24</b>	<b>5</b>

**Comment:** In 2022, 264 suppliers (218), corresponding to 97 per cent of the total purchase value from significant suppliers (98), had valid commitments to the Supplier Code of Conduct or had been assessed to have equivalent standards in place which are in line with Gränges' sustainability requirements. In 2022, 45 of Gränges' significant suppliers had a third-party verified desktop sustainability assessment available. Gränges also conducted 16 on-site supplier audits (24), of which no supplier was new. Supplier audits are conducted periodically depending on suppliers' strategic importance and results from supplier performance assessments. In total, 17 new significant suppliers (16) were added to the supplier base during the year and will be included in the annual responsible sourcing process from 2022.

**Reporting principles and definitions:** Data is reported at a regional level by the purchasing organizations and consolidated annually at group level using common definitions and principles. Data for Gränges AB and Gränges Powder Metallurgy is included in data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy.

*Significant supplier:* All metal suppliers (suppliers of primary ingots, purchased slabs, recycled aluminium, alloying elements) as well as other suppliers which have an annual purchase value above SEK 5 million or an equivalent amount in local currencies. Local purchase values have been converted to SEK using average currency rates for 2022.

**Policies:** The governing policy is Gränges' Responsible Sourcing Policy which outlines group-wide principles and requirements on responsible sourcing, including signing Gränges' Supplier Code of Conduct. Four of the company's production sites are certified in accordance with the quality management standard IATF 16949, which includes criteria on suppliers' quality performance.

**2025 target:** Gränges' target is that 100 per cent of significant suppliers are committed to Gränges' Supplier Code of Conduct or equivalent standard.

## 5 Energy intensity

### Total energy use

GWh	2022	2021	2020
Natural gas	989.2	1,016.8	778.4
Electricity	577.8	595.1	390.6
Liquified petroleum gas	52.3	51.7	40.4
Steam	16.6	16.4	–
Diesel	11.8	12.2	6.9
District heating	10.0	10.5	3.8
Petrol	0.1	0.1	0.1
<b>Gränges total</b>	<b>1,657.8</b>	<b>1,702.9</b>	<b>1,220.2</b>

### Energy intensity

MWh/tonne	2022	2021	2020
<b>Gränges Eurasia</b>	<b>2.8</b>	<b>2.8</b>	<b>2.4</b>
Finspång	2.3	2.4	2.4
Konin	3.7	3.5	–
Shanghai	2.3	2.4	2.5
<b>Gränges Americas</b>	<b>4.2</b>	<b>4.2</b>	<b>4.5</b>
<b>Gränges total</b>	<b>3.4</b>	<b>3.4</b>	<b>3.6</b>
Development vs baseline 2017, %	3	5	

Note: Development versus baseline 2017, recalculated to include the Konin facility. Development between 2020 versus baseline is not applicable due to comparability.

**Comment:** In 2022, total energy reduced by 3 per cent to 1,657.8 GWh (1,702.9). The energy intensity stayed at similar level compared to 2021, with a slight decrease by one per cent to 3.41 MWh/tonne (3.45). The decrease was mainly driven by ongoing operational improvements in all regions and increased re-roll purchase in Gränges Americas resulting in reduced total energy consumption.

**Reporting principles and definitions:** Data is reported at regional level and consolidated annually at group level using common definitions and principles. Data for Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy.

*Energy intensity* is defined as total energy use within the organization [MWh] divided by the total packed products [tonnes].

**Regulations:** Gränges adheres to applicable energy regulations in the countries of operations; Gränges' production site in Shanghai under the Shanghai Energy Conservation Regulations and the sites in Finspång and Konin under the Energy Efficiency Directive. Gränges' sites in Americas do currently not have any energy related regulations affecting its operations, but is required to control the consumption of energy that produces certain emissions under e.g. the USEPA's Clean Air Act.

**Policies:** The governing policy is Gränges' EHS Policy, which is reviewed annually and applies to all employees working at Gränges. The production sites in Finspång, Salisbury, Shanghai and Saint-Avold are certified in accordance with the energy management standard ISO 50001, while the Huntingdon and Newport sites as well as Konin are preparing for implementation.

**2025 target:** Gränges' target is that energy intensity is reduced by 17 per cent versus baseline 2017.

## 6 Water management

### Water withdrawal, by source

Thousand m <sup>3</sup>	2022		2021		2020	
	All areas	Areas with water stress	All areas	Areas with water stress	All areas	Areas with water stress
Surface water (total)	2,879	–	2,783	–	1,986	–
Groundwater (total)	704	153	749	118	597	–
Third-party water (total)	509	399	640	459	281	148
– of which surface water	440	399	478	459	162	148
– of which ground water	69	0	162	–	119	–
<b>Gränges total</b>	<b>4,092</b>	<b>552</b>	<b>4,176</b>	<b>577</b>	<b>2,864</b>	<b>148</b>

### Water withdrawal by region

Thousand m <sup>3</sup>	2022	2021	2020
<b>Gränges Eurasia</b>	<b>3,449</b>	<b>3,382</b>	<b>2,148</b>
Finspång	2,894	2,798	2,000
Konin	371	413	–
Shanghai	181	164	148
<b>Gränges Americas</b>	<b>643</b>	<b>793</b>	<b>717</b>
<b>Gränges total</b>	<b>4,092</b>	<b>4,176</b>	<b>2,864</b>

### Water intensity

m <sup>3</sup> /tonnes	2022	2021	2020
<b>Gränges Eurasia</b>	<b>13.2</b>	<b>12.6</b>	<b>15.2</b>
Finspång	34.2	33.5	31.3
Konin	4.3	6.6	–
Shanghai	2.0	1.8	1.9
<b>Gränges Americas</b>	<b>2.9</b>	<b>3.5</b>	<b>3.7</b>
<b>Gränges total</b>	<b>8.4</b>	<b>8.5</b>	<b>8.5</b>

Note: All water withdrawal is categorized as freshwater ( $\leq 1,000$  mg/L Total Dissolved Solids).

**Comment:** In 2022, the total water withdrawal decreased by 2 per cent to 4,092 m<sup>3</sup> (4,176). Water intensity ended at 8.4 m<sup>3</sup>/tonne (8.5). The slight decrease was mainly driven by decreased production in Konin leading to less water needed for cooling purposes. Gränges Americas experienced an extended cold weather period which reduced the need of water for cooling purpose in 2022 compared 2021. No water sources are significantly affected by the water withdrawal or discharge from Gränges.

At the end of 2022, Gränges had implemented local water management plans in three sites: Finspång, Shanghai and Newport. The site in Newport is certified in accordance with Alliance for Water Stewardship's (AWS) International Waters Stewardship Standards. Input from the World Resources Institute's Aqueduct Water Risk Atlas shows that the sites in Finspång and Newport are located in areas with low-to-medium risk, Saint-Avold, Huntingdon and Salisbury sites in medium-to-high risk, and Shanghai and Konin in high-risk areas.

**Reporting principles and definitions:** Data is reported at regional level and consolidated annually at group level using common definitions and principles. Data for Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy.

**Water withdrawal** is defined as water used in the production facility withdrawn from wetlands, rivers, lakes, own wells, municipal water suppliers or from other public or private water utilities [m<sup>3</sup>].

**Water stress** is defined as the ratio of total water withdrawals to available renewable surface and groundwater supplies. The definition is based on Aqueduct Water Risk Atlas developed by World Resources Institute, where the result for the indicator "Baseline water stress" is high (40–80 per cent) or extremely high (> 80 per cent) in the area.

**Water intensity** is defined as total water withdrawal [m<sup>3</sup>] divided by the total packed products [tonnes].

**Regulations:** The water use and management for Gränges' site in Shanghai is regulated via permits and by legislation such as Water Pollution Prevention and Control Law of the People's Republic of China, Water Law of the People's Republic of China, and Management in Shanghai Drainage Ordinance. Gränges Americas is regulated under the USEPA's Clean Water Act.

**Policies:** The governing policy is Gränges' EHS Policy, which is reviewed annually and applies to all employees working at Gränges.

**2025 target:** Gränges' target is that all sites have implemented a local water management plan.

## 7 Waste

### Waste, by hazardous and non-hazardous waste

ktonnes	2022	2021	2020
Hazardous waste	5.0	–	–
Non-hazardous waste	25.6	–	–
<b>Gränges total</b>	<b>30.6</b>	<b>–</b>	<b>–</b>

**Comment:** In 2022, total waste amounted to 30.6 ktonnes of which 16 per cent was hazardous waste and 84 per cent was non-hazardous waste. Gränges aims to reduce waste in all operations with the ambition to recycle and reuse waste in production where possible and minimize waste sent to landfill. In 2022, 78 per cent of all waste was recycled and 4 per cent was sent to landfill. Waste management is handled locally, and all sites have a local waste handling procedure.

**Reporting principles and definitions:** Data is reported at regional level and consolidated annually at group level using common definitions and principles. This is the first year that Gränges reports waste data, hence numbers for 2021 and 2020 are not disclosed. Hazardous and non-hazardous waste are defined in accordance with national law.

**Regulations:** Gränges adheres to applicable waste regulations in the countries of operations; Gränges facility in Shanghai under the Law of the People's Republic of China on the Prevention and Control of Environmental Pollution by Solid Waste (2020 Reversion), Konin under the Environmental protection law, Gränges Americas under the USEPA's Solid Waste Disposal Act and ensuing amendments and Gränges' site in Finspång under Avfallsförordningen (2020:614). All Gränges' production sites are required to annually report waste data to local authorities.

**Policies:** The governing policy is the EHS Policy, which is reviewed annually and applies to all employees working at Gränges. All sites have local waste handling procedures.

**2025 target:** No group-wide target available.

## 8 Workplace safety

### Recordable accidents

Number of recordable accidents	2022	2021	2020
<b>Gränges Eurasia</b>	<b>20</b>	<b>22</b>	<b>10</b>
Finspång	11	12	7
Konin	6	7	–
Shanghai	3	3	3
<b>Gränges Americas</b>	<b>20</b>	<b>13</b>	<b>10</b>
<b>Gränges total</b>	<b>43</b>	<b>35</b>	<b>20</b>

### Total Recordable Rate (TRR)

Number of recordable accidents per million hours worked	2022	2021	2020
<b>Gränges Eurasia</b>	<b>5.7</b>	<b>6.2</b>	<b>4.8</b>
Finspång	13.0	13.7	10.0
Konin	4.8	5.5	–
Shanghai	2.2	2.1	2.2
<b>Gränges Americas</b>	<b>10.7</b>	<b>7.3</b>	<b>6.3</b>
<b>Gränges total</b>	<b>8.0</b>	<b>6.5</b>	<b>5.5</b>

### Lost Workdays

Number of lost workdays	2022	2021	2020
<b>Gränges Eurasia</b>	<b>255</b>	<b>639</b>	<b>295</b>
Finspång	38	92	93
Konin	153	334	–
Shanghai	64	213	202
<b>Gränges Americas</b>	<b>18</b>	<b>107</b>	<b>102</b>
<b>Gränges total</b>	<b>300</b>	<b>746</b>	<b>397</b>

### Severity Rate

Number of lost workdays per million hours worked	2022	2021	2020
<b>Gränges Eurasia</b>	<b>73</b>	<b>179</b>	<b>142</b>
Finspång	45	105	132
Konin	122	261	–
Shanghai	46	151	148
<b>Gränges Americas</b>	<b>10</b>	<b>60</b>	<b>65</b>
<b>Gränges total</b>	<b>56</b>	<b>139</b>	<b>109</b>

**Comment:** In 2022, Total Recordable Rate (TRR) increased to 8.0 (6.5) mainly due to an increased number of recordable accidents in Gränges Americas. In 2022, there was a great focus on safety across all regions with many activities were completed to reduce the risk of serious injuries resulting in reduced number of lost workdays. This resulted in a significantly improved Severity Rate which was reduced by 60 per cent to 56 (139).

During the year, a tragic fatal accident occurred in the Salisbury facility. Following the accident, intense work has been undertaken to develop and improve the safety performance.

**Reporting principles and definitions:** All incidents and accidents are registered and categorized in local incident reporting systems. Events reported are tracked weekly and monthly. Data is reported at regional level and consolidated monthly at group level using common definitions and principles. Data includes contracted workers and is based on total working hours 1 January–31 December. Data for employees covered by OHS management systems and internal safety assessments is based on headcount on 31 December. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy.

*Contracted worker* is defined as individuals working on-site or off-site on behalf of Gränges.

*Recordable accident* is defined as either a medical treatment case, a restricted work case or a lost workday case.

*Total Recordable Rate (TRR)* is defined as total number of recordable accidents per million hours worked.

*Lost workday case* is defined as an accident resulting in absence from work.

*Lost workdays* are defined as the total number of workdays accumulated by employees being absent from work due to work-related accidents.

*Severity Rate* is defined as total number of lost workdays per million hours worked.

*Serious injury* is defined as an irreversible injury such as an amputated finger or lost eyesight, or a reversible injury causing prolonged periods of pain or suffering for the employee, or an accident with an absence longer than 15 days.

**Policies:** The governing policy is Gränges' EHS Policy, which is reviewed annually and applies to all employees and individuals who are directly or indirectly related to Gränges' operations, such as independent contractors and consultants who work on behalf of Gränges. Contracted workers are covered by all safety processes, and where applicable in the efforts to identify and evaluate work related hazards and risks. Moreover, contracted workers are covered by Gränges' safety training, depending on the type of tasks.

*OHS management systems:* All Gränges' production sites, covering 98 per cent of Gränges' total employees in 2022, had an occupational health and safety (OHS) management system in place, implemented in line with applicable legislation. The OHS management system also covers contracted workers. In the Shanghai site, the OHS system is certified in accordance with ISO 45001, covering 19 per cent of all Gränges' employees. The sites in Gränges Americas, Finspång and Konin have initiated pre-studies to implement OHS management systems in accordance with ISO 45001.

*Internal safety assessments:* Gränges generally conducts cross assessments every six months at the sites. In 2022, Gränges facilities in Konin and Finspång had cross assessments completed covering in total 48 per cent of total employees.

*Safety committees:* Gränges has employee-managed safety committees at all plants which consult on the working environment and work for increased safety. Issues addressed include occupational health care, identifying and evaluating hazards, as well as follow-up of corrective actions to eliminate risks. The efficiency of the committees is monitored by the Supervisory safety committees, headed by the regional Presidents. Contracted workers are not represented in the safety committees. In Gränges Americas, all plants have monthly in-person safety meetings for all employees as well as an Americas Region monthly safety meeting. There is also a weekly safety meeting for the management team, plant managers and EHS managers. In Shanghai, safety committee meetings are conducted quarterly, in Finspång two to four times per year and in Konin meetings are held each month. Contracted workers do not participate in the meetings but are treated in the same way as Gränges' employees when it comes to OHS.

**2025 target:** Gränges' target is that Total Recordable Rate (TRR) is  $\leq 3.0$  recordable accidents per million hours worked and that Severity Rate is  $\leq 50$  lost workdays per million hours worked.



## 9 Total employees

### Total number of employees by category

Number of employees	2022	2021	2020
Blue-collar	1,999	2,004	1,244
White-collar	730	708	530
<b>Gränges total</b>	<b>2,729</b>	<b>2,712</b>	<b>1,774</b>
Contracted workers	120	108	116

### Employment contract and type, by gender and region 2022

Number of employees	Region		Gender	
	Gränges Eurasia	Gränges Americas	Women	Men
Permanent contract	1,814	836	346	2,304
Temporary contract	78	1	27	52
<b>Gränges total</b>	<b>1,892</b>	<b>837</b>	<b>373</b>	<b>2,356</b>
Number of employees			Women	Men
Full-time			360	2,354
Part-time			13	2
<b>Gränges total</b>			<b>373</b>	<b>2,356</b>

**Comment:** In 2022, the total number of employees increased slightly to 2,729 (2,712). The increase was mainly driven by increased headcount in Gränges Americas as a result of expansion projects in Newport and Huntingdon. The total number of contracted workers was 120 (108). Gränges does not have any non-guaranteed employees.

**Reporting principles and definitions:** Data is reported at a regional level and consolidated annually at group level using common definitions and principles. Data for Gränges AB and Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy. Data is based on headcount on 31 December.

*Contracted worker* is defined as individuals working on-site or off-site on behalf of Gränges.

*Permanent contract* is defined as a contract for an indeterminate period.

*Temporary contract* is defined as a contract of limited duration.

*Full-time employee* is defined according to national legislation and practice regarding working time, such as employees working a minimum of nine months per year and 30 hours per week.

*Part-time employee* is defined as employees working less than a full-time employee.

**Policies:** No group-wide policy available.

**2025 target:** No group-wide target available.

## 10 Career and leadership

### Performance and development discussion

%	2022	2021	2020
<b>Gränges Eurasia</b>	<b>60</b>	<b>52</b>	<b>100</b>
Finspång	100	100	100
Konin	15	0	–
Shanghai	100	100	100
<b>Gränges Americas</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Gränges total</b>	<b>73</b>	<b>67</b>	<b>100</b>

### Total training hours

Average hours of training	2022	2021	2020
Women	7.2	6.7	–
Men	9.7	5.4	–
White-collar	11.2	6.6	–
Blue-collar	8.6	5.1	–
<b>Gränges total</b>	<b>9.3</b>	<b>5.5</b>	<b>–</b>

**Comment:** In 2022, 73 per cent (67) of Gränges' employees received a performance and development discussion. The increase was a result of Gränges Powder Metallurgy and the Konin facility implementing a structured approach to conduct performance reviews during the year. Konin focused on implementing performance and development reviews for white-collar employees in 2022 and will during 2023 implement performance reviews for blue-collar employees. During the year, the average training hours increased to 9.3 hours per employee (5.5) mainly driven by an increased investment in training in Gränges Americas.

**Reporting principles and definitions:** Data is reported at a regional level and consolidated annually at group level using common definitions and principles. Data for Gränges AB and Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy. Data covers employees in duty adjusted for those who are long-term absent as well as new employees who did not have a performance and development discussion as they started their employment after the period when the annual performance and development discussions were conducted. Training data is based on average number of employees and the scope is limited to trainings conducted by or together with an external party as well as the group-wide Code of Conduct, anti-corruption and IT security trainings.

**Policies:** No group-wide policy available.

**2025 target:** Gränges' 2025 target is that 100 per cent of all employees annually have a performance and development discussion.

## 11 Diversity and inclusion

### Gender balance by region

Share of women in total workforce, %	2022	2021	2020
<b>Gränges Eurasia</b>	<b>14</b>	<b>13</b>	<b>17</b>
Finspång	22	20	21
Konin	10	9	–
Shanghai	11	11	12
<b>Gränges Americas</b>	<b>14</b>	<b>13</b>	<b>13</b>
<b>Gränges total</b>	<b>14</b>	<b>13</b>	<b>15</b>

### Gender balance and age structure

%	Women	Men	<30 years	30–50 years	>50 years
Board of Directors	29	71	–	–	100
Group Management	17	83	–	67	33
Senior Management	29	71	2	68	31
White-collar	34	66	8	64	28
Blue-collar	6	94	20	54	27
<b>Gränges total</b>	<b>14</b>	<b>86</b>	<b>16</b>	<b>56</b>	<b>27</b>

**Comment:** In 2022, the share of women in Gränges' total workforce was 14 per cent (13). The share of women among senior management was 29 per cent. Gränges sees clear challenges to improve the gender balance including high turnover rate in some regions because of stronger employment markets, operating in countries where gender roles are traditional as well as operating in an industry with shift work. With that said, Gränges works to improve the gender balance both in the total workforce and among senior management.

**Reporting principles and definitions:** Data is reported at a regional level and consolidated annually at group level using common definitions and principles. Data for Gränges AB and Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy. Data is based on headcount on 31 December.

*Senior management* is defined as members included in Gränges' Global Leadership Team which was established in 2022. The company has updated the definition of Senior Management during the year as a result of a new structure of the LTI-program.

**Policies:** The governing policy is the Diversity Policy, which is reviewed annually and applies to all employees working at Gränges. Finspång performs annual gender-related disparity pay analysis and in 2022 it was confirmed that a few non-objective gaps were identified which were instantly corrected.

**2025 target:** Gränges' 2025 target is that at least 30 per cent of senior management are women.

## 12 Employee wellbeing

%	2022	2021	2020
Sick leave	3.5	3.7	2.0
Employee turnover	17.7	18.7	16.0
Employee engagement index	77	–	78

**Comment:** In 2022, the total sick-leave was 3.5 per cent (3.7) and the total employee turnover was 17.7 per cent (18.7). One of the main reasons for the high turnover rate was a stronger employment market in Europe compared to last year, and a continuing high turnover rate in Gränges Americas. However, Gränges Americas' strong focus on improving employee retention was the main reason for the decrease in Gränges Group employee turnover rate. Activities implemented during the year included longer onboarding program for new employees, review of incentive programme to hourly employees and extensive training provided to employees.

By gender, employee turnover was 17.2 per cent among men and 21.3 per cent among women and by category 19.9 per cent among blue-collar employees and 10.8 per cent among white-collar employees.

Employee engagement index stayed at the a similar level at 77 in 2022 versus the last survey conducted in 2020, which is in line with relevant benchmark for other industrial companies.

**Reporting principles and definitions:** Data is reported at a regional level and consolidated annually at group level using common definitions and principles. Data for Gränges AB and Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy. Data for sick-leave and employee turnover is based on average number of employees (expressed as present full-time positions). Data for employee engagement comes from Gränges' employee survey, which is conducted every other year. Contracted workers are not included in these key performance indicators.

*Sick-leave* is defined as all absent hours for sickness within a year divided by total annual working hours (as applicable in local standards). Excludes permitted leave absences such as holidays, study and parental leave.

*Employee turnover* is defined as number of employees who leave the organization (voluntarily or due to dismissal, retirement, or death in service) during the reporting period divided by the total average number of employees converted to full-time positions.

*Employee engagement* index is a calculated mean from a number of questions in Gränges' employee survey related to energy and clarity, two important dimensions of employee engagement. The mean is converted to an index 0–100.

**Policies:** The governing policy is Gränges' Code of Conduct which is updated annually and applicable for all employees and board members in entities owned by Gränges.

**2025 target:** Gränges' target is that Employee engagement index should reach at least 85.

## 13 Business ethics

### Code of Conduct training

Share of employees trained in the Code of Conduct, %	2022	2021	2020
<b>Gränges Eurasia</b>	<b>99</b>	<b>100</b>	<b>100</b>
Finspång	97	100	100
Konin	100	99	–
Shanghai	100	100	100
<b>Gränges Americas</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Gränges total</b>	<b>100</b>	<b>100</b>	<b>100</b>

### Anti-corruption training

Share of white-collar employees trained in anti-corruption %	2022	2021	2020
<b>Gränges Eurasia</b>	<b>100</b>	<b>100</b>	<b>100</b>
Finspång	100	100	100
Konin	100	100	–
Shanghai	100	100	100
<b>Gränges Americas</b>	<b>100</b>	<b>100</b>	<b>100</b>
<b>Gränges total</b>	<b>100</b>	<b>100</b>	<b>100</b>

### Incidents of corruption

Total number	2022	2021	2020
Incidents of corruption	0	0	0
Incidents of terminated business contracts due to corruption	0	0	0

**Comment:** In 2022, Gränges continued to conduct its annual group-wide Code of Conduct and anti-corruption trainings. All employees who had access to computers conducted the group-wide e-learning Code of Conduct training, whereas blue-collar employees in Gränges Americas and the Konin facility conducted classroom training or individual training. Total training participation ended at 100 per cent (100). Gränges also conducted the annual anti-corruption e-learning training which 100 per cent (100) of all white-collar employees conducted. No confirmed corruption incidents were detected during 2022.

**Reporting principles and definitions:** Data for Code of Conduct and anti-corruption training participation is collected and consolidated annually via the e-learning system used for online training. Data for Gränges AB and Gränges Powder Metallurgy is included in the data for Gränges Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy. Data includes employees in duty and is adjusted for long-term sick-leave, parental leave, resignations and employees off duty for a longer period.

**Policies:** The governing policy is Gränges' Code of Conduct which is updated annually and applicable for all employees and board members in entities owned by Gränges. It also applies to independent contractors and consultants or others acting on behalf of Gränges. Also, Gränges' Anti-Corruption Policy defines, explains, and expands on what Gränges means by corruption.

**2025 target:** Gränges' target is that 100 per cent of all employees are annually trained in the Code of Conduct, and that 100 per cent of all white-collar employees are annually trained in anti-corruption.

## 14 Sustainable innovation

### Products with third-party verified sustainability information

%	2022	2021	2020
<b>Gränges Eurasia</b>	<b>67</b>	<b>65</b>	<b>48</b>
Finspång	100	100	100
Konin	0	0	0
Shanghai	100	100	0
<b>Gränges Americas</b>	<b>94</b>	<b>0</b>	<b>0</b>
<b>Gränges total</b>	<b>79</b>	<b>35</b>	<b>19</b>

**Comment:** In 2022, Gränges site in Huntingdon and Salisbury developed and implemented a life-cycle and carbon footprint assessment (LCA/CF) tool which enables declarations of environmental impacts on a product level, starting with the products' carbon footprint. The tool has previously been implemented in Finspång and Shanghai. In 2022, all products produced at the Finspång, Shanghai, Huntingdon, and Salisbury site had verified sustainability information available which corresponds to 79 per cent (35) of the company's total products. Konin and Newport are developing its LCA/CF tool to be implemented in 2023.

**Reporting principles and definitions:** Data is reported at regional level and consolidated annually at group level using common definitions and principles. Gränges will initially declare the products' carbon footprint impact but aims to expand the information to cover other environmental impact categories and sustainability topics. To ensure transparency and credibility, Gränges has engaged the external party IVL Swedish Environmental Research Institute to verify the carbon footprint methodology, process, and routines. Verification reports and statements are available on Gränges' website. Details about the methodology and key assumptions can be found in local Carbon footprint reports, also available on Gränges' website. Data for Gränges Powder Metallurgy is included in the data for Eurasia. Numbers for 2020 do not include Konin and Gränges Powder Metallurgy.

*Products with third-party verified sustainability information* is defined as the packed products with third-party verified sustainability information available [tonnes] divided by the total packed products [tonnes].

**Policies:** No group-wide policy available. Local procedure and routine documents available.

**2025 target:** Gränges' target is that 100 per cent of its products have third-party verified sustainability information available.