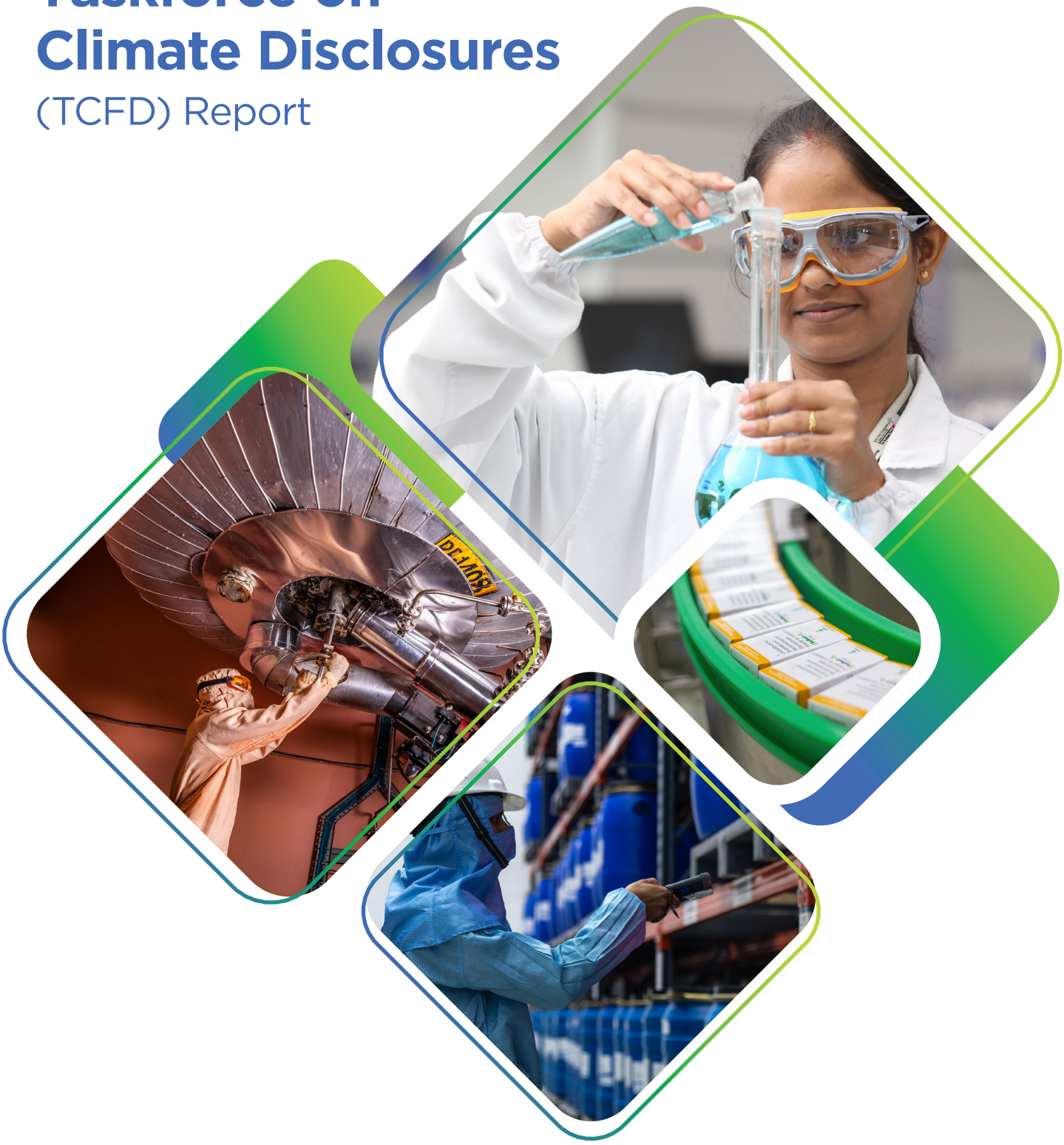
LUPIN

Taskforce on Climate Disclosures

(TCFD) Report



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About Us

Who We Are

Founded in 1968 by Desh Bandhu Gupta, Lupin is today one of the leading pharmaceutical companies in India. Headquartered in Mumbai, India, we have expanded our footprint to a global level across the U.S., LATAM, APAC and EMEA regions, operating in over 100 countries and offering a diverse portfolio of over 1,000 products. Our position as an integrated pharmaceutical company is built on the backbone of cutting-edge research, world-class manufacturing facilities and a truly global supply chain. We are a multinational pharmaceutical company focused on a meaningful and diverse product portfolio, comprising Generics, Biosimilars, and Specialty Products. Lupin manufactures and markets an extensive variety of branded and generic formulations, Active Pharmaceutical Ingredients (APIs), biotechnology products as well as Over the Counter (OTC) medicines across multiple dosage forms and therapeutic categories. In addition, we are acknowledged as one of the largest manufacturers of anti-Tuberculosis drugs in the world and are proud of our global leadership position in areas such as Anti- TB and Cephalosporins. With over 15 state-of-the-art manufacturing facilities spread across India, the United States, Brazil and Mexico and a workforce of over 21,381 personnel committed to enhancing the quality of our patients' lives, we are working towards expanding access to newer and innovative healthcare solutions at scale. Our journey is guided by the belief that healthcare should be accessible, affordable, and of the highest quality. We strive to advance our infrastructure and expand our presence in high-growth markets to better serve the evolving needs of patients worldwide while also embracing innovation and sustainability. Environmental, Social and Governance (ESG) aspects are deeply ingrained in our organizational DNA, driving relentless pursuit of excellence in sustainability. Lupin's commitment to building a sustainable future is at the core of our long-term value creation strategy.

Our Climate Commitments

As part of our ESG journey and sustainable strategy, we have made great strides in strategic prioritization of key initiatives and measures and undertaken commitments focusing on our Natural Capital.

Focus Areas	Targets Taken
Supply Chain Sustainability	**Undertaking detailed ESG audits of 100% of our Tier 1 and Tier 2 suppliers by 2025** **Incorporation of ESG aspects in the evaluation criteria for onboarding all new vendors by 2025**
Environmental Performance	**Reduce our Scope 1 and Scope 2 GHG emissions by 15% from 2019-20 levels, by 2030.**
Biodiversity	**Plant 1,600,000 trees by 2025**

Key Highlights of the Year

In FY23, we made significant strides in our ESG agenda, setting the stage for transformative initiatives that lie ahead. Key decisions that focus on the implementation of these initiatives are detailed below:

Key decisions taken in FY23

- Further Enhancement of ESG Governance Mechanisms through the Establishment of Board Level ESG Committee and linkage of the Materiality Assessment
- Policy Formulation - Water Stewardship Policy, Biodiversity and No-Deforestation Policy
- Implementation of ESG Dashboard and Data Management Tools
- Published our First TCFD Reporting
- Conducted a Physical and Transition Risk Assessment along with Scenario Analysis
- Undertook GHG Inventorization for Scope 3
- Became a UNGC Signatory

Climate Governance at Lupin

Lupin Limited has recognized the importance of assessing and identifying climate-related risks and opportunities and developing climate-related strategies for the organization to align with the needs of the society, rising stakeholder expectations and the need for sustainable growth.
One of our key principles is to integrate Environmental, Social and Governance (ESG) issues into our decision-making, overarching organizational strategy and business priorities. In light of this, we have developed a governance structure that includes developing and monitoring of our climate-related issues and sustainability strategies with a feedback and reporting mechanism that allows the organization continuously evaluate our aim to embed climate change into our overall business practices and strategies. Details on our climate governance structure are described below:

Governance Bodies	Composition	Responsibilities
Board of Directors	Mix of executive, non-executive and independent directors including the CEO, CFO and MD	• Responsible for taking key business decisions, reviewing climate risks and opportunities, and developing new climate strategies for the medium and long term. • Involved in the organization's reporting and disclosure activities and regular monitoring of climate-related initiatives.
ESG Core Committee	Chaired by Global CFO & Head of Corporate Affairs Members include senior management and global presidents at Lupin	• Drives the ESG agenda of the company and climate-related initiatives, addresses climate-related issues, identifies climate-related risks and opportunities on all aspects related to climate change, including energy efficiency, decarbonization, renewable energy, water management, and waste recovery. • Meets on a monthly basis and reports progress to the Board of Directors.
Risk Committee	Chaired by the Global CFO & Head of Corporate Affairs Members include CEO, MD and an independent director	Directly oversees the enterprise risk management framework. The focus of the risk committee is entity-wide identification, assessment and mitigation of organizational risks including climate issues and providing insights for proactive risk governance.

Apart from the committees, individuals from C-suite functions, higher management and other committees are also involved in climate-related aspects:

CEO
The CEO is ultimately responsible and accountable for finalizing the overall agenda, targets that are set, the policies that need to be acted upon or implemented including climate-related risks and opportunities. The CEO is also responsible for ensuring the effective alignment of climate related targets and strategy with the organization's overall strategy and direction.

MD
The MD works in tandem with the CEO and is actively responsible for the organization's reporting and disclosure activities and tracking the progress of climate related issues year on year. The MD also engages with key organization function heads to monitor climate related issues such as risk, emissions, etc.

CFO
The CFO is responsible for managing all climate-related risks and opportunities. The CFO has the highest level of responsibility with regards to the effective monitoring, management, and mitigation of climate related issues at Lupin as he is the chair of the ESG core committee and is responsible for overseeing the progress made against any identified climate-related issues.

The Vice President & Global Head – Corporate Communications and Sustainability
The Vice President & Global Head – Corporate Communications and Sustainability is responsible for meeting ESG-related targets, communicating target progress to board members, coordinating with internal subject matter experts on climate-related issues, and liaising with third party organizations that Lupin works with.

EHS Team
The EHS Leader spearheads environmental, health, safety, and sustainability efforts by championing an established EHS&S policy. This framework governs our environmental practices, emphasizing efficient resource utilization, pollution prevention, energy conservation, water recycling, waste reduction, and emission control. Proactive hazard identification and risk assessment systems prioritize risk mitigation. This commitment extends across the value chain, demanding global alignment and high environmental and safety standards from all Lupin partners, including suppliers and contractors.

Our Strategy

At Lupin Limited we recognize and believe in protecting the business and stakeholders against external threats and shocks by building resilience. It prioritizes that the company must monitor and address a wide range of external factors to be successful. In supporting the fight against climate change, Lupin has committed to remain fully supportive of the Paris Agreement on climate change do its part to limit the increase of the world's temperatures to well below 2°C with an ambition to keep it below 1.5°C to minimize the worst impacts. To achieve this, Lupin has launched strategic initiatives to gain a comprehensive understanding of how climate change affects our business and enhance our ability to withstand external shocks.

In line with the TCFD recommendation to study the impact of climate change on the business under different climate scenarios, we undertook a climate risk assessment including scenario analysis in FY 2022-23. The risk assessment included physical climate risks and transition related risks to the business. Our initiatives align with leading internal frameworks and guidelines, such as the Task Force on Climate-Related Financial Disclosure (TCFD) and the Carbon Disclosure Project (CDP). Lupin's TCFD methodology is grounded in rigorous climate risk studies, GHG inventorisation, and analysis of existing institutional arrangements.

Physical Risks and Scenario Analysis

Climate change can pose physical risks in the form of sudden events (acute) or long-term changes (chronic) in climate patterns. These risks may have financial implications for organizations such as damage to assets (direct impact) and disruptions in the supply chain (indirect impact).

For Lupin, physical risk was calculated for its 17 locations/ sites situated in India and abroad based on IPCC AR5 Risk Assessment Framework. According to IPCC AR5, risk (or impact) (R) is a function of hazard (H), exposure (E) and vulnerability (V). It is used primarily to refer to the risks of climate-change impacts.

We studied the historical trends and future projections of various climate hazards such as change in temperature, change in precipitation, floods, droughts, and cyclones to understand how the changing climate may impact our different business locations. For future hazard trends, our climate risk assessment used the Shared Socioeconomic Pathways (SSPs). These scenarios have been used to help produce the IPCC Sixth Assessment Report on climate change, published in 2022. The SSPs are based on five narratives describing broad socioeconomic trends that could shape future society. For Lupin's physical risk assessment, two climate scenarios have been considered for all the locations:

SSP 2: Middle of the Road

- Medium challenges to mitigation and adaptation
- Strong mitigation actions to reduce emissions to half of current levels by 2080
- Emissions continue to increase through the end of the century with resulting 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

For both SSP 2 and SSP 5 scenarios, two time periods have been considered – 2020-2039 and 2040-2059 for future projections. A composite climate risk index was developed based on various acute and chronic climate risks, further a vulnerability index was developed considering the exposure, sensitivity and adaptive capacity of our units. This assessment has been made to articulate the key risks that will be faced by Lupin's Units between the critical time periods Near- and mid-term (2020-2039, 2049-2059) as the impacts of climate change are already being experienced.

Under the SSP 2 scenario, sites at Vadodara and Kalpataru, Mumbai will be most impacted by the climate hazards by 2060. For SSP 5 scenario, sites at Vadodara, Kalpataru (Mumbai), Aurangabad and Mandideep will be most impacted by the climate hazards by 2060. All these locations under both the scenarios, would specifically be impacted by increase in hot days, cyclones and water stress.

Centers	IPCC Contributing Factors	Climate Risk Description	Key Drivers/Impacts
Vadodara	• Hazard – Medium • Exposure – Medium • Vulnerability - Low	• There would be high variability in precipitation level. • An increase in number of very hot days (above 35˚C) will be experienced by all the locations. • Mumbai will experience most change in wind speed. • Overall water stress is increasing in all the four sites.	• Increase in mean precipitation will result in high levels of humidity and resulting humid heat. • Increase in hot number of days would require more cooling resulting in increased energy use and also drive-up the air-conditioning costs • High temperatures would impact staff health and also drive-up the air-conditioning costs. • Mumbai is very susceptible to cyclones. Increase wind speed would result in typical failures in the infrastructure • Overall water stress would result in shortage of water in the long run.
Mumbai	• Hazard – Medium • Exposure – Medium • Vulnerability - Low		
Mandideep	• Hazard – Medium • Exposure – Medium • Vulnerability - Low		
Aurangabad	• Hazard – Medium • Exposure – Medium • Vulnerability - Low		

Transition Risks and Scenario Analysis

Transitioning to a lower-carbon economy may entail extensive policy, legal, technology, and market changes to address mitigation and adaptation requirements related to climate change. Depending on the nature, speed, and focus of these changes, transition risks may pose varying levels of financial and reputational risk to organizations (TCFD, 2020).

At Lupin we have conducted a scenario analysis until 2050 to assess the risks to the business posed by upcoming/ anticipated changes in the policies, regulations, markets, technologies as a result of 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.

The different scenarios used are as follows:

- **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:** Scenario gradually increases the stringency of climate policies, giving a 67% chance of limiting global warming to below 2°C
- **"Net Zero 2050" Scenario:** Scenario limits global warming to 1.5°C through stringent climate policies and innovation, reaching global net zero by 2050
- **Delayed Transition Scenario:** This assumes a disorderly transition where emissions until 2030 will follow BAU and then it will suddenly start declining with an aim to restrict global warming below 2°C
- **Divergent Net Zero Scenario:** The world reaches net zero around 2050 but with higher costs due to divergent policies introduced across sectors that leads to a quicker phase out of oil use

A variety of transition risk factors (as defined by the TCFD) were reviewed for our scenario analysis:

Risk: Political and Legal

Consequences	Policy actions attempt to constrain actions that contribute to the adverse effects of climate change or seek to promote adaptation to climate change. Legal risks are likely to increase as the value of loss and damage arising from climate change grows, these maybe translated through increase in carbon taxes or through other carbon pricing mechanisms.
Impacts to Lupin Limited	Currently there is no carbon price/tax implemented in India. Thus, for Lupin regulatory implications from a point of view of policy is low. But on the other hand, for our units based out of India might have some regulatory implications on their operations due to different carbon prices/tax policies currently in practice. Lupin is proactively implementing initiatives for reducing direct and indirect GHG emissions for multiple sites worldwide aligning with Lupin's target for reducing GHG emissions by 15% by 2030.
Risk Level	Medium Low

Risk: Market

Consequences	This could be understood as shifts in supply and demand for certain commodities, products, and services as climate-related risks are increasingly considered.
Impacts to Lupin Limited	With an increase in cost for the essentials (power/electricity rates at local sites and cost of raw materials), Lupin needs to transition to renewable sources for energy. It is important to note as the Indian Government currently has no plans to phase out coal, the scenarios consider the price to remain same and not expected to increase. This is similar for the NDC scenario. However, the other three low-carbon transition scenarios see a very steep increase in prices especially post 2030, this indicates that there is dissuasion to use coal as a source of energy. Globally, Lupin units would be affected as policies would impact the market to an extent. Pharmaceutical manufacturers, as energy-intensive industries, may be subject to carbon tax obligations, depending on their emissions profile.
Risk Level	Medium Low

Risk: Technology

Consequences	Technological improvements or innovations that support the transition to a lower-carbon, energy efficient economic system can have a significant impact on organizations.
Impacts to Lupin Limited	Lupin units might face the risk of increased power consumption and increased emissions due to fossil fuel dependence. Over the last few years, Lupin has been increasingly using renewable sources of energy production. Currently Lupin uses renewable power through onsite solar power plant, wind and hybrid power through open access. Our share of renewable power to total power has been increased to 5.4 % in FY23 from 3.9 % in FY22. Lupin has also been moving towards agro-waste boilers at 7 of their locations Tarapur, Nagpur, MDP, Sikkim, Ankaleshwar, Dabhasa & Indore. Shifting to total renewable sources for energy consumption would require significant investment affecting manufacturing, production, and overall operational costs.
Risk Level	Medium Low

Risk: Reputational

Consequences	The potential source of reputational risk is tied to changing perceptions of customers towards an organization's contribution to or detraction with regards to climate change.
Impacts to Lupin Limited	Lupin has adopted a policy of "Zero Liquid Discharge (ZLD)". To alleviate any negative environmental impact through wastewater generated, the company has been implementing ZLD systems at many of their manufacturing facilities. Currently, 6 out of 13 of our sites in India have ZLD systems. The efficient management of effluents within the manufacturing sites is in accordance with the standards prescribed by regulatory authorities. This is also a first step towards our commitment to Anti-Microbial Resistance (AMR) stewardship and we strive to ensure that there are no antibiotic releases to the environment. Therefore, risk faced by Lupin appears to be more environmental rather than climate/emission related.
Risk Level	Low

Opportunities

Regardless of the risks posing threat to the pharmaceutical industry, changing climate and situations provide ample number of opportunities for a pharmaceutical industry to develop and grow. These opportunities could be identified through launch of new innovative products, water-waste-emission saving activities, GHG emission reduction throughout the supply chain, increased investor attraction etc.

- **Technological Innovations:** Lupin has undertaken various technological initiatives for lowering down its carbon consumption and to improve their energy consumption practices. We have prioritized responsible and efficient energy consumption across their operations. Due to Lupin's commitment to achieve higher energy efficiency, successful implementation of various technologies and measures to increase energy efficiency across all our sites are being carried out. The progress of energy-efficient measures across all thirteen manufacturing locations in India and three overseas locations including Brazil, Mexico, and the United States are continuously tracked.
- **Resource Efficiency and Cost Savings:** For reduction of our carbon footprint, Lupin has set a target for reducing direct and indirect GHG emissions by 15% by 2030. It has been continually striving to introduce energy and water saving initiatives such as replacement of Old Conventional Luminaries by energy efficient LED lights as well as using Electronically Commuted motors in AHU's, installation of solar rooftops at various sites, air and water pollution control equipment, installation of energy efficient cooling tower, using smart and efficient Heating Ventilation and Air conditioning (HVAC) equipment, optimization of pressure of cooling water and chilled water pumps, replacement of old evaporators with efficient ones, installation of heat exchangers etc. Additionally, our Jammu, Aurangabad and Goa sites already use cleaner fuels derived from agro-waste.
- **Decarbonization Commitments Through Value Chain Partners:** Lupin can benefit by having a climate resilient supply chain. Over the course of the years, value chain partners of Lupin are interested in decarbonizing or committing to GHG emission targets such as Novartis. Peer like Pfizer promoted product achievements through videos for pharmacists and promotional literature and conducted lifecycle assessment to substantiate claims reductions in GHG. A lifecycle assessment (LCA) of the supply chain would help Lupin bring resiliency and help in increased revenue.

New Technology: Green Propellants Initiative

The current propellants used in metered dose inhalers, HFA 134a and HFA 227ea, have significant global warming potential (GWP). Alternate propellants with low GWP such as HFA152a and HFO1234ze have been developed. Lupin is actively engaged in lowering the GWP footprint of its inhalation products, both in India and the developed markets, by developing novel formulations that incorporate low GWP propellants while achieving similar therapeutic effect. This work includes re-formulation and modifying the container closure system to establish in-vitro equivalence. Lupin will also be demonstrating the clinical safety of the low GWP propellant for its formulations through verification of non-inferior ciliary function and absence of airway sensitization. This switch to low GWPs demonstrates Lupin's commitment to the environment.

Emission Reduction Through Cloud Technology

Lupin has embarked on a comprehensive transition to Cloud Technology, aiming to shift away from physical storage and server options. As part of this move, they have successfully implemented Microsoft Cloud Based Technologies across our various sites and offices. By leveraging these technologies, they have achieved operational efficiency and significantly reduced carbon emissions. They have implemented usage of the Microsoft Emissions Impact Dashboard to quantify and track progress, which enables them to accurately measure the emissions savings resulting from migrating production workloads to the cloud.

In FY23, Lupin's collective efforts translated into a reduction of approximately 27 tCO2e across operations.

Risk Management

At Lupin, risks and opportunities are inherent to our business as our operating environment is complex, highly regulated, and dynamic. Identifying, analyzing, and responding appropriately to these business risks and opportunities is important to attain our strategic growth objectives, thereby protecting the interests of our stakeholders and meeting legal requirements.

Risk Management Framework

As a result, we have developed a robust risk management framework that embeds risk governance, culture, monitoring, and mitigation across the organization. Through our risk management framework, we can understand a wide array of risks ranging from financial, operational, strategic, climate related, and regulatory. Our risk management framework is governed and overseen by the Risk Management Committee, which is headed by the Vice Chairman of the organization, and includes the CEO, MD, CFO, and other key board members.

Our response to risk management begins through the correct identification of a risk or opportunity, and their importance to our organization. This is done through a risk management tool which helps categorize risks based on our risk appetite. All risks are usually bucketed into one of the following – Pricing Pressure and Competitive, Regulatory, Emerging, Environmental Health and Safety, Cyber Security & Data Privacy, Ethical Conduct, Safety, Financial, etc. Once risks are categorized into their corresponding buckets, an in-depth assessment is carried out to prioritize them based on their likelihood and severity. This assessment includes the identification of a risk using a range of qualitative and quantitative measures. Risks are usually then categorized into a low, medium, high ranking.

Post this, we ensure the correct response is determined and implemented to manage and mitigate the risk. This includes understanding how best to allocate funds, which teams would be involved in mitigating the risk including the risk owner, communication of the risk response, and the timeframe of the mitigation process.

Finally, we establish a continual improvement and monitoring process to ensure similar risks do not arise. This is done through risk training, technological improvements, stakeholder engagement, etc.

Materiality Assessment

Our approach to risk is further bolstered by our most recent materiality assessment, where the objective was to identify risks that could interrupt operations, affect the reasonable expectation of achieving the entity's strategy and business objectives or materially impact the license to operate. The identified material topics which range from regulatory compliance to emissions reduction, to opportunities in renewable energy, are continuously monitored to identify any risks or opportunities associated with them. A range of quantitative and qualitative measures are used to estimate the severity of the risks leading to a more concrete understanding of the nature, size, and scope of the risk and its impact on the organization.

The assessment identified forty topics based on the macro business landscape and sector-specific trends relevant to our business and operating locations. These topics were narrowed down to seventeen key material topics, categorized into six thematic areas: Environmental Performance and Climate Change, Employment Practices, Supply Chain Management, Governance, Community Engagement, Product, and Consumer. Our material issues, priority areas, and metrics were discussed and approved by the Board of Directors and the ESG Core Committee.

Integration of Material Issues in Enterprise Risk Management Framework

It's important to note that our material topics are not linked to the Enterprise Risk Management Framework (ERM). However, we aim to connect our key material ESG issues with the larger ERM framework to manage risks and opportunities and properly allocate resources effectively. We are in the process of aligning our material issues with the organizational enterprise risk management framework. As part of this process, we have identified key risks and opportunities and our management approach to mitigating the risks and realizing the opportunities. This analysis was conducted by collaborating with our internal functions and business units. This process is ongoing and will be completed within FY24.

Managing Organizational Climate Risks

Climate risks and climate scenario planning should not be treated as business-as-usual exercises. At Lupin we understand the importance of addressing the climate change impacts and limiting the increase of the world's temperatures to below 2 degrees Celsius. Thus, it becomes integral to integrate the outputs of the climate scenario analysis into the firm's risk management practices. We should leverage climate action as a risk mitigation strategy as well as a business opportunity. Hence, it is recommended that climate risks are considered an important factor in medium to long-term decision-making and adaptation measures are implemented as part of the larger ESG and occupational safety measures. Our analysis shows that higher preference for adaptation action in the short term is recommended towards Vadodara, Mumbai, Mandideep, and Aurangabad.

Element of Risk	Location/ Sites	Infrastructure and Human impacts	Adaptation Measures Implemented/ Planned
Cyclones	• Mumbai • Vishakhapatnam • USA	• Disconnection or disruption of internet and/or phone services, electricity leading to disruption in operations • Infrastructure failures due to cyclone/wind such as complete collapse of galvalume roofing system, failure of connections, failure of structures, and progressive collapse of roof steel trusses, breakage of windowpanes at the plants and office locations.	• Policy on building all new infrastructure considering the cyclone and wind impacts • Retrofit all existing structures as per IS:875(Part 3) codes for various types of buildings and structures. • Provision of shelter and resilient assembly places for staff in case of climate or industrial disasters • Identify cyclone weak spots (roofing, shafts, chimney stacks etc) also review transmission lines and potential consequences of power cuts.
Sea Level rise	• Mumbai • Vishakhapatnam	• Dry spells may not directly impact Lupin's infrastructure except through water scarcity • This will impact its cooling systems, water requirements, pools etc. • Saltwater inundation/ groundwater contamination causing diseases	• Business interruption/relocation plans • Additional insurance for buildings/assets • Flood barriers and plantations • Avoid new projects in low-lying coastal zone
High Temperature	• Vadodara • Kalpataru, Mumbai • Aurangabad • Mandideep	• Temperature increase impacting the building structures • Building energy use will increase if climate extremes become the norm. • High temperature variability impacting the comfort level and the productivity of the staffs • Heat waves are the leading causes of weather-related morbidity and mortality and will directly impact the health of the staff/community in the vicinity	• Conduct internal survey on heat related impacts on staff • Heat Resistant Roofing, Heat Resistant Tiles • Install efficient heating, ventilation and air-conditioning (HVAC) systems. • Assess high temperature impacts on energy usage/ product storage/ development • Conduct detailed study on lowering down the increasing cost of cooling due to increased temperatures.
Dry Spell and water stress	• Mumbai • Vadodara • Indore • Mandideep	• Dry spells may not directly impact Lab's infrastructure except through water scarcity • This will impact its cooling systems, water requirements, pools etc. • Water scarcity can cause Health and Safety issues • Reduced water availability may also impact sanitation and hygiene needs	• Grey water re-use and Recycling systems. • Rainwater harvesting is also an important measure that maybe installed. • Annual training programmes on water saving measures • Site-based water usage minimization programme • Exploration of alternate sources of water other than groundwater

Element of Risk	Location/ Sites	Infrastructure and Human impacts	Adaptation Measures Implemented/ Planned
Flooding	• Vadodara • Kalpataru, Mumbai • Aurangabad • Mandideep	• Increase in localized heavy rain will intensify flooding • The flooding may also result in damage to infrastructure and can represent a risk to workplace safety. • It may also disrupt road connectivity to locations • Disconnection or disruption of internet and/or phone services, electricity leading to disruption of work and inconvenience to staffs • Outbreak of diseases, post-flooding due to water stagnation or through pollution of existing waterbodies	• Early warning systems • Updating Stormwater drainage systems • Floodproofing of technical infrastructure, lower walls and basements

Building Climate Resilience of Communities

An integral part of our overall business strategy is our Corporate Social Responsibility (CSR) strategy, which aims to focus building resilience of lives and livelihoods. Our Corporate Social Responsibility Committee focuses on initiatives while also ensuring compliance with regulations and best practices for social and environmental responsibilities in cooperation with our social responsibility arm, the Lupin Human Welfare and Research Foundation ('LHWRF').

Our CSR Policy is multifaceted, with a focus on various elements that we believe can lead to Lupin and includes the following elements:

Sustainable partnerships with government bodies and relevant stakeholders

Responding to natural and anthropogenic disasters and providing support

Social, economic and natural development at regional, district and village levels

Prioritizing marginalized and under-privileged communities

We have undertaken various CSR activities which incorporate the founding principles of our CSR policy while also increasing climate adaptation capacity and reducing climate-related vulnerabilities for highly susceptible communities.

In addition to these community-centered activities, almost 137,000 trees were planted by LHWRF Initiatives in FY23 with an aim to plant 1,600,000 trees by 2025. These allow for high level of carbon sequestration, that we will assess in the coming years.

Communities	Climate Vulnerabilities	Initiatives Undertaken
Farmers in multiple districts, Nandurabar, Maharashtra	Climate change will lead to uncertainties in traditional farming methods and produce and impact their livelihoods. Building resilience would require improvement of agricultural practices	• Lupin is supporting the implementation of the Tribal Development Fund (TDF) WADI project started at Amoni and the TDF WADI at Padalpur districts of Nandurbar. Both projects support 500 farmer families and 50 landless families. • **Better Cotton Initiative:** LHWRF has been implementing this BCI project with smallholder cotton growers in Nandurbar districts since 2019. We are working with 40000 Better cotton farmers across the Nandurbar district. 60048 co-farmers and 7254 farm workers are also the stakeholder of the project. The Project aims to upgrade their knowledge to adopt BCSS practices which will reduce their cost of cultivation, increase productivity & production of cotton.
Farmers (specifically women) Akkalkuwa district, Nandurabar	Climate change impacts the resilience of the most vulnerable communities, especially women	• **Women are most impacted by climate change impacts in Rural India.** Our work in Akkalkuwa district focusses on training and capacity building of women besides other initiatives. • **IWMS - Integrated Water Management System Project:** The project, supported by NABARD, covers 5 villages of Akkalkuwa block. The project treats about 100 hectare of land in each of the five villages, thus covering a total of 500-hectare area. Key project components include capacity building of women. • **We are supporting the** Livelihood development project funded by Atlas Copco Charitable Foundation is ongoing in Nandurbar district of Maharashtra at Akkalkuwa Block.
Farmers in Nandurbar, Maharashtra Farmers in Sikkim Communities in Dholpur district, Rajasthan	• Climate change will impact water stress and lead to disruption of traditional farming practices • Climate change impacts are leading to an increase in weather unpredictability and impacting agricultural systems specifically impacting water quality and quantity • Resilience would require augmenting the water supply and farming practices management	• **Climate Change Adaptation project Shendhavan:** The project has components of Soil and water conservation, soil health for productivity enhancement, sustainable NRM, CCA farming practices & nutritional security. It aims to build the adaptive capacity of farmers through livelihood development. The project also includes the provision of weather and crop based agricultural advisories to farmers to cope with climate change. • **FSPF-NABARD-Cardamom Project:**. We supported 21-acre land by providing 39900 saplings of cardamom to poor farmers as demonstration for value addition and supply chain to get better price & adaptation of new practices. We also provided 1000 lit water tanks, sprinkler irrigation system & PVC pipes, vermicompost units. • **Livelihood development by Atlas Copco Charitable Foundation:** This project in ongoing Dholpur district of Rajasthan. Objective of the project is to restore livelihoods of 1500 poor Farmer Families through Water Resource Development. Key project aspects include crop diversification, increasing food security and drinking water availability for human beings and cattle.

Communities	Climate Vulnerabilities	Initiatives Undertaken
Farmers in Vidisha district, Madhya Pradesh Farmers in Akkalkuwa, Asthamba, Akkarani, Ranikajal districts in Maharashtra	• Climate change impacts lead to uncertainties around economic growth and can impact the social and financial development of vulnerable communities • Climate change impacts also have an amplified impact on micro small business enterprises in rural areas • Climate change impacts impact the availability of traditional raw materials and disrupt existing supply chains	• **WDF-Non Watershed Project:** The project focuses on improving the economic condition of the poor rural families through multi-functional cropping system and integrated farming system in order to increase their supplementary income and quality of life in 4 villages of district Vidisha. • **BRLF- Integrated Water Management System Project:** The project is focusing on water management across about 100 acres of land in each of the five villages. • **We are supporting multiple Farmer Producer Organizations (FPOs) in various districts in Maharashtra:** 1. FPO Asthamba, Akkarani, Ranikajal and Sarmathura: These projects are working on supply/procurement, Agri processing and fertilizers with around 1,310 stakeholders across the 4 FPOs. 2. We are also supporting similar projects in Rajasthan: FPO Sironj, Vidisha, Lateri: The projects are focused on input supply/ procurement. There are a total 1,059 shareholders from 20 different villages in cluster approach. • **Livelihood Project:** It is executed with 89 poor families of district Vidisha at block Sironj and Vidisha. Major activities are goat rearing, backyard poultry, fish rearing and cattle induction.
Communities in Visakhapatnam, Andhra Pradesh	Climate change impacts children disproportionately and building resilience requires education	LHWRF supported Model Anganwadi, model school as well as micro enterprise development for poor families

Metrics and Targets

Our Decarbonization Strategy

To address our materiality issues, either through the mitigation of risks or realization of opportunities, we have developed a comprehensive ESG framework and roadmap which helps in articulating our strategy, goals, and targets. Through this framework, we can track the progress of our ESG performance across our entire business.

Focus Areas	Targets
Environmental Performance	By 2030, we aim to reduce our Scope 1 and Scope 2 GHG emissions by 15%, benchmarked against 2019-20 levels.
Supply Chain Sustainability	Undertaking detailed ESG audits of 100% of our Tier 1 and Tier 2 suppliers by 2025
	Incorporation of ESG aspects in the evaluation criteria for onboarding all new vendors by 2025

Our targets are a crucial part of our ESG and decarbonization strategy, which we have mapped till FY25. Looking forward to FY24 and FY25, our milestones are as follows. The setting of these milestones has allowed us track our year-on-year improvements.

Add, Expand, and Accelerate	Attain and Achieve
2024	**2025 and beyond**
Establish Next Stage of ESG Strategy	Development and Enhancement of Key ESG Strategic Areas
Continue Renewable Energy Transition	Sustained Progress and Development of Existing ESG Performance
Explore Feasibility of Environmental Profit and Loss Accounting	Implementation of decarbonization strategy
Decarbonization strategy finalization	Integrating ESG risk management with ERM framework

Our Progress on Targets

We continue to monitor our progress against these targets and ensure that we improve our environmental performance and conduct our business responsibly and consciously.

Emissions Data: While we have been tracking Scope 1 and Scope 2 emissions since FY2019-20, in FY22-23, we conducted GHG Inventorisation to account for our Scope 3 emissions as well. The development of a robust inventory and a tracking mechanism for emissions is a key indicator that the organization is using to assess our performance when compared to our targets.

Scope 3 Inventorization: In FY23, we conducted a comprehensive Scope 3 assessment which enabled us to have an in-depth understanding of our greenhouse gas emissions across our value chain and beyond. The inventorization process included engagements with multiple stakeholders, both internally and across our value chain in order to assess data availability and calculate Scope 3 emissions for eight categories.

The categories shortlisted for our Scope 3 assessment include Purchased Goods and Services, Capital Goods, Fuel and Energy, Waste Generated and Disposed, Upstream Transport, Downstream Transport, Business Travel, and Employee Commute. Our assessment aligns with recognized global frameworks such as the GHG Protocol, ensuring our analysis is robust and reliable.

As a result, we have developed a complete inventory across all 3 Scopes, which is presented below:

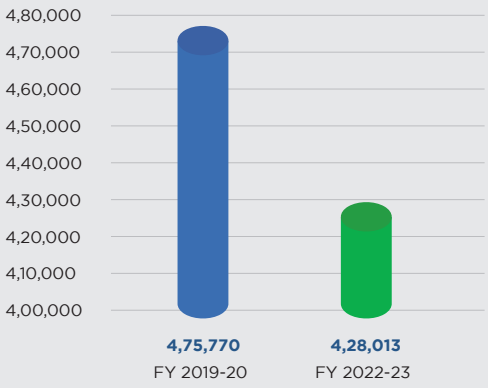
Emissions (in tCO2e)				
Scope(s)	**FY2019-20**	**FY2020-21**	**FY2021-22**	**FY2022-23**
Scope 1	103,887	100,726	86,175	87,068
Scope 2	371,883	403,829	380,306	340,945
Scope 1 and 2 emissions	475,770	504,555	466,481	428,013
Scope 3	680,968	802,465	676,018	651,664

Progress on Emissions Targets

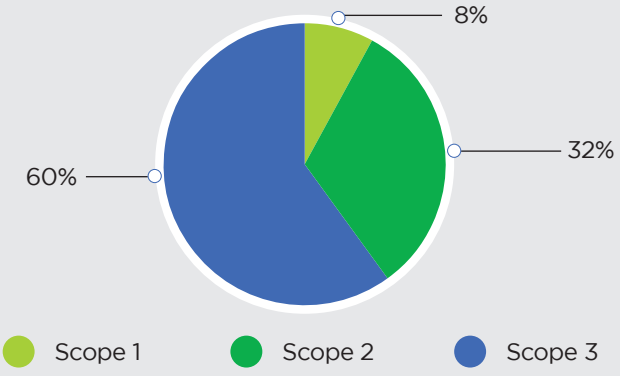
We set our Scope 1 and Scope 2 emissions reduction target in FY22. Against our baseline of FY2019-2020, in FY2023, we have achieved a 10% reduction in absolute Scope 1 and Scope 2 emissions.

In order to further progress on our target, we are adding 22MW Renewable energy capacity in FY24.

Progress on our emissions target (Scope 1 and 2 emissions)



Lupin's scope-wise breakdown in FY23



Advocacy and Partnerships

Lupin Limited, A UNGC Signatory

Lupin takes immense pride in becoming a signatory of the United Nations Global Compact (UNGC), an endorsement that reflects our strong commitment to good governance and ethics. As a UNGC signatory, we join a global network of like-minded organizations, enabling us to leverage collective expertise, best practices, and collaborative initiatives to address global challenges. By becoming a UNGC signatory, Lupin affirms its dedication to upholding the ten principles of the UNGC in human rights, labor, environment, and anticorruption. This commitment aligns with our core values and reinforces our ongoing efforts to integrate sustainability and responsible business practices throughout our operations. We will communicate our progress to the UNGC, ensuring transparency and accountability while actively participating in sustainable development goals.

Looking Ahead

Lupin Limited recognizes the ongoing need for disclosure and increasing transparency on our climate-related issues and consider it as a key business priority. Aligned with this, we have published our first Task Force on Climate-Related Disclosures (TCFD) report in this reporting year. The disclosures included in this report are being provided in an effort to satisfy TCFD reporting obligations and enhance our understanding of climate risks and how we can integrate them into our business processes.

This report contains emissions projections, projections of various scenarios and forward-looking targets in the context of climate change. Projecting these emissions and other factors that influence climate change is a work in progress. Projections based on technological, regulatory, social and environmental are inherently probability and likelihood-based and come with limitations in their modelling. The report also makes use of non-financial metrics (for adaptive capacity, sensitivity, transition risks) that are subject to measurement uncertainties resulting from limitations inherent to such data. Upcoming regulations on climate disclosures will also continue to inform the company's reporting. Upcoming regulations on climate disclosures will also continue to inform the company's reporting.

The forward-looking statements in this document are subject to numerous assumptions and uncertainties, which may change over time. The actual impacts on our business could differ materially from those anticipated in the future in this report.

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