

# Environmental Stewardship (continued)

## TCFD and Climate Risk Management Approach

The climate risks included in our Enterprise Risk Management (ERM) undergo the risk management approach mentioned hereunder.

<b>TCFD and Climate Risk Management<sup>65</sup></b>	<b>Short term (0-5 years)</b>	<b>Medium term (5-10 years)</b>	<b>Long term (10-30 years)</b>
<p>In alignment with the Task Force on Climate-related Financial Disclosures (TCFD) Framework, we have conducted a detailed physical and transition climate risk assessment, including scenario analyses. The risk assessment included physical climate risks and transition-related risks to the business. Our initiatives align with leading frameworks and guidelines, such as the TCFD and the Carbon Disclosure Project (CDP). Sun Pharma's TCFD methodology is grounded in rigorous climate risk studies, GHG inventorisation, and analysis of existing institutional arrangements. We are using both qualitative and quantitative climate-related scenario analysis.</p> <p>We have covered short-term, medium-term, and long-term time horizons in our climate risk assessment.</p>	<p>The short-term climate risks are defined for a period of 0 to 5 years and are addressed through various initiatives within the organisation, including energy efficiency and renewable energy projects. We have also set environmental targets for 2025 (considering 2020 as the baseline year) in alignment with our climate action strategy.</p>	<p>The medium-term climate risks are defined for a period of 5 to 10 years and are expected to be addressed through various initiatives within the organisation including, energy efficiency and renewable energy projects. We have also set a target of 35% reduction in absolute emissions (Scope 1 and Scope 2) by 2030, considering the baseline year of 2020 in alignment with our climate action strategy.</p>	<p>While the long-term horizon presents inherent uncertainties, we proactively address this challenge by integrating our climate action plans into our business growth strategy. By doing so, we ensure that sustainability and climate resilience are ingrained in our operations, allowing us to adapt effectively to emerging situations, including unforeseen events like climate-related supply chain disruptions.</p>

## TCFD – Physical Risks and Scenario Analysis

We analysed the physical risks for all of Sun Pharma's geographical locations as well as its value chain. This assessment encompassed our manufacturing locations, offices and upstream strategic supplier's manufacturing sites, and critical downstream warehouses. Our assessment process utilised globally recognised models to assess acute and chronic physical risks associated with extreme temperatures, droughts, flooding, thunderstorms, precipitation, wildfires, and wind velocity.

<p><b>Acute Physical Risks</b></p> <p>We have identified potential acute physical risks that may challenge our operations and value chain. Subsequently, we will develop location-specific mitigation plans to address these risks effectively. The primary objective of our physical climate risk assessment was to understand exposure to acute physical risks and minimise the impact of extreme weather events and other climate-related hazards on our operations and supply chain. By proactively addressing these risks, we focus on ensuring the continuity of our operations and mitigate potential damages arising from acute physical impacts.</p>	<p><b>Chronic Physical Risks</b></p> <p>The primary objective of our chronic physical climate risk assessment was to understand exposure to risks such as precipitation patterns, extreme temperature, and water availability and minimise its impact on our direct operations and supply chain. Additionally, we used WWF's Water Risk Filter Tool to evaluate water stress and availability risks at our manufacturing and R&amp;D sites.</p>
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We studied the historical trends and future projections of the above-mentioned various climate hazards impacting our business locations.

<sup>65</sup>GRI 201-2

## Climate-related Scenario Analysis

We studied the historical trends and future projections of various climate hazards with potential impacts on our business locations. For future hazard trends, our climate risk assessment used the Shared Socioeconomic Pathways (SSPs) assessment using SSP 1, 2, and 5 scenarios until the

year 2100. For this analysis, we used these scenarios and the Sixth Assessment Report of the United Nations Intergovernmental Panel on Climate Change (IPCC), published in 2022. The data allows physical climate risk to be assessed every five years from the present to 2100.

The SSPs are based on five narratives describing broad socioeconomic trends that could shape future society. We considered SSP 1, 2, and 5 climate scenarios for Sun Pharma's physical risk assessment for all locations.

## SSP – Scenarios

### SSP 1:

Sustainability – Taking the Green Road

- Low challenges to mitigation and adaptation
- Shift to sustainable practices results in rapid technological development, relative global equality of income and environmental sustainability
- Emissions continue to increase through the end of the century, with resulting warming of more than 1°C by 2100

### SSP 2:

Middle of the Road

- Medium challenges to mitigation and adaptation
- Decisive mitigation actions to reduce emissions to half of current levels by 2080
- Emissions will continue to increase through the end of the century, with warming of more than 2 degrees Celsius by 2100

### SSP 5:

Fossil-fueled Development – Taking the Highway

- High challenges to mitigation, low challenges to adaptation
- Continuation of business as usual with emissions at current rates
- High-growth energy-intensive emissions result in warming of more than 4 degrees Celsius by 2100



The above three scenario analyses gave us insights into various long-term climate risks across our value chain. Our assessment process utilised globally recognised models to assess acute and chronic physical risks associated with extreme temperatures, droughts, flooding, thunderstorms, precipitation, wildfires, and wind velocity.

## Transition Risks and Scenario Analysis

We have conducted a Transition Risks and Scenario Analysis until 2050 to assess the risks to the business posed by upcoming/ anticipated changes in the policies, regulations, markets, and technologies due to climate change

impacts. We have used Network for Greening the Financial System (NGFS) scenarios developed in partnership with an academic consortium from the Potsdam Institute for Climate Impact Research (PIK), International Institute for Applied Systems Analysis (IIASA), University of Maryland (UMD), Climate Analytics (CA) and Eidgenössische Technische Hochschule Zürich (ETH) for this assessment.

The transition pathways for the NGFS Scenarios are differentiated by several key design choices relating to long-term temperature targets, net-zero targets, short-term policy, overall policy coordination and technology availability.

# Environmental Stewardship (continued)

## Different Transition Scenarios

### Nationally determined contributions (NDCs) scenario:

This scenario foresees India's NDC is implemented fully and aligns the business' emissions as per the NDC trajectory.

### Below 2°C scenario:

This scenario gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2°C.

### 'Net Zero 2050' scenario:

This scenario limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero by 2050.

### Delayed transition scenario:





This scenario assumes a disorderly transition where emissions until 2030 will follow the business as usual (BAU) scenario, and then

it will suddenly start declining to restrict global warming below 2°C.

### Divergent net zero scenario:

The world will reach net zero around 2050 but with higher costs due to divergent policies introduced across sectors, leading to a quicker phase-out of fossil fuels.

## Addressing Transition Risks

Transition Risk	Impact	Risk Level
 <p><b>Policy and Legal Risks</b></p>	<p>Currently, there is no carbon price/tax implemented in India. Thus, for Sun Pharma, regulatory implications from a policy perspective are low. On the other hand, our units based outside India might have some regulatory implications on their operations due to different carbon prices/tax policies. We are proactively implementing initiatives for reducing direct and indirect GHG emissions for multiple sites worldwide, aligning with our target for reducing GHG emissions (Scope 1 and Scope 2) by 35% by 2030.</p>	Low – Medium
 <p><b>Market Risk</b></p>	<p>With an increase in cost for the essentials (power/electricity rates at local sites and cost of raw materials), Sun Pharma needs to transition to renewable energy sources. It is important to note that as the Indian Government currently has no plans to phase out coal, this scenario considers the price of power to not increase significantly. This is similar to the NDC scenario. However, the other three low-carbon transition scenarios mentioned above may steeply increase prices, especially post-2030. These three scenarios indicate the dissuasion of using coal as a source of energy. Sun Pharma's units worldwide would be affected as policies would impact the market price of power to an extent.</p>	Low – Medium
 <p><b>Technology Risk</b></p>	<p>Technological improvements or innovations that support the transition to a lower-carbon, energy-efficient economic system can have a significant impact on organisations. The percentage share of projected renewable energy sources would grow in the next few years, posing a lower transition risk. Renewable energy constitutes ~32% of our total energy usage. We are consistently working to increase the share of renewable energy in our overall energy mix. We have recently installed a Hybrid (Solar + Wind) power plant. We have also installed solar rooftops at various locations and are consistently working towards the upgradation of our boilers to use biomass.</p>	Low
 <p><b>Reputational Risk</b></p>	<p>Climate change has been identified as a potential source of reputational risk tied to changing customer or community perceptions related to climate risks. Our reputational risks are low because of our commitment to GHG reduction and focus on renewable energy. We have set targets for the reduction of GHG emissions (Scope 1 and Scope 2), reduction of water consumption and co-processing of our hazardous waste. Furthermore, we are increasing the share of renewable energy in our overall energy consumption and are also focusing on various other energy efficiency initiatives. The Company has been implementing Zero Liquid Discharge (ZLD) systems at many manufacturing facilities to alleviate any negative environmental impact through wastewater generated. Currently, 16 manufacturing locations have ZLD status.</p>	Low

## Physical Climate Risk Adaptation

### Energy Efficiency

We aim to reduce carbon emissions (Scope 1 and 2) by 35% by 2030, considering the baseline of 2020. To achieve these targets, we have introduced many energy-saving initiatives like the installation of an energy-efficient zero purge refrigerant type air dryer, the installation of an energy-efficient cooling tower, the use of smart and efficient heating ventilation and air conditioning (HVAC) equipment, replacement of chilled water (CHW) and hot water (HW) pumps with an energy-efficient pump equipped with IE3 motor, among others. These measures have helped us reduce fuel consumption, optimise water usage and shrink our carbon footprint for many sites worldwide.

### Water Management

Since droughts and water scarcity are expected to be exacerbated as a result of the physical impacts of climate change, we are exposed to water risks at some of our sites which have the potential to temporarily

disrupt operations and affect our revenues. To comprehensively assess water risk, we have utilised both the WWF Water Risk Filter and Central Ground Water Board (CGWB) analysis for all our locations. For our sites in India, we relied on the CGWB analysis to identify water-stress areas. In contrast, for locations outside of India, we employed the WWF Water Risk Filter to identify water stress sites. We have taken a target to reduce our water consumption by 10% by the year 2025, compared to baseline year of 2020.

### Metrics and Targets

We are committed to reducing our carbon footprint, and to accomplish this goal, we have implemented several carbon and energy-related initiatives to manage our GHG emissions. All these initiatives aim to realise our ambitious target of achieving a 35% reduction in absolute GHG emissions for Scope 1 and Scope 2 by 2030 compared to the 2020 baseline.

Scope Covered by the Target  
**Scope 1 + Scope 2**

#### Target Timeframe

Base Year	Target Year
<b>2020</b>	<b>2030</b>

#### Base Year Emissions

**451,068** MT CO<sub>2</sub>

#### % Reduction Target from Base Year

**35%**

