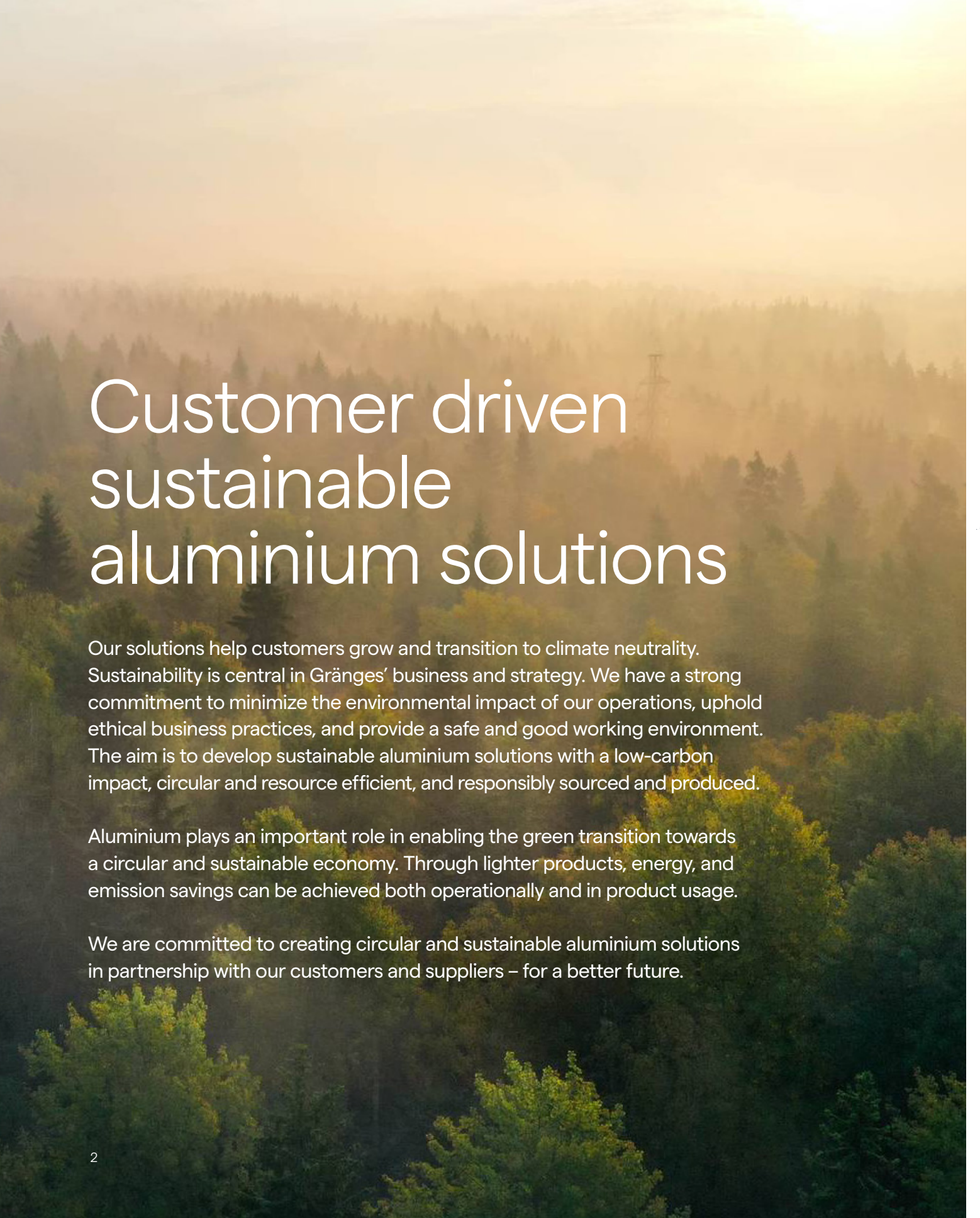




DISPAL[®] products for lightweight precision parts





Customer driven sustainable aluminium solutions

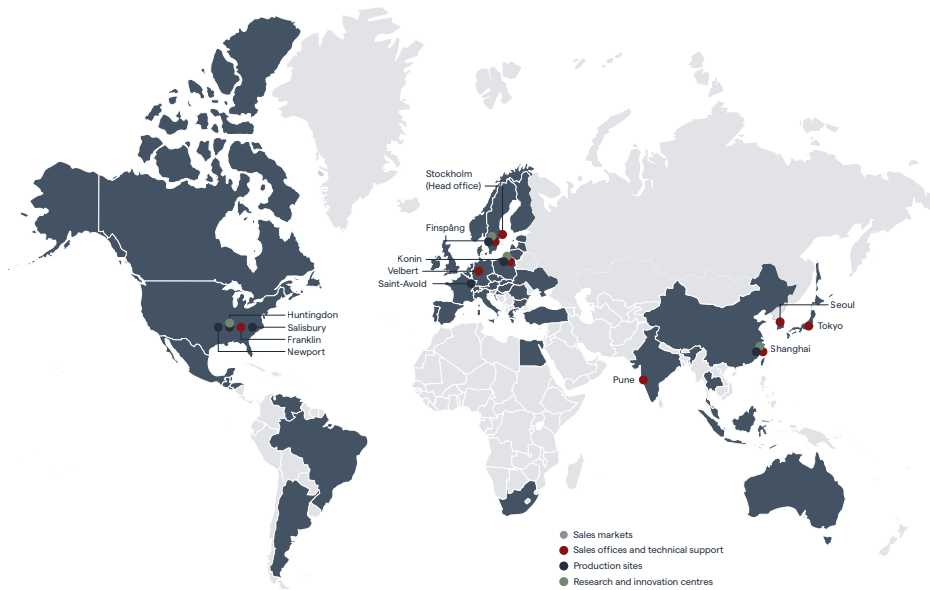
Our solutions help customers grow and transition to climate neutrality. Sustainability is central in Gränges' business and strategy. We have a strong commitment to minimize the environmental impact of our operations, uphold ethical business practices, and provide a safe and good working environment. The aim is to develop sustainable aluminium solutions with a low-carbon impact, circular and resource efficient, and responsibly sourced and produced.

Aluminium plays an important role in enabling the green transition towards a circular and sustainable economy. Through lighter products, energy, and emission savings can be achieved both operationally and in product usage.

We are committed to creating circular and sustainable aluminium solutions in partnership with our customers and suppliers – for a better future.

Globally powered, locally committed

With customized product development, regional production, sales and technical support, we meet customers globally in an efficient and sustainable way.

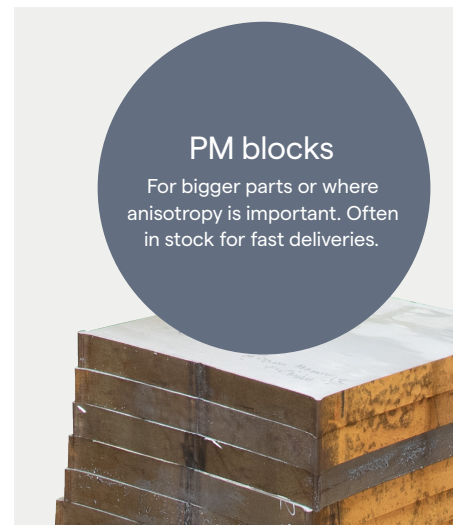
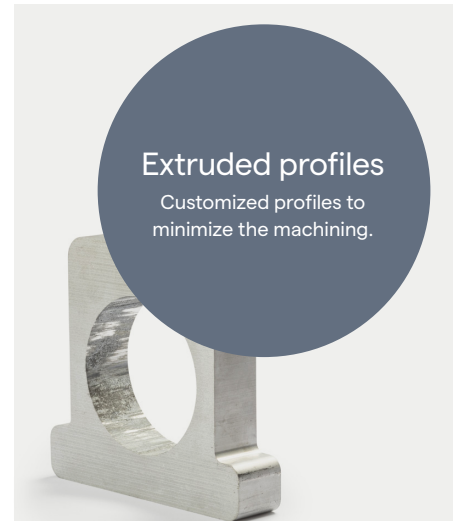


A global leader in sprayed aluminium products

Dispal is a range of advanced powder metallurgical AISi alloys with low CTE and high stiffness. The powder metallurgical process makes the alloys solidify extremely quickly. This results in the material having a very fine grain and homogeneous microstructure.

The DISPAL® material offers a higher specific stiffness than titanium alloys and steels. This combined with a high thermal conductivity and low thermal expansion gives it an exceptional form stability.

DISPAL® has properties comparable to those of steel but at only a third of its weight. It has a thermal expansion rate comparable with steel and a resistance to wear on the same level as cast iron alloys.

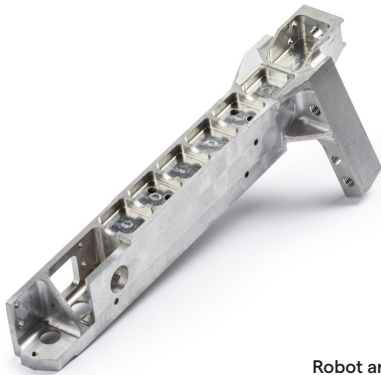


Applications and schematic parts

Precision motion control

Specific stiffness and form stability at temperature

Semi-conductor



Robot arm
S250

Precision optics



Spectroscopy head
S225

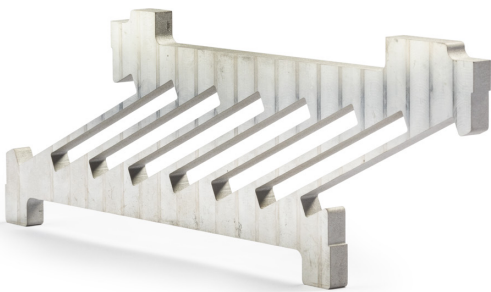


CFK support
S225

High performance components

Wear and fatigue resistance, high strength

Precision motion control



Printer Head Plate
S220

Automotive



Oil pump gear
S232



Oil distribution ring
S260

Your experienced partner

Built on the foundation of 125 years of innovative engineering and materials development, we are a world leader in high-performance aluminium alloys. With a long heritage of powder metallurgy, we are an experienced partner delivering consistent, high quality materials to industries with high demands on safety, performance and sustainability.

1580

1580 is considered the start of the first "real" industry in Finspång. The production of cannons and cannonballs started and made **Finspongs Bruk** internationally known.

1896

When **Gränges** was formed in 1896, it had its roots in two activities: railways and mines.

1922

Production of **aluminium products** started in Finspång.

1990

Start of the **sprayforming activity** by WKW in **Velbert, Germany**.

1995

Start-up of the French sprayforming activity in **Saint-Avoid, France**

1996

A milestone as Gränges becomes a global player and established a production plant in **Shanghai**.

2014

The new **Gränges** was listed on Nasdaq Stockholm Stock Exchange.





CEO COMMENT



2016

In 2016, Gränges acquired Noranda's downstream business in the US and the name was changed to **Gränges Americas**.

2017

Creation of **GETEK**, a joint venture between Gränges and WKW.

2020

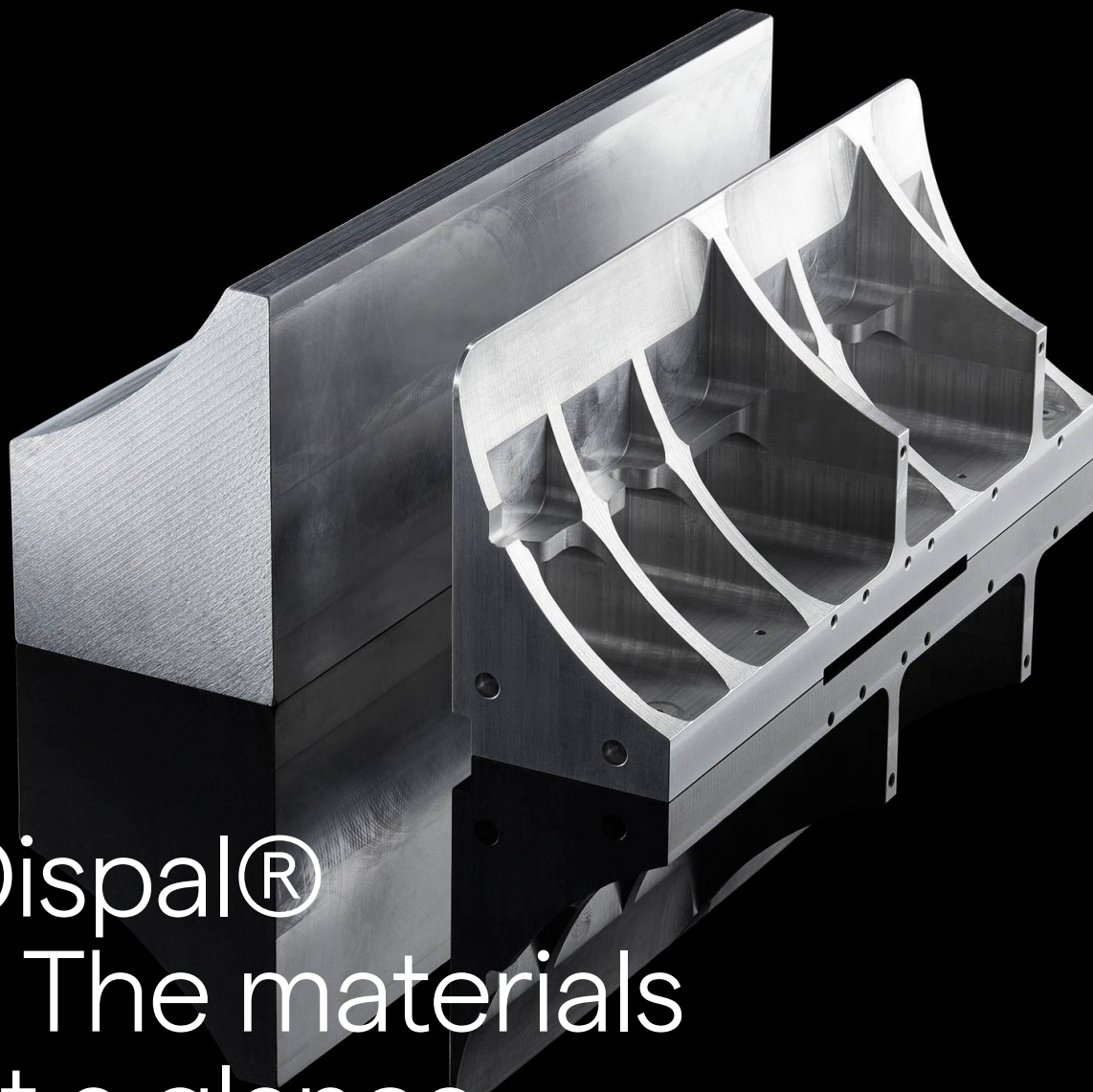
Gränges acquires the remaining shares in GETEK and created the new business area **Gränges Powder Metallurgy**.

2024

Investment in a new post processing line for powders for **additive manufacturing**.



Going forward, our strategy and approach will remain the same: to stay focused on long-term sustainable growth while flexibly meeting any short-term challenges.



Dispall® – The materials at a glance

(minimum values) GPM-4.3.0-DB-000 Re

The physical and mechanical properties depend on geometry and the production process. All mechanical properties are preliminary minimal values (average minus 3 Sigma) taken from specimen Ø30mm and for all other geometries only for reference.

Material designation	Composition type	Heat treatment	UTS: Ultimate tensile strength Rm [MPa]	Yield strength RPO.2 [MPa]	Elongation to Fracture A5 [%]	Young's modulus E [GPa]	Hardness HV30	Density [g/cm ³ ± 5%]	CTE: Coefficient of thermal expansion 20-100°C [10 ⁻⁶ /K]
S220	AISI35	F	165	95	2.5	85	65	2.54	15.1 ± 0.5
		O	140	80	2.0	80	58	2.54	15.1 ± 0.5
S221	AISI40	F	189	149	0.5	101	106	2.53	13.5 ± 0.5
		O	140	80	2.0	80	58	2.53	13.5 ± 0.5
S225	AISI35	F	218	128	1.0	86	85	2.58	15.1 ± 0.5
S232	AISI17	T6 ¹	490	448	0.6	88	175	2.79	18.4 ± 0.5
		T6 ¹	470	405	1.0	88	170	2.79	18.4 ± 0.5
S250	AISI20	F	334	205	2.7	95	105	2.78	16.9 ± 0.5
S260	AISI25	F	265	180	1.0	85	110	2.66	17.2 ± 0.5
		T6 ¹	448	396	0.4	95	190	2.66	17.2 ± 0.5
S270	AISI25	F	370	240	0.8	90	160	2.79	15.7 ± 0.5
		T4 ¹	439	335	0.3	98	180	2.79	15.7 ± 0.5
		T6 ¹	480	470	0.15	100	230	2.79	15.7 ± 0.5
		T4 ²	385	279	0.7	96	175	2.79	15.7 ± 0.5
		T6 ²	425	373	0.2	99	200	2.79	15.7 ± 0.5
		T6 SB ³	486	356	0.9	97	185	2.79	15.7 ± 0.5

¹ Quenching in water at room temperature or

² In water at 80°C to avoid stress cracking for large sections

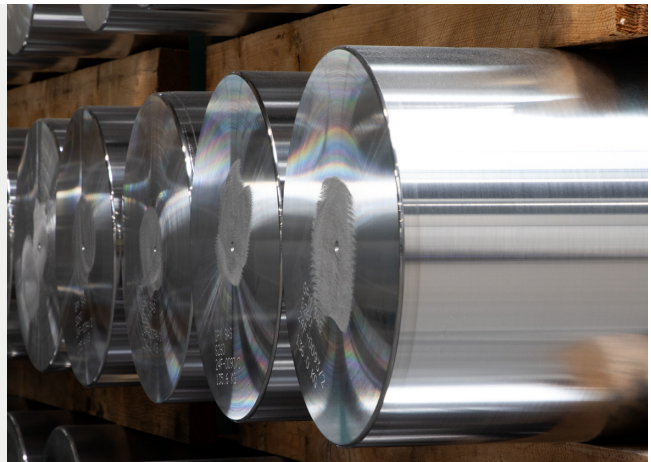
³ In salt bath

All Silicon containing materials are wear resistant depending on mating partners.

Further alloys can be manufactured on request, depending on your requirements and the overall volume of the order.

You can contact our Sales team to find out more.

In addition, new alloys are currently being developed.



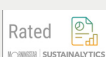
Solutions that enable a sustainable society

With solutions that enable a sustainable society we are committed to mitigating climate change and has set a goal to reach net-zero by 2040. We strives to reduce the climate impact along the value chain – from our own operations and from the materials sourced. The main pathways to reach net-zero include recycling growth, low-carbon primary aluminium sourcing, and renewable energy usage



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. Gränges has an ambition to develop industry-leading aluminium solutions that can help its customers and end-users become more sustainable.

To achieve sustainable growth, Gränges will focus on investing in three areas: sustainable supply and recycling, sustainable operations and sustainable customers and sectors.



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Join us on the path to net-zero 2040

2017
Baseline

2022
SBTi commitment

2023 result
-26% reduction

2025 goal
-30% reduction

2030 goal
-65% reduction

2040 goal
Net-zero

Gränges' five pathways to net-zero and prioritized activities

1

Net-zero Gränges

Scope 1

- Activities**
- Increase material and energy efficiency
 - Reduce and phase-out natural gas and non-renewable fuels
 - Deploy decarbonization technologies

Ambition 100% net-zero fuels by 2040

2

Net-zero electricity

Scope 2

- Form value chain partnerships
- Renewable electricity certificates
- Generate own renewable electricity

Ambition 100% renewable electricity by 2030

3

Recycling growth

Scope 3

- Form value chain partnerships
- Invest in recycling capabilities and capacity
- Develop circular alloys

Ambition 500 ktonnes recycling by 2030

4

Net-zero primary aluminium

Scope 3

- Activities**
- Form value chain partnerships
 - Support suppliers' decarbonization plans

Ambition 100% net-zero primary aluminium by 2040

5

Net-zero solutions and sectors

- Invest in growth from sustainable sectors
- Collaborate with customers and OEMs
- Develop sustainable and circular alloys

Ambition Enabler for net-zero and sustainable growth

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