

SANDVIK ROCK TOOLS OUR WAY REPORT 2021

SANDVIK ROCK TOOLS REPORT ON SUSTAINABILITY
Mining and Rock Solutions



CONTENT

5	What is sustainability
6	Words from Jens
7	Global goals
8	Our way of working
9	Sandvik Group
10	Sandvik Rock Tools
11	Sustainability Governance
12	What do we mean by lead the way?
13	Sustainable sales
13	Tundo™ RH650 Down-The-Hole Hammer
14	Speedy Bit (Top Hammer) & Charger™ RR440 (Rotary bit)
15	Digital Shift
15	Track (Services) & Analyze (Services)
16	Other sustainable initiatives
18	Sandvik Rock Tools way to build circularity
18	What do we mean by circularity?
19	Return Rate Drill Bits
19	Supply Circularity Carbides
20	Supply Circularity Steel
20	Waste Circularity
21	Grinding
23	Sandvik Rock Tools Way to Climate Action
23	Climate change & how to measure climate change
24	What do we mean by Climate Action?
24	Climate Impact from Steel Suppliers
25	Fossil free electricity supply
25	Air freight finished goods
26	Business Air Travel
26	A more sustainable transportation

WHAT IS SUSTAINABILITY

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 support ecological, human, and economic health and vitality. Sustainability presumes that resources are finite and should be used conservatively and wisely with a view to long-term priorities and consequences of the ways in which resources are used. The increasing threat of climate change pushes us to make concrete efforts to ensure development without negative effects on future generations.





FOR THE GOOD OF OUR PLANET AND OUR BUSINESS

Sandvik Rock Tools is determined to bring about positive change in the business we operate in, from all aspects. And when it comes to sustainability, we are no different. Sustainability is a key driver for the future of our planet; if the global community fail to act – humanity will face unprecedented challenges in the short-, mid-, and long-term. Sandvik as a whole, and Sandvik Rock Tools specifically, has set out on a journey to make our part of the mining industry as sustainable as possible, in order to secure necessary minerals to make the needed sustainability shift. Here, we also need to be humble: we do not have all the answers, and we are constantly learning and developing our approach and methods. Why? For the good of our planet, as well as our business.

This report, which we call the “Our Way Report”, aims to provide our customers, employees and other important stakeholders with an annual overview of where we stand in terms of the progress of our sustainability efforts in three key areas: our way to Lead the Way, Build Circularity and Shift Climate. These three areas have different aspects of our sustainability work in mind, and all contribute to our highly set goals. We will publish this yearly, to create transparency in terms of how we work to achieve a more sustainable world.



Jens Holmberg
President Rock Tools Division,
Sandvik Mining and Rock Solutions

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

The Paris Agreement is a legally binding, international treaty on climate change. The core of the agreement is to reduce global warming, limit global temperature rise to well-below 2°C above pre-industrial levels and pursue efforts to limit warming to 1.5°C. The importance of not exceeding 1,5°C was highlighted by the Intergovernmental Panel on Climate Change (IPCC) who warned about the catastrophic impacts climate change could generate. To achieve this, Greenhouse Gas (GHG) emissions must halve by 2030 – and drop to net zero by 2050.





OUR WAY OF WORKING FOR A SUSTAINABLE SHIFT

SANDVIK GROUP AND SUSTAINABILITY

SUSTAINABILITY SHIFT

Sandvik as a company has set clear sustainability goals for 2030 in the areas of Climate, Circularity, People and Fair Play. These are in place to help us make the shift to a more sustainable business. The sustainability goals take a holistic approach that includes customers, suppliers, and our own operations.

This report is about the environmental aspects of sustainability and describes Sandvik Rock Tools way of working with the goals "We Shift Climate" and "We Build Circularity".

COMMITMENT TO SCIENCE BASED TARGET INITIATIVE

The Science Based Target initiative (SBTi) drives ambitious climate action in the private sector by validating companies' GHG 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 3,000 businesses and financial institutions are working with the SBTi to reduce their emissions in line with this initiative.

In December 2021, Sandvik committed to set targets in line with the Science Based Targets initiative (SBTi). This is a natural step in Sandvik's sustainable business strategy, where we can make a big difference through our customer offerings.



SANDVIK ROCK TOOLS AND SUSTAINABILITY



SUSTAINABILITY MISSION STATEMENT

Sandvik Rock Tools has developed a Sustainability Mission Statement. This states that "Sandvik Rock Tools should be a 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.
 - **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.
- Our offerings will not only be of the highest quality and effectiveness but also the most resource-efficient and circular.

SUSTAINABILITY GOVERNANCE

To achieve Sandvik Rock Tools Sustainability Mission Statement, we have implemented a governance 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 scorecard set the foundation for the function's long- and short-term sustainability projects and activities. This is a key factor to involve all functions and employees and for our sustainability work to be successful.

“Our approach to sustainability is that it is a continuous journey, where we all learn and adopt to the latest science and ways of working. This report aims to bring transparency and clarity into how Sandvik Rock Tools works on a yearly basis.”

Boel Schylander, Global Sustainability Manager,
Sandvik Rock Tools





WHAT DO WE MEAN BY LEAD THE WAY?

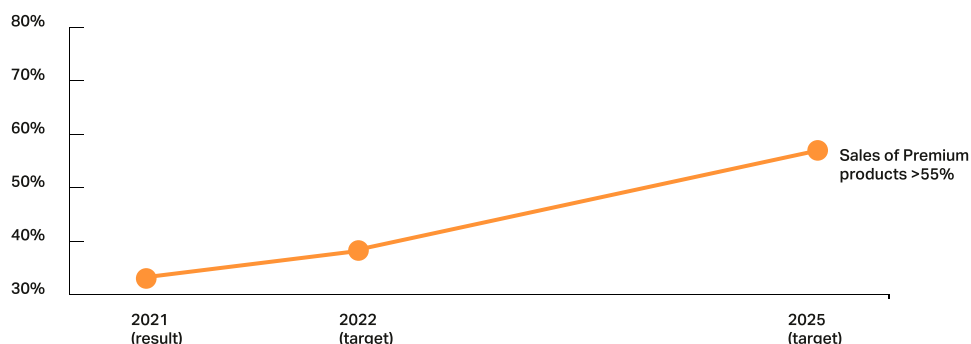
Lead the way means that Sandvik Rock Tools is striving to be the leading, most innovative and sustainable supplier of rock tools in the world. We want our products to have longer service life, higher productivity, be more energy efficient and consume less fuel than our competitors'. By providing this, Sandvik Rock Tools builds circularity and reduce our products climate impact in the whole life cycle. This is our way to lead sustainability in our business.

In New Product Development Projects, our R&D organization aims to develop new products that are significantly better than standard products and provide either longer service life, higher productivity or are more energy efficient.

Rock Tools has decided to follow two targets in the focus area "We lead the way":

1. Sustainable Sales
2. Digital Shift

SUSTAINABLE SALES



Key Performance Area (KPA) definition

"Sustainable Sales" is a KPA 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. Below are some of the products that Sandvik Rock Tools define as being included in the term "Sustainable Sales".



TUNDO™ RH650 DOWN-THE-HOLE HAMMER

The 6-inch Tundo™ RH650 Down-The-Hole (DTH) hammer is a great and recent example of how Rock Tools products have a reduced fuel consumption with maintained productivity. In a field test, the improved design features on the Tundo™ DTH hammer led to a decrease in diesel usage of 32% in comparison with other premium brands. The new design has a more efficient air cycle and lighter weight compared to other hammers in its class. An efficient air cycle makes it possible to put the hammer on a smaller class drill rig, which generates fuel savings and efficiency benefits.

With an average efficiency improvement of 20%, every fifth tank of diesel can be saved on every drill rig, simply by changing the hammer. For an average mine, that corresponds to an annual saving in diesel consumption of 3,3 million liters. Therefore, by using the Tundo™ Hammer, our customers can drill more with less and reduce their direct GHG emissions.

SPEEDY BIT (TOP HAMMER)

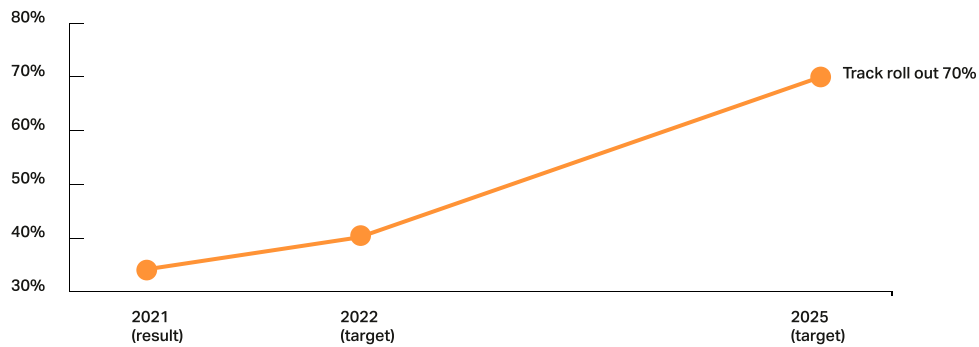
Rock drilling productivity is increased with higher drill speed. Therefore, higher drill speed corresponds to leveraged fix costs for our customers. An improved drill speed of 10% can be achieved through Speedy Bit. The Speedy Bit's design is unique with its aggressive buttons, patented elevated front, improved flushing and PowerCarbide™ technology. This creates bits with much higher efficiency than for normal bits, which ones again shows and emphasizes the hand-in-hand relationship of business, technology and sustainability.



CHARGER™ RR440 (ROTARY BIT)

For more than 20 years, the Charger™ RR440 sealed journal bearing bit for surface drilling has been a benchmark in the mining industry. This bearing gives longer bit life which generates longer bearing hours and higher bit load capacity and makes this product ideal for autonomous drill rigs. The advanced sealing system helps to avoid contamination of the bearing. It was the proud winner of an extended rotary drill bit test (result presented below) in one of Australia's largest iron ore mines, proved to achieve lower total drilling cost, higher penetration rate and longer bit life. Therefore, the Charger™ RR440 drill bit is a good example of how sustainability in the shape of resource efficiency leads to higher business performance.

DIGITAL SHIFT



Key Performance Area (KPA) definition

"Digital Shift" is a KPA defined as the amount 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 in order to improve productivity and increase the service life of our products. Track is described more in detail below, as are some other products that form Sandvik Rock Tools digital shift in the mining industry.



TRACK (SERVICES)

Track is an application to capture data, and measure and optimize customer contracts. For many years, the track and 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 help 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.

ANALYZE (SERVICES)

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.

At a customer site, the use of My Rock Tools Analyze showed that many of the discard reasons had to do with a change in ground conditions. Thanks to this insight, Sandvik sales representatives could help the customer choose a different cemented carbide type, the

PowerCarbide™ SH69, and performance increased by about 40%. A great example of excellent customer support through close collaboration and the use of digital solutions results in a sustainable outcome of longer service life and resource efficiency.



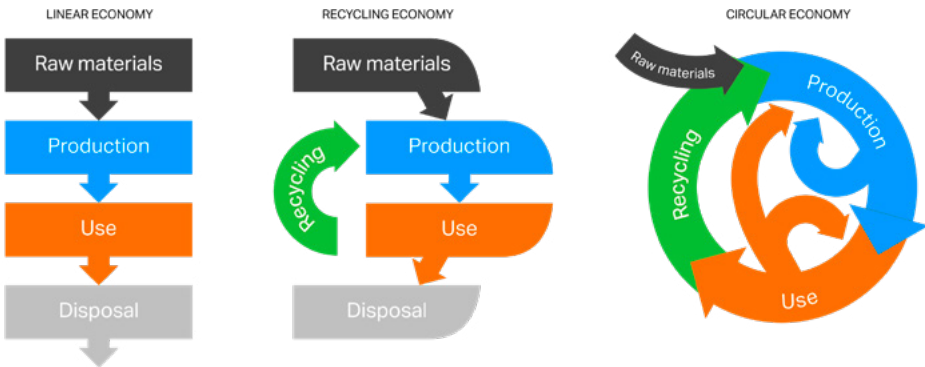
OTHER SUSTAINABLE INITIATIVES

Sandvik Rock Tools offers interactive customer trainings based on drill hole simulation, called My Rock Tools Drill. There are two different versions: classroom training, through the use of 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' life length and performance when using the correct settings. This has the possibility to achieve greater life length of our products, and in turn, sustainability benefits.



SANDVIK ROCK TOOLS WAY TO 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.

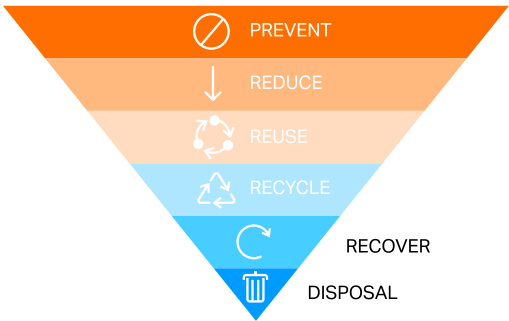


WHAT DO WE MEAN BY CIRCULARITY?

Building circularity is our way to make sure that raw material and other resources are used in an efficient and sustainable way and that our products are recycled when they reach end-of-life. Building circularity also means that we work to prolong the service life, use recycled material, design products and develop processes that make recycling easier.

WASTE CIRCULARITY

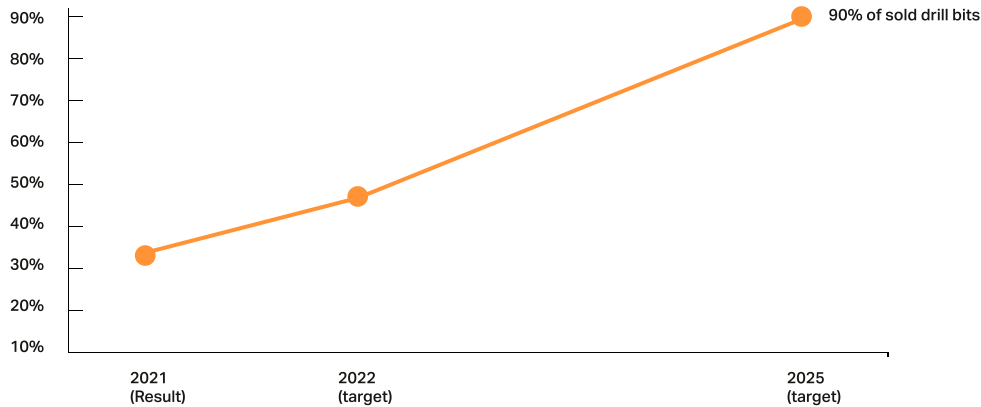
The waste hierarchy guides us when improving Rock Tools Waste circularity. Preventing and reducing waste is our first priority and therefore we focus on increasing raw material yield and preventing the emergence of all types of waste.



Four Key Performance Areas have been developed to measure our progress, and targets have been set:

1. Return Rate Drill Bits
2. Supply Circularity Carbides
3. Supply Circularity Steel
4. Waste Circularity

RETURN RATE DRILL BITS



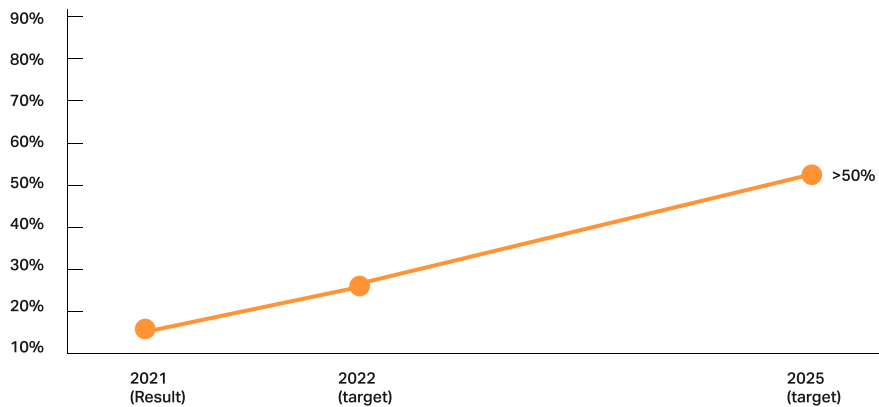
Key Performance Area (KPA) definition

The KPA "return rate drill bits" is the number of drill bits sold by Sandvik Rock Tools that are returned via the Buy-back program for recycling.

How do we reach this KPA/KPI? - Buy-back program

For the recycling process to be possible, our tools must be returned to us. The Buy-back program is a return system where Sandvik Rock Tools buys back used drills from customers. The tool's steel and carbides are then separated and recycled using different methods.

SUPPLY CIRCULARITY CARBIDES



Key Performance Area (KPA) definition

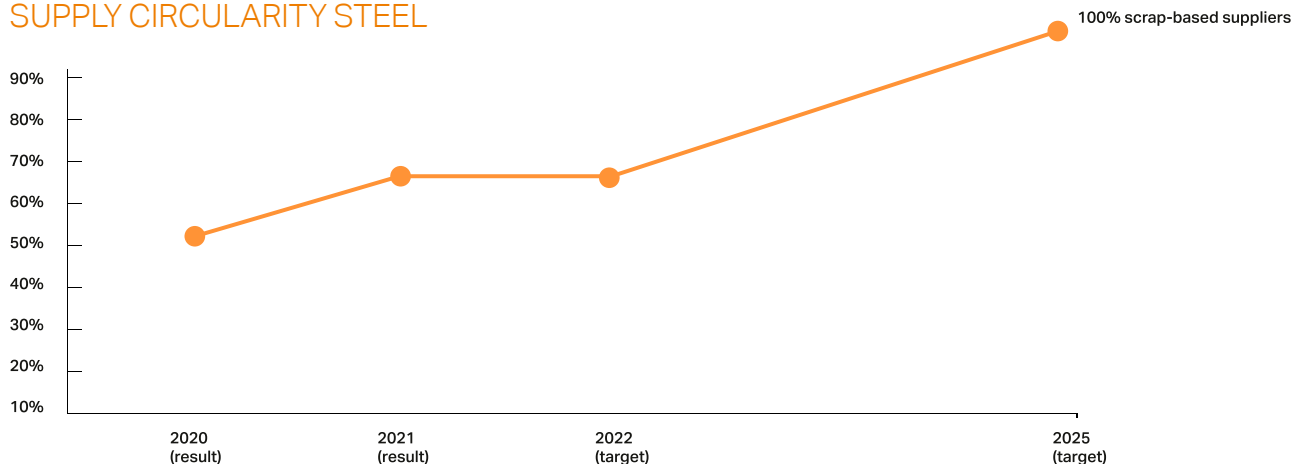
"Supply Circularity Carbides" is a KPA which describes the weight percent of recycled hard material in the carbides used in Sandvik Rock Tools drill bits.

How do we reach this KPA/KPI?

Cemented carbide is a key component for Sandvik Rock Tools products and a well-integrated component in our circular sustainability work. Our focus has so far been on carbide recycling. Currently, Sandvik Rock Tools can recycle carbides through two processes - Zinc Recycling

Process (PRZ) or chemical cleaning. With the recently developed chemical cleaning process, we can now recycle carbides back to basic raw materials with the same quality and properties as virgin raw materials. This generates a >64% CO₂ reduction and >70% energy consumption reduction compared to mining minerals needed to produce cemented carbide. This goes hand-in-hand with how Sandvik Rock Tools wants to run a sustainable business.

SUPPLY CIRCULARITY STEEL



Key Performance Area (KPA) definition

The KPA "Supply Circularity Steel" describes the weight percent of steel Sandvik Rock Tools source from scrap-based steel suppliers

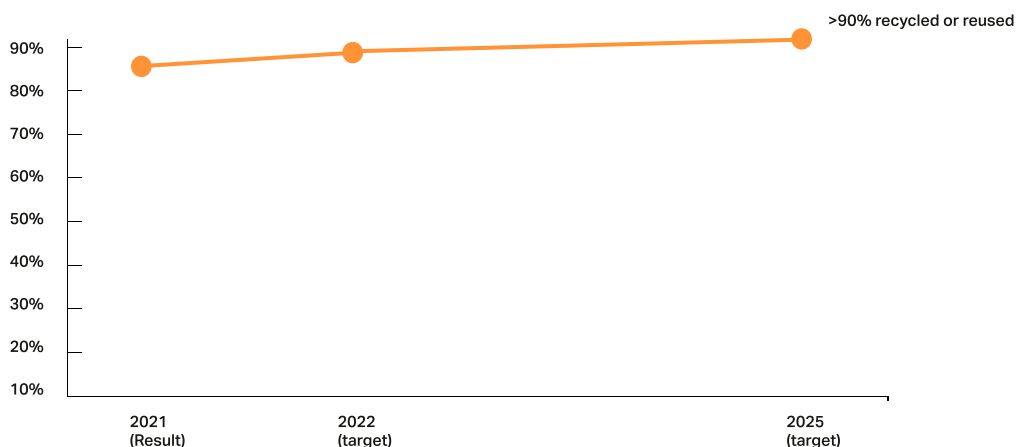
How do we reach this KPA/KPI?

Production of steel stands for approximately 7% of the total Green House 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. 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.

During 2021, Sandvik Rock Tools sourcing organization mapped all steel suppliers to find out what type of production route they had. 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 GHG emissions from the steel used in Sandvik Rock Tools drill bits.

Sandvik Rock Tools works 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.

WASTE CIRCULARITY



Key Performance Area (KPA) definition

"Waste Circularity" is a KPA that describes how much of Sandvik Rock Tools generated waste that is reused or recycled.

How do we reach this KPA/KPI?

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.

Activities to increase the sorting of upcoming waste is ongoing. For example, all generated steel scrap is recycled and used in the production of new steel. By increasing recycling rates from better waste sorting, the possibility of finding good recycling options increases.

GRINDING

One way to enhance productivity and service life for Rock Tools products is by re-sharpening our drill bits through grinding. It is an upgrade of the bit, which is visualized in the figure below. By regrinding 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

Top right: Grinding at Boliden, Sweden.

Bottom left: Melting Steel

Bottom right: Drill bits ready for recycling and later reuse.





SANDVIK ROCK TOOLS WAY TO CLIMATE ACTION

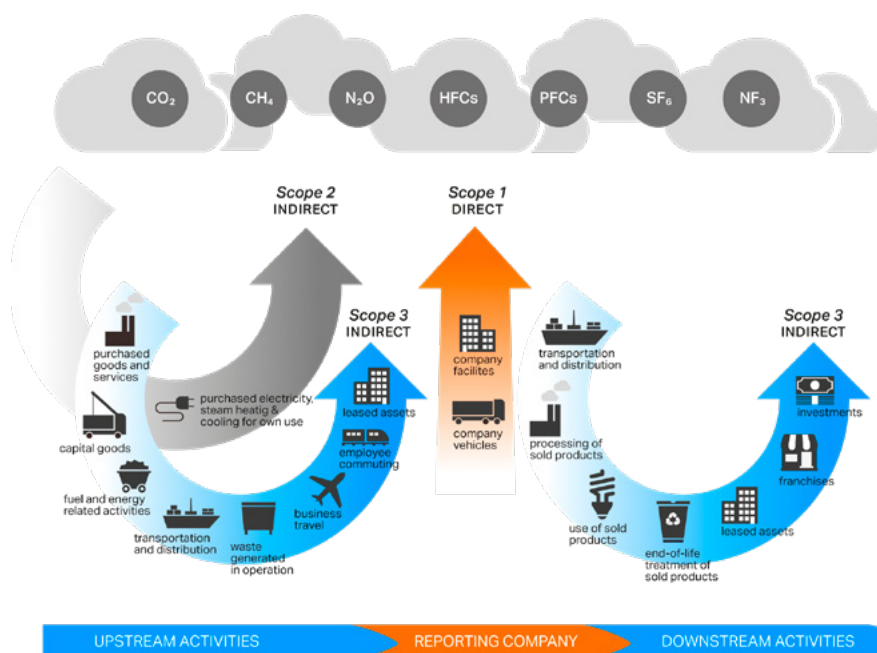
As previously mentioned, climate action is one of the Sustainable Development Goals established by the United Nations in 2015. The official mission statement of the goal is "Take urgent action to combat climate change and its impact". Let us now explore what that means.

CLIMATE CHANGE

According to the United Nations climate change refers to "long-term shifts in temperature and weather patterns". Since the 1800s human activities have been a large climate change driver by emitting greenhouse gases (GHG) like water vapor (H₂O), carbon dioxide (CO₂), methane (CH₄) and laughing gas (N₂O). The source has primarily been from burning fossil fuels. This results in an enhanced greenhouse effect where the average temperature on earth increases.

HOW TO MEASURE CLIMATE CHANGE

There is no specific defined system to measure climate change, since the climate system is very complex and consists of several components. Therefore, the choice of measurement method depends on the climate change effect of interest. One common way for companies to describe climate change is to measure GHG emissions following the international standard Greenhouse Gas Protocol where all GHG emissions are translated into one common unit – carbon dioxide equivalents CO₂e.



GREENHOUSE GAS PROTOCOL DIVIDES THE EMISSION INTO THREE MAIN AREAS.

The first one is scope 1 and includes the direct emissions from owned or controlled sources. This could be heat-treating equipment in production or company vehicles.

The second area is scope 2 and it represents the indirect GHG emissions consumed by the company from electricity, heat, cooling and steam.

The last area is scope 3 and it includes all other indirect emissions that are present in the company's value chain. Scope 3 is divided into upstream and downstream emissions. The upstream emissions are generated indirectly before they reach the company "walls" and could include production of materials, while downstream emissions represent the indirect emissions from example fuel consumption when the product is produced.

Scope 1 and 2 emissions is under the organizations own control.

WHAT DO WE MEAN BY CLIMATE ACTION?

Sandvik as a whole, and Sandvik Rock Tools, have reported scope 1 and 2 GHG emissions for many years and since Sandvik Group's Sustainability Climate goal was introduced in 2019, plans to halve the climate impact by the latest 2030 have been set and activities successfully executed.

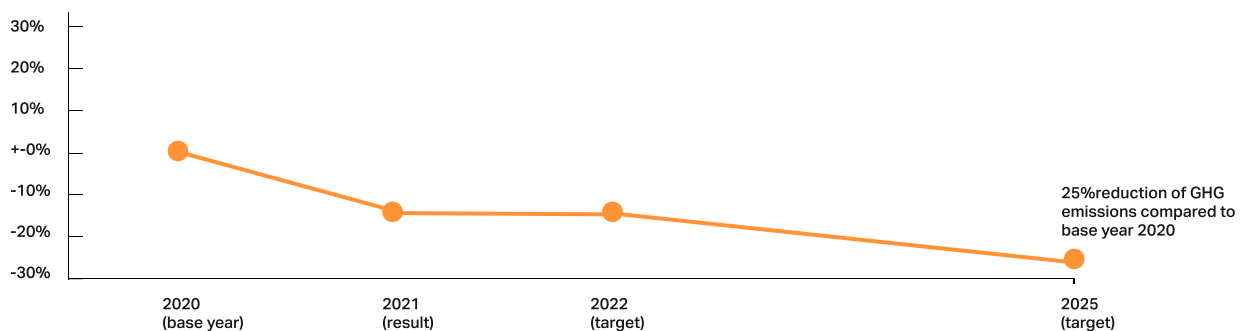
Sandvik Rock Tools also needs to understand the total climate impact of the business and in 2021, a mapping of upstream and downstream scope 3 emissions was introduced. The mapping shows that the largest group of scope 3 emissions comes from upstream steel production. In 2022, a total scope 3 inventory - aligned with the Green House Gas Protocol and the rules of the Science Based Targets initiative - will be carried out and this will increase our knowledge about our business climate impact and where we should focus to reduce our GHG emissions in the coming years.

Based on today's knowledge, Sandvik Rock Tools has set the following targets for Climate Action:

Based on today's knowledge, Sandvik Rock Tools has set the following targets for Climate Action:

1. Climate Impact from Steel Suppliers
2. Fossil free electricity supply
3. Air freight finished goods
4. Business Air Travel

CLIMATE IMPACT FROM STEEL SUPPLIERS



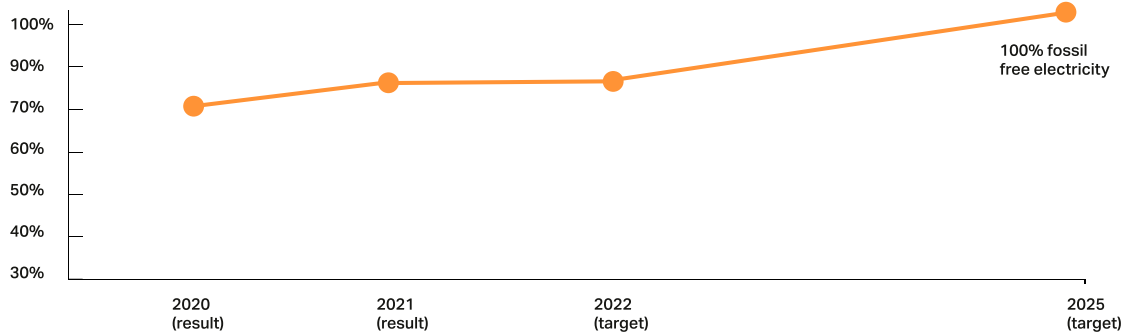
Key Performance Area definition

"Climate Impact from Steel Suppliers" is a KPA that refers to the total upstream scope 3 emissions from the steel used to produce Sandvik Rock Tools products. Emissions from the transportation of the steel to the production are also included. The target is to decrease CO₂ emissions from the steel used in Sandvik Rock Tools products by 25% until 2025.

How do we reach this?

The target for CO₂ emissions from our steel suppliers is absolute and it is important for Sandvik Rock Tools to have a transparent dialogue with suppliers to make sure that they take action to reduce their GHG emissions. By increasing the proportion of steel from scrap-based suppliers, the CO₂ emissions will decrease both per tonne purchased steel and in total.

FOSSIL FREE ELECTRICITY SUPPLY



Key Performance Area (KPA) definition

The KPA "Fossil free electricity supply" is defined as the percentage of electricity that is provided from fossil free electricity production.

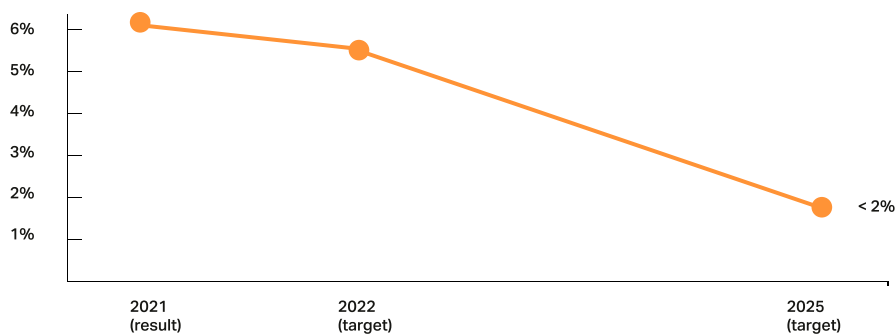
How do we reach this KPA/KPI?

Our production units use electricity as their main energy source. By using fossil free electricity, Sandvik Rock Tools can decrease scope 2 GHG emissions. Sandvik has purchased fossil free electricity in Europe for many years and 2021 was the first year when Sandvik Rock Tools purchased renewable electricity in India. By doing that,

88% of the electricity used at our Production Units comes from fossil free sources.

There is not enough renewable electricity in the world, and therefore Sandvik Rock Tools has installed solar panels on roofs to the production buildings in Patancheru and Pune in India. The solar panels provided 430 MWh renewable electricity in 2021. In 2022 solar panels will be installed in our Production Unit in Wuxi (China) as well.

AIR FREIGHT FINISHED GOODS



Key Performance Area (KPA) definition

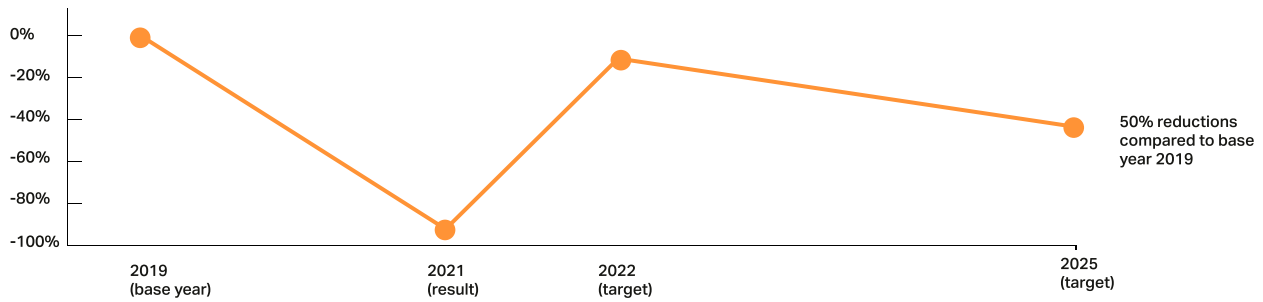
"Air freight finished goods" is a KPA that describes how many weight percent of finished goods that is transported from our production units to our warehouses by airplane.

How do we reach this KPA/KPI?

Distribution of finished products to warehouses and costumers leads to GHG emissions. However, different shipping methods – train, boat, lorry or airplane - have

different climate impacts. Air freight has the highest climate impact and therefore, Sandvik Rock Tools aims to reduce this shipping alternative to less than 2% by 2025. During 2021 air freight increased compared to 2020 due to the challenging, post-covid distribution situation in the world.

BUSINESS AIR TRAVEL



Key Performance Area (KPA) definition

Annual GHG emissions caused by business air travel is accounted for in the KPA "Business Air Travel".

How do we reach this KPA/KPI?

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 shall be avoided, and the digital way of working should continue and be developed. During 2021 CO₂ emissions from air travel was very low due to the pandemic.

A MORE SUSTAINABLE TRANSPORTATION

Climate-neutral Production Units

Sandvik Rock Tools aims to have fully climate-neutral Production Units by 2025, in regards to Scope 1 and 2 emissions. This means that all electricity supply should be fossil-free and that all fossil fuel usage should be phased out.

Electrical taxis in Santiago

In line with our ambition to reduce our climate footprint, Sandvik Rock Tools Production Unit in Santiago (Chile) has initiated a local partnership with a taxi service provider called E-Mov. The new partnership provides 100% electric vehicles for the transportation of visitors and

employees to and from the site which represents a meaningful reduction of the Production Unit's scope 3 CO₂ emissions. This prevents about 284 kg CO₂ emissions annually, based on an estimated 192 trips per year. While this is a relatively small saving from the Production Unit itself, the partnership allows E-Mov to invest in local growth through the investment of additional electric vehicles, further contributing to local emission reductions from other taxi service consumers. Additionally, the Production Unit can offer the taxi company 100% renewable energy if they re-charge the taxi batteries at the site. The new taxi collaboration is a great example of putting how Rock Tools makes the shift both inside and outside our operations.

Bottom left: Electric taxis in Santiago.



