

# SKF Climate risks and opportunities 2022

Climate report aligned with the TCFD recommendations

SKF was founded in 1907 and is a leading global supplier of bearings, seals, lubrication systems and services, which include technical support, maintenance and reliability services, engineering, consulting, and training.



# Introduction

**There is an urgent need** to transform from a non-circular carbon-based economy to one which is clean, net zero and fully circular. This transformation needs to happen with a speed and on a scale not seen before and SKF is determined to be at the heart of it. SKF's products and services are already helping to enable the transformation, and SKF's strategic focus on cleantech will accelerate it further – helping more customers and industries to make the transition across the world.

SKF works across the full value chain to understand the CO<sub>2</sub>e impact and find viable and effective ways to minimize them. Considering SKF's direct operations (factories, warehouses, research centres), the Group has been able to decouple the economic growth of the business from the CO<sub>2</sub>e impact. Comparing 2022 to 2015, SKF's absolute CO<sub>2</sub>e emissions have reduced by 46.5%, while the revenues have increased by 27%.

In 2020, SKF announced the target to achieve net zero greenhouse gas emissions for all its manufacturing, warehouse, and research centres by 2030. This will happen through a combination of efforts, primarily related to energy efficiency, material efficiency, generating and sourcing renewable energy, and as a last resort to cover any remaining emissions, purchasing carbon removals.

In 2021, SKF signed up to the Science Based Targets initiative (SBTi) and committed that the climate targets shall be in line with the Paris Agreement to limit global warming to 1.5°C. SKF also announced its target to achieve net zero greenhouse gas emissions in the full SKF value chain (from raw material to finished product delivered to the customer) by 2050.

At time of writing the SBTi are evaluating SKF's climate goals and the Group anticipates that these will be approved in the next few months.

SKF's focus and performance in this area is becoming an increasingly important differentiator for the increasing number of customers who seek to achieve carbon neutrality in their full value chain.

TCFD is the Task Force on Climate-related Financial Disclosures initiated by the Financial Stability Board. The aim with the initiative was to develop a set of recommendations for voluntary and consistent climate-related financial risk disclosures.

The purpose of this report is to summarize SKF's ambitions and actions on climate related risks and opportunities, guided by the TCFD recommendations in four sections: Governance, Strategy, Risk management, Metrics and targets. SKF is also a respondent to the CDP Climate Change survey and achieved an A- score for its 2022 submission. The Group's submission is publicly available on the CDP website, CDP have aligned their survey with the TCFD and so the SKF response provides a further, more detailed resource for stakeholders wishing to gain a deeper understanding of SKF's climate risks and opportunities and how the company is addressing these.

As part of the Groups Net Zero strategy, SKF has defined and communicated objectives for the decarbonization of its own operations by 2030 and the significant upstream impacts by 2050, with interim goals set at 2025, 2030 and 2040. The details of these goals and how they will be met can be found in **this positioning paper**.

## Core elements of the TCFD recommendations



**Governance**  
The organization's governance around climate-related risks and opportunities.

**Strategy**  
The actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy and financial planning.

**Risk management**  
The processes used by the organization to identify, assess, and manage climate-related risks.

**Metrics and targets**  
The metrics and targets used to assess and manage relevant climate-related risks and opportunities.

Source: TCFD

# Governance

## The SKF Board's oversight of climate related risks and opportunities

Sustainability and the risks and opportunities related to climate are fundamental to the Group's strategy and are consequently frequently discussed with the Board in connection with strategic decisions.

The Group's sustainability work and targets are reviewed and approved by the Board every year. SKF's key environmental goals and progress are presented to the Board each quarter and are part of SKF's quarterly reports. SKF manages its climate related risks primarily through the Enterprise Risk Management (ERM) process. The results from the ERM process are presented every year to the Audit Committee, which includes three members from the Board. The ERM process provides input to all strategic activities such as investment decisions and strategic business plans.

## Management's role in assessing and managing climate-related risks and opportunities

Group Management and the Board have the ultimate responsibility to state SKF's mission and to ensure that the values and drivers are implemented. The Sustainability, Quality and EHS Director has the task to ensure that all relevant aspects of sustainability are addressed and integrated into operations and activities throughout the Group, establishing policies, strategies and targets related to SKF's overall sustainability performance. These drive and support the integration of sustainability into business practices, processes, operations, and staff functions. In addition, SKF has set up a Group wide Net Zero Program to support, oversee and coordinate the development and development of suitable plans and actions within the operations and relevant functions. This helps to assure that

the needed climate related actions are delivered by these operations and functions in accordance with the strategic direction and fundamental requirements as set by Group Management and the Board.

SKF's ERM process covers all parts of the Group and includes assessing and managing climate-related risks. The result is shared twice per year with Group Management and once per year with the Audit Committee. There is also a half-year internal assessment to monitor changes and make sure mitigation actions are in place and delivering expected results, which is presented to Group Management. Mitigating actions or actions to seize the opportunities are initiated and fed into the Group's strategic work.

Group Management reviews and follows up on the climate-related KPI's every month and a more detailed review and assessment is made every quarter. The Board of Directors reviews the climate-related KPI's every quarter end the results are also published in the Group's quarterly reports. In addition, the strategic risks and opportunities related to climate and SKF's business are further analysed and acted upon in the yearly strategic review and in the yearly business planning.

The Group Energy Committee meets frequently to decide on how SKF should drive energy efficiency and source renewable energy. SKF has joined the RE100 initiative with a target and commitment to source 100% renewable electricity by 2030, and this committee is actively driving this work.

The Group Environment, Health & Safety (EHS) function and the Group Sustainability team provide support to the business to understand the environmental impact and carbon footprint of SKF operations, products and services, based on a life-cycle approach.



## SKF's Green Bond

As one of the first industrial companies, SKF issued a Green Bond in 2019. The value of the bond is EUR 300 million with a duration of ten years. SKF issued a second Green Bond in September 2022 with a value of 400 million euro and a duration of six years.

To secure alignment with national and international guidelines SKF has obtained an external third-party opinion on the Green Finance Framework which has been applied for both of the issued bonds. Engaging in green financing connects SKF's company funding strategy to the climate objectives. It is a way to engage stakeholders in the Group's integration of sustainability into SKF's business model and to ensure the strategy, investments and development activities keep to our commitment. The Green Bond is used for financing of projects in whole or in part that support the transition to low-carbon, climate resilient growth and lower

environmental impacts. The primary areas are increased energy and material efficiency, use of renewable energy, reduced waste and reduced emissions.

A Green Bond assessment is done as part of the normal processes for investments and R&D projects. Based on this assessment and the supporting documentation, experts in the Group Sustainability organization make an evaluation against the defined Green Bond categories and criteria. SKF has established a Green Finance Team which approves the evaluations made by the Group EHS experts and decides about Green Bond financing for investments and R&D projects. The Green Finance Team is chaired by the Group CFO and consists of representatives from finance, treasury, EHS, sustainability and manufacturing. In December 2021, SKF had allocated the full value of the first (EUR 300 million) Green Bond to investments in accordance with the Green Finance Framework.

# Strategy

## Group strategy overview

In the beginning of 2022, SKF presented a new strategic framework based on two concepts: intelligent and clean. These concepts will be the guide on the journey to become an even more focused, innovative, and profitable industrial player.

The broad business reach gives SKF a platform to drive profitable growth, as it allows the Group

to continuously target the most attractive opportunities. Within these growth areas, strong market demand matches the ability to differentiate and provide customer value. This means that SKF is well positioned to accelerate profitable growth.



## Intelligent and clean growth means

### Intelligent ...

- Customer offerings and solutions
- Portfolio management
- Digital value chain and processes
- Capital allocation and resource deployment

### Clean ...

- Tech applications
- Industries: minimize friction and waste
- Value chain: net zero emissions and high transparency
- Business practice and high ethics

## Climate-related risks and opportunities and impact on SKF

SKF's core business is based on well-established technology and the Group is diversified in terms of products, markets, manufacturing location and currencies used, which reduces SKF's overall exposure to business risks. Based on this diversification, SKF does not anticipate that climate-related business risks will have substantive negative financial or strategic impact on Group level in the short or medium term. SKF defines substantive financial risks as those which can have an impact of more than 0.5% of Group turnover.

Some specific market sectors will be negatively affected, such as the demand for SKF products to diesel and gasoline engines. However, other sectors will be positively affected, such as the market demand for SKF products to electric motors. Overall, SKF believes that the climate-related business opportunities outweigh the risks also in the long term. In the green transition there will be major investments which will create significant opportunities for SKF to capture new business with the Group's enabling technology, which is reflected in SKF's strategy.

Short term (0–1 years) climate risks and opportunities are integrated into yearly operational business planning and follow-up.

Medium term (1–3 years) and long term (>3 years) climate risks and opportunities are integrated into strategic business planning. The Group's climate targets typically cover a longer time horizon (for example, the target to have net zero greenhouse gas emissions in SKF's operations by 2030 and in the supply chain by 2050), to make sure that long term climate-related risks and opportunities are proactively identified.

As part of the strategy work, a comprehensive list of climate-related risks and opportunities have been identified. A few areas are highlighted below. Some of these have also been quantified using the

Sustainable Development Scenario (SDS) to analyze what their financial impact could be in 2030.

### CO<sub>2</sub>e taxes and increasing cost of steel

The production of steel is energy intensive and mostly also CO<sub>2</sub>e intensive. For a long time, SKF has been working actively to reduce CO<sub>2</sub>e in the supply chain in collaboration with suppliers. As the EU Carbon Border Adjustment Mechanism moves into deployment, it is clear that this will increase costs for some raw materials imported into the EU by SKF (mainly steel). Similar discussions are ongoing in the United States but where taxation might not be the preferred method. The effect will be relatively higher on steel with high embodied CO<sub>2</sub>e emissions. For the last years, SKF has simulated potential outcomes of the Carbon Border Adjustment Mechanism to understand the impact. SKF has also accelerated the collection of energy and CO<sub>2</sub>e data from its major steel and forging suppliers representing the majority of value, weight and environmental impact in the upstream supply chain. Through scenario analysis and financial simulation on cost increase at different levels of CO<sub>2</sub>e taxation, SKF has increased the understanding of this risk, the potential financial impact to SKF, and actions the Group can deploy to mitigate this risk. SKF is interacting with suppliers and customers in order to create a common view of how to manage the introduction and increased cost of steel with lower embodied carbon.

### Increasing cost of energy

A structural transformation is expected in the energy sector and massive investments globally are planned for more efficient and cleaner energy production. One of the most immediate and obvious financial risks, related to climate change for SKF and its value chain, is an increased cost of energy, linked to, for example, CO<sub>2</sub>e taxation but also due to an increasing demand when more and more products run on electricity. Due to a variety of

external factors (mainly the war in Ukraine but also other energy infrastructure related issues), energy prices in Europe increased drastically during 2022. Based on the SDS, the Group has analyzed the impact from an increased cost of energy and defined actions to minimize that impact. The best way to mitigate this risk is to reduce the energy demand and in 2022 SKF stepped up its focus on energy efficiency within its operations, delivering a 3.8% improvement in efficiency. In terms of spend, electricity makes up most of the energy cost with a smaller share of natural gas, biomass, heat, fuel oil and LPG. To give an indication of the potential financial impact, based on 2022 data, a 20% increase in costs related to energy would impact the Group's result by around SEK 440 million.

### Transformation of the automotive industry

Electrification is a strong trend in many industries, especially in the automotive industry. The growing market of electric and connected vehicles is positive for SKF, as the bearings play an important role in these applications. Today, SKF has a portfolio of innovative solutions that enable robust and efficient e-powertrain drives.

SKF's innovation within the automotive sector focuses on the technology transformation heading to a net zero vehicle market. SKF is partnering with key OEMs and tier 1 pioneers for the launch of full electric vehicles, for example, by providing a complete package offering of bearings and seals featuring high speed, thin sections and electric current insulation options. Power density and friction reduction are some of the main drivers of current and new vehicles. SKF has become a leader by developing low friction bearings for electric vehicles.

The specific requirements for electrification like bearing features for high speed and electric current insulation have considerably increased the value for bearings. Transmission electrification drives

for bigger bearing sizes, and for more innovative features both on seals and bearings. Through analysis and financial simulations, the conclusion is that SKF is well positioned for the transition to full electric vehicles and sees it as more an opportunity than a risk.

### Growth of cleantech, including wind energy generation

Cleantech covers all businesses in SKF which provide a sustainable output, for example, wind and tidal energy, remanufacturing, RecondOil circular use of oil, the Rotating Equipment Performance (REP) value proposition and specific applications that provide a reduced environmental footprint. To build the position and capabilities within cleantech, SKF is accelerating the remanufacturing offer, scaling magnetic bearings and other low friction applications.

SKF has also made a number of acquisitions in the field e.g in laser cladding in order to improve offers within the circular economy by increasing the possibilities to remanufacture worn products instead of scrapping them.

SKF is finding and developing new cleantech applications, solutions and technologies, for example, through partnerships, business development and acquisitions. This is an area where SKF is looking at possibilities outside the core business, around the rotating shaft, if it can provide a significant environmental or sustainability impact.

A significant opportunity is the investments in wind energy production, which are projected to increase in the years until 2030 and then accelerate even further up to 2050. SKF offers both products and services for the wind market. SKF technology and solutions enable wind farm operators to optimize the efficiency and thereby the competitiveness of wind turbines. The wind industry is growing worldwide and SKF sees a large business potential in sales of both products and services.



An increasingly important factor for winning new business is how a solution contributes to the customer's climate footprint. The combination of SKF's offering and internal commitment to reduce the impact of SKF's operations will continue to be a source of competitive advantage in the future. Industries will adopt new and efficient business models, which are less dependent on physical resources and generate less climate impact.

#### **Energy and material efficient manufacturing operations in SKF**

New technologies such as digitalization and automation, the use of sensors and AI etc. will support further improvements in energy and material efficiency of SKF manufacturing operations. The result will be lower costs, better material utilization and a significantly lower carbon footprint for the SKF factories and the products they produce.

#### **Mitigation actions and resilience of SKF's strategy**

##### **Scenario analysis**

To further understand the climate risks and opportunities and the resilience of SKF's strategy a scenario analysis was conducted during 2020 and further refinement was done in the strategic work 2021 and 2022. The scenario analysis was based on the SDS from the International Energy Agency. The SDS shows a future course to meet the requirements in the Paris Agreement which SKF wants to contribute to with its enabling technology.

SKF has also included the quantitative perspective on climate related risks and opportunities in the scenario analysis using the TCFD framework and best practices. The time frame for the scenario analysis is 2030.

The method used was to present SDS to senior persons in various areas of expertise, including Finance, Sales, Marketing, R&D, Sustainability and

Operations. Each person contributed with their view on what impact it would have on SKF if the society would act to fulfil actions needed to meet the SDS projection. Their input resulted in an updated list with the major climate related risks and opportunities. Actions to meet these risks and opportunities were identified and discussed.

A shortlist of the risks and opportunities and their related financial impact until 2030 was estimated together with Group Finance and SKF subject matter experts within the respective field. Based on the conclusions from the scenario analysis, further understanding of climate related risks and opportunities was achieved and resulted in updated actions that SKF will drive going forward. Further work and refinement of the analysis was done in 2021 and 2022 and SKF's objective is that this analysis will be further developed and conducted on a yearly basis.

The risk and opportunity assessment together with the scenario analysis have shown, that climate-related risks in the short- and medium-term time horizons are limited, however in the long-term time horizon there are some risks. SKF's diversification in terms of products, markets, manufacturing location and currencies used reduces SKF's overall exposure to business risks. With the green transformation the world is going through, SKF believes that there are opportunities in the short- and medium time horizons but especially the long-term horizon which will be covered in more detail later in this report.

The business strategy will be continually adapted and adjusted to mitigate the risks and manage the opportunities coming up with a stronger focus in society to combat climate change. A significant review of the SKF business and the risks and opportunities related to the transition to a greener economy was made during the fall 2021 which formed the basis for SKF's strategic decisions.

### Products and services

SKF is well positioned to enable reduced CO<sub>2</sub>e emissions in customer industries and applications. SKF's products and solutions help to reduce friction and enable reliable rotation, which leads to reduced energy use and CO<sub>2</sub>e emissions in customer applications. SKF also provides products and services enabling the growth of cleantech industries such as renewable energy generation, electric vehicles, etc.

SKF is focusing on the environmental benefits of products, services and customer solutions, including increased energy efficiency, reduced CO<sub>2</sub>e emissions, improved safety, reduced water use, increased lifetime of applications, increased material efficiency, reduced noise levels and more.

For many years, SKF has built up knowledge around lifecycle management and worked closely with customers to reduce or avoid CO<sub>2</sub>e emissions. Already in 2005, SKF introduced its BeyondZero concept to this regard. SKF has established guidelines for product development, environmental pre-evaluation tools and guidelines for quantifying and communicating sustainability performance.

The shift to a more circular way of doing business is changing the way business is done and how SKF provides value to customers. By combining sensor technology with direct access to SKF expertise and analysis from the REP centers, customers can perform condition-based maintenance to avoid costly unplanned downtime. By creating and capturing customer value through e.g. fee-based business models with incentives based on key performance indicators, the interests of SKF and the customers are aligned to reduce cost, safety risks and environmental impacts.

### Supply chain

The GHG emissions which result from the production of the raw materials and components which SKF buys are significantly larger than those which result from SKF's direct manufacturing operations. For several years, SKF has worked to influence energy intensive suppliers to implement energy management systems certified according to ISO 50001. The Group also works to reduce emissions from transports.

SKF has accelerated the collection of energy and CO<sub>2</sub>e data from its major steel and forging suppliers representing the majority of value, weight and environmental impact in the upstream supply chain and is now able to publicly report this data.

Organizational carbon footprints of SKF indicate that steel production generates the most significant greenhouse gas impact (occurring 'cradle to gate' – raw material to finished SKF product). SKF is acting to measure and reduce this impact in accordance with its Net Zero strategy. This involves working directly with steel suppliers as well as advocating for the needed changes through active membership of multi stakeholder initiatives such as SteelZero and the ResponsibleSteel initiative.

SKF also works to develop new business models to reduce environmental impact alongside cost. For example, SKF works to predict maintenance and enable cost-effective repairs and services within the customers processes. This reduces unplanned shutdowns, which are very often linked to significant waste of energy, materials and related CO<sub>2</sub>e emissions. Secondly, SKF brings back bearings and units for refurbishment or remanufacturing – a process which can cut energy and emissions by up to 90%, compared to the production of a new bearing.

### Research and development

In 2019, SKF was one of the first industrial companies ever to issue a Green Bond and a second bond was issued in 2022. The bonds raised EUR 300 million and EUR 400 million respectively to fund eligible green projects in accordance with the Group's Green Finance Framework, which was launched in 2019. R&D projects targeting cleantech as well as green products and processes are eligible for Green Bond financing. For example, SKF's R&D focusing on technologies and products for renewable energy generation, electric vehicles and railway applications will help to improve performance of current cleantech technologies as well as enable new cleantech innovations. Thereby, SKF aims to support the growth of these technologies and industries, which in turn, will help to reduce environmental impact on a large scale. As an example of strategic research activities, SKF has joined the Center for Hydrogen Energy Systems Sweden – CH2ESS at Luleå University of Technology to enable the transition to steel with low embodied carbon.

### Operations

SKF has an energy management system globally certified according to ISO 50001. SKF has a centralized function to manage strategic energy sourcing decisions for the Group, but daily work is decentralized to SKF's sites and integrated in the environmental management system. To increase focus and drive improvements in both energy and CO<sub>2</sub>e performance, SKF has defined yearly energy efficiency targets for all major manufacturing units and progress towards these targets is followed up unit by unit, month by month.



# Risk management

## Processes for identifying and assessing climate related risks

### Identifying risks

Risk identification, evaluation and response are carried out within the operations through a number of means, such as Group policies and instructions, training, management systems, reporting reviews and approval processes. All are coordinated and overseen by the related Group functions.

### Current and emerging regulations

The Group's energy and EHS management systems assure that SKF operations are up to date with applicable current regulations and have adequate ways of addressing them. Obligations on emissions reporting are followed via implementation of relevant reporting frameworks such as the GRI Standards. SKF has a segment organization with marketing specialists who focus on understanding the needs and drivers of customers. Group Sustainability's work includes mapping of relevant trends from a legislative perspective, including for example, impacts from current energy and carbon related regulations, such as, carbon tax and carbon emissions trading schemes, banned substances or other product material compliance issues.

### Technology risks

SKF was founded based on technology innovation and has ever since focused on staying in the forefront of new technology development. Within the R&D organization the monitoring of technology trends in general, which also includes climate related trends, is mainly achieved through the management review process. The approach used is based on PESTEL with input received through a structured stakeholder analysis. Throughout the year, there is a continuous patent watch with special focus in the steels and materials area and

looking into competitors' filings. Based on the risks and opportunities captured in these processes, the required mitigation actions are put in place.

Climate related requirements are embedded in the design process, the targets include, for example, reducing friction, design for sustainability /circular economy, and adhering to EHS/legislation compliance. There are also specific guidelines on material compliance and sustainability performance in product development, enabling SKF to proactively manage related risks and opportunities.

### Legal risks

SKF considers the risk of legal non-compliance climate-related risk for the Group to be very low. SKF is not a heavy emitting industry and has a well-established way of working to measure, report and mitigate the climate impact related both to its operations and to the products and services provided to customers. Inclusion in the EU Emissions Trading System is an example of a legal risk. SKF's EHS management system assures that we are aware of any such legal obligations.

### Market risks

Bearing Market Information (BMI) is SKF's key instrument to understand and monitor the sizes and structures of the markets for rolling bearings. It's a way to monitor the key trends in the global bearings market and the competitive landscape. BMI gives an understanding of the SKF market position and the market share development vs. competition. BMI is an annual process analysis involving around 70 countries globally. Climate related trends and market developments are integrated and captured within the BMI process. The work also includes mapping of relevant trends from a macroeconomic perspective, including, for example, sustainability drivers.



### Reputational risks

SKF's performance and credibility in the climate related area is very important for the SKF brand and for our stakeholders, such as, shareholders, employees, customers and general society. Poor performance and/or associated stakeholder perception is judged as a potential risk for negative impact on the brand value. To mitigate this risk, SKF tries, for example, to be as transparent as possible regarding the climate impact, not only from SKF's own operations, but from a value chain perspective. SKF reports on scope 1, scope 2, and some scope 3 emissions through the Annual Report. The data is third-party verified to improve quality and credibility.

All SKF communication is developed in accordance with SKF communication guidelines and policies, whereby all communication is factual and delivered in a way that minimizes risks for misunderstanding and greenwashing. A Group guideline for quantification and communication of sustainability impact is available to support the organization.

### Physical risks

SKF has a globally unified EHS management system, which is certified according to the ISO 14001, ISO 45001 and ISO 50001 management standards. This system requires that all sites conduct regular risk assessments including the identification of physical climate-related risks such as flooding, water shortages or forest fires which could impact the facilities.

SKF also incorporates the identification of such risks into the due diligence process when building new facilities or acquiring companies. In addition, SKF's loss prevention activities require that site-level risks of flooding and related scenarios are captured through Flood Emergency Response Plans, which is part of SKF's loss prevention activities with processes for assessing the potential size and scope of identified climate-related risks.

### Strategy

The strategy process incorporates the assessment of risks and opportunities. In 2022, a new strategy for the SKF Group was launched and as part of this a thorough analysis of risks and opportunities was made involving a large number of SKF employees as well as customers and industry experts. On Group level the strategy process now follows a yearly cycle with the strategy review done yearly, and a quarterly cadence of follow-up of strategy execution by Business area and Group Function. Risks are also managed through the ERM process which is described in more detail in the next section.

### Assessing risks

SKF's risks are assessed two times per year and shared at Group level and the result is shared with Group management. Once per year it is also shared with the Audit Committee and a summary of the assessment is included in the Annual Report. This process is managed by SKF's Group risk manager with input from the business areas and senior Group staff members. Based on the risk

assessment the needed actions are also developed or updated based on the conclusion of the assessment. This process covers also climate risks.

The key risks are assessed on both probability and impact. The probability ranging from very low to high. The impact is assessed based on impact on strategic execution, financial performance and brand & reputation.

To further understand the sustainability risks, SKF's materiality analysis is used to identify sustainability and climate-related risks in the value chain and supports the organization to filter out and aggregate the risks, that if they are materialized, would have the most significant impact on the SKF Group, its operations and society. SKF's materiality analysis includes feedback from all stakeholder groups such as investors, suppliers, customers, employees and the community.

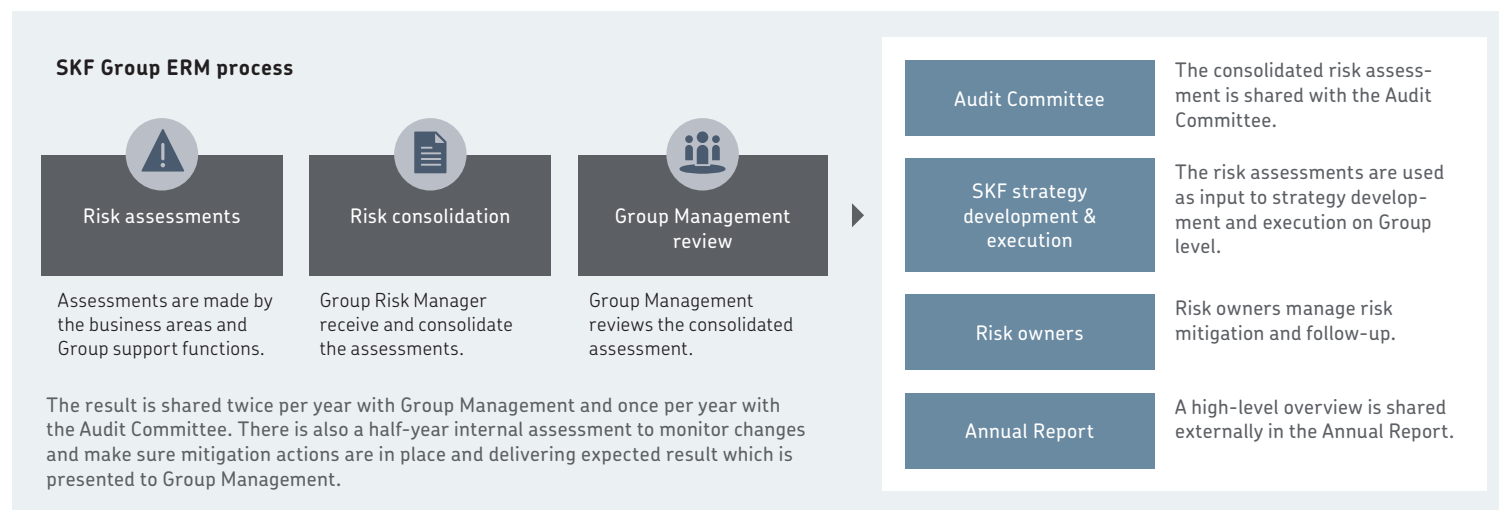
### Processes for managing climate-related risks

SKF's integrated management system and processes for risk management is critical to manage the risks and opportunities. Sustainability including

climate is an integrated part of this framework and is therefore integrated in the overall risk management. The basis of the assessment also provides input to the corporate strategy development and execution.

The result of the overall risk assessment is presented and reviewed by Group Management two times per year, feedback is provided to the respective risk owners in the business to drive the mitigation actions in their respective area. Where needed, additional actions are started in order to mitigate the risks and assigned to the relevant risk owner. Follow-up of the risk mitigation is executed in the respective area with assigned resources based on the competence needed. Issues and deviations are escalated to Group Management whenever there is a need.

For a more detailed description of how SKF identifies and addresses potential risks related to climate change, please refer to SKF's 2022 CDP Climate Change Response – section C2.



# Metrics and targets

SKF reports on an extensive number of metrics related to sustainability and climate, including for example, energy and emissions, materials, water, effluents, and waste. These are fully disclosed in the Annual Report. A summary of the specific metrics related to greenhouse gas (GHG) emissions is provided hereafter.

## GHG emissions

SKF uses the GHG Protocol Corporate Guidance for reporting its emissions. Due to the nature of SKF's

operations, only three greenhouse gases are likely to be released in significant quantities for tracking. These are CO<sub>2</sub>e, methane and nitrous acid, where CO<sub>2</sub>e is by far the biggest contributor to SKF's emissions.

Energy data and related GHG emissions are reported monthly and followed up bi-annually by the SKF Group management.

### Scope 1 and scope 2 GHG emissions

Market-based emissions, tonnes	2022	2021	2020
<b>Direct (Scope 1) GHG emissions</b> CO <sub>2</sub> e emissions	52,816	55,941	49,828
<b>Energy indirect (Scope 2) GHG emissions</b> CO <sub>2</sub> e emissions market-based	259,350	312,180	330,267
<b>Total CO<sub>2</sub>e emissions, market-based</b>	<b>312,166</b>	<b>368,121</b>	<b>380,095</b>
Location-based, tonnes	2022	2021	2020
<b>Direct (Scope 1) GHG emissions</b> CO <sub>2</sub> e emissions	56,580	55,941	49,828
<b>Energy indirect (Scope 2) GHG emissions</b> CO <sub>2</sub> e emissions location-based	470,895	524,626	465,006
<b>Total CO<sub>2</sub>e emissions, location-based</b>	<b>527,475</b>	<b>580,567</b>	<b>514,834</b>

### Sources of emissions

Tonnes, conversion factors in tonne per unit in brackets	2022	2021	2020
<b>Direct (Scope 1) LPG</b> (3.0 per tonne)	3,696	3,890	3,468
<b>Fuel oil</b> (3.2 per tonne)	1,543	1,937	1,302
<b>Natural gas</b> (0.002 per cubic meter)	47,576	50,114	45,058
<b>Supplied (Scope 2), market-based Electricity</b>	241,700	287,366	309,040
District heating and cooling	17,650	24,813	21,226
<b>Total CO<sub>2</sub>e emissions, market-based</b>	<b>312,166</b>	<b>368,121</b>	<b>380,095</b>

Scope 1 emission factors have been derived from DEFRA, except Gothenburg where the local RECERT standard has been applied.

Scope 2 contractual emission factors have been provided by relevant electricity suppliers. Scope 2 location based emission

factors have been taken from IEA, DEFRA and other recognized data sources.

Emission factors from DEFRA are used for district heat except certain sites in Germany, Sweden and Poland where specific emission factors from suppliers are provided by the local district heat provider.

## Scope 3 GHG emissions

Under Scope 3 emissions, SKF reports CO<sub>2</sub>e emissions from the most significant direct material suppliers (steel, forgings, rings and rolling elements), goods transportation and business travel.

### Direct material suppliers

These data are based on aggregation of figures provided by the 38 major suppliers of steel, the 26 major suppliers of forgings and the 15 major suppliers sites of rolling elements (in term of weight of material and CO<sub>2</sub>e emission factor).

The CO<sub>2</sub>e emission factors for the remaining suppliers (when direct declarations are not yet available) have been estimated based on primary data collected for similar suppliers. This scope covers at least 50% by volume of total direct material spend and 96% by weight of steel purchased. This is only the third year in which SKF reports this information and the data should be considered as indicative rather than a precise quantification of these upstream impacts. SKF is working to increase both the scope and accuracy of the data collected and reported.

CO <sub>2</sub> e Tonnes	2022	2021 <sup>2)</sup>
Scope 3, category 1 direct material supplier emissions in scope <sup>1)</sup>	1,294,825	1,276,571

1) Total estimated emissions related to steel, forgings and rings, rolling elements.

2) Scope of reporting was increased and figure for 2021 recalculated (restated) accordingly.

### Goods transportation data and related CO<sub>2</sub>e emissions

	2022	2021	2020 <sup>1)</sup>	2015
CO <sub>2</sub> e emissions from transport Scope 3, (tonnes)	213,061	227,228	144,466	153,031
Transport works (tonnes shipped)	487,779	422,720	340,934	352,641

1) Scope of reporting was increased and figure for 2020 recalculated, previous figures re-stated accordingly.

### Business travel

In 2020, SKF announced the ambition to reduce CO<sub>2</sub>e emissions from business travel by limiting the amount of CO<sub>2</sub>e at 50% of the full year 2019.

The ambition commits to stay below this ceiling for the coming years and will be achieved by significantly increasing the use of digital collaboration.

	2022	2021	2020	2019
CO <sub>2</sub> e emissions (tonnes) from air travel (scope 3, category 6)	6,395	3,990	3,584	12,954

## SKF's climate targets

The Group has defined climate targets based on life-cycle thinking and these are summarized in the table below.

### Summary of SKF's climate goals

	Purchased Direct Material	Logistics	Other up-stream impacts	SKF operations
GHG Reporting Scope	Scope 3, Category 1	Scope 3, Category 4	Scope 3 Category 6 and others	Scope 1 & 2
2025	<ul style="list-style-type: none"> <li>ISO 50001 for energy intensive suppliers.</li> <li>15% reduction in CO<sub>2</sub>e from forgings and rings suppliers, base year 2019.</li> </ul>	<ul style="list-style-type: none"> <li>40% reduction in CO<sub>2</sub>e emissions per tonne of goods shipped to end customer, base year 2015.</li> </ul>	<ul style="list-style-type: none"> <li>Ambition for maximum CO<sub>2</sub>e for business travel &lt; 50% of 2019 figure.</li> <li>Goals and follow up defined for all other relevant emissions.</li> </ul>	<ul style="list-style-type: none"> <li>40% reduction of CO<sub>2</sub>e emissions from manufacturing per tonne of bearings sold, base year 2015.</li> <li>5% year-on-year improvement in energy efficiency.</li> </ul>
2030	<ul style="list-style-type: none"> <li>32% reduction in CO<sub>2</sub>e from direct material, base year 2019.</li> <li>In accordance with the SteelZero initiative, we will ensure that at least 50% of all sourced steel is either;               <ol style="list-style-type: none"> <li>ResponsibleSteel certified,</li> <li>coming from steel companies with approved SBTi targets or</li> <li>low embodied carbon steel.</li> </ol> </li> </ul> <p>This can be achieved by each criteria or by a combination of them.</p>	35% reduction in transport related CO <sub>2</sub> e, base year 2019.	TBD	<b>Zero CO<sub>2</sub>e for all SKF operations.</b>
2035	43% reduction in CO <sub>2</sub> e from direct material, base year 2019.	55% reduction in transport related CO <sub>2</sub> e, base year 2019.	TBD	
2040	60% reduction in CO <sub>2</sub> e from direct material, base year 2019.	77% reduction in transport related CO <sub>2</sub> e, base year 2019.	TBD	
2050	<b>Net zero CO<sub>2</sub>e</b>			

In 2020, SKF announced a new objective for manufacturing and other operations to have net zero operations by 2030. This relates to scope 1 and scope 2 emissions. This will be achieved by a combination of efforts focused on energy and material efficiency, generating renewable energy, sourcing renewable energy and as a last resort to cover any remaining emissions purchasing credible carbon removals. As part of this approach, SKF has joined the RE100 initiative – a signal that the Group intends to source 100% renewable electricity within 2030.

In 2021, SKF announced its target to achieve net zero greenhouse gas emissions in the full SKF value chain (from raw material to finished product delivered to the customer) by 2050.

SKF has committed to the Science Based Targets initiative meaning that all these targets shall be aligned with the Paris Agreement to limit global warming to 1.5°C.

The operations are responsible to develop plans to reach the targets, implement relevant actions and report on the progress. The Group EHS function provides a climate targets report to the Group Management, based on input from the operations. The Net Zero program within Group Sustainability is responsible for the coordination of the activities taking SKF to net zero greenhouse gas emission in the operations by 2030 and the supply chain by 2050.

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AB SKF  
SE-415 50 Gothenburg, Sweden  
Telephone +46 31 337 10 00  
[www.skf.com](http://www.skf.com)

