



**INDIAN PHARMA:
TRANSITIONING TO
A SUSTAINABLE FUTURE**

INTRODUCTION:



Since the beginning of the Covid-19 pandemic, the Indian pharmaceutical industry has seen unprecedented challenges including, but not limited to, rapidly developing and distributing vaccines. As the industry leaves behind the pandemic, and its associated challenges, Sustainability targets are now front and center. The pharma or life sciences industry, which accounts for 4.4% of global net emissions, produces

55%

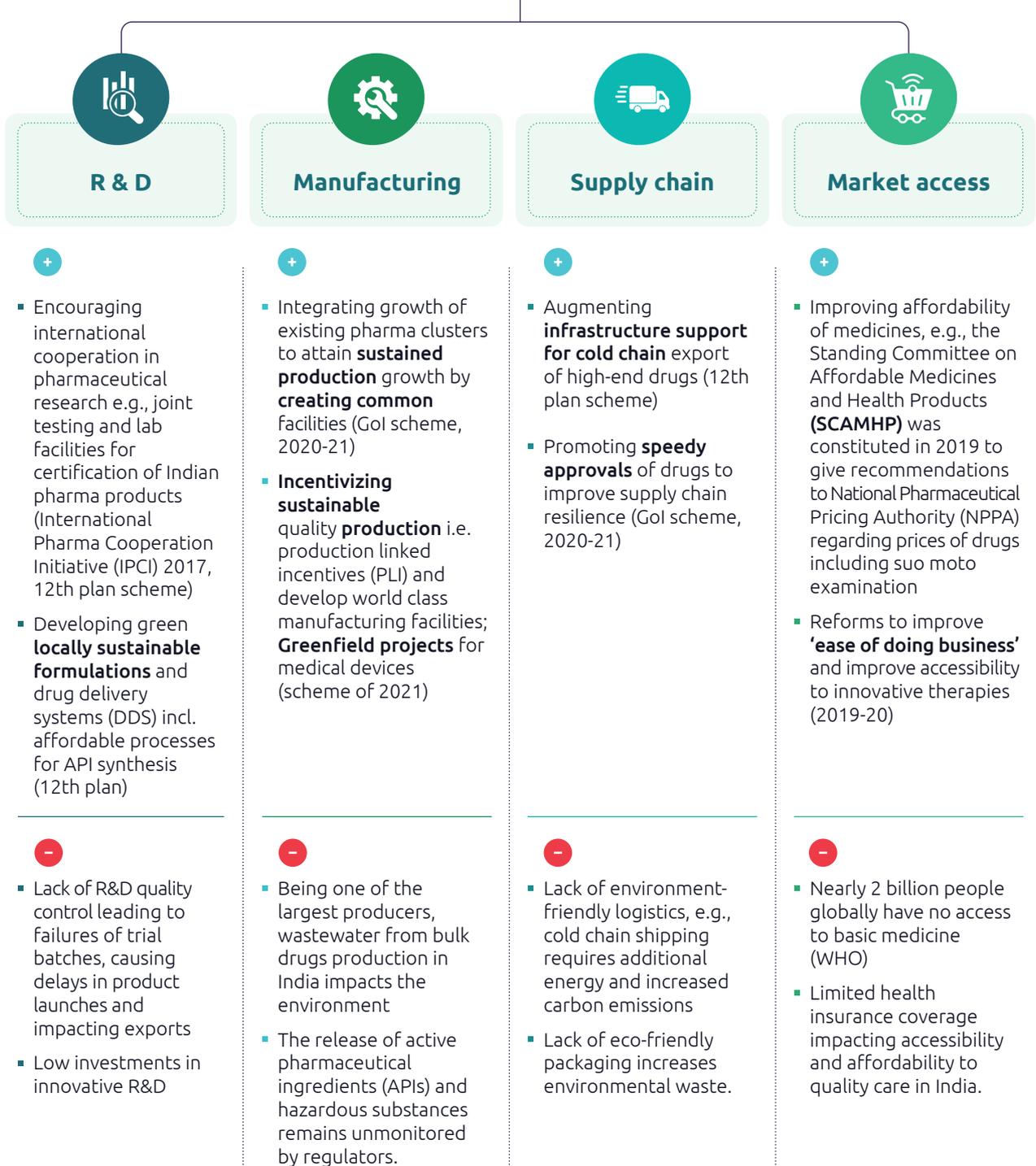
more greenhouse gases (GHG) emissions than the automotive sector (McMaster university). However, Sustainability goes beyond environmental impact due to pharma's research and development (R&D), manufacturing, packaging, supply chain or waste disposal operations. It also includes social issues of health inequity and the need for better governance.

The Indian pharmaceutical sector has seen tremendous growth in the past decade and is now recognized as a leader in vaccine manufacturing; and is also known for its export of generics to the world. In the Government of India's Union Budget of 2022, the pharma sector was recognized as the 'Sunrise Sector' and it is expected to grow three-fold over the next decade to reach

\$65

billion by 2024 (as per the Economic Survey 2021-2022)^{1,2}. Hence, it is imperative for the government, regulators, and pharma companies to collaborate and promote sustainable development of the Indian pharma industry. The Department of Pharmaceuticals (of the Government of India (GoI)) embedded Sustainability as a mission to achieve its vision of, 'making India the largest global provider of quality medicines at reasonable prices,' in the 12th plan; and new initiatives are being undertaken to encourage sustainable development of pharma's value chain. However, Indian pharma companies need to go full throttle to overcome barriers and pursue a revitalized action plan to meet sustainable targets in future.^{3,4,5,6}

Pharma value chain: Enablers and barriers for sustainability



INDIAN PHARMA NAVIGATING THE ROAD TO SUSTAINABILITY

Currently, Indian pharma or life sciences companies are preparing for their transformation into more sustainable organizations by –





1. Embracing the change with Sustainability

Leading Indian pharma companies are including Sustainability in their core growth strategy. As industry leaders put it, “Sustainability and profitability are not mutually exclusive corporate goals.”



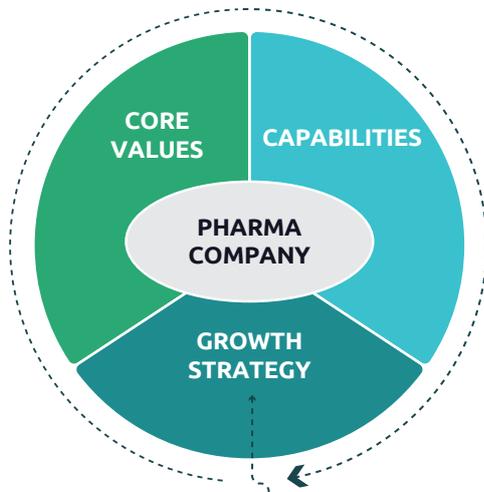
It is clear to us that sustainable entrepreneurship and profitable growth are not mutually exclusive, but rather mutually dependent.

Robert M. Davis
CEO, MERCK



As part of our core strategy, we strive to emphasise on sustainability, operational resilience and workforce agility to revitalise our business activities for the next phase of growth.

Dilip Shanghvi
MD, SUN PHARMA



Sustainability acts as an anchor for a company's strategy

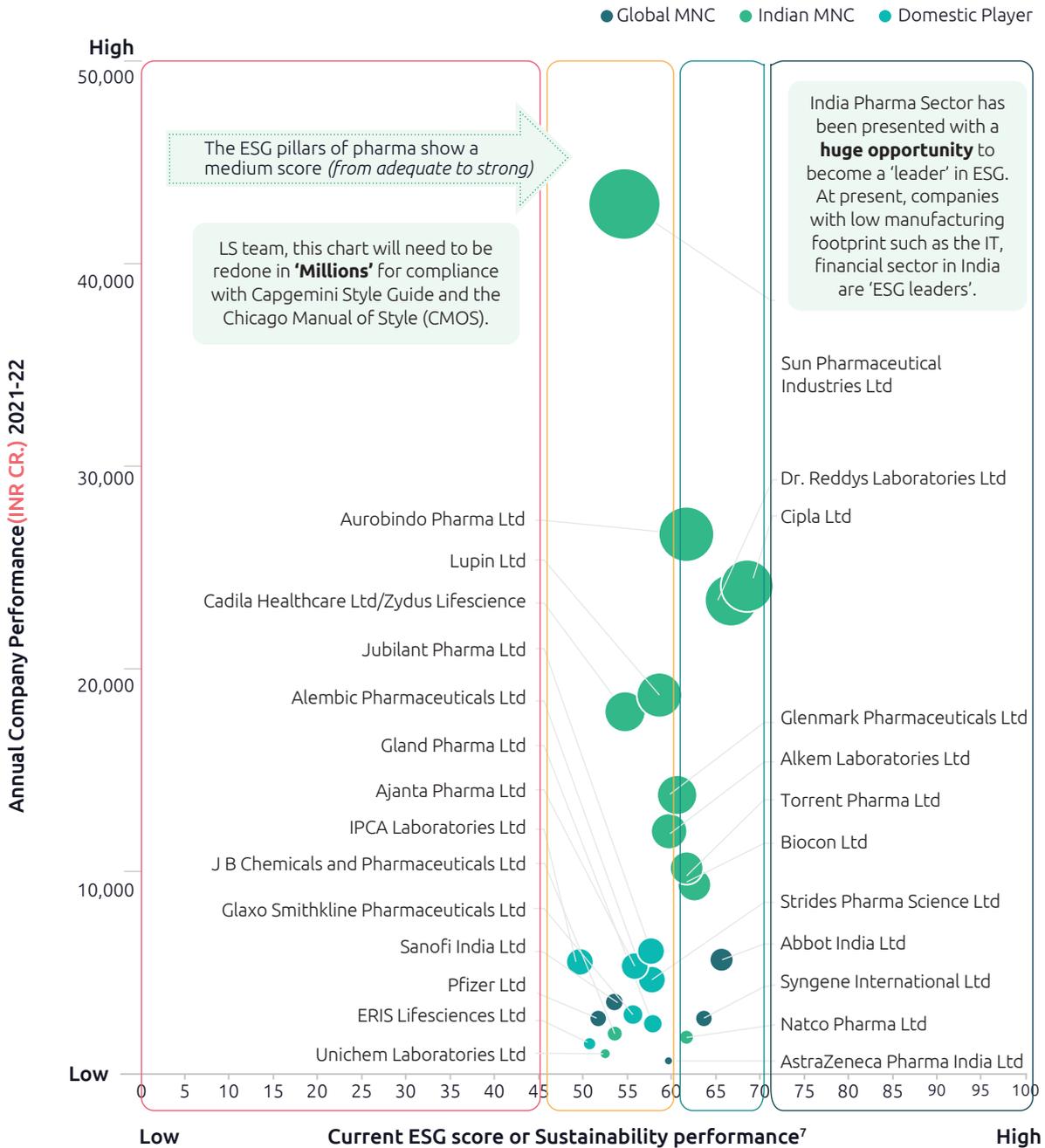
While all* Indian pharma companies (including multinational corporations (MNCs) and domestic players) are considering Sustainability or environmental, social, and governance (ESG) objectives, there are varying trends on how Sustainability is being approached or reported.

Sample analysis of 21 Indian Pharma Companies

- **38%** of Indian pharma companies have a **dedicated Sustainability or ESG report** (of which, approximately 63% are India Pharma MNCs and remaining approximately 37% are domestic players)
 - › Companies are actively publishing dedicated Sustainability or ESG reports from the year 2020 onwards
 - › Remaining approximately 62% of Indian pharma companies that did not publish dedicated Sustainability reports, drafted their Sustainability objectives in company annual reports or integrated reports or business responsibility reports
- **Approximately 43%** of Indian pharma companies have a dedicated **ESG or Sustainability Governance Committee** (Sustainability Working Group (SWG), ESG Board Committee, ESG Core Committee, Delegation of Authority (DoA), or science, technology, operations (STO) committee, etc.) and majority of them are India pharma MNCs and one domestic player
 - › Remaining Indian pharma MNCs and domestic players have a corporate social responsibility (CSR) committee, risk management committee or other internal audit committee evaluating Sustainability objectives.

*Sample Analysis of 21 Indian Pharma Companies includes listed companies & analysis is based on publicly available information.

Sustainability and Business Performance of India Pharma vs. Global Pharma, 2021-22



Source: ESG Scores (CRISIL SUSTAINABILITY YEARBOOK, 2022), Only listed pharma companies are covered in CRISIL Report; Annual revenue of companies FY2021-22 from company annual reports or publicly available sources; annual revenue for India market only; Global MNC: Not founded in India & operating in >30 countries; India MNC: Founded in India & operating in >30 countries; Domestic players: Founded in India & operating in <5 Countries; K: '000

As standard ESG benchmarks continue to evolve, independent ESG scores provided by third parties are serving as an important reference for comparison. Investors, regulators, and other stakeholders see merit in companies making ESG disclosures. According to the ESG leader board analysis, none of the pharma companies in India are 'leaders' in ESG performance based on fiscal 2021 data (CRISIL's Sustainability Yearbook 2021-22 that comprised of about 33 listed pharma companies in India). It is also noteworthy that none of the pharma companies scored 'weak' or 'below average.'

A certain level of correlation can be drawn between a company's financial performance and sustainability performance or it can be suggested that ESG pillars can influence financial performance of pharma and a favourable buy-in from its stakeholders⁸. For example, India pharma MNCs with a high revenue of >₹200,000 million in

the Indian market (Dr. Reddy's, Cipla, Aurobindo) were rated as 'strong' with respect to their ESG score; the strong social and governance scores of these companies stood out. Global MNCs with a presence in India had strong governance scores, but lower environmental and social scores dragged down their overall rating to 'adequate'.

ESG scoring assessment presents a opportunity for domestic pharma companies (with revenues of < ₹65,000 million) that were rated as 'adequate' and none were observed to be in the 'strong' category yet. The assigned rating was due to their lower environmental score. Governance is an important Sustainability pillar. While the highest revenue generating India pharma MNC in 2021-22 did not fall under the 'strong' ESG category due to opportunities in governance, a small pharma MNC with revenues of ₹20,000 million emerged 'strong' in its overall ESG performance driven by a higher governance score.



2

2. Setting Goals for Sustainable Strategies

Most big pharma or life sciences MNCs have mapped out ambitious Sustainability targets to be achieved by 2025-2050, including targets for net zero or CN (Scope 1 and 2), and few companies have expanded targets to Scope 3 as well.

		Sustainability Milestones					
		2010-2022	2025	2030	2040	2050	
Global pharma in decreasing order of revenue	J&J	Reduced GHG emissions (Scope 1 & 2) by 45% since 2010		CN (Scope 1 & 2)			
	PFIZER	Reduced direct GHG emissions (Scope 1 & 2) by 33% since 2012		CN (Scope 1 & 2)			
	ROCHE	Reduced GHG emissions per employee (Scope 1 & 2) by 15% since 2015				Net zero (Scope 1 & 2)	
	NOVARTIS	Reduced GHG emissions (Scope 1 & 2) by 19% since 2016	CN (Scope 1 & 2)	CN (Scope 1, 2 & 3)	Net zero (Scope 1,2 & 3)		
	MERCK	Reduced CO ₂ (Scope 1 & 2) by 9% since 2020	CN (Scope 1 & 2)				
	SANOFI	Reduced GHG emissions (Scope 1 & 2) by 27% since 2015		CN (Scope 1, 2 & 3)		Net zero (Scope 1 & 2)	
	ASTRA ZENECA	Reduced GHG emissions (Scope 1 & 2) by 60% since 2015	Net 0 (Scope 1 & 2)	Net zero (Scope 1,2 & 3)			
	GSK	Reduced GHG emissions ("across its operations") by 34% since 2010		Net zero (Scope 1 & 2)			
	TAKEDA	Reduced GHG emissions in direct operations by 27% since 2016			Net zero (Scope 1 & 2)		
	NOVO NORDISK	In 2021, 100% of power sourced for production sites was from renewable energy				Net zero (Scope 1 & 2)	
Indian Pharma MNCs in decreasing order of revenue	SERVIER			25% reduction in carbon footprint			
	IPSEN	88% of global electricity is from renewable sources		50% reduction in GHG emissions (Scope 1 & 2)			
	SUN PHARMA	In FY2021, 38% of energy sourced was from renewable sources		Carbon emissions (Scope 1 & 2) reduced by 35%			
	CIPLA	In 2022, GHG emissions were reduced by 8%	CN (Scope 1 & 2)				
	DR. REDDY'S	Reduced carbon emissions intensity by 27% since 2018		55% reduction in carbon emissions (base year 2018)			
	LUPIN	Achieved Zero Liquid Discharge status in almost 50% of Indian manufacturing sites		15% reduction in GHG emissions (Scope 1 & 2)			
	GLENMARK	In FY2022, 6% of electrical energy was derived from renewable sources		CN (Scope 1 & 2)			
	BIOCON	Recorded 680,000 liters of incremental water savings per day across global manufacturing operations					
	Domestic Players of decreasing order of revenue	JUBILANT PHARMA	Reduced absolute GHG emissions by 36% from 2019				
		AJANTA PHARMA	Engaged a waste management agency for ensuring recycling of 100% recyclable plastic waste.	50 % of consumption through renewable energy (by 2026)			

CN = Carbon Neutral Net 0 = net zero

The path to net zero or 'CN' remains unclear for India's pharma MNCs and domestic players. Two Indian pharma MNC giants, however, have set aggressive targets of CN (Scope 1 and 2) for 2025 and 2030, respectively.

SUSTAINABILITY STRATEGIES OF INDIAN PHARMA COMPANIES: CASE STUDIES

Over the years, Indian pharma companies such as Sun Pharma, Cipla, Glenmark, DRL among others have focused on building sustainable environmental, social, and governance levers, and have undertaken initiatives to align with the United Nations (UN) Sustainable Development Goals (SDGs) on climate action, responsible consumption & production, good health & well-being, and quality education, among others.

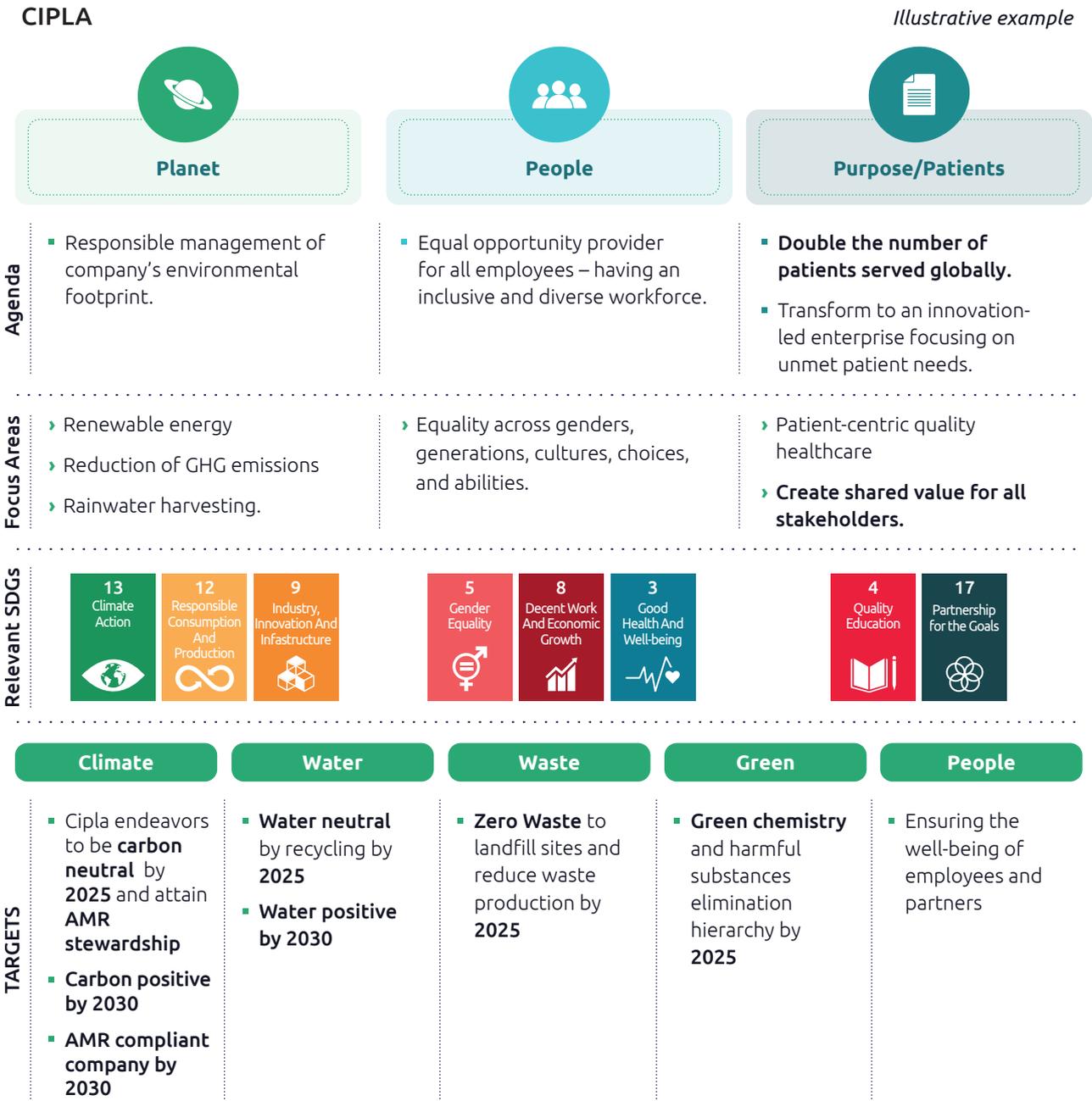
- A case in point is the Sustainability model of Sun pharma guided by their 'Sunology'. Environmental levers include expanding portfolio of renewable energy, water-smart, eco-efficient technologies; social levers include

a multi-disciplinary, diverse workforce, CSR programs; and governance impact levers. Sun's model focuses on digitalization, innovation and circular economy.

- Another example is of Cipla – ranked as one of the most sustainable healthcare companies in the Dow Jones Sustainability Emerging Markets Index in 2021 and the recipient of 'Sliver Shield' for reporting on SDGs (2020-21). The company has set aggressive targets to be a CN, water-neutral, and zero waste company by 2025. Cipla's Sustainability model focuses on antimicrobial resistance (AMR) compliance, green chemistry, 'Making it Right', well-being of employees and partners.



CASE 1 – SUSTAINABILITY PILLARS AND SUSTAINABLE STRATEGIES, 3rd highest revenue in India and strongest ESG performance FY 2021

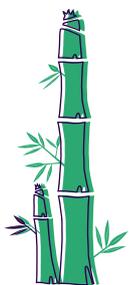


CASE 2 – SUSTAINABILITY PILLARS AND SUSTAINABLE STRATEGIES, highest revenue in India and adequate ESG performance FY 2021

SUN PHARMA

Illustrative example

	 Environment	 Social	 Governance
Focus Areas	<ul style="list-style-type: none"> Managing waste, water stewardship, energy management. 	<ul style="list-style-type: none"> Community development – CSR, Health education, and prevention. 	<ul style="list-style-type: none"> Risk management, ESG compliance.
Impact Levers	<ul style="list-style-type: none"> Expanding portfolio of renewable energy Water-smart and eco-efficient technologies Digitalization enabled greater productivity and resource optimization capabilities. 	<ul style="list-style-type: none"> A multi-disciplinary and diverse workforce Robust occupational health and safety management system. 	<ul style="list-style-type: none"> Six core Board committees Global code of conduct More than ten corporate policies Experienced and diverse Board.
Impact Aspiration	<ul style="list-style-type: none"> Low-carbon economy compatible, water efficient and resilient, circular economy focused, innovation and digitalization enabled. 	<ul style="list-style-type: none"> Future-ready, inclusive and agile workforce, safe work environment with zero fatalities Strengthening of global healthcare system Superior pharmacovigilance and quality control capabilities. 	<ul style="list-style-type: none"> Initiatives to promote good health Educate community on prevention of disease Local community engagements.
Relevant SDGs	<div style="display: flex; justify-content: space-between;"> <div style="background-color: #28a745; color: white; padding: 5px; text-align: center;"> 13 Climate Action </div> <div style="background-color: #17a2b8; color: white; padding: 5px; text-align: center;"> 7 Affordable And Clean Energy </div> <div style="background-color: #ffc107; color: white; padding: 5px; text-align: center;"> 11 Sustainable Cities And Communities </div> <div style="background-color: #ffc107; color: white; padding: 5px; text-align: center;"> 12 Responsible Consumption And Production </div> </div>	<div style="display: flex; justify-content: space-between;"> <div style="background-color: #17a2b8; color: white; padding: 5px; text-align: center;"> 3 Good Health And Well-being </div> <div style="background-color: #17a2b8; color: white; padding: 5px; text-align: center;"> 6 Clean Water And Sanitation </div> <div style="background-color: #dc3545; color: white; padding: 5px; text-align: center;"> 4 Quality Education </div> </div>	<div style="background-color: #17a2b8; color: white; padding: 5px; text-align: center;"> 16 Peace, Justice And Strong Institutions </div>
	Climate	Water	Waste
TARGETS	<ul style="list-style-type: none"> Reducing carbon emissions by 35% by 2030 (for Scope 1 and Scope 2 emissions). 	<ul style="list-style-type: none"> Reducing water consumption by 10% by 2025. 	<ul style="list-style-type: none"> Disposing off 30% of hazardous waste through co-processing by 2025.



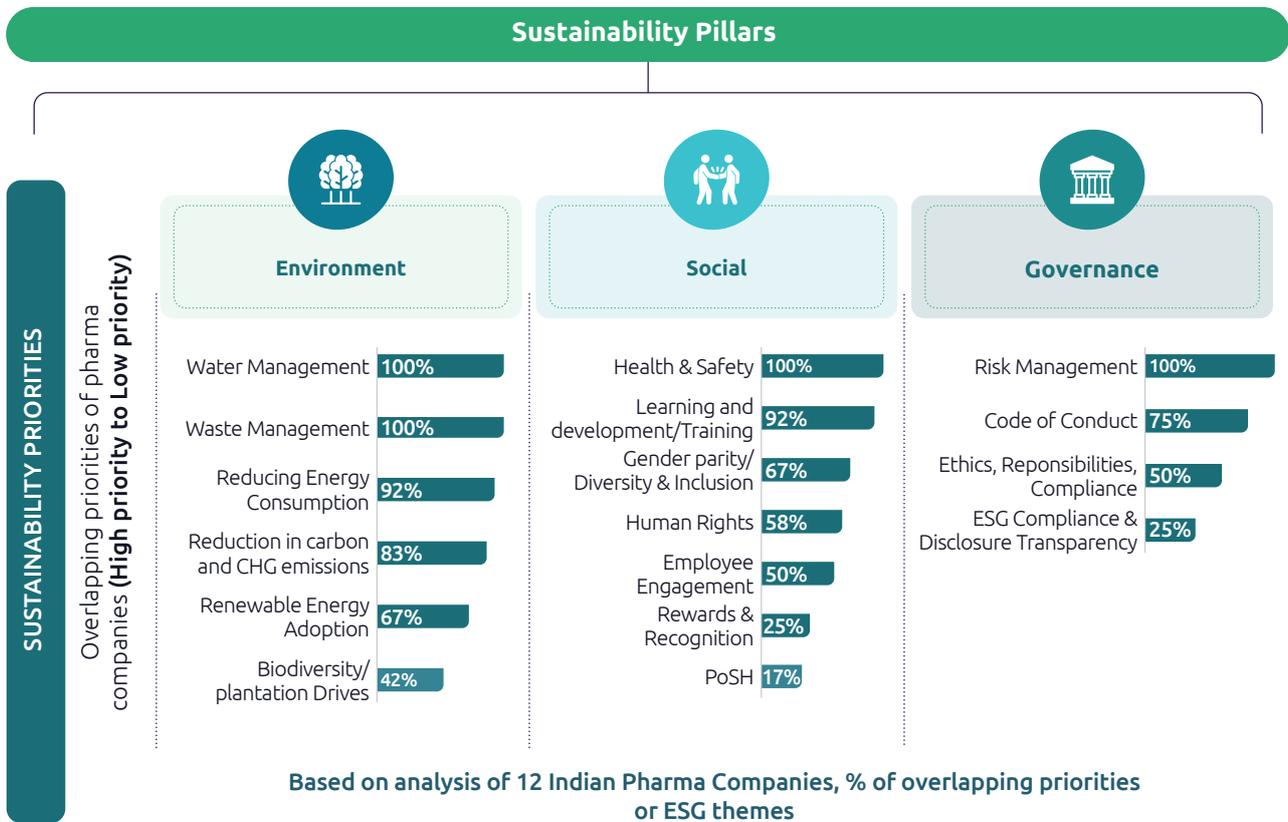
Governing the Goals and Aligning with Global Standards to meet Future Expectations

While the pharma sector has already embarked on its journey towards Sustainability, governance is an area that has often been overlooked. Drafting and implementing good ESG or Sustainability practices in a company requires good governance that can be attributed to better ESG compliance and disclosures, performance relative to competitors, risk management, business ethics, and code of conduct. Indian pharma companies are putting responsibility at the top - the directors or senior leadership are at the forefront of driving commitment to business ethics and sustainable practices. Some of the **governance impact levers** include –

- A board-level committee to deliver on Sustainability agenda (experienced and diverse board including independent directors)
- Encouraging businesses to re-align their products, services, and operations with responsible behaviour, and creating shared value for all stakeholders
- Oversight of corporate policies and alignment with global code of conduct
- Conducting ESG risk assessments such as materiality assessment in line with the Global Reporting Initiative (GRI) standards to create a Sustainability-focused business approach
- Taking inputs from all business functions and monitoring **big and bold milestones** –
 - For example: achieving a big milestone such as ‘becoming CN by 2030’
 - Sharing carbon emission scores and participating in Carbon Disclosure Project as a bold move
- Reporting of ESG scores through self-assessment, 3rd party assessment vs. peers including an assessment of suppliers or vendors
- Ensuring a sustainable strategy for each business function – from R&D or clinical to commercial value chain
 - For example: an India pharma MNC has adopted a ‘Sustainability by design’ approach, which looks at Sustainability in all aspects of a business; consequently, Sustainability goes beyond being a ‘boardroom agenda’. Every employee in the company is provided a Sustainability code for their contribution towards bring more accountability in achieving Sustainability goals.^{10,19}

SUSTAINABILITY PRIORITIES, BEST PRACTICES, AND GAPS:

- **Indian pharma companies have few overlapping themes across the three Sustainability pillars –**
 - Waste & water management followed by energy reduction (environmental pillar)
 - Health & safety, learning & development followed by gender diversity & inclusion (social pillar)
 - Risk management and code of conduct (governance pillar)



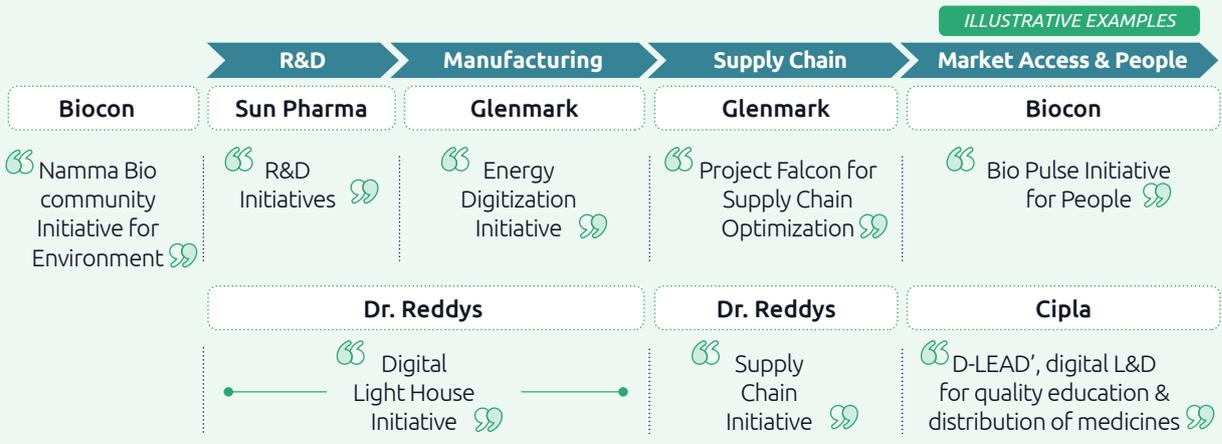
Sustainability Pillars

Pharma companies are defining KPIs to measure and monitor progress towards Sustainability goals. While global pharma MNCs have made some bold moves of issuing Sustainability-linked bonds indexed on social targets (such as access to medicines or other environmental commitments), an example of Sustainability KPIs adopted by a leading India pharma MNC is illustrated below –

KPIs/ BEST PRACTICES

- | | | | | |
|--|--|---|---|---|
| <ul style="list-style-type: none"> ▶ Total weight of hazardous and non-hazardous waste disposed ▶ Total water withdrawal, discharge and consumption ▶ Total energy consumption. | <ul style="list-style-type: none"> ▶ Percentage of operations implemented, local community engagement, impact assessments, and/or development programs. | <ul style="list-style-type: none"> ▶ Total number of incidents of discrimination and status of corrective actions taken. | <ul style="list-style-type: none"> ▶ Incidents of non-compliance concerning product and service information and labelling. | <p>ILLUSTRATIVE KPIs</p> <ul style="list-style-type: none"> ▶ Investments in R&D ▶ Number of dossiers filed ▶ Number of patents granted |
|--|--|---|---|---|
- Environment
 ■ Social
 ■ Employee
 ■ Product
 ■ Innovation & Technology

KEY INITIATIVES



GAPS

- **Environmental issues** are top global risks; and hazardous waste generation in pharma sector is significantly high. There is an urgent need for Indian pharma companies to commit to and finalize carbon reduction strategies and reduce GHG emissions on priority. The companies need to commit to 'CN' including Scope 1,2,3 and net zero, and ensure independent validation of their targets by the Science-Based Targets initiative (SBTi)⁷. In comparison, global pharma has clearly defined its path to CN or net zero.
- While India pharma through its CSR and other corporate initiatives has improved on the social aspect, it needs to up the ante to improve accessibility and affordability of quality health care, that goes beyond the cost of therapy to reduce societal costs.
- Fewer Indian companies have made disclosures as per the Task Force on Climate-Related Financial Disclosures (TCFD) framework⁷ and the Indian pharma industry needs to address long-term **governance requirements** with an action plan for better ESG compliance and disclosures transparency including good compliance with global standards.

FUTURE GROWTH LEVERS

By focusing on **KEY L.E.V.E.R.S.** for **GROWTH**, pharma companies in India can strive to make this transition more sustainable and achievable. Six factors or levers that have the potential to shape the future 'Sustainability landscape' include:

- L

Lowering costs & carbon emissions through Technology and Innovation

 - The 'Green Transition' and the 'Digital Transition' are unfolding at the same time, and one cannot succeed without the other
 - Lowering costs and emissions across all functions – from product design, material sourcing, R&D trials, quality assurance, manufacturing, packaging & delivery, to waste reduction – would require more innovative technological interventions.
- E

Enabling better ESG & Regulatory Compliance

 - GHG regulation, quality & safety will likely see further restrictions placed on all pharma products
 - For example: compliance with upcoming regulations of the Securities and Exchange Board of India (SEBI) would push pharma to undertake more initiatives – listed companies are required to disclose their strategies to alleviate or adapt to risks associated with ESG along with financial implications under the new Business Responsibility and Sustainability Reporting (BRSR) format by 2023.
- V

Value Creation for All Stakeholders across the Value Chain

 - Pharma needs to focus on the entire value chain if it wants to make a paradigm shift in reducing carbon emissions in the long-term
 - A leading Indian pharma MNC mentioned that, "creating a shared value proposition by safeguarding the environment, promoting workforce welfare, supporting community development while delivering economic value is a key focus area."
- E

Encouraging Enablers for Environmental-Friendly Engagement Models

 - A company's culture can act as an enabler to drive new engagement or business models by transitioning to environment-friendly models of circularity (circular economy model), recyclability, use of renewable or alternate sources of energy
 - Circular economy promotes waste reduction, maximizes medicines value, and enables Sustainability across the value chain
 - India has the fourth largest installed renewable capacity in the world (India Brand Equity Foundation (IBEF) 2022) and a sunrise sector like pharma should benefit.
- R

Re-allocation of Resources into R&D Infrastructure & Innovation

 - Innovation and R&D into more sustainable pharma products will be a key factor in ensuring Sustainability of Indian pharma
 - The pandemic gave a fillip to R&D of Indian pharma that is spending more on development of complex products and technologies; Average industry funding in R&D is approximately 10% as compared to approximately 15-20% of global pharma; and Indian pharma needs to attract partnerships for more funding.^{14,15}
- S

Shifting Supply Chain

 - Measures to strengthen resiliency, ensure supply chain traceability, and greening the supply chain will be major focuses going forward
 - Improving Sustainability tracking across the supply chain, focusing on long-term economic performance of individual companies, and implementing a green supply chain management approach should replace the 'business as usual' approach.

CONCLUSION:

The pharma sector in India is embracing the change with Sustainability and is aware of its responsibilities towards ESG goals. However, it is yet to commit aggressively to major Sustainability targets. As regulatory benchmarks evolve and become increasingly stringent, the sector would be walking a tight rope. Indian pharma companies need to make some bold moves by increasing emphasis on governance and leveraging innovative and collaborative solutions to meet the environment and social benchmarks of Sustainability. Each company will need a well-defined ESG strategy in order to successfully navigate the journey towards Sustainability and collectively become more compliant with improved economies of scale.

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Company Press Releases, Annual Reports and Investor Presentations

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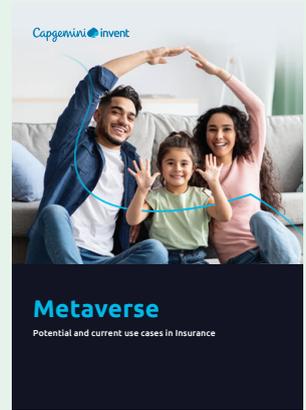
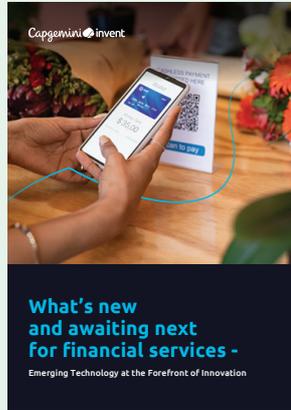
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Indian Pharma: Transitioning to A Sustainable Future



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