Climate Stewardship

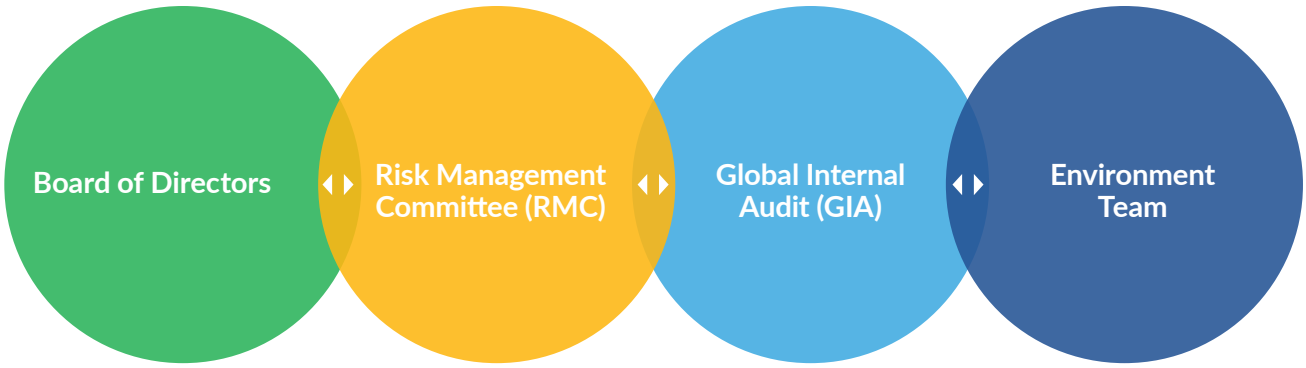
As a leading pharmaceutical company, we are aware of our ecological footprint, as well as our impact on and dependence upon the ecosystem in which we operate. We are committed to leveraging our environmental management systems to mitigate the environmental risks associated with our business operations, while continuously improving our performance and building resilience.

We aim to reduce carbon emissions year on year and promote the use of renewable energy.

Climate Governance

At Sun Pharma, we implement risk management using a cross-functional approach that promotes collaboration for addressing and managing risk incidents, supported by a multi-layered governance structure.

Our Multi-layered Governance Structure



Roles and Responsibilities

Board Oversight

The Board of Directors has constituted a Board-level Risk Management Committee (RMC) tasked with comprehensive oversight of risk management. Chaired by the Chairman and Managing Director (CMD), this committee is responsible for assessing our risk profile and opportunities, including the identification and monitoring of significant climate-related risks and opportunities.

The RMC conducts strategic reviews of risk management policies and measures performance against business objectives using the enterprise risk management (ERM) framework. With extensive corporate experience, our CMD also guides the Company's ESG strategy and regularly oversees climate-related initiatives, including major projects and capital expenditures. The environmental team provides continuous updates to the CMD on these critical areas.

Management Roles and Responsibilities

The Environment team manages the implementation, monitoring, and assessment of our climate change initiatives, and keeps the Chairman and Managing Director (CMD) informed on climate-related matters.

Climate Risk Management Approach

Climate Risk Management[64]

We have conducted a comprehensive assessment of physical and transition climate risks, including scenario analysis aligned with the Task Force on Climate-Related Financial Disclosures (TCFD) framework. This assessment assessed and identified physical climate risks and transition-related climate risks impacting the business. Qualitative and Quantitative analysis were employed during scenario analysis. Sun Pharma's climate risk management approach is based on thorough climate risk assessments, GHG inventorisation, and evaluating current institutional mechanisms.

Through a comprehensive assessment of climate risk assessment, we have covered short, medium and long-term time horizons.

Short-term (0-5 years)	Medium-term (5-10 years)	Long-term (10-30 years)
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.	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 carbon emissions (Scope 1 and Scope 2) by 2030, considering the baseline year of 2020 in alignment with our climate action strategy.	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. We have also set a target to become a Net Zero company by 2050.

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 included our offices, manufacturing sites, strategic upstream suppliers, and critical downstream warehouses. Utilising globally recognised models, we analysed acute and chronic risks from droughts, extreme temperatures, thunderstorms, floods, wildfires, precipitation, and wind velocity.

Acute Physical Risks

We have identified potential acute physical risks that could adversely impact our operations and value chain. To effectively manage these risks, we plan to implement location-specific mitigation plans. The main objective of evaluating physical climate risk was to assess our vulnerability to immediate threats and mitigate the impact of weather-related incidents on our operations and supply chains. By proactively addressing these challenges, we aim to ensure the sustained continuity of our operations and minimise damages arising from the acute physical impacts.

Chronic Physical Risks

Understanding our exposure to chronic physical risks like precipitation patterns, water availability, and extreme temperature through our physical climate risk assessment helps us minimise its impact on our direct supply chain and operations. We evaluate water stress risks at our manufacturing and research sites using WWF's Water Risk Filter Tool. The climate risk assessment study identified our manufacturing sites in Sikkim as vulnerable to flash flooding. We estimate the financial implications of flooding of Sikkim sites to be ₹ 700-809 Million. In late 2023, an adverse weather event led to large-scale flooding in Sikkim which damaged public infrastructure validating our climate risk study. Our sites remained operational due to their strategic terrain. However, we will continue to consider Sikkim sites critically important and invest in mitigation measures.

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Climate Stewardship

Climate-related Scenario Analysis

We analysed historical trends and future projections of various climate hazards with potential impacts on our business locations. To understand the future hazard trends, the Shared Socioeconomic Pathways (SSPs) assessment using SSP 1, 2, and 5 scenarios until the year 2100 were used. The analysis used scenarios from the IPCC Sixth Assessment Report (SAR) published by the United Nations Intergovernmental Panel on Climate Change in 2022. The physical climate risk data has a temporal resolution of every five years from the present till 2100. The SSPs are based on five narratives that describe broad socioeconomic trends likely to influence future society.

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°C 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°C by 2100

The scenario analysis provided findings on various long-term climate risks across the value chain. The evaluation process used globally recognised models to evaluate acute and chronic risks related to extreme temperatures, flooding, thunderstorms, droughts, precipitation, wildfires, and wind velocity.

Transition Risks and Scenario Analysis

We conducted a Transition Risk and Scenario Analysis till 2050 to evaluate potential risks to our business arising from anticipated changes in policies, regulations, markets, and technologies driven by the impacts of climate change. We used the Network for Greening the Financial System (NGFS) Scenarios created in partnership with an academic association from the Potsdam Institute for Climate Impact Research (PIK), the International Institute for Applied Systems Analysis (IIASA), the University of Maryland (UMD), Climate Analytics (CA) and the Eidgenössische Technische Hochschule Zürich (ETH) for this assessment.

The transition pathways for NGFS Scenarios are differentiated by many key design choices of Net Zero targets, long-term temperature targets, short-term policy, technology available, and overall policy coordination.

Different Transition Scenarios as Detailed in the NGFS

Nationally Determined Contributions (NDCs) scenario

The scenario envisions India's NDC being executed completely and aligns with the business' emissions 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

The scenario follows a haphazard transition where the business as usual (BAU) scenario will be followed until 2030 after which it will suddenly start to decline to restrain global warming below 2°C.

Divergent Net Zero scenario

By 2050, the world will reach the Net Zero target 2050, but with increased costs due to various policies introduced across sectors, resulting in a quicker phase-out of fossil fuels.

Climate Stewardship

Addressing Transition Risks

Transition Risk	Impact	Risk Level
Policy and Legal Risks	Currently, India does not have a carbon price/tax resulting in minimal regulatory implications for Sun Pharma from a policy perspective. However, our operations outside India may be subject to different carbon prices/ tax policies resulting in potential regulatory impacts. To mitigate these challenges, we are actively implementing initiatives aimed at reducing direct and indirect Greenhouse Gas (GHG) emissions across our global sites, in adherence to our targets to reduce absolute Carbon emissions (Scope 1 and Scope 2) by 35% by 2030.	Low - Medium
Market Risk	Given the rising costs of essential resources at local sites such as electricity/ power, and raw materials, Sun Pharma recognises the need to transition to renewable energy sources. An important consideration is that the Indian Government currently has no immediate plans to phase out coal; hence, the scenario considers the power prices will remain relatively stable aligning with India's NDC target. In contrast, the other three low-carbon transition scenarios mentioned above suggest a significant increase in energy costs particularly after 2030 due to coal usage reduction. These policy changes will likely impact the market price of electricity affecting Sun Pharma's global operations.	Low - Medium
Technology Risk	Technological advancement and innovation aid the transition to lower-carbon and energy-efficient economic systems, significantly benefiting the Company. In the upcoming years, the share of renewable energy in overall energy consumption is projected to increase, posing a lower transition risk. Currently, renewable energy accounts for approximately 38% of our total energy usage and we are working towards further increasing its share as a part of our total energy mix. We have installed captive hybrid (wind+solar), solar, and wind power plants, and solar rooftops at various locations. Additionally, we are actively upgrading our boilers to utilise biomass energy to further advance our sustainability efforts.	Low
Reputational Risk	Climate change presents a potential reputational risk, driven by evolving customer or community perceptions of climate-related risks. However, our commitment to Green House Gas (GHG) reduction and focus on renewable energy mitigates these risks. We have established targets for reducing carbon emissions (Scope 1&2), decreasing water consumption, and co-processing hazardous waste. Additionally, we are enhancing the share of renewable energy in our overall energy mix and pursuing various energy efficiency incentives. The Company has implemented Zero Liquid Discharge (ZLD) systems at various manufacturing facilities to minimise negative environmental impact by wastewater generation. Currently, 16 of our manufacturing sites have achieved ZLD status.	Low

Physical Climate Risk Adaptation

Energy Efficiency

We are committed to reducing our carbon emissions (Scope 1&2) by 35% by 2030 using 2020 as our baseline. To achieve this goal, we have implemented several energy-saving initiatives like installing 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 successfully reduced fuel and power consumption, optimised water usage, and carbon footprint across multiple sites globally.

Water Management

As droughts and water scarcity intensify due to climate change, we recognise that some of our sites may face water-related risks disrupting operations and impacting revenues temporarily. To assess these risks, we used the WWF Water Risk Filter and Central Ground Water Board (CGWB) analysis at all our sites. In India, we focused on CGWB analysis to identify water-stressed areas, while for sites outside India, we applied the WWF Water Risk Filter. We have set a target to reduce our water consumption by 10% by 2025, from the baseline year of 2020.

Metrics and Targets

We have launched several initiatives aimed at carbon management and energy efficiency to reduce GHG emissions and decrease our carbon footprint. These initiatives aim to help achieve a 35% reduction in absolute Scope 1 and Scope 2 carbon emissions by 2030 compared to the 2020 baseline year.

We have identified several climate-related opportunities to significantly reduce our energy costs. We estimate to save around ₹ 1,604.5 Million annually once all the planned projects are commissioned. We expect to invest approximately ₹ 5,721.5 Million to implement various energy efficiency and renewable energy projects. Some projects planned are hybrid power (Solar+Wind), solar rooftop projects, converting boiler fuel from non-renewable fuel to biomass, upgrading heat pumps, energy efficient chillers, compressors and pumps. In addition to the above projects, we are exploring various projects for carbon offsets to neutralise our residual emissions.

Reduction Target

Scope Covered by Target
Scope 1 + 2

Base Year
2020

451,068 tCO_2e
Base year emissions

Target Year
2030

35%
Reduction in absolute Scope 1 and Scope 2 carbon emissions