TCFD report

Task Force on Climate-related Disclosures (TCFD) 2023

In our TCFD-disclosure for the year 2023 we are describing the climate-related risks and opportunities that impact our business. It elucidates the potential impact of climate change scenarios on our operations and delineates our strategy to address these effects, emphasizing our commitment to resilience in the face of evolving challenges.

The structure of this report adheres to the TCFD recommendations. Consequently, it encompasses our governance structures, strategy, risk management, assessment of resilience, metrics and targets, along with a summary of our environmental performance.

Governance

Leadership and responsibilities in Climate Strategy

Our Executive Board has Group-wide responsibility for our sustainability strategy. This includes the responsibility for climate-related issues, e.g. setting our climate protection targets. Within their respective area of responsibility, each Executive Board member is also responsible for sustainability, reviews the priorities that have been set, and decides on the implementation of initiatives.

The Sustainability Board, sponsored by the CEO, steers and monitors the Group-wide **implementation of the sustainability strategy**. It aligns the strategy with the individual business strategies, defines priorities and specifies globally applicable sustainability guidelines. Amongst others, it is responsible for integrating climate-related issues into the company's strategy and monitoring progress against climate-related corporate targets.

Incentives for the Executive Board's progress towards achieving our scope 1 and 2 company targets are key elements in our overall sustainability strategy, as they will impact the entire organization (e.g., there are GHG reduction targets on various levels) and help us reach our SBTi approved 1.5°C near-term goals for 2030. For this, we have defined key indicators for the Executive Board on climate-related issues.

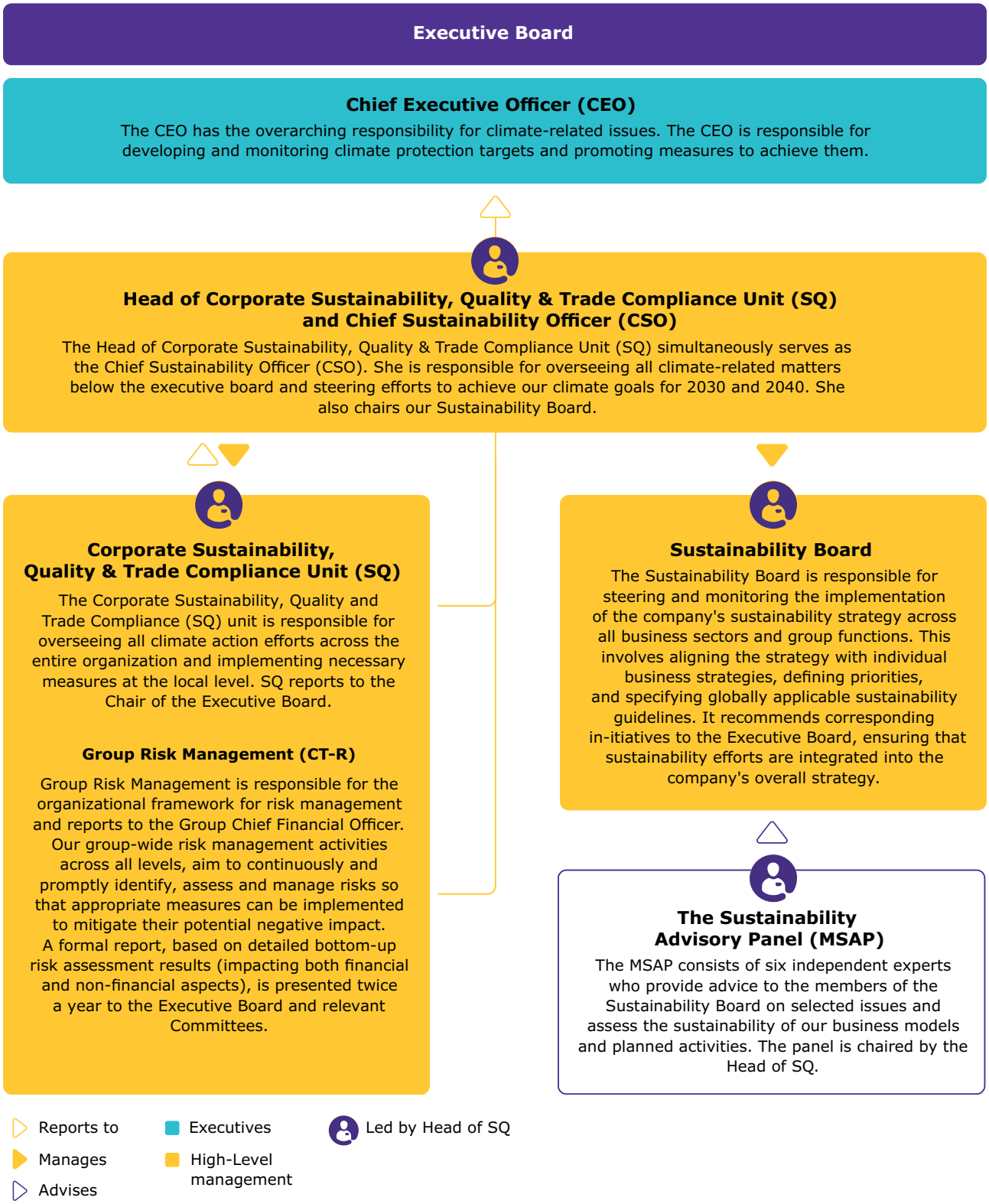
Starting from fiscal year 2022, our sustainability targets are considered in the Long-Term Incentive Plan (LTIP) by adding a sustainability factor to the existing three financial performance indicators. It measures the performance of three selected sustainability goals over a period of three years, in this way, the target achievement resulting from the financial performance indicators is adjusted up or down by up to 20%. Details on how this sustainability factor is calculated can be found in the **Compensation Report**.

Coordinated sustainability oversight

The Sustainability Board consists of representatives from our business sectors and from key Group functions, such as Procurement, Communications, as well as Controlling and Risk Management. Members from Europe, the United States and Asia provide input on regional sustainability aspects. The Sustainability Board ensures that

initiatives of our various business sectors, Group functions and subsidiaries align with our global sustainability strategy and recommends corresponding initiatives to the Executive Board. It is led by the head of Group Corporate Sustainability, which is chaired by the Head of SQ, who simultaneously serves as Chief Sustainability Officer. The Sustainability Board meets monthly, the performance on Key Indicators is reviewed quarterly. Further, SQ coordinates and steers activities to implement our climate protection program to reach our 2030 and 2040 climate targets. For instance, SQ regularly monitors GHG emissions using a central IT platform and tracks the implementation of energy efficiency and GHG reduction projects.

Our governance structure



Strategy

While a scenario analysis cannot predict the future with certainty, it serves as a crucial tool for understanding the potential impacts of climate change on our business. This analytical approach is essential for risk management, strategic planning, and assessing our overall resilience to potential challenges. In 2023, we dedicated efforts to enhance both qualitative and quantitative climate modeling, establishing a baseline for a comprehensive transition plan.

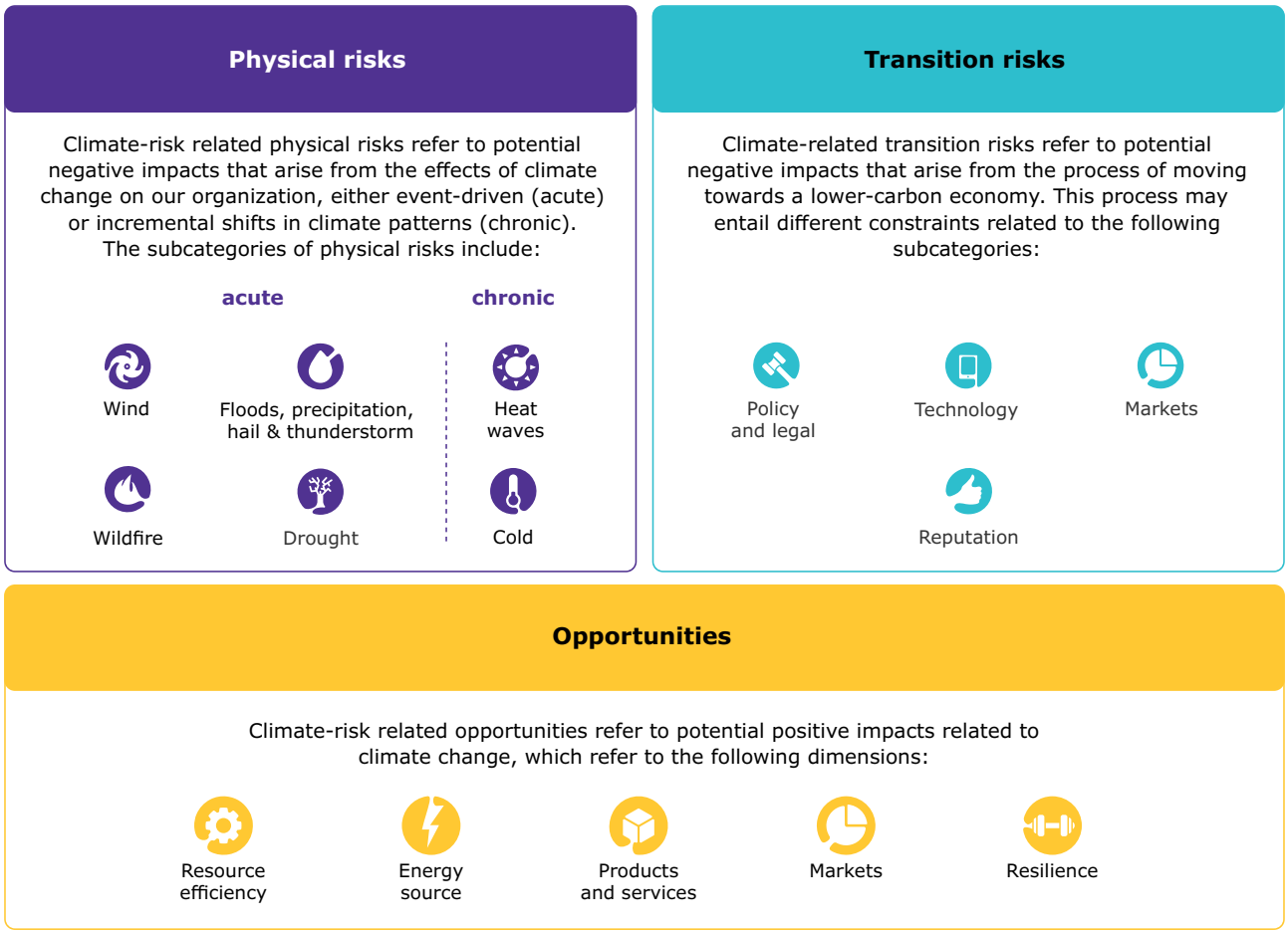
In the following, we outline our methodology, the foundational assumptions guiding our approach, and the resulting insights. The conclusion encompasses an assessment of our resilience, considering the opportunities we have explored, and outlines the strategic actions we intend to pursue.

Climate-assessment approach

Further advancing on our qualitative scenario analysis from 2022, we conducted a quantitative study in 2023 supported by external consultants. Part of this was an in-depth scenario analysis based on which we have assessed transitional and physical risks and opportunities for our business. We considered climate-related transition and physical risks across the different regions in which we operate.

Climate risks and opportunities can be defined as “potential financial value impact as a result of climate change”. According to the TCFD climate impacts are typically grouped into the following categories:

Distinguishing physical and transition risks as well as opportunities



Our forward-looking climate projections are based on assumptions about the future trajectory of greenhouse gas emissions, with different scenarios used for this analysis, as in the Intergovernmental Panel on Climate Change (IPCC) reports. Depending on global climate action, demographics, social aspects, geopolitics, and technology development (to name a few factors), the effective greenhouse gases emitted may vary from the scenarios used.

Our climate risks and opportunities were modelled along the well-established scenarios by the IPCC. We examined the risks and opportunities associated with transitioning to a 1.5°C scenario and a 4°C scenario, represented by RCP 8.5. These scenarios project temperature increases by 2100 compared to pre-industrial levels. Our modeling timeframe extended to the year 2050. We consider 2030 as the near term and 2050 as the mid-to-long-term horizons.

Our scenarios, approach and methodology

Scenario's application in our analysis	Transition risk	Physical risk
Scenario details	1.5°C warming	4°C warming (RCP 8.5)
Economic Constraints	Aligned to SSP2: ◆ Global population growth is moderate and levels off in the second half of the century ◆ GDP continues to grow in line with historical trends ◆ Resource and intensity of energy use declines as productivity increases due to new technologies	No economic constraints for the physical risk
Decarbonisation trends	Global decarbonisation trajectory in line with achieving 1.5°C pathway. Emissions are expected to decrease dramatically before 2030, with net-zero reached around 2040-2050	Emissions continue to increase in line with current business-as-usual pathway. Emissions expected to double by 2050 and triple by 2100.
Policy Expectations	◆ Up to 2030, Nationally Determined Contributions (NDCs) are successfully delivered by countries as pledged in the 2015 Paris Agreement and consolidated into a pledge pipeline. ◆ Post-2030, cost-effective emission reduction measures are implemented by countries to achieve the global 1.5°C target, in proportion to their pledged NDCs.	No further climate policy intervention. Government or state intervention on climate change does not exceed current levels.
Physical Impacts	Very little increase in severe climate-related weather events. In these calculations, it is assumed zero.	Likely increased severity of climate-related weather events.

Source: KPMG Climate IQ
It should be noted that the scenarios presented herein are hypothetical constructions commensurate with a given climate outcome – for the purposes of highlighting sensitivity between climate scenarios.

For our physical risk assessment, we considered to which extent the total insured value of assets is associated with high or very high hazard levels at a certain time and warming scenario. For this, we considered hazard information, exposure data as well as forward-looking climate data, which was provided by our external partners.

We considered the importance and feasibility of accurately quantifying economic and financial impacts in our modeling. To this aim, we identified the top 100 clusters of sites in our portfolio based on their size and significance.

For each scenario, we modelled the economic transition impacts across sectors, regions and time periods. For each projection, multiple variables were calculated, including, demand and supply of labour and capital, carbon emissions, economic production, output volumes and price changes. Likewise, for the financial assessment, impacts for each area, including costs for direct labour, electricity, emissions, raw materials, and revenue were calculated.

Climate-related risks and opportunities and their impact on the organization

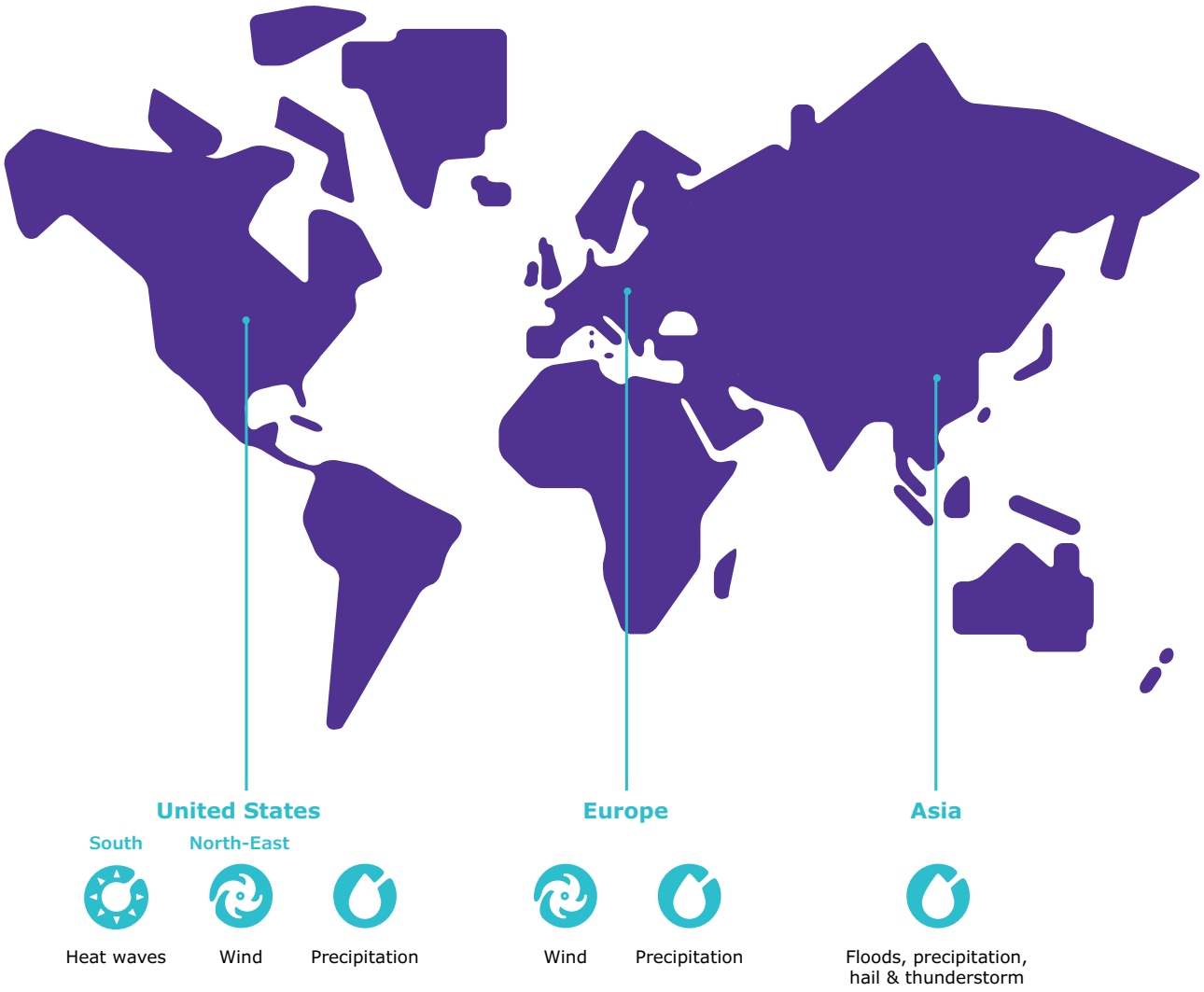
Physical risks

The IPCC finds that human activity has unequivocally caused warming on a global scale. Gradual changes, including rising sea levels and sustained changes to temperature and precipitation can pose chronic physical risks to companies.

Further, extreme weather events (acute physical risks) such as heavy precipitation, heatwaves or tropical cyclones have become more frequent and intense in recent years. Such trends are expected to continue in direct relationship with global temperature rise and could impact our business through physical damage to sites, equipment or stock, and disruptions to operations including internal and external supply networks and employee safety, among other impacts.

Looking at our 100 most important site clusters, based on their total insured value (TIV), we identified the top perils, which may impact them, and how those may develop over time.

Countries and regions considered, as well as their most important risk



Physical risk impact by time horizon and climate scenario

Physical risks	Scenario	2030	2050
Precipitation	**Base case**	🟡	🟡
	4°C	🟡	🟡
Wind	**Base case**	🟡	🟡
	4°C	🟡	🟡
Drought	**Base case**	🟢	🟢
	4°C	🟢	🟡
Thunderstorms	**Base case**	🟢	🟢
	4°C	🟡	🟡
Flood	**Base case**	🟢	🟢
	4°C	🟢	🟢
Heat	**Base case**	🟢	🟢
	4°C	🟢	🟢
Wildfires	**Base case**	🟢	🟢
	4°C	🟢	🟢
Cold	**Base case**	🟡	🟢
	4°C	🟡	🟢
Hail	**Base case**	🟢	🟢
	4°C	🟢	🟢

Legend:
Orange: 20% or more of the Total Insured Value (TIV) of the cluster of site falls within the high or very high hazard level
Green: Less than 20% of the Total Insured Value (TIV) of the cluster of site falls within the high or very high hazard level

Key transition risks

Risks	Description
Scope 1 Emission costs	Our emission and electricity costs could increase in a low carbon transition as a result of carbon price rises, electricity price changes, and differences in electricity consumption.
Electricity costs	
Labour costs	Our overall direct labour costs could increase in a low carbon transition, which could be driven by the economic growth increasing faster than labour supply growth, putting upward pressure on wages.

Key transition opportunities

Opportunities	Description
Revenue	We could experience increased revenue growth in all key geographies with the greatest impact in the USA and Asia.
Chemicals costs	We could benefit from lower costs of chemicals under 1.5°C scenario, compared to the base case.

Transition risks selected for analysis

RO1 Opportunity for increased revenue

RO2 Risk due to carbon taxes and emissions trading

RO3 Risk due to increased cost of electricity

RO4 Risk due to increased cost of labour

RO5 Risk due to increased cost of chemicals

Across a time horizon out to 2050, we found that the impact of physical risk on our sites is limited under a 4°C scenario. In fact, the financial impact of the physical risk is projected to be significantly lower than the impact of transition risk.

Having conducted a first stage quantitative scenario analysis with established levels of impact, we will now use the results to define mitigation leavers for the most significant risks that could occur. The data and findings of the climate-related risk and opportunity assessment will form the foundation for our transition plan to further integrate climate-related issues in our decision-making, planning and strategy.

Our strategic response and resilience assessment:

Transition to a low-carbon economy

One of our core strategic sustainability objectives revolves around "reducing our ecological footprint," targeting a 50% reduction in both direct (Scope 1) and indirect (Scope 2) greenhouse gas emissions by 2030, compared to 2020. Moreover, we aim to reduce our **Scope 3** emissions across the entire value chain by 52% (per euro of gross profit) by 2030. In addressing potential transitional and physical risks in our supply chain, we started a Supplier Decarbonization Program. In addition, we actively seek greener raw materials to integrate into our products, processes, packaging, and buildings. These programs aims to reduce greenhouse gas emissions associated with purchased goods and services, including capital goods.

This near-term goal for 2030 was approved by the Science Based Targets initiative (SBTi), which independently assesses and approves company targets based on its strict climate science criteria. With this confirmation, we

are contributing to limiting global warming to 1.5 °C, thus complying with the requirements of the Paris Agreement.

We also aim to cover 80% of our purchased electricity with renewables by 2030.

Looking ahead to 2040, our overarching objective is to attain climate-neutral operations across our entire value chain, encompassing Scope 1, 2, and 3 emissions. To realize these commitments, climate-related considerations are integrated into all aspects of our businesses, supported by a comprehensive set of measures.

Innovation and sustainable products

The sustainable innovation we actively promote aligns with the three core goals outlined in our sustainability strategy. In our pursuit of sustainability, we recognize the pivotal role of Research and Development (R&D) within the realm of science and technology to create sustainable products. Aligned with our sustainability strategy, evaluating our R&D projects regarding their sustainability impact along the value chain is an integral part of our global product development process across the whole organization. We have assessed the majority of relevant R&D projects and consolidated the insights gained from our Design for Sustainability scorecards such as emissions, waste, water, substances of concern and human progress data.

Recognizing the integral role of sustainable products, we acknowledge their significance in mitigating transition risks, such as reputation concerns, while simultaneously capitalizing on opportunities arising from climate change, such as increased revenue through elevated demand for sustainable products. This underscores the strategic importance of embedding sustainability into our innovation processes to navigate challenges and leverage emerging opportunities in the dynamic business landscape.

Carbon Pricing

Furthermore, we incorporate GHG emissions criteria into our investment decisions above 10 Mio Euro. To assess the potential impact of carbon emissions, we use a shadow price, representing a hypothetical cost of carbon per ton of CO_2eq. This helps to understand risks and opportunities across operations, aiding strategic decision-making for future capital investments and mitigating transitional risks, such as those stemming from increased carbon prices.

Given the increasing global adoption of carbon pricing mechanisms, affecting our operations across 66 countries, we are proactively investing in energy efficiency and greenhouse gas reduction measures to mitigate policy-related transition risks and reduce operational costs.

To stay ahead of emerging trends and challenges, we closely monitor global developments, integrating them into our climate scenarios. We engage in dialogues, initiatives, and consultations with industry peers, customers and other stakeholders.

Looking ahead

We are convinced that sustainable entrepreneurship and profitable growth are seamlessly intertwined. Our commitment to accelerating the transition to a low-carbon economy aligns with a broader dedication to advancing our sustainability strategy. In 2023, a thorough quantitative climate-risk assessment has equipped us with an understanding of potential climate-related exposure and opportunities within our operations.

With this insight, we are poised to make well-informed strategic decisions, enhancing our risk management by acknowledging potential exposure across various climate scenarios. Additionally, we aim to identify revenue opportunities stemming from the ongoing transition to a low-carbon economy. A comprehensive transition plan, which we aim to develop in 2024, will guide us in outlining a decarbonization pathway to both mitigate risks and capitalize on climate-related opportunities. Looking forward, we are committed to further integrating

climate risks and opportunities into our decision-making processes and strategies, extending to financial planning and performance considerations.

Risk Management

We recognize that climate change introduces both risks and opportunities that could affect our entire value chain and business operations over the short and long term. Climate-related risks are included in our Group-wide Risk Management, assessed according to our guidelines, and categorized under pre-defined groups like "sustainability and safety risks." We internally evaluate and report on risk-mitigating measures, which may involve transferring risks, reducing impact or probability, and obtaining additional insurance, all crucial for effective risk management.

Our Business Continuity Management, part of our overall risk assessment, addresses long-term risks such as those related to climate change. We also monitor regulatory risks associated with transitioning to a low-carbon economy, anticipating potential impacts from rising carbon prices, emissions trading systems, taxes, or energy legislation in the mid- and long-term.

While we are taking the described steps, we are still working on our approach to managing climate risks. Until now, our focus has been on selectively managing specific aspects. Nevertheless, we remain committed to continually incorporating the risks and opportunities posed by climate change into our evolving risk management strategies.

Metrics & Targets

We are committed to transparently reporting on our environmental goals and the impact of climate change on our business. To implement our long-term climate strategy, we are focusing on reducing our impact from greenhouse gas emissions, water, and waste and building resilience in our businesses. Metrics and targets are important tools to measure and track our progress in achieving our environmental goals. Therefore, we have set specific targets and metrics to measure and improve our environmental performance.

For further information please see the **Indicators section** of our report.