

# SIKA'S TASK FORCE ON CLIMATE-RELATED FINANCIAL DISCLOSURES (TCFD) **REPORT 2022**

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BUILDING TRUST



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# INTRODUCTION

As outlined in the “Risk Management and TCFD Recommendations” chapter on p.25 of the Annual Report 2022, climate change represents one of the top risks in the company Enterprise Risk Management (ERM) framework. Sika recognizes that climate change is having a significant impact on the world, and it therefore needs to be addressed in the risk management process and considered in the strategic planning. Evaluating how climate-related risks and opportunities affect Sika and developing appropriate response measures as recommended by the Task Force on Climate-related Financial Disclosures (TCFD) helps the company ensure long-term sustainable performance and business continuity.

Therefore, over the past three years, Sika has worked to progress the implementation of TCFD recommendations, ensuring transparency on disclosing climate-related risks and opportunities along with their impact on the organization.

To face the global challenge, Sika is addressing climate change comprehensively in its strategic development with the commitment to become a net zero company. Since 2019, Sika has defined a strategic target for reducing scope 1 and 2 CO<sub>2</sub>eq emissions by 12% until 2023. Moreover, the compensation scheme of Top Management and Sika Senior Managers is linked to the CO<sub>2</sub> performance of the company (scope 1 and 2). In October 2022, Sika finalized a two-year company-wide initiative to systematically identify and calculate emissions from its material scope 3 GHG categories. The overall scope 1,2 and 3 emissions continuous assessment and reporting will contribute to the definition of Sika’s climate strategy and carbon reduction pathway to reach net zero by 2050. More information on Sika’s Net Zero Commitment is available in the “Planet” chapter, “Climate Change” section on p.88 of the Sustainability Report 2022.

In this report, Sika describes how climate change scenarios may impact its business considering both physical and transition risks. Sika understands that climate change is still an evolving topic which requires continuous improvement of its climate impact analysis and disclosures. This helps Sika better understand the implications on its current business model and to drive the respective mitigation activities.

## 2022 TCFD STATUS

In 2022, Sika updated its TCFD reporting with a focus on a first financial quantification of physical risks for the two scenarios described in the section “Climate Scenario” on p.4 of the TCFD Report 2022. Alongside its Net Zero commitment, Sika started an internal cross-functional project to identify the decarbonization levers at Group and regional level. With this project, Sika creates a better understanding of the transition impacts to be considered for its SBTi-aligned commitment, which will contribute to Sika’s future TCFD reporting. These transition risks and opportunities will also be used in the strategy review process to improve Sika’s resilience to the impacts of climate change.

The following progress has been made in 2022:

- Strengthened its 2022 scenario analysis with a focus on two scenarios (1.5°C and 4.4°C)<sup>1</sup>.
- Assessed potential climate-related physical risks on manufacturing sites and respective financial implications related to turnover and assets.
- Reviewed the list of climate-related transition risks and opportunities with an internal cross-functional team.

For the future, Sika plans to improve its analysis by:

- Strengthening its understanding of physical and transition climate-related risk and opportunities with respective financial implications.
- Analyzing climate-related risks and opportunities and respective mitigation activities on short, medium and long-term time horizon.
- Evaluating systemic climate change physical risks beyond Sika operations (upstream and downstream the value chain).

<sup>1</sup> In 2021, Sika focused its analysis on three scenarios (1.5°C, 2.7°C and 4.4°C). Based on the conclusions of this first qualitative assessment, Sika decided to exclude the 2.7°C scenario for further analysis since the most significant risks lie in the two extreme scenarios (1.5°C and 4.4°C).

## CLIMATE SCENARIOS

In 2022, Sika conducted a scenario analysis based on two global warming scenarios:

- “Most optimistic”: 1.5°C scenario, in line with the Paris Agreement.
- “To avoid at any cost”: 4.4°C scenario, consistent with continued dependence on fossil fuels.

These scenarios are defined based on historical data on climate events since 1900 and scientific projections to 2100. They allow Sika to explore and develop an understanding of how various combinations of climate-related risks and opportunities, both transition and physical, might impact Sika’s business and value chain. The two scenarios’ narratives are based upon assumptions which consider research done by organizations such as the International Energy Agency (IEA), the Food and Agriculture Organization (FAO), the Central Banks and Supervisors Network for Greening the Financial System (NGFS), and the Intergovernmental Panel on Climate Change (IPCC).

### SCENARIO 1 – MOST OPTIMISTIC (1.5°C)

The sustainable and “green” pathway describes an increasingly sustainable world where global CO<sub>2</sub> emissions are cut to net zero around 2050.

Global commons are being preserved, and the limits of nature are being respected. More focus is placed on human well-being and not exclusively on GDP growth per capita, which would be higher at global level but medium in High Income Countries (HICs). The population growth is low and investments in education and health go up. Social standards are reinforced on a global scale through a higher level of international cooperation. Income inequalities between and within states are being reduced. Consumption is oriented towards minimizing material resources and energy usage. Circularity becomes mainstream.

In this scenario, global economies shift away from fossil fuel-based consumption. Decarbonizing the power sector is a central pillar and requires switching to alternative sources of energy such as solar, wind, or nuclear, as well as some targeted deployment of carbon capture and storage (CSS) for new and existing power plants. Complementary investments are needed in new grid management and storage solutions to ensure continued reliability. Fossil-fired power plants risk losing revenues and becoming

stranded. As a result, renewable electricity increases five-fold over the next three decades. Energy intensity decreases by almost 60% between 2020 and 2050. More than half of the energy for buildings, industry, and transport will be electric by 2050. Innovative technologies could be developed to electrify the production of steel, cement, and other industrial products.

Global economies switch to carbon neutral-fuels (i.e., green hydrogen, biofuels, and synthetic fuels) and 40% of gaseous, liquid, and solid fuels are carbon neutral in 2050. Investments and policy incentives are required to bring these fuels to scale. Additionally, investment strategies for companies will require an accelerated shift to innovative technologies that reduce or eliminate GHG emissions and therefore a portion of their capital expenditure budget will be allocated for GHG reduction.

Land use is strongly regulated to avoid environmental trade-offs. Thanks to the restoration of biodiversity and more sustainable agricultural practices, agriculture experiences productivity increases. Due to effective international cooperation, there is a rapid diffusion of best practices. Increasing forest cover, as well as reversing deforestation and land clearing, become essential to meet net zero targets. People follow a low-meat diet. This is the only setting where global economies meet the Paris Agreement’s goal of keeping global warming to around 1.5°C above preindustrial temperatures, with warming hitting 1.5°C but then dipping back down and stabilizing around 1.4°C by the end of the century. Such an outcome implies that around 5 gigatons of CO<sub>2</sub> should be removed from the atmosphere every year.

### SCENARIO 2 – TO AVOID AT ANY COST (4.4°C)

This is a future where there is no effort to mitigate emissions. Resources are devoted to adapting to the consequences of climate change. CO<sub>2</sub> emissions levels will double by 2050.

In the short term, the global economy grows quickly, GDP per capita is high and people experience a strong open economy where materialism as consumption-orientation is well established. International cooperation is effective for economic development, but not for environmental protection and conservation. Exploitation of fossil fuel resources is intensified with a high usage of oil, coal, and natural gas. Energy investments are directed towards fossil fuels and alternative sources are not actively pursued. Energy efficiency improves only slightly. High population growth and a lower rate of technological development and innovation result in an energy-intensive lifestyle worldwide. There is lower awareness of severe consequences of climate change, resulting in weaker and fewer environmental and sustainable development goals, decarbonizing trends, and no harmonized carbon tax. There are no stringent regulations to reduce climate change globally, air pollution, or toxic waste. In the medium and long term, due to the severe consequences of climate change, the global economy pathway declines and faces negative growth and drawbacks. Large scale displacements of populations take place, with consequences for human security, economic, and trade systems stability.

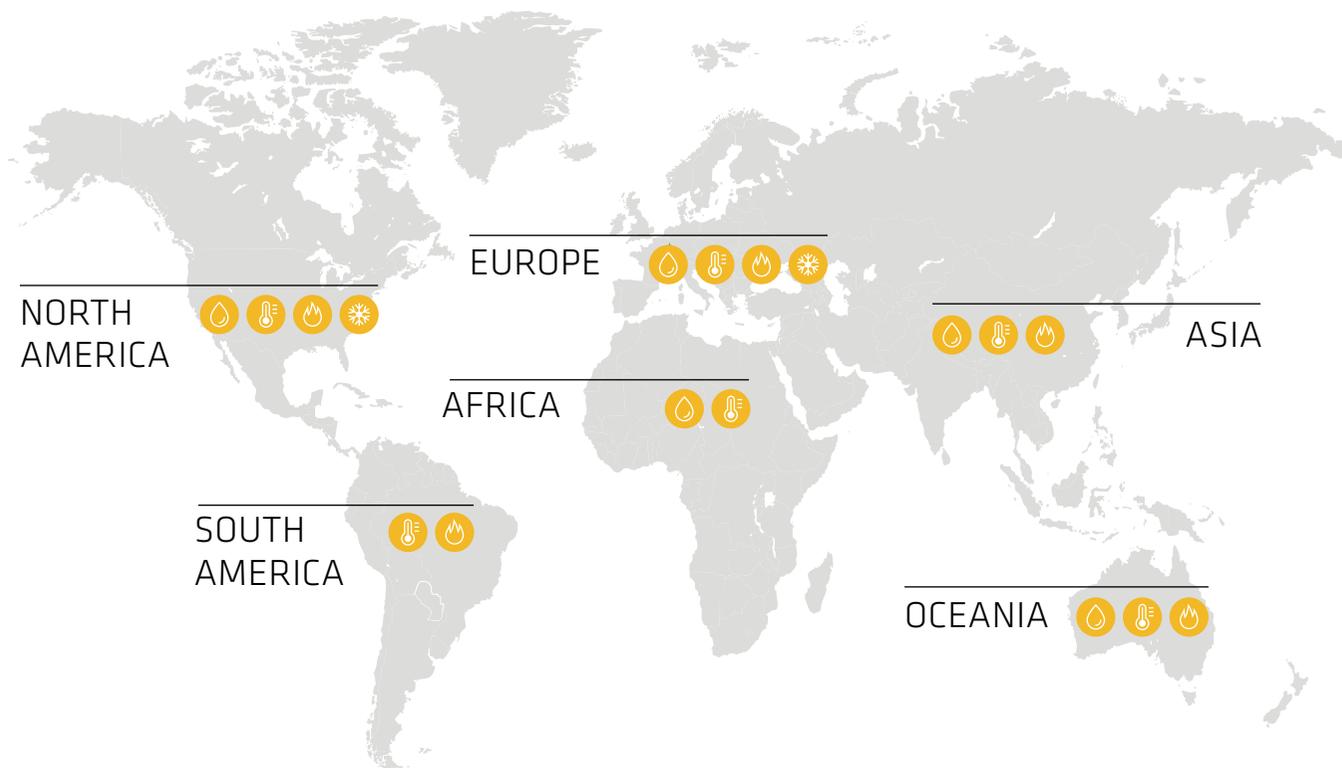
In this scenario, global economies do not shift away from fossil fuels. Land-use regulations are weak, leading to a slow decline in the rate of deforestation. The agricultural sector is highly exploited and animal pollination of both wild and cultivated plant species is under threat due to multiple environmental pressures acting in concert (use of pesticides, invasive species, land-use changes such as habitat fragmentation, and climate change). The use of cropland and grasslands increases, mostly driven by an increasing global population. People follow a meat-rich diet. Loss of biodiversity not only threatens natural ecosystems but also affects economic activities, such as the health sector which heavily relies on natural or synthetic products inspired by nature.

# PHYSICAL CLIMATE-RELATED IMPACT ANALYSIS

According to the latest IPCC Assessment Report (2021), physical risks related to global warming will continue for at least a few decades in both scenarios. On a global scale, physical risks are larger in frequency and intensity with every additional increment of global warming, but also depending on the time horizon. For Sika, with more than 300 production sites globally, physical risks will vary significantly within the different geographical regions in terms of risks and intensity in a 4.4°C trajectory in 2050, as described below.

## PHYSICAL CLIMATE RISKS – 4.4°C TRAJECTORY IN 2050

- Heat Extreme:** Temperatures will increase globally following a 4.4°C trajectory. Currently high temperature regions (north Africa, Middle East and central South America) will see the highest increases. These increases will lead to more frequent heatwaves.
- Wildfire:** The length of the fire season and extreme fire days will increase worldwide with peaks in Europe, in the Middle East, in the United States and in South America.
- Water Extreme:** Extreme and total precipitation increase in India and north Asia (monsoon regions), north Africa and central Europe. Water stress increases globally especially in Africa, Middle East and Asia. Flooding areas will remain similar but with a small increase in the height of events.
- Cold Extreme:** A high decrease will be seen globally, especially in affected regions, Europe and on the American-Canadian border.



In 2022, a first financial quantification of Sika's direct exposure to climate physical risks has been performed. This analysis focused on the comparison of the maximum exposure of the company under two scenarios: a baseline scenario reflecting Sika's current climate exposure versus the exposure in 2050<sup>2</sup> in a 4.4°C trajectory scenario<sup>3</sup>. This assessment focused on quantifying the maximum gross climate risk exposure of Sika's production sites based on 13 different indicators<sup>4</sup>.

The baseline scenario reflects Sika's maximum climate exposure to physical-related risks under current climate conditions. For the analysis, it is assumed that the company's exposure in a 1.5°C scenario would be comparable to this baseline scenario.

## DESCRIPTION OF PHYSICAL RISKS CONSIDERED IN SIKA'S ASSESSMENT

CATEGORY	PHYSICAL CLIMATE RISK	METRIC DESCRIPTION
 <b>HEAT EXTREME</b>	– Heatwave	It represents the sum days per year within a period with at least 6 consecutive days with a daily maximum temperature above the 90th percentile in the region (according to underlying meteorological data).
	– Highest temperature	It represents the annual maximum value of maximum temperature.
 <b>WILDFIRE</b>	– Length of fire season	It represents the number of days exceeding the yearly average.
	– Highest temperature	It represents the number of days with high FWI (Fire Weather Index, indicator used to estimate risk of wildfire) risk.
 <b>WATER EXTREME</b>	– Water Stress	Water stress is an indicator of competition for water resources and defined informally as the ratio of demand for water by human society divided by available water.
	– Riverine Flood	It represents flooding from river overflow and occurs in river basins with an area of at least 10,000 km <sup>2</sup> .
	– Coastal Flood	It represents flooding from storm surges and occurs along coastlines around the world.
	– Total Rainfall	It represents the total yearly rainfall.
	– Heavy Rainfall	It represents the average yearly number of days with precipitation over 20mm.
 <b>COLD EXTREME</b>	– Longest dry spell	It represents the maximum number of consecutive days a year when daily precipitation is under 1mm per day.
	– Frost days	It represents the annual count of days when the daily minimum temperature is below 0°C.
	– Ice days	It represents the annual count of days when the daily maximum temperature is below 0°C.
	– Lowest temperature	It represents the annual minimum value of minimum temperature.

<sup>2</sup> Values for a year are calculated as the average climate value for a 20-year period. 2050 reflects the average of climate values over 2041-2060 period. The current climate exposure is based on the average of climate hazards over the 1986-2015 period.

<sup>3</sup> Based on IPCC RCP 8.5° scenario (4.4°C in 2100).

<sup>4</sup> The following climate events have been considered immaterial for Sika and have not been taken into consideration: wind speed, water seasonal variability, water demand and water supply.

## METHODOLOGY

In assessing the physical impacts of climate change, Sika applied the following methodology based on 2021 data:

- The analysis focused on Sika's manufacturing sites<sup>5</sup> and its related sales and assets. The modeling did not include the sales from third party traded products<sup>6</sup> and parts of the intercompany sales from smaller manufacturing sites. The underlying GPS coordinates of each site were taken into consideration to ensure a precise vulnerability assessment per location and per climate indicator.
  - The financial impact quantification was based on two metrics:
    - internal operations reporting revenues from each manufacturing site were considered, representing the potential business interruption from physical climate risks,
    - insured asset values from each manufacturing site were included in the modeling to assess the potential asset destruction from physical climate risks.
  - With factories located in 101 countries, Sika faces a wide range of physical climate risks depending on the local context. Thus, Regional Operations Managers defined thresholds of when, for a given region<sup>7</sup>, a physical climate risk becomes material. These thresholds were used to quantify the potential impact of business interruption for the 13 different climate risks for each location.
  - For riverine and coastal floods, extreme precipitations, ice days, extreme fire days and length of fire season<sup>8</sup>, a share of impacted asset value was defined by Sika's Corporate Operations Technology Department to define the magnitude of potential asset destruction from each climate risks. The financial impact for each asset was then quantified based on the dedicated climate indicator exceeding the threshold and its defined share of potential asset destruction.
- The quantification of both baseline and 2050 scenarios were based on Sika's current footprint<sup>9</sup> and did not consider any potential acquisition or changes in the business plan. For both scenarios, the quantification reflects the gross climate risk exposure since no mitigation activities have been included in the modeling.
  - Further supply chain impacts were not included in the modeling and therefore corresponding physical climate risks have not been quantified.

<sup>5</sup> The assessment covered all operating factories at the end of 2021, with the exclusion of Hamatite factories (Japan, Thailand, United States, China) and Shenzhen Landun Holding Co., Ltd factories (China). Non-production sites such as warehouses not linked to manufacturing locations, sales offices and HQ have been excluded from the analysis. In addition, Sika's supply chain has not been covered by this assessment.

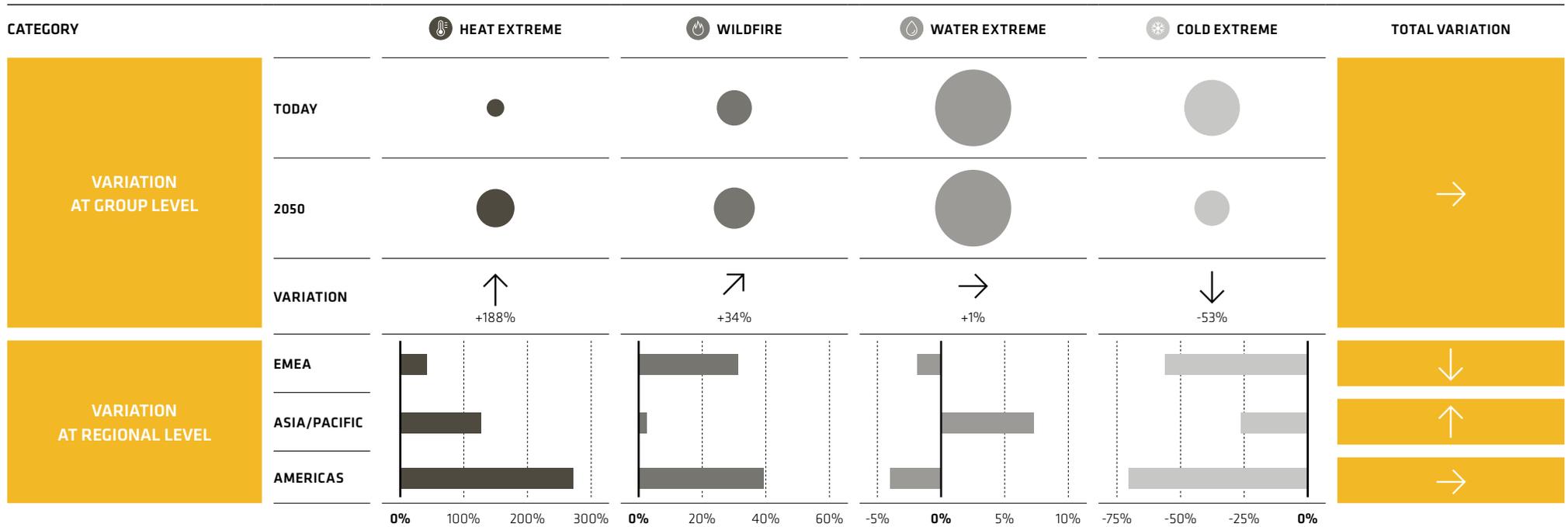
<sup>6</sup> Finished good materials purchased from third parties for resale.

<sup>7</sup> The thresholds have been defined for the following geographical areas: North America, Latin America, Europe, Middle East - Africa and Asia Pacific.

<sup>8</sup> According to the Corporate Operations Technology Department, heat extreme (highest temperature and heatwaves) and water stress don't have any impact on Sika's assets.

<sup>9</sup> Based on 2021 data.

# RISK EVOLUTION OF REVENUES<sup>10</sup>



In the baseline scenario, Sika's maximum gross value at risk from physical climate hazards represents 28% of its factory operation revenues. The maximum risk represents the gross value if all climate events happen at the same time, which is understood to be very unlikely.

From a revenue perspective, the type of climate risks leading to business interruptions in a 4.4°C scenario in 2050 will differ compared to today, but the magnitude of the related financial impacts will not change significantly since the increase of heat extreme and wildfire risks will be compensated by the decrease of Sika's exposure to cold extreme risks:

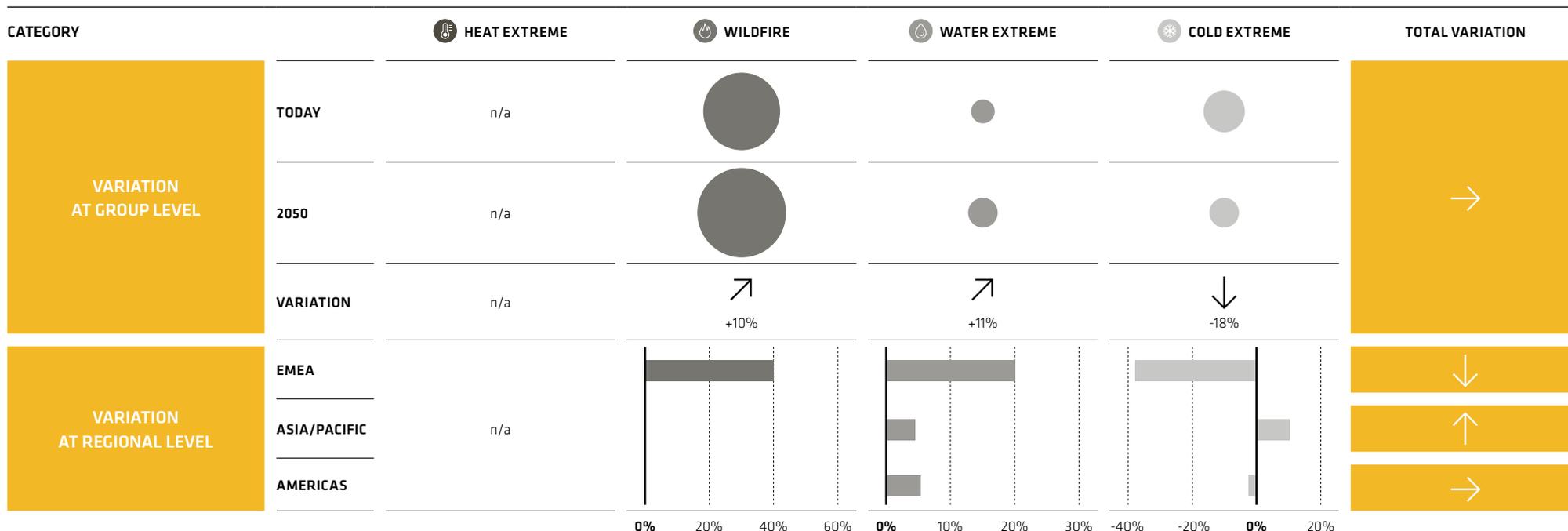
- Heat extreme risks will increase the most (+188%), with the current high temperature regions (North Africa, Middle East and central South America) facing the highest increase and more frequent heatwaves.

- Wildfire risks will also increase (+34%) with the length of the fire season and extreme fire days increasing worldwide. EMEA (Europe and Middle East mainly) and Americas (US and South America mainly) will face the highest peaks.
- Water extreme risks will remain stable (+1%) but still represent the biggest risk for Sika's direct operations compared to today. The intensity of the exposure at regional level will vary with a major increase expected for Asia/Pacific due to extreme and total precipitation increases in India and north Asia monsoon region while the risk will strongly decrease for other regions.
- Cold Extreme risks will strongly decrease (-53%) globally, especially in today's most affected regions, Europe and on the Canadian-American border.

From a regional perspective, Asia/Pacific will be the region that will face the biggest shift in risk exposure (+12%) due to increased heat and water extreme risks. Americas's risk exposure will remain stable (+1%) since the increase in wild fire and heat extreme in Latin America will be compensated by the decrease in cold extreme risks on the American-Canadian border. EMEA's exposure will decrease (-10%), mainly driven by the reduction in cold extreme.

<sup>10</sup> The size of the bubble represents the magnitude of the related financial impacts of each category, based on gross risks.

# RISK EVOLUTION OF ASSETS<sup>11</sup>



In the baseline scenario, Sika's maximum gross value at risk from physical climate hazards represents 4% of the asset value of its manufacturing sites. The maximum risk represents the gross value if all climate events happen at the same time, which is understood to be very unlikely.

From an asset perspective, Sika's exposure to climate risks in a 4.4°C scenario in 2050 is comparable to today's situation, both per type of risk and per region - with slight changes:

- Wildfire risks will slightly increase (+10%) due to a stronger exposure in EMEA. This climate hazard will still represent the biggest risk on Sika's assets considering a high destruction potential.
- Water extreme risks will slightly increase (+11%) - mainly in EMEA and in Americas - but the associated impact will remain quite small on Sika's assets.

- Cold Extreme (ice days) risks related to ice days would decrease (-18%), especially in Europe. EMEA and Asia/Pacific face differences on cold extreme in 2050 compared to today, mainly because sites in Asia/Pacific are more sensitive to ice days compared to the sites in EMEA.

From a regional perspective, APAC will be the region facing the biggest increase in risk exposure (+7%) due to slight increase both on cold extreme and water extreme risks. EMEA's exposure will decrease (-3%) in 2050 since the increase in wildfire and water extreme risks will be compensated by the decrease of cold extreme risks on Sika's regional assets. Americas' risk exposure will remain stable (-0.1%).

<sup>11</sup> The size of the bubble represents the magnitude of the related financial impacts of each category, based on gross risks.

## RISK EVOLUTION AT GROUP LEVEL

Based on the described method of assessing climate related physical risks and their financial implications for Sika, the first analysis demonstrates that the financial impact for Sika would not significantly change in a 4.4°C scenario in 2050 compared to today's baseline. In fact, compared to the baseline, revenues at risk would slightly reduce by -0.2% while the share of assets at risks would remain the same at Group level.

Even if this first analysis did not consider the impact of physical climate-related risks beyond Sika's operation, the company acknowledges that climate-related risks could have an impact on the wider value chain (up and downstream). For example, physical damage of assets or business disruption at supplier levels could lead to shortages and a price increase of raw materials and therefore, increased operational costs for Sika. Next to financial implications of physical climate related risk on revenues and insured asset values, the company acknowledges further potential financial implications such as capital expenditures for mitigation activities, insurance premiums or increased operational expenditures due to wider value chain disruptions.

Sika's climate related physical risks assessment is based on gross values. However, besides the insurance coverage, mitigation measures related to identified physical risks are already in place for certain sites. Sika will investigate this topic over the coming years and further align on additional necessary mitigations within its operations.

# CLIMATE-RELATED TRANSITION IMPACT ANALYSIS

Risks and opportunities arising from efforts to transition to a lower-carbon economy may lead to various policy, legal, technology, and market changes. Addressing mitigation and adaptation requirements related to climate change may pose varying levels of financial impact as well as reputation risks to the company.

Sika's commitment to SBTi and its target to become a net zero company by 2050 will generate various transition risks and opportunities in a 1.5°C aligned scenario. Sika has identified various external factors which create risks and opportunities arising from efforts to address environmental change, including but not limited to abrupt or disorderly introduction of public policies, technological changes, shifts in consumer demand, investor sentiment, and disruptive business model innovation. By offering products and solutions for durable, resource-saving construction and infrastructure, the company can help customers implement measures to prevent and mitigate adverse effects of climate change in all regions.

To limit global warming to 1.5°C, it is expected that significant changes in legislation, policy and technology will be required and will primarily lead to changes in market dynamics impacting Sika's business practices. The efforts required to align with this 1.5°C trajectory represent transition risks and opportunities. In a 4.4°C world however, the significant impact lies mainly in potential business interruption arising from a continued increase in severe physical climate events, which outweigh transition efforts.

## METHODOLOGY

The list of climate-related transition risks and opportunities disclosed in 2021 for both scenarios analyzed in 2022 has been reviewed with an internal cross-functional team, including Procurement, Marketing and Target Markets, R&D, Controlling, Communication & Investor Relations.

## TRANSITION RISKS

	“Most optimistic” 1.5°C	“To avoid at any cost” 4.4°C
<b>POLICY &amp; LEGAL</b>	<ul style="list-style-type: none"> <li>– <b>Pricing GHG Emissions</b> Increasing costs (either in the form of carbon tax, direct emission charge or emissions trading scheme) in sourcing of raw materials and in manufacturing and products distribution activities around the world.</li> <li>– <b>Climate related reporting standards and requirements</b> Increasing costs (employees, consulting services, IT investments) due to additional reporting requirements and more stringent due diligence processes.</li> <li>– <b>Sustainable products regulations and mega-trends</b> Sika business model must consider new mega-trends and regulations which lead to additional costs for developing or applying innovative technologies and identifying or sourcing alternative raw materials. In addition, changes in sustainability regulation create risks that the sustainability ranking of materials may change, leading to frequent reformulation needs and supplier changes.</li> <li>– <b>Litigation liabilities</b> Failure to meet new sustainability regulations, combined with a global transparency obligation, causes significant legal and reputational damage, loss of investors and customers globally, and related financial losses.</li> <li>– <b>Failure to meet Net Zero Commitment</b> Due to elevated risk of climate change litigation Sika must thoroughly select suppliers and cannot partner with those who are not fully aligned with the decarbonization plan. If suppliers face such climate litigations, Sika might have to terminate the partnership, incurring supply chain disruptions and potential higher costs from aligned suppliers.</li> </ul>	<ul style="list-style-type: none"> <li>– <b>Product performance warranty</b> If Sika products and solutions underperform due to extreme climate events and conditions, Sika might be exposed to a higher number of warranty claims from customers, impacting Sika’s reputation.</li> </ul>
<b>TECHNOLOGY</b>	<ul style="list-style-type: none"> <li>– <b>Product disruption</b> To ensure that most of Sika's products become low-carbon and circular (extended product responsibility), Sika faces additional costs/expenditure in R&amp;D, quality, manufacturing, marketing, and customer services. It requires an active product portfolio management approach for acquired and own product lines to fast replace less sustainable offerings. Without such additional investments, Sika faces difficulties to secure its market position and keep the pace in the low-carbon innovation race fostered by a strong and aggressive competition from an increasing number of stakeholders (traditional and disruptive competitors, startups, universities).</li> <li>– <b>EHS or performance issues from alternative materials</b> There is considerable technical and EHS risk from fast introduction of new sustainable materials that are insufficiently known and tested for their toxicity and long-term behavior and may have strong variations due to missing quality standards or supply chain gaps.</li> </ul>	

	“Most optimistic” 1.5°C	“To avoid at any cost” 4.4°C
<b>MARKET</b>	<ul style="list-style-type: none"> <li>– <b>Raw material prices</b> The increasing taxation of CO<sub>2</sub> intensive materials and increasing costs of suppliers - due to their own transitions - results in a significant increase in raw material prices.</li> <li>– <b>Decrease in raw material stock</b> Due to limited natural resource availability or a reduction in fossil-based chemicals, input material resources become scarce, leading to higher procurement costs or supply chain.</li> <li>– <b>Alternative raw materials</b> Greater competitiveness of alternative raw materials and higher prices due to too high demand compared to availability.</li> <li>– <b>Electricity supply instability</b> Electricity supply issues are expected depending on daytime or season due to lack of base load and storage capacity from renewable electricity production, resulting in unsteady prices and supply disruption.</li> <li>– <b>Increase in electricity prices</b> A structural shift in electricity production towards renewables, together with increased gas prices, leads to increased electricity costs.</li> <li>– <b>Increase in fuel/energy for transportation and shipping</b> Higher costs for operations as a result of increased regulations on fuel and energy prices in the transportation and shipping side of the supply chain. Global international supply chains may become increasingly economically unfeasible for low cost (bulk) materials.</li> <li>– <b>Transition towards a low-carbon economy</b> The market wants to move to a low carbon economy, higher investments are needed to decarbonize Sika’s processes (sourcing, manufacturing, packaging, and distribution) and higher spending for transitioning towards alternative raw materials, renewable energy sourcing, and low-carbon modes of distribution are required. Higher CapEx costs to increase production footprint to bring finished products closer to end users and reduce the related logistics costs are to be considered.</li> <li>– <b>Customer behavior and preferences</b> Due to strong customer demand for low-carbon solutions, Sika must shift its focus towards sustainable solutions very rapidly, which will lead to transitional R&amp;D and operational costs. If the transition is too slow, customers will move to competitors, leading to a loss of market share for Sika. Market demand to generate “green” certificates and quantify product sustainability benefits will add extra costs that may not be recovered in product pricing. Additionally, not having said certificates puts Sika’s business at risk if competitors have more compelling sales and marketing documentation. Market dynamics (e.g., inflationary, recessionary) will have an influence on the willingness to invest, customers might only consider solutions that will not add costs on their side.</li> </ul>	<ul style="list-style-type: none"> <li>– <b>Lack of adaptation to new market needs</b> Lack of capacity to adapt Sika’s business model and portfolio towards increased needs for climate adaptation products and solutions in the construction and building industry, leading to market share losses in specific target markets.</li> <li>– <b>Decrease in raw material stock</b> Exploitation of conventional and carbon intensive raw materials leads to raw material scarcity and consequential prices increase.</li> <li>– <b>Open market</b> The global market is mostly focused on economic growth, and a strong open economy with lack of regulations leads to harsh competition and instability regarding profitability. Sika faces competition from companies that sell products at lower prices without considering social and environmental standards/costs.</li> <li>– <b>Customer behavior and preferences</b> Lack of customer awareness/education and/or unwillingness to pay higher prices for more sustainable/durable products. This is further impacted by inflationary/recessionary markets where market conditions limit investment.</li> </ul>
<b>REPUTATION</b>	<ul style="list-style-type: none"> <li>– <b>Decrease in stock prices</b> In case Sika is not able to meet the claimed targets and is decarbonizing at a slower pace compared to its competitors, the reputation of the company might be affected, causing a decrease in stock price.</li> </ul>	<ul style="list-style-type: none"> <li>– <b>Lack of cooperation</b> Fierce competition among companies and countries reduces the possibility to cooperate with global, regional, and local stakeholders (customers, institutions, universities, etc.) to develop solutions for the construction, transportation, and automotive sectors which improve performance and adapt to climate change impacts.</li> </ul>

## TRANSITION OPPORTUNITIES

	“Most optimistic” 1.5°C	“To avoid at any cost” 4.4°C
<b>ENERGY SOURCE</b>	<ul style="list-style-type: none"> <li>– <b>Return on investment in energy efficiency</b> Retrofitting buildings with energy efficient measures, efficiency optimization of production and distribution processes, and introduction of self-generated electricity sources at relevant factories (e.g., solar, wind, district heating/geothermal).</li> <li>– <b>Low-carbon energy incentives</b> Sika makes use of low-carbon energy offerings where policies are introduced to incentivize the renewable energy sector. Sika benefits from supportive local/regional/global incentives which can reduce operational costs.</li> <li>– <b>Self-production of electricity</b> As part of its decarbonization plan, Sika increases its capacity of renewable energy self-production and reduces its dependency on market prices fluctuations for electricity.</li> </ul>	
<b>MARKETS</b>	<ul style="list-style-type: none"> <li>– <b>Access to new markets</b> Transitioning industries and emerging adaptation practices open new markets for Sika's products (e.g., adaptation infrastructure, low-carbon transportation). Strong customer preferences for durable buildings and infrastructures due to extreme weather events, increasing the demand for performance products and solutions in the construction sector, strengthening Sika's positioning in the building materials market. That would be an important asset for government tenders in infrastructure projects for example.</li> <li>– <b>Incentives for the application of low carbon products</b> Sika builds low-carbon product offerings where policies are introduced to incentivize the application of low-carbon products. The company benefits from supportive local/regional/global incentives to develop low-carbon products and solutions.</li> </ul>	<ul style="list-style-type: none"> <li>– <b>Access to new markets</b> In the construction and infrastructure industry, due to the exacerbated severity and frequency of climate-related physical risks at Group level, the market demand for products and solutions that facilitate adaptation to climate change increases. It strengthens Sika's positioning in the market.</li> </ul>
<b>PRODUCTS &amp; SERVICES</b>	<ul style="list-style-type: none"> <li>– <b>General innovation towards development of low-carbon solutions</b> Strong in-house innovation and entrepreneurial culture foster the development of breakthrough low-carbon products and solutions. An increase in demand for low-carbon solutions reinforces Sika's market share for those solutions that help to prevent and mitigate adverse effects of climate change. Various external factors encourage new approaches in product development/optimization that lead to other upstream or downstream savings (reduced raw material consumption, reduced waste, reduced material shipping weight, lower production costs, etc.). Additionally, the broad deployment of Sika's SPM concept offers key differentiation potential and reinforces Sika's positioning resulting in increased market shares and revenues.</li> <li>– <b>Development of new technologies</b> Availability of innovative technologies at supplier level can enhance sika's products and help Sika to develop new sustainable solutions leads to increased revenues for Sika. New technologies (at supplier level or in-house) give Sika the opportunity to enter new customer fields in new or established markets.</li> </ul>	

	“Most optimistic” 1.5°C	“To avoid at any cost” 4.4°C
<b>RESOURCE EFFICIENCY</b>	<ul style="list-style-type: none"> <li>– <b>Changes in source material</b> Changes to low-carbon inputs or alterations of current material inputs enable revenue increase by avoiding high carbon taxes or reducing OPEX, respectively.</li> <li>– <b>Increased circularity of materials</b> Introduction of circular business practices and further developments in reuse and recycling of products reduces Sika's environmental and climate impact (i.e., waste and emission reduction) and reduces the need to rely on virgin raw materials, which reduces raw material costs. In addition, it would improve Sika's potential to access affordable quality materials which are becoming increasingly scarce in the hunt for sustainability.</li> <li>– <b>Return on investment in water efficiency</b> Reducing water used in products as a raw material and optimizing efficient production and distribution processes leads to cost reduction. Additionally, reducing water in products could reduce the weight of products which has positive implications on transportation emissions.</li> </ul>	
<b>RESILIENCE</b>	<ul style="list-style-type: none"> <li>– <b>Decentralization</b> Due to high carbon pricing and transportation costs, shipping of goods between continents is reduced. Sika's decentral organization and local production represent an important competitive advantage.</li> <li>– <b>Product and process diversity</b> Diversifying its products' portfolio towards more sustainable solutions, Sika reduces its dependencies on fossil fuel, and significantly increases its business resilience and reputation.</li> <li>– <b>Alternative revenue streams</b> Shifting to alternative revenue streams such as service models, digital tools, product leasing/maintenance models could give Sika access to new markets and related sales..</li> </ul>	

Alongside its Net Zero commitment, Sika will further analyze the financial and operational impact of climate-related transition risks and opportunities listed in the tables above. All the related findings will contribute to Sika's future TCFD reporting.

# TCFD MAPPING TABLE

Areas	Recommended Disclosures	Annual report reference pages/links
<b>Governance</b> Disclose the organization's governance around climate-related risks and opportunities.	a) Describe the Board's oversight of climate-related risks and opportunities.	p.25–26 <a href="#">▶ Board of Directors</a>
	b) Describe management's role in assessing and managing climate-related risks and opportunities.	p.25–26 <a href="#">▶ TCFD Report 2022</a>
<b>Strategy</b> Disclose the actual and potential impacts of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning where such information is material.	a) Describe the climate-related risks and opportunities the organization has identified over the short, medium, and long term	p.33 <a href="#">▶ TCFD Report 2022</a>
	b) Describe the impact of climate-related risks and opportunities on the organization's businesses, strategy, and financial planning.	p.33 <a href="#">▶ TCFD Report 2022</a>
	c) Describe the resilience of the organization's strategy, taking into consideration different climate-related scenarios, including a 2°C or lower scenario.	p.33 <a href="#">▶ TCFD Report 2022</a>
<b>Risk management</b> Disclose how the organization identifies, assesses, and manages climate-related risks.	a) Describe the organization's processes for identifying and assessing climate-related risks.	p.33 <a href="#">▶ TCFD Report 2022</a>
	b) Describe the organization's processes for managing climate-related risks.	p.25–26
	c) Describe how processes for identifying, assessing, and managing climate-related risks are integrated into the organization's overall risk management.	p.26
<b>Metrics and targets</b> Disclose the metrics and targets set to manage relevant climate-related risks and opportunities where such information is material.	a) Disclose the metrics used by the organization to assess climate-related risks and opportunities in line with its strategy and risk management process.	<a href="#">▶ TCFD Report 2022</a>
	b) Disclose scope 1, scope 2, and, if appropriate, scope 3 greenhouse gas (GHG) emissions, and the related risks.	p.90–92 <a href="#">▶ Sika Methodology for Scope 3 Emissions Calculation</a>
	c) Describe the targets set by the organization to manage climate-related risks and opportunities and performance against targets.	p.19, 187