

Our way report 2023

Sandvik Rock Tools



A scenic landscape of mountains and forests under a cloudy sky. The foreground is filled with dense green trees on a hillside. In the middle ground, there are rolling hills and a valley with some power lines. In the background, there are more mountains, some with snow-capped peaks, partially obscured by a layer of white clouds. The sky is filled with soft, white and light blue clouds, with a hint of a blue sky at the top.

Definition of sustainability

The United Nations Brundtland Commission defined sustainability as 'meeting the needs of the present without compromising the ability of future generations to meet their own needs.' Sustainable practices are fundamental in fostering ecological, human, and economic health and vitality.

The concept of sustainability acknowledges the finite nature

of resources and advocates for their conservative and wise utilization, with careful consideration of long-term priorities and consequences. The escalating threat of climate change underscores the urgency for concrete efforts to ensure development that does not jeopardize the well-being of future generations.

Our commitment to sustainable business: empowering people, preserving the planet, and driving profitability.

“Our commitment to sustainability is ingrained in our company culture and drives continual improvement and innovation, benefiting the mining business.”

Maria Hugosson, President Rock Tools division, Sandvik Mining and Rock Solutions

In the Rock Tools division, we are committed to incorporating sustainability into every aspect of our business. We believe that sustainability should come through intelligent practices that benefit both ours and our customers business as well as the environment.

As a company, we have a crucial role to play by acting responsibly and integrating sustainability principles throughout our operations. This starts from our partnerships with suppliers, where we prioritize minimizing greenhouse gas (GHG) emissions during raw material sourcing to offering products designed for maximum tool life, thus optimizing resource utilization for our customers. However, our commitment does not stop there; we also strive for circularity by recycling the products used by our customers.

We are dedicated to empowering our customers to make sustainable choices effortlessly. By providing comprehensive data and fostering informed decision-making, we aim to collaborate closely, enabling them to align sustainability values with profitability.

Our focus on sustainability extends beyond mere compliance with regulations – it is embedded in our company culture and guides our decision-making processes. We strive to continually improve our sustainability initiatives, seeking innovative solutions that benefit both our business and the environment.

Together, we are committed to building a sustainable future where people, the planet, and profitability thrive in harmony, demonstrating that sustainability and business success are not mutually exclusive but complementary goals.



United Nations agenda 2030

To emphasize the importance of climate change, it is well integrated in the United Nations Agenda 2030. Agenda 2030 consists of 17 Sustainable Development Goals (SDGs) for a better world and is an action plan for a sustainable future. It is stated that to reach lasting sustainability all three parts of sustainability: people, planet, and profit, must be considered. No goal can be achieved at the expense of another goal and progress for all SDGs is required to reach success.

Sandvik Rock Tools business affects many of the sustainable development goals, and this report highlights our work regarding climate change, climate action and resource efficiency. Visit the United Nations Agenda 2030 site to learn more: www.un.org/sustainabledevelopment



Paris Agreement



Photo: UN Climate Change



The Paris Agreement is a legally binding international treaty on climate change. Adopted by 194 parties (193 countries plus the EU) in December 2015, it came into force in November 2016. The agreement aims to prevent global temperatures from rising more than 2°C above pre-industrial levels, with an even more desirable target of limiting warming to 1.5°C.

Why is keeping global warming to 1.5°C crucial?

Scientists emphasize that every 0.1°C increase in temperature brings greater risks, including longer heatwaves, more intense storms, and wildfires. The 1.5°C target was chosen because there is strong evidence that impacts would become significantly more extreme as the world approaches 2°C. Some potential consequences of exceeding 1.5°C versus staying below it include:

- Extreme hot days would be 4°C warmer on average at mid-latitudes (regions outside the poles and tropics), compared to 3°C at 1.5°C.
- Sea-level rise would be 0.1 meters higher than at 1.5°C, exposing up to 10 million more people to frequent flooding.
- More than 99% of coral reefs would be lost, compared with 70-90% at 1.5°C.

The Intergovernmental Panel on Climate Change (IPCC) emphasizes not exceeding 1.5°C to avoid catastrophic impacts. Achieving this requires halving greenhouse gas emissions by 2030 and reaching net-zero by 2050—a critical global effort demanding urgent action and commitment from all nations.

A strategy for a sustainable future

In 2023, Sandvik launched its new sustainability strategy, which aligns with the company's purpose of advancing the world through engineering. Our starting point is the Paris Agreement and with the goal of achieving net-zero emissions by 2050 at the latest*.

Setting targets in line with climate science and the Paris Agreement is a natural step in Sandvik's sustainable business strategy, where we can make a big difference through our customer offerings.

** At Sandvik Rock Tools, we have set an even more ambitious target: zero emissions by 2045*

The six focus areas in the strategy

1. Sustainable solutions:

Sandvik connects its purpose to customers' businesses by creating sustainable solutions through engineering.

2. Ecosystems:

Sandvik collaborates across the value chain to regenerate ecosystems, aid water stewardship, and reduce pollution.

3. Circularity and resource efficiency:

Sandvik aims to achieve more with less by adopting resource efficiency as a mindset.

4. Net-zero:

Sandvik commits to science-based net zero targets, aligning with global climate change efforts.

5. People and communities:

Sandvik engages responsibly with local communities where it operates.

6. Responsible business:

Sandvik operates ethically and sustainably throughout its value chain.

Commitment to Science Based Target initiative

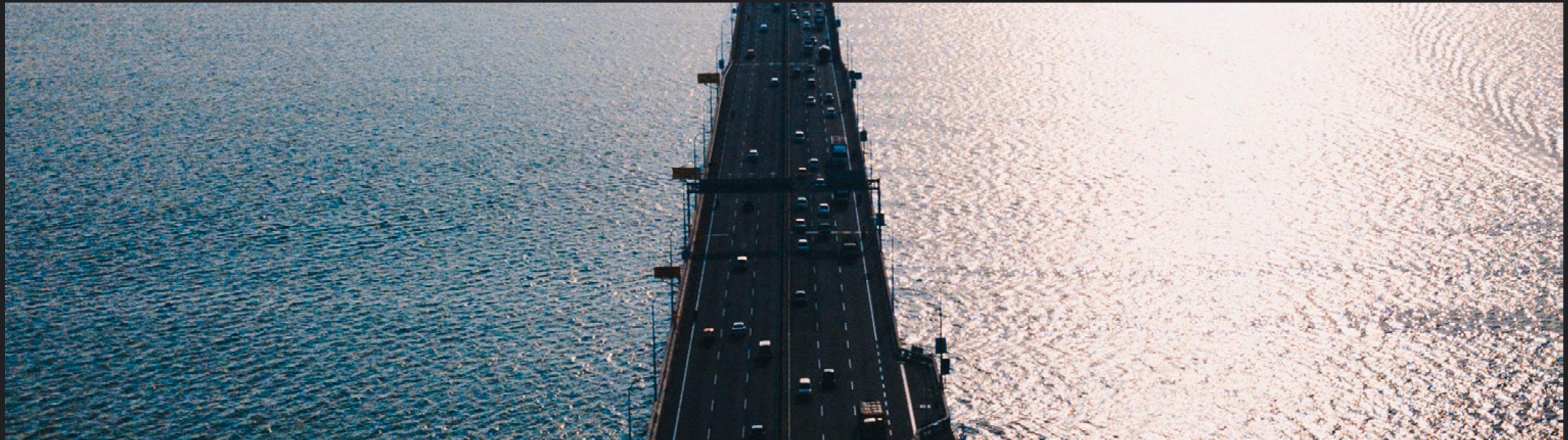
The Science Based Target initiative (SBTi) drives ambitious climate action in the private sector by validating companies' greenhouse gas emission reduction targets consistent with climate science and the Paris Agreement. SBTi is a partnership between CDP, the United Nations Global Compact, World Resources Institute (WRI) and the Worldwide Fund for Nature (WWF). More than 5,700 businesses and financial institutions are working with the SBTi to reduce their emissions in line with this initiative.

Sandvik's greenhouse gas emissions reduction targets have received validation from the Science Based Targets initiative (SBTi), aligning with the latest climate science and the Paris Agreement goals.

Sandvik committed to these targets in December 2021 and approval from SBTi was received in September 2023.

The new targets include achieving net-zero greenhouse gas emissions by 2050 at the latest. Additionally, Sandvik commits to reduce absolute scope 1 and 2 greenhouse gas emissions by 50% by 2030 (using 2019 as the base year) and decrease absolute scope 3 emissions by 30%. Furthermore, Sandvik commits to a 90% reduction in absolute scope 1 and 2 greenhouse gas emissions by 2040.

For Sandvik Rock Tools, a recent emissions inventory revealed a total reduction of 7.5% from 2022 and a 4% reduction from 2019.



How to measure impact on climate change

The Greenhouse Gas Protocol (GHG Protocol) is a global standard for measuring and reporting greenhouse gas emissions from businesses and other organizations. It was developed by the World Resources Institute (WRI) and the World Business Council for Sustainable Development (WBCSD) and has become a foundational framework to help organizations understand and manage their climate impact emissions.

The GHG Protocol categorizes emissions into three "scopes" to provide a more comprehensive picture of the organization's climate impact.

By measuring and reporting emissions within Scope 1, Scope 2, and Scope 3, the company gains a more complete understanding of its climate impact and can identify opportunities to reduce its emissions, improve its environmental performance, and work towards achieving climate and sustainability goals.



Scope 1:

Direct greenhouse gas emissions from the organization's operations, like fuel used in company vehicles, heat-treating equipment and other internal processes. Reducing Scope 1 emissions is crucial to mitigate the organization's direct climate impact.

Reducing scope 1 emissions:

Vehicle fleet efficiency: Invest in fuel-efficient vehicles, transition to lower or zero-emission vehicles like electric cars and adopt fuel-efficient driving techniques to reduce vehicle emissions.

Internal process optimization:

Identify and implement energy-efficient technologies and processes to reduce emissions from internal facilities and production processes.

Scope 2:

Indirect greenhouse gas emissions from the energy used by the organization, such as purchased electricity and consumed heat, cooling and steam.

Reducing scope 2 emissions:

Renewable energy usage: Purchase electricity from renewable sources like solar or wind farms to reduce indirect emissions from energy use.

Energy efficiency:

Implement energy-efficient technologies and processes like LED lighting and smart energy management systems to reduce total energy consumption and Scope 2 emissions.

Purchase of fossil-free electricity: Purchase of fossil-free electricity through direct contracts with energy providers or by guarantees of origin that ensure the electricity is sourced from fossil-free sources (and assure additionality of fossil-free electricity to the grid).

Scope 3:

Other indirect emissions from activities like supply chains, product use, and business travel.

Reducing scope 3 emissions:

Work with suppliers to reduce their emissions and choose low-carbon footprint suppliers to decrease scope 3 emissions from the supply chain.

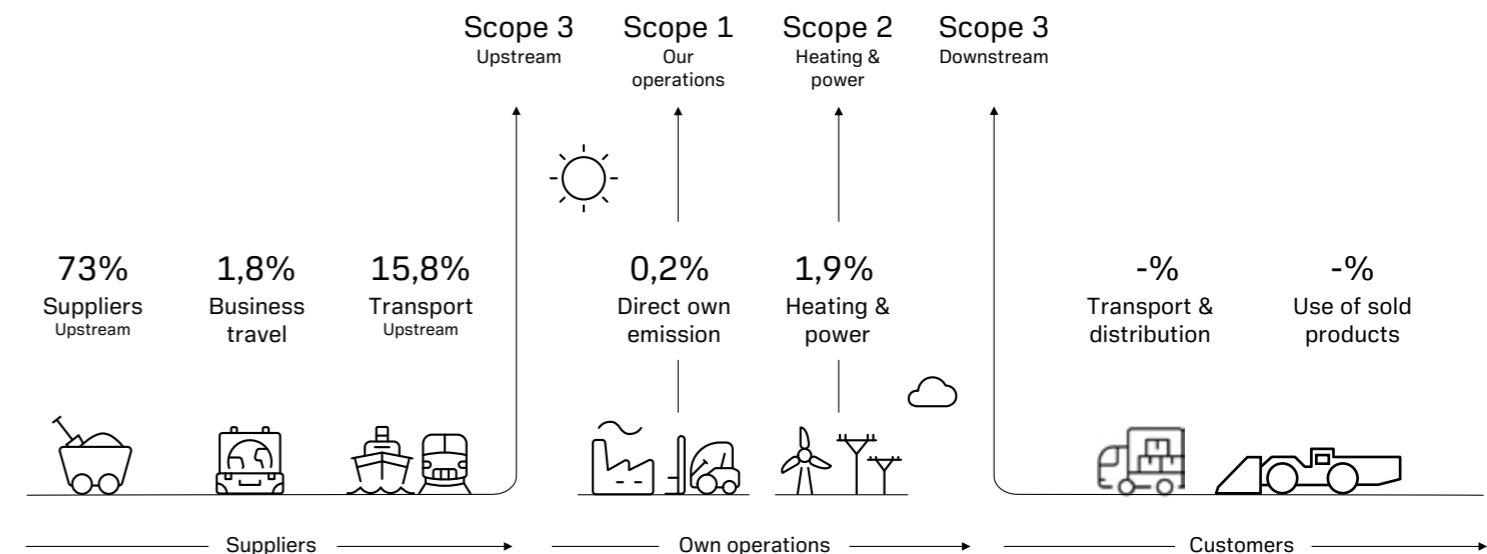
Design of sustainable products:

Design products to be energy-efficient, sustainable, and recyclable to reduce emissions from product use.

The scope 3 upstream emissions are indirect emissions created from activities before the resources enter our direct control such as production of raw materials and transports.

The scope 3 downstream emissions are related to outbound transport and the use of the products. Rock tools products do not emit greenhouse gas emissions themselves (it is the machines using them that do) therefore our scope 3 downstream emissions are very low.

Our climate impact across the value chain - Rock Tools division 2023 (excluding Sales Areas)



Sustainability mission statement

The Sandvik Rock Tools mission statement states that we should be the forerunner in making the shift to sustainable business in our industry by being an innovative business partner who delivers sustainable values (People, Planet, Profit) for all stakeholders in our industry.

The sustainability mission statement also clarifies how we drive the sustainability progress within our division through four areas stated below.

We are a part of the solution:

We commit to climate action to reach or exceed targets agreed in the Paris Agreement. We will reach carbon neutrality in our entire value chain by 2045.

We take responsibility for our business impacts:

We drive continuous improvement of sustainable mining and construction practices. Our offerings will not only be of the highest quality and effectiveness but also the most resource-efficient and circular.

We optimize our operations:

Our operations, logistics and supplier base will be climate neutral, resource-lean and, as a result, nearly zero waste. We aim for zero harm to people.

We are sustainable people:

We shall be a true learning organization with the highest level of knowledge and awareness within sustainability. Sustainability is always part of what we do.



Managing our sustainability mission



To achieve Sandvik Rock Tools sustainability mission statement, we have implemented a management process guided by three focus areas:

- **We lead the way**
- **We build circularity**
- **We shift climate**

Each statement contains measurable goals that are followed and revised regularly to ensure that plans, investments, and activities deliver sustainable results in wanted direction.

All Sandvik Rock Tools functions have their own unique scorecard with relevant Key Performance Indicators (KPIs) for their operations. The scorecards set the foundation for each function's long- and short-term sustainability projects and activities. They form a key instrument in involving all functions and employees in our sustainability work.

At Sandvik Rock Tools, we are continually evolving our sustainability practices with strong engagement from all teams. In this report, we aim to provide a transparent view of our methods, including our latest achievements and challenges.

”With the ten warmest years on record occurring in the past decade, it is more important than ever to focus on solid actions to be part of the solution for a sustainable future.”

Magnus Selling, Sustainability Manager
Sandvik Rock Tools

We lead the way

Lead the way means that Sandvik Rock Tools is striving to be the leading, most innovative, and sustainable supplier of rock tools in the world. The products we supply should provide our customers with longer service life, higher productivity, greater energy efficiency, and lower fuel consumption than those supplied by our competitors.

By achieving this, Sandvik Rock Tools contributes to more effective use of resources, such as the raw materials of our tools and the fuels and energy

consumed while the tools are in operation. Sandvik Rock Tools follows two targets in the focus area “We lead the way”.

Sustainable sales

In product development projects, our research and development (R&D) organization aims to develop products that are significantly better than standard products and provide either longer service life, higher productivity, or greater energy efficiency. With the KPI sustainable sales we will actively work to

increase sales of premium products that can help our customers achieve better performance within sustainability.

Digital shift

This is supported through the implementation of our digital tracking and performance system. With the KPI digital shift, we will actively work to introduce Track, our application to capture data, measure, and optimize customer contracts to improve productivity and increase the service life of our products.

Drilling efficiency and increased service life improve customer sustainability



Sandvik Rock Tools offers a wide range of tools and systems for the mining industry. We are committed to continuous product development, dedicating significant resources to research and development (R&D). Our focus is on refining existing products and innovating new solutions to enhance performance, extend service life, boost productivity, and improve energy efficiency.

For example, comparing the first-generation T51 tool system with the new CT55 system reveals significant advancements. Field tests under equivalent conditions indicate a 15% reduction in fuel consumption and a 30% increase in service life with the CT55 system. Through our investment in innovation, we aim to lead the way in sustainable solutions.

What does the improved performance of our products specifically mean for contributing to a sustainable business?

There are several aspects positively impacted when we develop our products to drill faster and more productively. Fewer operating hours mean we need to run our

compressors for shorter periods, reducing diesel consumption.

Water is not an infinite resource: looking at underground drilling, every earned minute of production time also results in reduced water consumption for cooling systems and dust suppression.

Electricity to power for example ventilation and pumps also play an important part in our customers operations.

By improving the efficiency of our tooling, we support our customers in reducing the amount of kilowatts used per drilled meter.

Exemplifying sustainable productivity

In our commitment to sustainability, we recognize the inherent connection between productivity and sustainability.

This synergy underscores our belief that by embracing sustainable practices, we not only mitigate environmental impact but also drive our customers' operational efficiency and productivity. The following examples are grounded in actual data, although a certain margin of error may apply depending on specific conditions.

Reducing diesel consumption with CT67 in Brazil

Below is a value case from Brazil where we have converted a DP1500i top hammer drill rig from GT60 to CT67, enabling the drilling of 140 mm holes.

Both GT60 and CT67 are tool systems in our top hammer range for surface bench drilling. While GT60 is an industry standard tool, CT67 offers higher productivity and a decrease in tool cost per meter thanks to its new curved technology, allowing customers to run their operations in a more sustainable way.

CT67 tooling allows the rig to utilize more of its installed power and drill with higher percussion, resulting in higher productivity (more meters drilled per hour and year). By drilling faster, reduced flushing and significant fuel reductions per drilled meter can be achieved.

In this case, annual diesel consumption is reduced by 29 600 liters, resulting in a reduction of greenhouse gas emissions by 74.4 tons CO₂e/year. Additionally, the reduced steel consumption represents a reduction of 1 ton CO₂e/year due to the

longer tool service life.

This example represent one rig in a mining operation, drilling full shifts of 2x12 hours/day, 7 days/week. A typical surface mining operation can have 8-10 rigs in operation. The data is collected from the onboard rig follow-up system called My Sandvik.

More efficient use of air makes drilling faster with RH560

Our RH560 Down-The-Hole (DTH) Hammer is renowned for its exceptional durability and extended service life due to its robust construction, contributing to increased productivity and reduced cost per meter drilled.

With the RH560, we are now able to drill the same number of meters in less time. This is due to refined methods of air usage. Today, we use less air, and it is utilized more efficiently.

In a field test with one of our customers, we compared our RH560 premium hammer with a competitor's equivalent product. In the test, we drilled 370 meters with each hammer under the

exact same conditions. The competitor's hammer took 10 hours and 30 minutes and consumed 920 liters of diesel. The RH560, on the other hand, took 9 hours and 10 minutes and consumed 811 liters of diesel.

Achieving the same outcome in a shorter time save fuel used to power the compressors. Calculating the annual diesel consumption for this operation results in savings of 28 340 liters of diesel per year/one rig, which reduces the greenhouse gas emissions by 71.1 tons CO₂e annually.



Digital tracking and performance system improves our customers' productivity



Track

Track is an application to capture data, and measure and optimize customer contracts. For many years, the review process of customer contracts was done using pen and paper and spreadsheets.

Today, Sandvik Rock Tools offers a concept that digitalizes our customer contracts and helps our customers' businesses excel. Track capture rock tools data and track inventory, rig, operator, and tool performance, while also presenting a real-time analysis for optimal tool selection and operational excellence securing safety, productivity, and efficiency.

By performing and understanding failure analysis and waste management our tools' service life will improve which is beneficial from both a sustainable and circular standpoint.

The power of using a solution such as Track – both regarding sustainability and productivity – was recently showcased at a customer site in Australia.

There, through the implementation of Track, it was possible to achieve a 30% lowered cost-per-meter, while at the same time significantly increasing the service life of the products.

Analyze

My Rock Tools Analyze is a mobile application designed to do failure and discard analysis of our customers' rock tools and provide guidance on improvements - all remotely. The aim is to determine the root

cause of the failure or discard reason of the rock tool, prevent it from happening again, and to help improve future performance. It is very easy to use: our customers download the app from either App Store or Google Play, provide some key product information, take a few photos of their worn-out tool and then send it to us for analysis and feedback.

They can then use this analysis to improve their operations with the aim of increasing productivity and in turn, profitability.

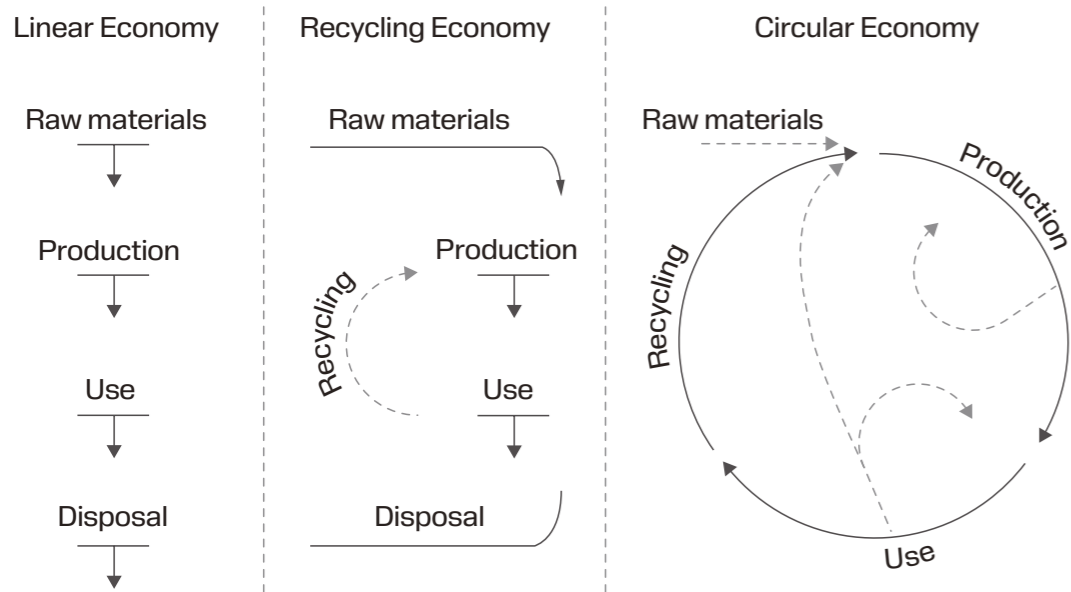
Drill

Sandvik Rock Tools offers interactive customer trainings based on drill hole simulation, called Drill. There are two different versions: classroom training, using an iPad app, and remote training, using a phone, tablet or computer, a web application, and a video conferencing system (Teams).

These digital offerings are available for top hammer, down-the-hole (DTH), and rotary drilling. It is a practical customer training that demonstrates the operational impact on rock tools' service life and performance when using the correct settings. This has the possibility to achieve longer service life of our products, and in turn, sustainability benefits.



We build circularity



The European Parliament defines circular economy, also referred to as circularity, as a model of production and consumption, which involves sharing, leasing, reusing, repairing, refurbishing and recycling existing materials and products as long as possible. Circular economy is the opposite to linear economy.

In linear economy, natural resources are turned into products which are ultimately destined to become waste because of the way they have been designed and manufactured.

Building circularity is Sandvik Rock Tools way to ensure that raw materials and other resources are used efficiently and sustainably, and that our products are recycled when they reach the end of their life. Building circularity also means working to prolong service life, using recycled materials, designing products, and developing processes that make recycling easier.

Sandvik Rock Tools follows four targets in the focus area “We build circularity”.

Return rate drill bits

With the KPI return rate drill bits we aim to optimize the amount of drill bits sold that enter our recycling loops. One major effort to achieve this is the “opt out”, a program where our customers actively choose if they are not to be part of the program. When we get the used tools back, we can separate steel and carbide and put the materials into effective recycling loops.

Supply circularity carbide

With the KPI supply circularity carbide we aim to increase the weight percent of recycled hard material used in Sandvik Rock Tools drill bits. In our efforts to constantly develop our circularity we both aim to optimize effective use of recycled materials at the same time as maintaining the high quality level of virgin raw materials.

Supply circularity steel

The KPI for supply circularity in steel describes the weight percent of steel Sandvik Rock Tools source from scrap-based steel suppliers. By doing so, we decrease the need to extract and process new raw materials. This leads to significant reductions in our greenhouse gas emissions, as the manufacturing process for recycled steel has a lower environmental impact compared to manufacturing of steel from virgin materials.

Waste circularity

In our focus to improve waste circularity, we aim to increase the proportion of waste that is recycled or reused. It is also aiming at reducing the total amounts of waste generated.

Achieving the waste circularity KPI involves closely monitoring our processes and implementing measures optimize the recycling of our waste.

Through optimized design and production methods, our goal is to minimize waste generation and maximize the amount of waste that enters into circular flows.



Carbide recycling

Continuous improvement in resource efficiency and recycling is crucial for the sustainability of our future supply chains. Our recycling program aims to optimize the recycling of drill bits, which contain scarce minerals such as tungsten and cobalt. This initiative leads to significant enhancements in circularity and reductions in greenhouse gas and energy consumption.

Being a part of Sandvik Rock Tools’ recycling program signifies a commitment to sustainable development.

Utilizing recycled carbide yields significant environmental benefits, including a notable 40% reduction in greenhouse gas compared to using mined minerals. This underscores the importance of recycled materials in achieving sustainable manufacturing practices.

Grinding

One way to enhance productivity and service life for our products is by reshaping our drill bits through grinding. By regrounding the drill bits regularly, the length of their service life can increase by up to 10 times.

Careful maintenance of the cemented carbide inserts in drilling tools improves almost all rock drilling parameters and ensure a more efficient and resourceful drilling experience with reduced operating cost.

Extending lifespan with recycled carbide in Sandvik’s RR240 Air Bits



During 2020, Sandvik Rock Tools embarked on a journey to increase the amount of recycled raw materials used in our rotary bits carbide, starting with RR240 air bit product line. Our initiative aimed to embrace circularity in our product lifecycle while upholding uncompromised standards of quality and product life.

Promising results

We had seen promising results from our initial field trials of the new carbide grade. Follow-up large scale evaluation of over 70 rotary bits was completed in the first half of 2024 and achieved an increase of over 5% in bit lifespan compared to standard carbide references. This improvement has resulted in fewer insert breakages and no visible increase in insert wear to the bits.

These trials were conducted in collaboration with Barrick, a long-standing Sandvik Rock Tools partner, at their

Lumwana copper mine in Zambia’s Northwest Province.

Located west of Solwezi, Lumwana represents a pivotal site for validating our rotary bits under real-world mining conditions. The trials are executed with rigorous methodologies, ensuring traceability and comprehensive reporting.

Next steps

Looking ahead, Sandvik Rock Tools remains dedicated to advancing recycled carbide technologies. Our strategic roadmap includes continued testing and expansion of this carbide offering over the coming months and years.

By the end of 2025, our objective is to offer the majority of the full RR240 offering with carbide produced from 75% recycled raw materials.

We shift climate

At Sandvik Rock Tools, we have been diligently tracking our scope 1 and 2 emissions since 2019, and we began monitoring scope 3 emissions in 2021.

Since establishing our baseline year in 2019, we have made significant reductions in both scope 1 and 2 emissions. Moreover, our progress in reducing scope 3 emissions has been consistent with our planned targets since the inception of our tracking efforts.

The upstream activities from suppliers and transport providers are the ones that generate the majority of the emissions.

Sandvik Rock Tools follows four targets in the focus area “We shift climate”.

Climate impact from steel suppliers

The KPI climate impact from steel suppliers involves engaging in constructive dialogue with our steel suppliers and encouraging them to take proactive measures to reduce their greenhouse gas emissions. Alongside increasing the proportion of steel sourced from scrap-based suppliers, our goal is to decrease greenhouse

gas emissions both on a per-ton basis and in total. This initiative includes monitoring emissions from the transportation of steel to our production facilities, further reinforcing our commitment to reducing climate impact throughout our supply chain.

In 2023 Sandvik Rock Tools decreased the upstream greenhouse gas emissions from the steel used in our products with 15% in comparison with our base year of 2019.

One example that exemplifies our cooperation with steel suppliers is the use of Alleimas recently developed LCA (Life Cycle Analysis) reports that we use to optimize design choices to reduce environmental impact of our end products.

Fossil free electricity supply

Our production units use electricity as their main energy source. The KPI fossil free electricity supply aims to decrease scope 2 greenhouse gas emissions by ensuring that all Sandvik Rock Tools production units operate on 100% fossil free energy.

All Sandvik Rock Tools production units now operate on 100% fossil free energy, reducing our scope 2 carbon footprint in 2023 by 75% compared to 2019.

One example is Sandvik Rock Tools’ production unit in Wuxi, China, which now consumes green electricity sourced from solar and wind energy, resulting in a reduction of greenhouse gases by 2,864 tons CO₂e/year.

Air freight finished goods

Our KPI for air freight of finished goods aims to reduce the weight percentage of airfreight from our production units to warehouses by improved forecasting and supply planning.

Instead, we are implementing various modes of transportation including road, rail, and container ships for distributing our finished products.

We always aim to improve transportation efficiency by decreasing the proportion of air freight and increasing the share of goods transported by rail and sea. For instance, container ships emit 99% less greenhouse gas emissions compared to air freight.

Additionally, we have a continuous dialogue with our transport providers regarding fuel types in vehicles and loading logistics to always make environmentally conscious choices. We are making strides within our production units too, with 90% of our

own vehicles running on electricity or fossil-free fuel. By 2025 we aim for all production vehicles to be electric or fossil-free. An achievement is that through network design, multimodal transportation, and the use of Hydrotreated Vegetable Oil (HVO), Sandvik Rock Tools Global Logistics has reduced greenhouse gas emissions by 455 tons CO₂e/year.

Business air travel

Annual GHG emissions caused by business air travel is accounted for in the KPI business air travel. While it is important for us to have physical meetings with our customers and other stakeholders, we encourage our employees to, where possible, explore alternatives such as digital meetings instead of air travel.

Business travel within Sandvik Rock Tools has significantly decreased, with an 84% reduction compared to our base year of 2019. Our objective is to maintain minimal business air travel while still prioritizing face-to-face meetings with customers and other key stakeholders when necessary.

Read more about Alleima, PU Wuxi and Global Logistics on the next pages.

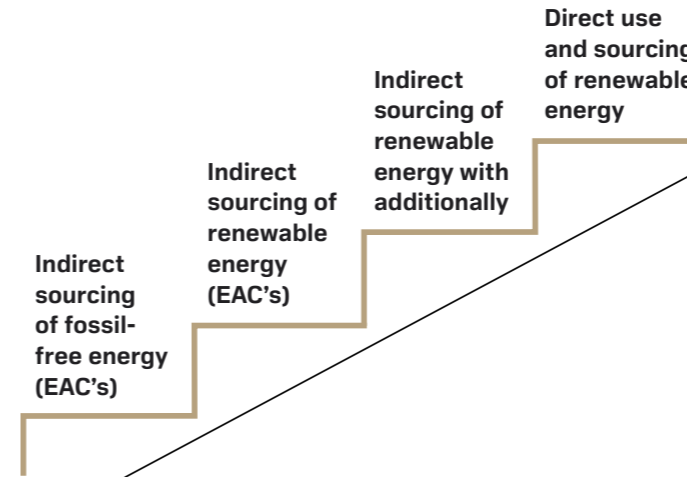
PU Wuxi China reduces carbon footprint through wind and solar energy

In addition to Sandvik's sustainability goals, the Chinese government has set a target for carbon neutrality by 2060. At PU Wuxi, they now procure green electricity sourced from solar and wind energy. By powering the production unit with fossil-free electricity greenhouse gas emissions were reduced by 2,864 tons CO₂e/year.

To ensure continuous access to green electricity and align with Sandvik Rock

Tools' overarching sustainability objectives, PU Wuxi has entered a long-term agreement with its energy provider to secure sustainable energy sources in the future.

The sources of the energy supply are assessed and verified by the Sandvik Energy advisory group*. Certificates from the suppliers document percentage distribution between energy sources (solar, wind) supplied on regular basis.



** In 2023 the new Sandvik energy sourcing and efficiency guideline was issued. This outlines how energy management should be aligned with our long-term targets and standards such as the Greenhouse Gas Protocol.*

Increased energy efficiency is always the number one priority and when it comes to energy supply the priorities range from indirect sourcing of fossil free energy to direct use and sourcing of renewable energy as explained by the above picture.



“Focus on sustainability is not just a moral duty; it’s a strategic investment. By prioritizing sustainability, we strengthen our brand, not only in today’s market but also for the future.”

Colin Zheng, Quality and EHS Manager Production Unit
Wuxi Sandvik Rock Tools



Greenhouse gas reduction with sustained focus on cost and lead times



Sandvik Rock Tools Global Logistics aims to reduce the greenhouse gas emissions associated with the transportation of our products. By examining entire flows worldwide and consistently focusing on finding the best and most environmentally friendly transport solutions, we have successfully reduced our greenhouse gas emissions.

One notable initiative is the significant reduction in climate impact achieved by changes implemented in our transport flow from Sandviken, Sweden to Gothenburg and Germany. This is achieved by loading trucks in Sandviken that run on HVO fuel down to Eskilstuna, where the transport mode is switched to rail. This initiative has led to a greenhouse gas emission reduction by 52% CO₂e/year.

Larger trucks and better load planning have also resulted in a reduction of 78 trucks per year from the Sandviken warehouse, benefiting both the local community and the environment. Through network design, multimodal transportation, and the use of HVO, we have reduced greenhouse gas emissions by 455 tons CO₂e/year.

By always requiring transparency from transport companies regarding their fleets and their sustainability practices within their own companies, Sandvik Rock Tools has significant leverage to influence future procurement decisions.

In the near future, Sandvik Rock Tools will drive improvements with the ambition of calculating the emissions costs of different transport routes and modes. Clearly visualizing the impact of the choices made will become an effective tool for future transport planning. Continued work with network design is also important as it allows us to make a real impact on the environment.



“We focus on reducing greenhouse gas emissions through conscious choices and ongoing dialogue with our distributors, ensuring development without compromising our level of service.”

Johan Jigemark, Global Freight Professional
Sandvik Rock Tools

Life cycle analysis for improved sustainability



Photo: Alleima

In an era where sustainability is becoming increasingly important, many companies are adopting new methods to reduce their environmental impact. One such method is Life Cycle Analysis (LCA), a process that helps companies understand and improve their environmental performance throughout the product's life cycle. Here is a description of how Alleima, one of our suppliers of drill steel, uses LCA to enhance sustainability in its processes and make informed decisions.

Identifying and reducing emissions

Alleima has been on a journey aiming at mapping all their products from raw material extraction to product manufacturing in a system called LCA for Experts. By doing so, they identified where the largest emissions occur throughout the life cycle. With this information, Alleima can initiate improvements, such as switching fuels in furnaces and selecting raw materials more carefully.

One of the most critical aspects Alleima analyses using LCA is Global Warming Potential (GWP). This provides a clear picture of how their products contribute to global warming and helps prioritize actions to reduce these emissions.

Integrating LCA results into business decisions

Although it is early in Alleima's LCA journey, they have already begun integrating the results into business

decisions and product development processes. The mapping has provided insights into which investments yield the best CO2 emission reductions, and the current focus is on continuing its improvement through the life cycle chain.

Looking ahead, Alleima sees an opportunity to work more purposefully to eliminate the largest emissions from their raw materials and processes. They plan to further work with their suppliers of raw materials and equipment to ensure they choose options with the lowest possible footprint.

The challenges Alleima highlights in their mapping for LCA analysis include obtaining relevant data and ensuring its quality. They still have suppliers who lack specific information about their climate impact, and for these, they use generic industry data. Overcoming these obstacles is an ongoing process.

Transparency and customer communication

Alleima strives to communicate the results from LCA analyses to their customers and stakeholders to increase transparency and build trust. This will be done by progressively sharing the results on material certificates and in LCA reports, which we at Sandvik Rock Tools have found very useful in our sustainability work.

Collaboration with customers is a crucial part of Alleima's strategy to promote sustainability along the entire

value chain. Alleima offers their carbon footprint data as scope 3 input data, providing customers with the opportunity to compare and make informed purchasing decisions based on environmental impact

Long-term sustainability goals

Alleima has set long-term sustainability goals and will update their life cycle analysis data regularly, making it possible to measure progress over time by comparing certificates or reports.

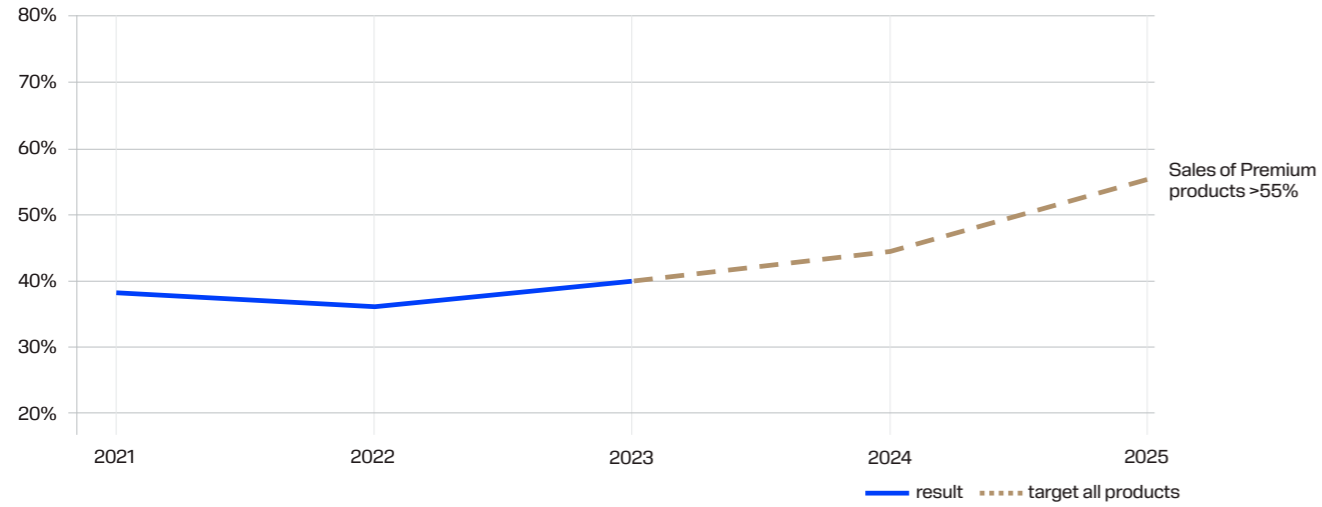
With the results from Alleima's LCA reports, we at Sandvik Rock Tools can optimize our product and design choices to reduce environmental impact and improve the sustainability of our end products.

Alleima also sees potential for collaboration with their customers to enhance sustainability efforts and reduce environmental impact through their delivery of steel products. Understanding the total environmental impact of the final product can lead to finding joint solutions that minimize this impact.

Finally, recycling is an area where Alleima sees significant potential. Their use of recycled materials greatly impacts the overall climate footprint, with Alleima utilizing 80% scrap as raw material and to reach 83% by 2030. Sandvik Rock Tools currently returns well-sorted scrap and steel chips from our manufacturing processes to Alleima.



Sustainable sales



Key Performance Indicator (KPI) definition

The KPI “sustainable sales” is defined as sales of premium products compared to industry standard. Rock Tools leads the way to reduce climate impact in the product life cycle, by increasing sustainable sales.

How do we achieve this?

We will actively work to increase sales of premium products that can help our customers achieve better performance within sustainability.

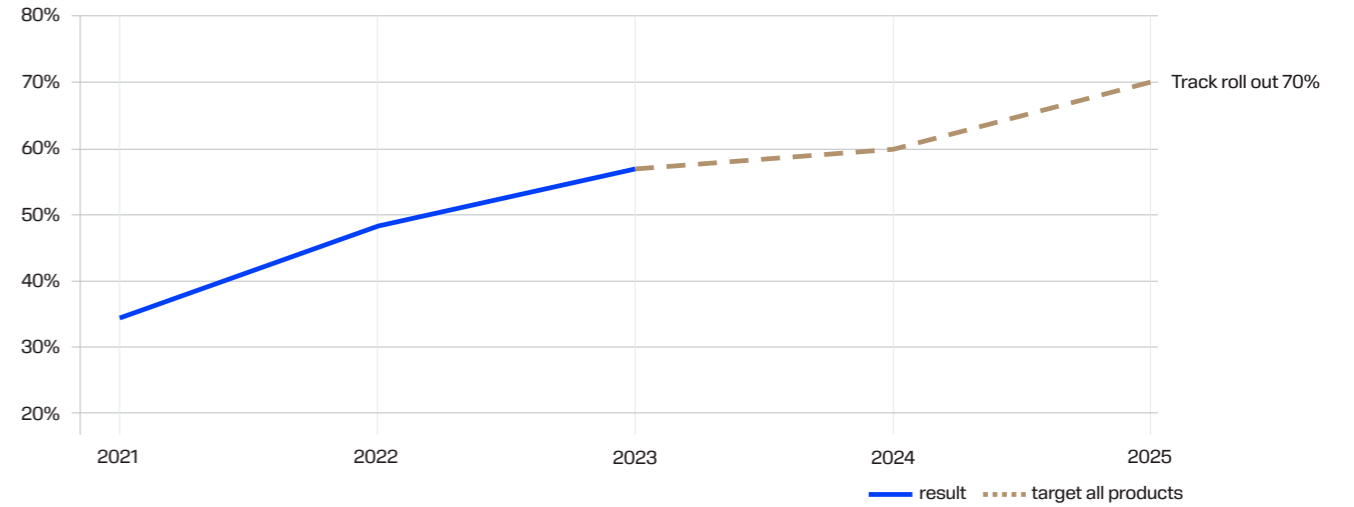
Result in 2023

In 2023, 40% of our sales were categorized as “sustainable sales”. We met the target of 40%. We were particularly pleased with the strong development in our product line for rotary tools.

Focus in 2024

During 2024, we will continue to work actively to focus on the value of our premium products, showcasing to an even larger share of our customers how they can contribute to more sustainable and efficient operations. The target for “sustainable sales” in 2024 is 45%.

Digital shift



Key Performance Indicator (KPI) definition

The KPI “digital shift” is defined as the number of customers that implement our digital tracking and performance system “Track”.

Sandvik Rock Tools leads the way by improving our customers productivity, increase the service life of our products and make sure no tools are lost at the customer sites. By doing this, and making the digital shift, the lifetime of our products increases and the total environmental impact decreases.

How do we achieve this?

We will work actively to introduce Track in more customer operations to improve productivity and increase the service life of our products.

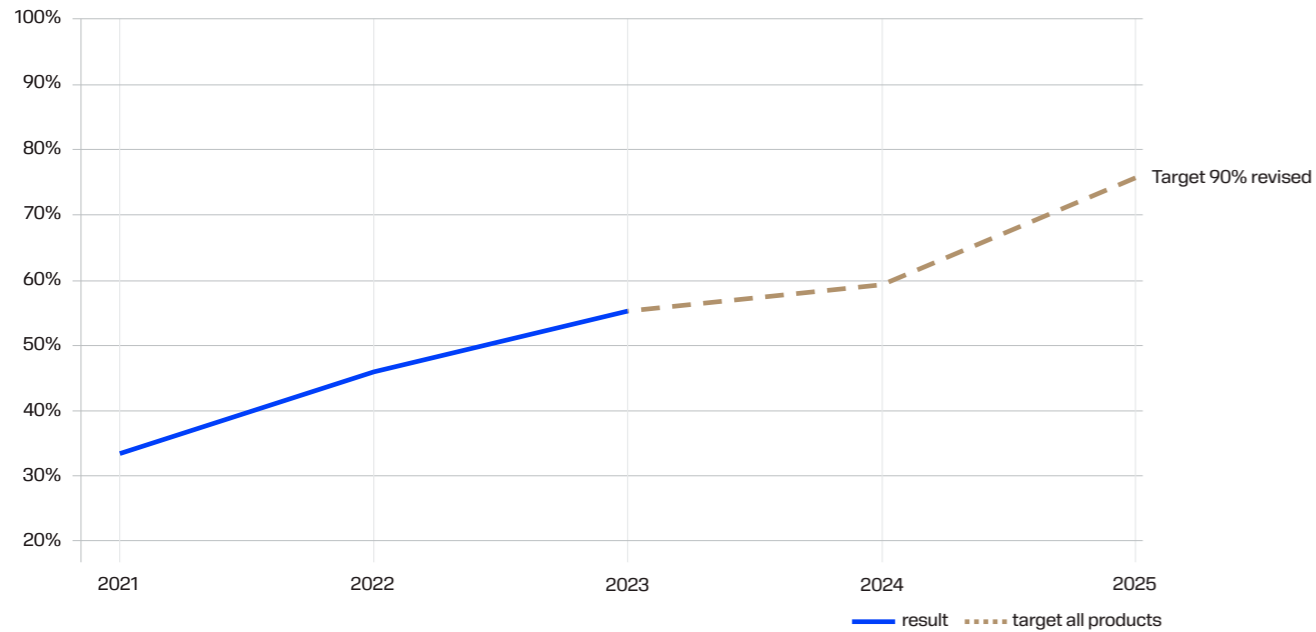
Result in 2023

In 2023 we had a good progress in the Track implementation, and we reached 57% implementation of track into our service contracts, almost reaching the target of 60%. This was made possible thanks to great collaboration between our customers, Sandvik on-site service personnel, digitalization specialists, and app development team.

Focus in 2024

The digitalization continues and important focus in the year will be to assure high quality of current implementations and therefore the growth in implementations will be moderate. Target 2024 is set to reach 60%.

Return rate drill bits



Key Performance Indicator (KPI) definition

The KPI “return rate drill bits” is the number of drill bits sold by Sandvik Rock Tools that are returned via the program for recycling.

How do we achieve this?

The drill bit recycling program is a return system where customers return used drill bits to Sandvik Rock Tools for recycling. In 2023 we implemented “opt-out” meaning that customers need to actively choose if they are not to be part of the program. When we get the used tools back, we can separate steel and carbide and put the materials into effective recycling loops.

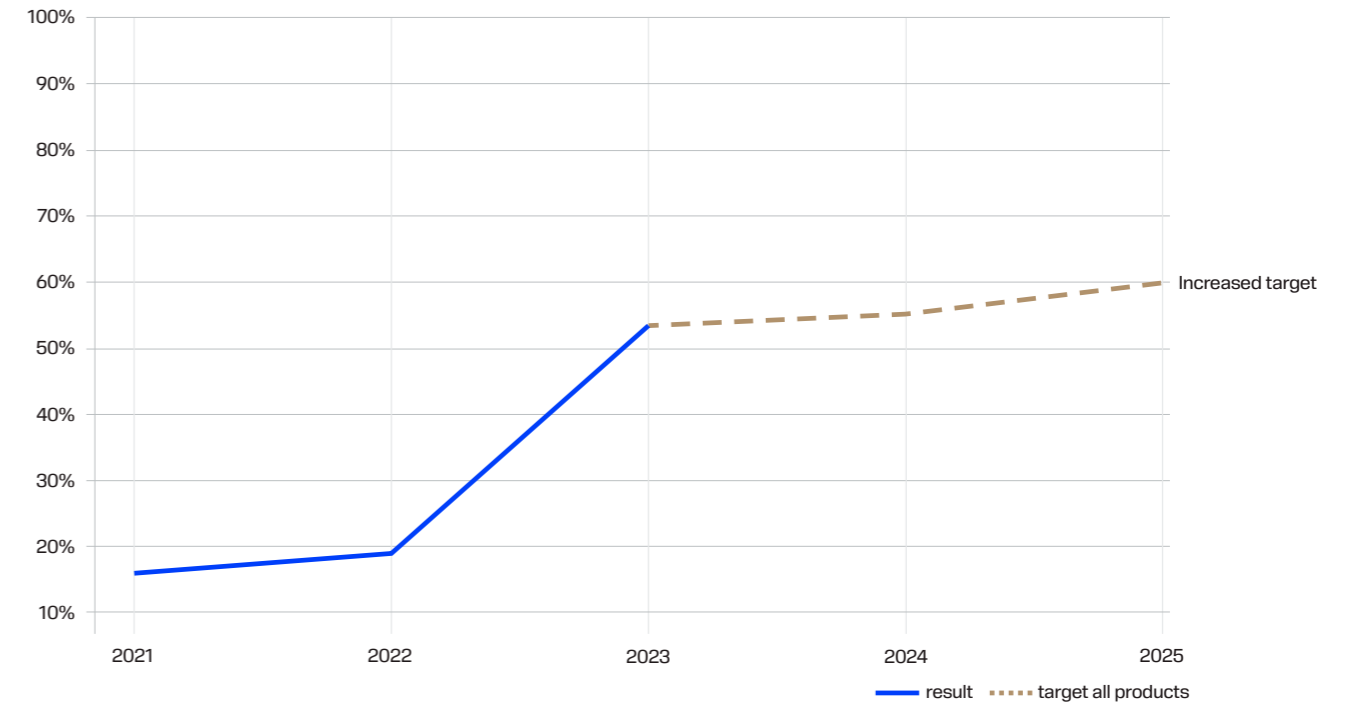
Result in 2023

Result in 2023 was that 56% of the drill bits we sold were returned, and we almost reached the target for the year of 60%.

Focus in 2024

The growth in number of extraction units in our sales areas continue but unfortunately, we have some challenges related to the logistics of recycled materials that have resulted in a review of our targeted levels. Target for 2024 is set to 60% and for 2025 to 75%.

Supply circularity carbide



Key Performance Indicator (KPI) definition

The KPI “supply circularity carbide” describes the weight percent of recycled hard material in the carbide used in Sandvik Rock Tools drill bits.

How do we achieve this?

Cemented carbide is a key component for Sandvik Rock Tools products and a well-integrated component in our circular sustainability work. Carbide, with the scarce ingredients of tungsten and cobalt is a very important area for recycling.

Through our recycling processes we assure effective use of materials and the same high quality as with virgin raw materials. Our recycling processes result in the significant savings of approximately 40% less CO₂ emissions and 70% less energy in comparison with use of virgin raw materials. This aligns with Sandvik Rock Tools’ commitment to running a sustainable business.

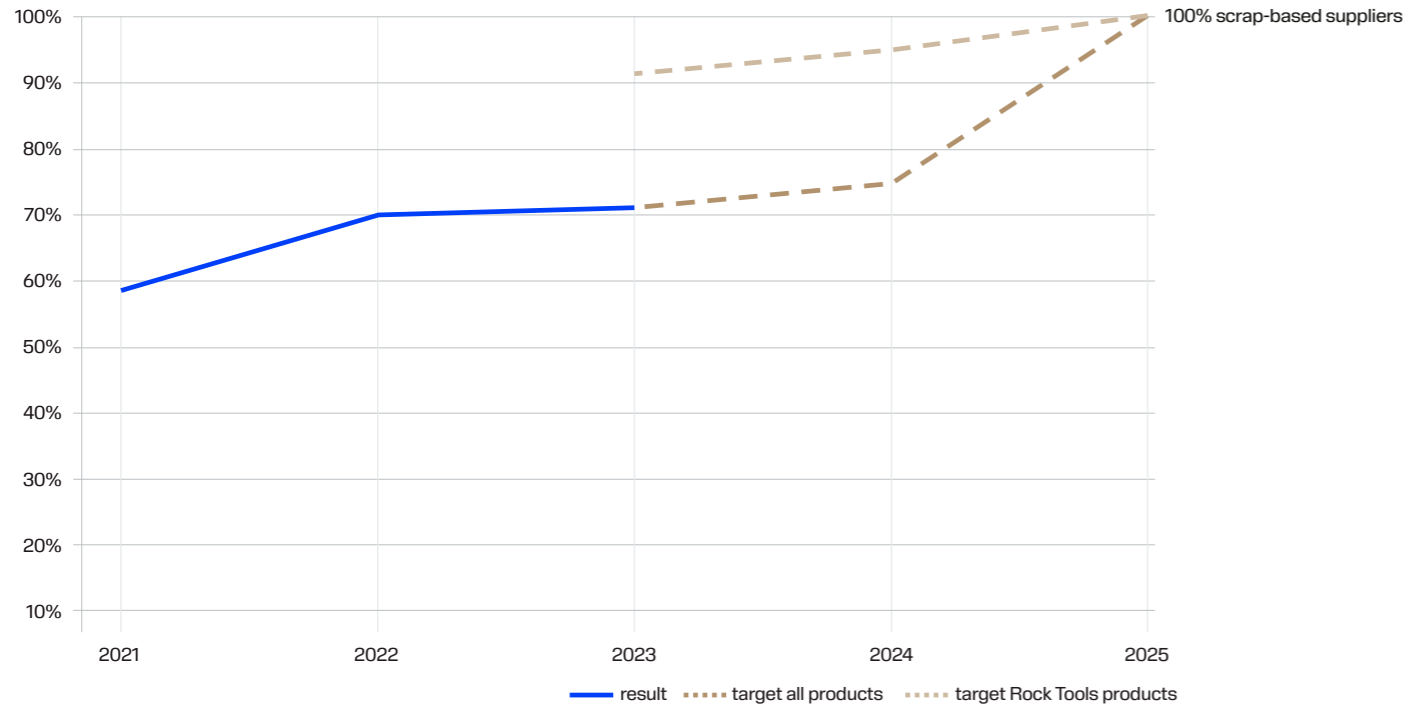
Result in 2023

The portion of recycled materials in or carbide reached 53%. This growth come from development both with regards to the design of our grades and development of the circularity at our suppliers.

Focus in 2024

Considering the efforts in improving circularity both at our suppliers as well as from our carbide development teams, we have now set the target for 2024 to 55% and reviewed the target for 2025 to 60%.

Supply circularity steel



Key Performance Indicator (KPI) definition

The KPI “supply circularity steel” describes the weight percent of steel Sandvik Rock Tools source from scrap-based steel suppliers

How do we achieve this?

Production of steel represent approximately 7% of the total greenhouse gas emissions in the world. Today there are two different ways to produce crude steel: reduction of iron ore in a blast furnace or smelting steel scrap in an electric arc furnace (EAF).

Recycling steel scrap is important when building circularity and the steel recycling process has a lower climate impact than today's process for reduction of iron ore. Our suppliers using the electric arc furnace process use a scrap intake of between 80-97% and we estimate an average CO₂ reduction from these processes of 67%.

Sandvik Rock Tools sourcing organization has mapped all steel suppliers to find out what type of production process they have. The suppliers were also asked to share their scope 1, 2 and upstream scope 3 emissions with the purpose to create a baseline for the total greenhouse gas emissions from the steel used in Sandvik Rock Tools drill bits.

We work closely with our steel suppliers to make sure that they have ambitious targets and plans to reduce their climate impact. To increase steel circularity, we strive to procure steel from scrap-based suppliers (EAF process route).

Result in 2023

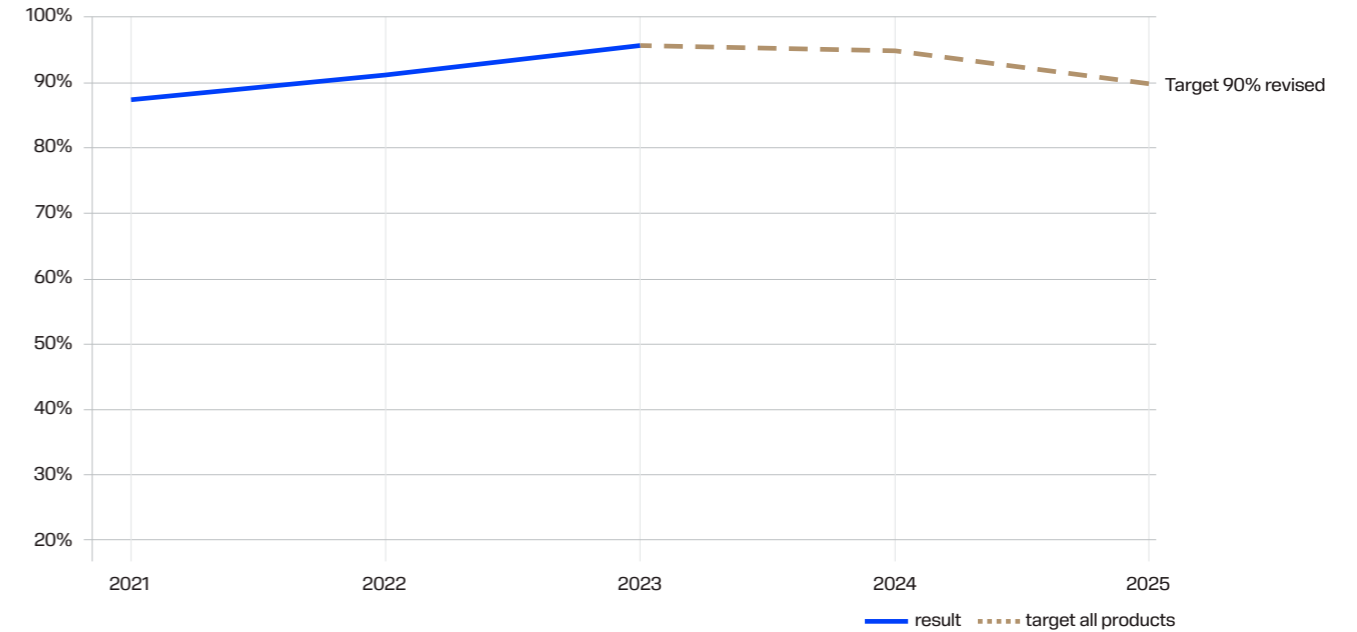
In 2023 we reached and overall level of steel supplied through the scrap based EAF-route of 70% so the target was achieved.

Focus in 2024

To better highlight strong and weak areas, we have decided to make some changes to how we monitor steel circularity. The measures will be split into two areas: one for products produced for the Rock Tools division and one for products produced for other divisions within Sandvik.

The target for Rock Tools products will be 95% for 2024 and will remain at 100% for 2025. We have realised that despite solid plans to increase portion of steel coming from scrap-based sources, reaching 100% for the full year of 2025 is probably unrealistic. However, our plans show that achieving 100% as a running rate at the end of the year is doable through and increased recycled portion throughout the year.

Waste circularity



Key Performance Indicator (KPI) definition

The KPI “waste circularity” describes how much of Sandvik Rock Tools generated waste that is reused or recycled.

How do we achieve this?

The main part of Sandvik Rock Tools waste is production-generated steel scrap. To reduce steel scrap, the most prioritized approach is to prevent it from occurring in the first place. If steel scrap is avoided, the production steel yield is increased. However, Sandvik Rock Tools is also actively preventing the generation of other waste materials, such as waste cutting fluids in CNC machines.

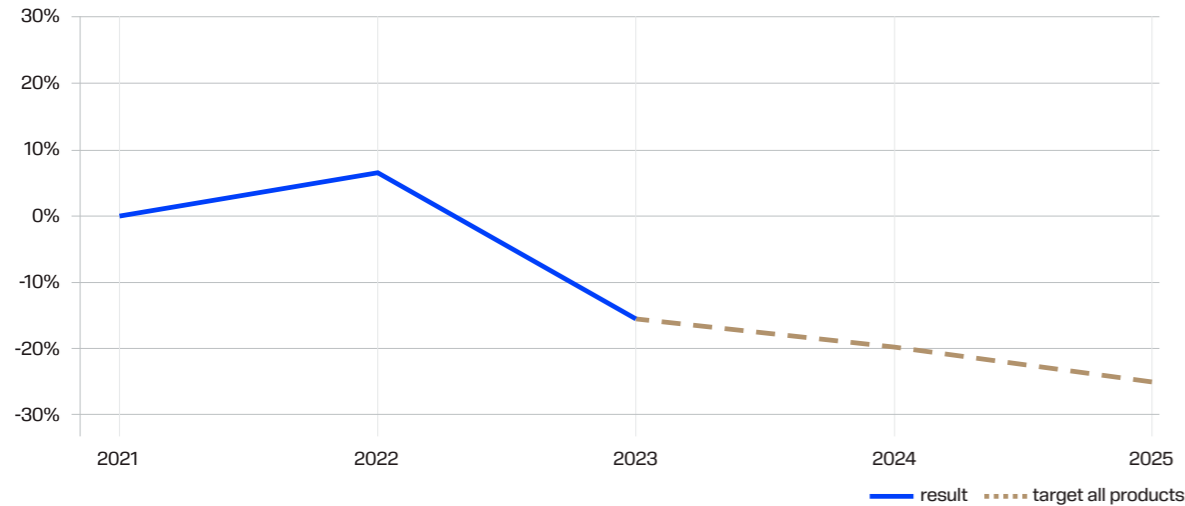
Result in 2023

In 2023, we reached a 96% level considering waste that was reused or recycled so the target level of 91% was achieved with a margin. This was achieved with improved handling and sorting.

Focus in 2024

For 2024 we keep the target of 95%. Focus will be in establishing this high level of circularity with further focus on minimizing waste and further developing efficiency of the current recycling streams.

Climate impact from steel suppliers



Key Performance Indicator (KPI) definition

The KPI “climate impact from steel suppliers” refers to the total upstream scope 3 emissions from the steel used to produce Sandvik Rock Tools products. Emissions from the transport of the steel to the production is also included. The target is to decrease greenhouse gas emissions from the steel used in Sandvik Rock Tools products by 25% until 2025.

How do we achieve this?

The target for greenhouse gas emissions from our steel suppliers is absolute and it is important for Sandvik Rock Tools to have an active and continuous dialogue with suppliers to make sure that they act to reduce their greenhouse gas emissions. By increasing the proportion of steel from scrap-based suppliers, the GHG emissions will decrease both per ton purchased steel and in total.

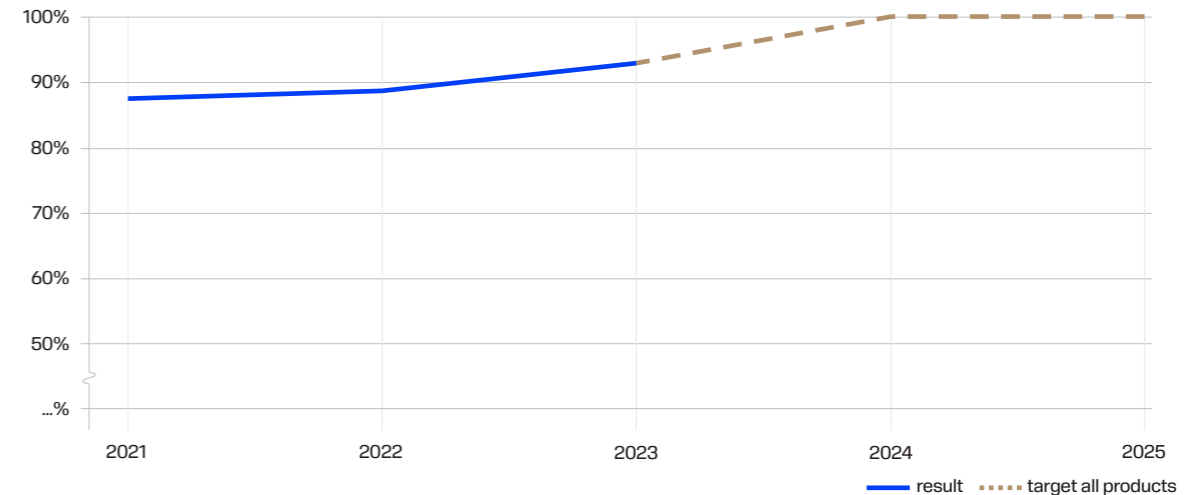
Result in 2023

The upstream greenhouse gas emissions from the steel used in Sandvik Rock Tools decreased with 15% in comparison with our base year of 2019 and even if we see an impact from volume there is a clear progress in greenhouse gas emissions per purchased ton of steel year by year.

Focus in 2024

Sandvik Rock Tools sourcing team continues with active dialogue with steel suppliers on their plans to reduce greenhouse gas emissions. Sourcing steel from scrap-based suppliers remains important to reach our 2025 greenhouse gas emissions reduction targets. The target for 2024 is 20% reduction compared to 2019.

Fossil free electricity supply



Key Performance Indicator (KPI) definition

The KPI “fossil free electricity supply” is defined as the percentage of electricity that is provided from fossil free electricity production.

How do we achieve this?

Our production units use electricity as their main energy source. By using fossil free electricity, Sandvik Rock Tools can decrease scope 2 greenhouse gas emissions. Our production units in Sweden have since many years been running with fossil free energy and our units in India became fully fossil free in 2022 with their mix of solar energy from own sources and green energy from the grid. In 2023 an important milestone was reached since our production unit in Wuxi China started to be fully supplied with renewable, fossil free energy. Hereby all our production units were running on fossil free energy from the last quarter of 2023.

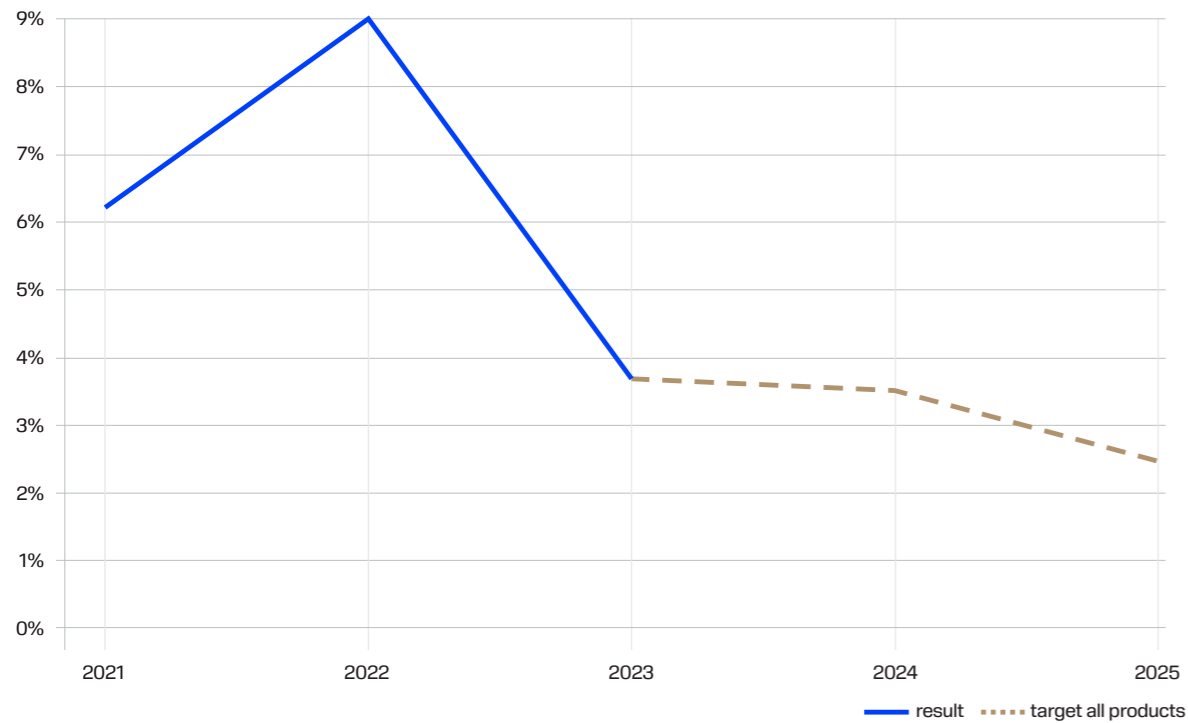
Result in 2023

We had great progress in this measure and reached 93% of our electricity that came from fossil free sources. So, we exceeded the target of the year of 89%.

Focus in 2024

Currently we now have fossil free electricity supply in place for all our production units so the target to be achieved is 100%.

Air freight finished goods



Key Performance Indicator (KPI) definition

The KPI “air freight finished goods” monitors the weight percentage of our transports from our production units to warehouses that take place with airfreight.

How do we achieve this?

Distribution of our finished products take place with several different transport modes such as road, air, train, and container ships. However, these different ways to transport vary greatly in terms of their impact on the environment. The biggest difference we see between airfreight and transport by container ships where the latter have a 99% less emissions of greenhouse gas. To reduce our emissions and reach our long-term targets it is therefore of essence to minimize the airfreight.

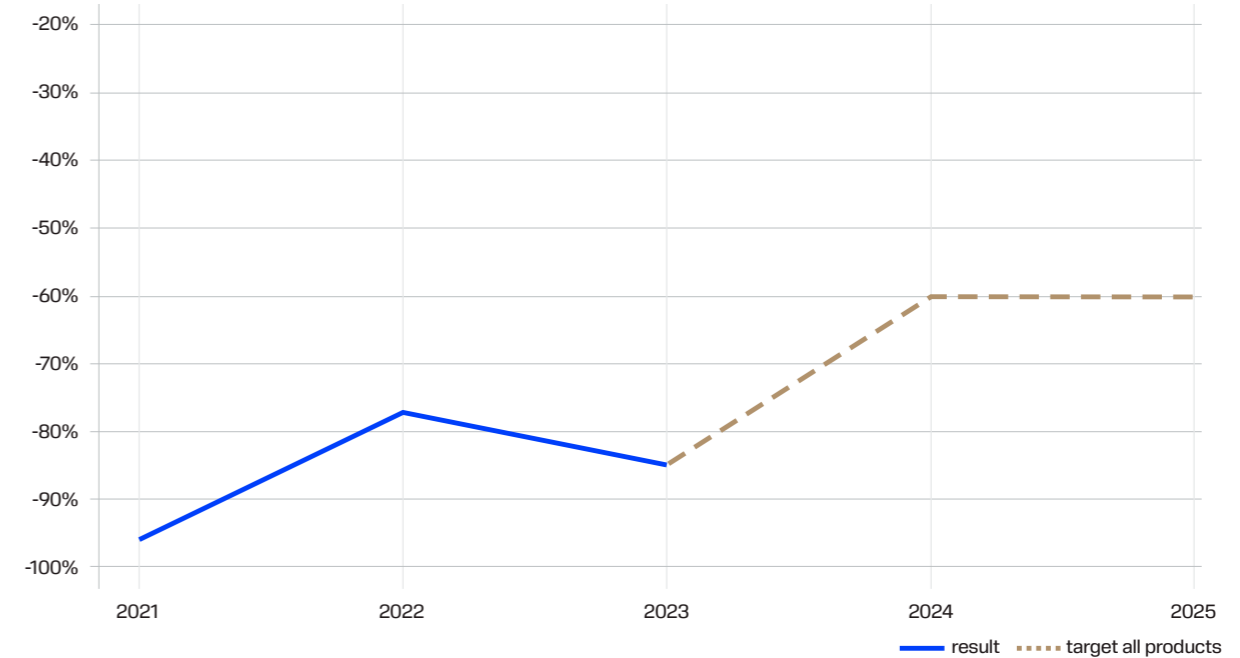
Result in 2023

The result achieved 2023 was 3.7% which exceeded the target of 5%. This was achieved through a stabilization of the global freight situation (compared to the turbulent year of 2022) as well as better control of our demand planning and supply chain performance.

Focus in 2024

The target for 2024 is set to 3,5% air freight. There are still challenges in the global logistics chains that need to be balanced with effective supply planning and inventory management.

Business air travel



Key Performance Indicator (KPI) definition

Annual greenhouse gas emissions caused by business air travel is accounted for in the KPI “business air travel”.

How do we achieve this?

Business air travel does not have the most significant climate impact but reducing business air travel also effects our sustainability culture. Employees should travel when it is needed, but unnecessary air travel must be avoided. Digital way of working should continue to be developed.

Result in 2023

In 2023 the business travel remained at a very low level, and we reached 84% reduction in relation to our base year of 2019.

Focus in 2024

We will continue to track business air travel on a quarterly basis and efforts to achieve cultural changes to reduce the organization’s travel habits continue. However, meeting our customers and other key stakeholders remains important and therefore, the target for 2024 and 2025 is to maintain the low level of business air travel below 60% compared to the base year of 2019.

